

## ABSTRACT

Title of Dissertation: HOW TEEN GIRLS AND PARENTS MAKE MEANING OF A CERVICAL CANCER VACCINE CAMPAIGN: TOWARD A FEMINIST, MULTICULTURAL CRITIQUE OF HEALTH COMMUNICATION

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The purpose of this study was to understand how teen girls and parents of teen girls make meaning of an HPV/cervical cancer vaccine communication campaign. Factors that were considered in investigating meaning-making were personal, familial, educational, sociopolitical, and technological and media factors. Other cultural concepts explored were identity, difference, communication preferences, and medicalization. Using a cultural study approach and feminist, qualitative methods, 40 teens between the ages of 13- and 18-years old and 14 parents of teen girls were interviewed using focus groups, dyad interviews, and individual interviews. The study employed the grounded theory approach to data analysis. Overall, parents and teens hold resolute beliefs about the Gardasil vaccine and media about it, and participants are divided as to their favorability toward the vaccine and its promotion to them. More specifically, the data suggest that teen girls largely make meaning of the HPV/cervical cancer vaccine campaign through the sociopolitical and mediated relationships in their lives, and in particular, how the girls perceive and act around difference in their lives largely contribute to the ways they view communication about sexual health topics like HPV, cervical cancer, and the vaccine. Differently, parents largely make meaning of the

campaign through the personal, familial, and educational aspects of their lives, for how they understand their roles as parents reflects a contradiction between their sexual lives growing up compared to their perceptions of how the media represent sexuality and health threats to their daughters. Overall, the data suggest that this campaign provides some empowering ideas and opportunities for teen girls and parents. However, the data also largely suggest that campaigns as such complicate not only decisions teen girls and parents must make about teen girls' health, but such campaigns also obscure how teen girls and parents know themselves individually, in relationship to one another, and in relationship with social and authoritative bodies outside their comfort zones. These data confirm previous studies findings in public relations, feminist media, and cervical cancer intervention research. The data also extend and combine extant research about culture, women's health topics, and communication campaigns in ways that suggest a feminist, cultural-centered health communication critique that encourages communicators to wholly reconsider traditional approaches to the origination, development, deployment, and involvement of communication campaigns involving women and teen girls and important health topics to them. Implications for health communication practice as well as feminist methodology are considered for similar future projects.

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VACCINE CAMPAIGN: TOWARD A FEMINIST, MULTICULTURAL CRITIQUE  
OF HEALTH COMMUNICATION

by

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Figure 1 Caption

*Figure 1:* Circuit of culture, du Gay et al., 1997, p. 3

## Figure 2 Caption

*Figure 2: Summary of Interview Participants, Participants' Relationships, Vaccination Status, and Methods Used*

## CHAPTER ONE: INTRODUCTION

Vaccine risk communication is a relatively new and unexplored field of health communication (Stoto, Evans, & Bostrom, 1998). Researchers and practitioners have suggested that communicators need to understand the breadth and depth of perceptions, opinions, and behaviors around vaccine adoption, particularly since it historically has been controversial due to scientific (e.g., has the vaccine been tested enough for safety and side effects?), commercial (e.g., is the pharmaceutical company developing a vaccine for health interest or for profit?), and political (e.g., why are politicians trying to mandate a vaccine among school girls to thwart a disease that is not an epidemic?). Research indicates, for example, little knowledge various publics have about the connection between HPV, cervical cancer, vaccine, and the Pap smear detection method, both domestically and worldwide. Most knowledgeable are health care practitioners, but communicators still need information about how to educate teen girls, parents, and young women about the vaccine (Sherris, Friedman, Wittet, Davies, Steben, & Saraiya, 2006). This study begins this exploration, from a public relations perspective.

One major quandary communicators face is convincing some parents of the benefits over the costs of vaccination. On one hand, vaccines have emerged as one of the most significant public health interventions of all time, second possibly to sewage disposal and clean water (Ball, Evans, & Bostrom, 1998). On the other hand, significant problems are believed to be associated with vaccinations (e.g., deaths, fetal malformations, autism; see S. L. Plotkin & S. A. Plotkin, 1994, for a brief history of vaccinations). Furthermore, the current climate of vaccine communication is complex because the problems of diseases associated with vaccination often are masked by the

emergence and widespread use of a vaccine, so publics may not recognize the initial disease burden:

One [Gellin, Maibach, & Marcuse, 2000] study determined that parents might undervalue immunizations because threats from infectious diseases in childhood largely have been eliminated. When the threat of disease decreases, the value of immunization is questioned and the concern about vaccination safety increases. *It is the great paradox of the success of immunization* [italics added]. (Stinchfield, 2001, p. 144)

Thus, the topic is complicated, requiring education and possibly persuasion for the purpose of behavior change (Stoto et al., 1998). The first step, however, is to investigate publics' perceptions in order to effectively communicate vaccination as well as help publics make informed decisions about what is right for them. This study investigates publics' perceptions of a vaccine and the communication environment around it: women, teens, and parents and their perceptions of Gardasil, the new vaccine to prevent HPV.

#### *Public Health Problem*

In 2003, 11,820 women in the United States were diagnosed with cervical cancer, and 3,919 women died from the disease (U.S. Cancer Statistics Working Group, 2006<sup>1</sup>). Approximately \$2 billion per year is spent in the United States on treatment for cervical cancer (National Cancer Institute, 2004). Worldwide, approximately 500,000 women are affected by the disease each year, and 257,000 of these women die from cervical cancer (Pollack, Balkin, Edouard, Cutts, & Brouttet, 2007). Cervical cancer is the second most common cancer in women worldwide, and it is the primary cause of cancer-related deaths

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<sup>1</sup> These are the most current morbidity and mortality data available from the Centers for Disease Control & Prevention.

of women in developing countries (PATH, 2007; Parkin, Bray, Ferlay, & Pisani, 2005; Pollack et al., 2007).

Cervical cancer can be caused by the human papillomavirus (HPV). HPV is the most common sexually transmitted infection (STI), carried by more than 20 million Americans, according to the Centers for Diseases Control and Prevention (Gibbs, 2006). Of the more than 100 types of HPV, 13 types are responsible for leading to cervical cancer (Pollack et al., 2007). Although no cure exists specifically for HPV infection, the detection method is called the Pap smear, which detects precancerous cells of the cervix in women (American Cancer Society, 2005).

Cervical cancer is one of the most preventable types of cancer. By reducing risk factors, such as smoking, practicing unsafe sex, and using birth control pills for prolonged periods of time, women can reduce their chances of developing cervical cancer (Williams, 1996). More importantly, having regular Pap smears can detect HPV infection and abnormal cell growth (American Cancer Society, 2005). Since the patterns of development of cervical cancer provide multiple opportunities for detection and treatment, “death from this disease should be exceedingly rare, occurring only in women who are not screened and treated appropriately” (Dignan, Michielutte, Wells, & Bahnson, 1994, p. 412).

*Health disparities.* In the United States, Latinas experience a higher incidence rate of cervical cancer than do non-Hispanic White women, and African American women experience a mortality rate from cervical cancer more than double that of White women (NCI, 2004). Disparities also exist with regards to access to Pap smears. The American Cancer Society (ACS, 2005) noted that between 60 and 80 percent of U.S. women have

not had a Pap smear performed in the past five years, and some women – particularly older women, African American women, and women with low incomes – have never received a Pap test. Dignan et al. (1994) explained that obtaining a diagnostic Pap smear is only one of the two necessary procedures for cervical cancer prevention: the other is the follow-up Pap smear to examine possible abnormal cell developments more closely.

### *Gardasil, the HPV Vaccine*

Vaccines are now available to protect young girls and young adult women against HPV infection by the HPV strains that most commonly lead to cervical cancer. A quadrivalent vaccine (consisting of four HPV-specific virus-like particles), named Gardasil and produced by Merck and Co., was approved by the U.S. Food and Drug Administration (FDA) in early June 2006 (CDC's Morbidity and Mortality Weekly Report, 2007, March 12; Gibbs, 2006), to protect against HPV strains 16, 18, 6, and 11 (PATH, 2007). A bivalent vaccine (consisting of two HPV-specific virus-like particles), named Cervarix and produced by GlaxoSmithKline Biologicals, is in advanced clinical trials. The advanced testing of Gardasil showed an almost 100% protection against moderate and severe cervical neoplasia, and it has been shown to protect against external genital lesions (aka "warts"), which are also caused by HPV (Pollack et al., 2007).

The CDC formally added Gardasil to its recommended vaccination schedule beginning in early 2007, recommending that girls aged 11-12 years old receive the vaccine (Manning, 2007) because the CDC believes girls aged 11-12 years "receive the vaccine before becoming sexually active" (Wilson, 2008). The CDC "HPV Vaccine Questions and Answers" fact sheet also states that the vaccine "can be given to girls as young as 9. The vaccine is also recommended for 13-26 year-old girls/women who have

not yet received or completed the vaccine series” (CDC, 2006, p.1). The vaccine is delivered intramuscularly in a series of three separate injections, for a total cost around \$360. In addition to the U.S. government’s involvement in moving this vaccine to public use, many domestic and international health advocacy organizations have endorsed the use of this vaccine, such as the American Academy of Pediatrics, PATH (an international, nonprofit organization formerly known as Program for Appropriate Technology in Health), the World Health Organization, and the National Organization for Women (Kaye, 2007; Manning, 2007; PATH, 2007; Pollack et al., 2007).

In fact, in early April 2006, Texas Governor Rick Perry launched the first legislative mandate among U.S. states to require that all 11- and 12-year old girls in Texas receive the HPV vaccine before they were eligible to attend public school (Kaye, 2007). This action received significant acclaim as well as criticism, even though 16 other states are considering such a mandate (Carreyrou, 2007). Although Gov. Perry’s mandate did not pass and the cervical cancer vaccination is voluntary in Texas, the discourse about whether a mandate undermines the principles of choice and privacy continues because mandates are being considered in other states (Gibbs, 2006).

Questions exist regarding the implications of the vaccine to teens and parents. One report cited that 25 percent of U.S. teenage girls have been vaccinated with Gardasil, although only one percent of Latina teens have been vaccinated (NBC4.com, 2008). Reasons that mass media have reported a low number include parents being cautious of the safety of the vaccine. Mass media reports about the vaccine quote public health officials stating that parents also believe their teens are too young to be vaccinated because parents do not think their daughters are sexually active yet, despite public health

officials' advisement to parents to not wait until they suspect their teens are sexually active (Rosenthal, 2008; Wilson, 2008).

Skepticism also exists among advocacy groups. Some conservative groups think that such a vaccine given to pre-teens will promote sexual behavior because teens may perceive the vaccine as parents' permission for teens to have sex (Gibbs, 2006).

Consumer advocacy groups (e.g., Center for Medical Consumers, National Vaccine Information Center) believe not enough information is available yet for Gardasil, that children are being over-vaccinated – largely because of the commercial practices of pharmaceutical companies – and that choice is a necessity to the immunization process (Napoli, 2007). These consumer advocacy groups look to historical experiences of deaths and adverse effects in children due to vaccines (see S. L. Plotkin & S. A. Plotkin, 1994) as evidence that current medicine has a pro-immunization bias.

Merck's communication activities to promote Gardasil in particular have received mixed reviews. Some have raised questions about the marketing, lobbying, and public relations practices of Merck as well as Merck's relationship with policy-makers, such as Gov. Perry in Texas. In fact, Merck reported its halting of its lobbying efforts, due to public outcry: "[Merck] said it made the decision after reevaluating its lobbying program, which has generated fierce debate with some religious organizations saying it could encourage promiscuity, and parents' groups questioning the need for such a widespread vaccination program" (Kaye, 2007, p. iv). Meanwhile, others have praised the marketing and public relations campaign of Gardasil, which Merck has dubbed, "Make the Connection," with commercials that emphasize the message that girls should get

vaccinated because “you can be one less life affected by cervical cancer” (Gardasil, 2007).

As a result of its public relations efforts and media, Merck received five awards from the Pharmaceutical Advertising and Marketing Excellence Awards this year for the Gardasil campaign, with the judges noting that the topic of the “success-in-the-face-of-adversity” campaign – HPV and cervical cancer – was something “most people did not know this time last year” (Edwards, 2007, p. S55). In addition, the vice president and general manager of the Gardasil campaign, Beverly J. Lybrand, recently received the Marketer of the Year award by *Brandweek* magazine, which lauded her ability to communicate such a controversial issue (Applebaum, 2007):

With roots in public-health policy and the touchy topic of teen sexuality, Gardasil has become a hot-button issue. But for this marketer, the only real issue is helping women avoid cancer... Why her? For not just promoting a product that generated tremendous sales for her company, but launching what many consider to be a lifesaving public-health initiative in the process. Fun Fact: Bracelet bead kits can be found in just about any craft store, but the “Make the Connection” campaign that Lybrand helped to create went the extra mile to achieve street cred with American girls by recruiting What Not to Wear host Stacy London to design the accessory.... (p. 34)

However, concurrent with Merck’s political, commercial, and communication practices, some groups have questioned the scientific evidence supporting the vaccine. In an announcement released by the consumer group National Vaccine Information Center (NVIC, 2006) – whose mission is to “support the availability of all preventive health care

options, including vaccination, and the right of consumers to make educated, voluntary health care choices' (NVIC, n.d.) – President Louise Loe Fisher accused Merck of prematurely releasing Gardasil before extended safety tests were performed and validated:

Merck and the FDA have not been completely honest with the people about the pre-licensure clinical trials...Merck's pre and post-licensure marketing strategy has positioned mass use of this vaccine by pre-teens as a morality play in order to avoid talking about the flawed science they used to get it licensed. This is not just about teenagers having sex, it is also about whether Gardasil has been proven safe and effective for little girls.

These multiple perspectives demonstrate conflicting goals amid public communication surrounding cervical cancer and vaccination. When conflict exists between participants in regards to a health risk situation, communication is used to negotiate differing perceptions and behaviors. Communication is also important for finding common ground among constituents when people encounter a health risk. Learning about the differing cultural beliefs, attitudes, and norms among the different constituents is one way to improve communication between groups. This study examines meaning making of the communication about Gardasil, the cervical cancer vaccine, among one of the target publics who are at risk for cervical cancer infection – teen girls – and the decision-makers for this teen public – parents of teen girls.

#### *Purpose of Study*

This study has two purposes. The primary purpose is to explore the different ways teen girls and parents of teen girls make meaning of cervical cancer and Gardasil vaccine

communication. This study exists at the nexus of mediated health/risk communication, difference within culture, public relations' campaign management, and knowledge production about gendered bodies. It problematizes the symbols and processes a vaccine communication campaign employs by concentrating on the meanings decoded from campaign representations consumed by teen girls and parents. A secondary purpose of this research is to highlight the complexities that exist within a communication initiative in which commercial, political, social, and public health interests intersect. As demonstrated through research, news, and activism, this risk communication topic contains multiple layers through which the many players – policy-makers, parents, teens, health care practitioners, politicians, pharmaceutical companies, etc. – construct, maintain, and use knowledge. Furthermore, as this issue is controversial on a number of levels – with one main opposition to the vaccine being that it prevents infection caused by having sex – the topic is sensitive and requires an open framework through which to allow for divergent attitudes and feelings. These complexities necessitate a study that will uncover the oftentimes multivocal ways of knowing that constitute identities, relationships, and experiences according to the power structures inherent throughout society (Lupton, 2003).

*Summary of method and study.* In order to access and understand how girls and parents of teens make meaning of a HPV vaccine campaign, I explored perceptions of cervical cancer, the vaccine, the campaign, and media representations of girls' health. As this area of health communication research and the publics addressed have not been researched previously, I explored what exists and how these publics give meaning and status to the phenomenon of vaccine and cervical cancer communication. As this study

employs a grounded theory approach (Glaser & Strauss, 1967), I did not test a hypothesis or pursue generalizable results. Thus, I conducted qualitative, individual and dyad interviews and focus groups to obtain thick, rich descriptions (Geertz, 1960) about how these publics understand and seek information around this health risk. I used constant comparison (Glaser & Strauss, 1967) to analyze the data.

*Summary of participants.* Communication campaigns usually involve multiple publics, and to understand how a culture – which can consist of multiple, heterogeneous groups – collectively gives meaning to a campaign, it is important to study the variable perceptions across multiple publics within a culture. Therefore, in investigating the meanings of the Gardasil campaign, I recruited from two publics: 14-17 year-old girls and parents of teen girls. The purpose of interviewing 14-17 teen girls is to understand this age group of teens that is being targeted by pharmaceutical manufacturers and by the government agencies as the recommended ages for vaccination. The parents of teens are being targeted because they permit their minor children to be vaccinated (Stinchfield, 2001). I used maximum variation, convenience, and snowball sampling strategies to find, approach, and recruit these participants.

*Summary of literature.* Several bodies of literature inform this study, including theories and concepts from public relations, cultural studies, feminism, media, health communication, and sociology. The guiding public relations theory for this study – the situational theory of publics (J. E. Grunig & Hunt, 1984) – is used by campaign designers to segment publics according to their various information seeking activities. The independent variables of problem recognition, constraint recognition, and level of involvement indicate the extent to which publics will actively seek or act around an issue

or organization. The situational theory has been evaluated according to its ability to predict communication behavior based on cultural identities (e.g., Aldoory, 2001; ReVelle, 1995; Sha, 2006; Zhang, 2007), where cultures have been conceptualized by groups that give meaning similarly to things.

Cultural studies offers the circuit of culture (du Gay, Hall, Janes, Mackay, & Negus, 1997) framework to visualize the five points of meaning making within a culture: production, identification, representation, consumption, and regulation. Furthermore, cultural studies have provided communicators with the encoding-decoding model by which to identify and examine mis-communications or breakdowns between message senders and receivers (Hall, 1993). These two bodies of literature relate and are relevant to this study because similarities exist between the concepts of publics and cultures, and in order to understand the extent to which a public perceives messages are important to them, communicators must know how publics consider message topics meaningful in their lives.

Furthermore, communication campaigns largely use mediated channels through which to send messages about knowledge, attitude, or behavior change topics. Media scholars in turn investigate how audiences use news and entertainment channels and content in order to gather, process, make meaning of, and act around important topics to them (Katz, Blumler, & Gurevitch, 1974; Morley, 1993). Specifically, some feminist media scholars examine how women use media to make decisions and how this process indicates the agency of women in a mediated culture (e.g., Steeves, 1987/2001; Tuchman, 1978/2001; van Zoonen, 1994). Two trends within media studies that will be highlighted in this study: (a) medicalization is a process by which medical culture assumes

jurisdiction over women's bodies as well as sublimates women's meanings of their bodies for its own (Kline, 2003; Lupton, 2003); and (b) media effects on women, which represents efforts to learn how women's emotions, cognitions, identities, behaviors, and decisions are impacted by media representations and usage.

Next, literature about campaigns targeting teen girls about risky sexual behavior and exploratory studies about girls' attitudes and behaviors around sexual health and interpersonal and mediated communication also informed this study. The literature on teens' campaigns, teens' usage of media, teens' learning of sex through sex, and counseling of teens provided insight into communicating with teens about sexual health using appropriate levels of disclosure and description. Several studies also provided techniques for communicators developing messages or interventions for teen girls around sexual health topics, such as engaging teens in experiential exercises, real-life stories, and case studies; providing tips to teens about how to utilize health care resources as ways to get their questions answered; and reminding teens of these lessons around times when high-risk sexual behavior occurs (such as prom nights, spring break, etc.) (Flowers-Coulson, Kushner, & Bankowski, 2000).

Also, theories about the processes by which science, biology, and medicine are represented in communication campaigns are discussed. This study seeks to understand how women perceive information around a commercial media campaign that persuades girls and women to vaccinate themselves against cervical cancer. In order to communicate with girls and women effectively, campaign designers should incorporate culturally appropriate messages, symbols, images, and language that these publics will find meaningful (Dutta, 2007). Persuasion scholars have outlined several criteria for

effective campaigns; conversely, campaign critics have argued that several reasons exist why campaigns tend to mis-communicate with publics (Lupton, 1994). Furthermore, as campaigns are produced by certain parties – those which scholars have argued inherently and inevitably hold more power than the publics of the campaigns (Dozier & Lauzen, 2000; Karlberg, 1996) – the messages, strategies, and relationships employed in campaigns tend to portray information to publics in subjective ways.

The literature review concludes with literature about cervical cancer communication. Specifically, the cervical cancer literature indicates particular trends in interventions, such that specific mixes of media and interpersonal communication tactics seem to encourage women better than other singular tactics to conduct Pap smears and follow-up tests (Suarez, Nichols, Pulley, Brady, & McAlister, 1993). Also, vaccine risk communication literature suggests that vaccines are considered highly problematic in some publics' viewpoints (Ball et al., 1998), and that communication – particularly between physicians and parents – is key for encouraging vaccination (Stinchfield, 2001).

### *Implications of Study*

This study has theoretical implications on three areas of research: public relations, cultural studies, and health communication. Although traditional bodies of public relations research informed this study, theory-building occurred in the realm of alternative approaches to campaign development. Specifically, attempting to fit the findings of this study into most of these extant frameworks proved difficult and problematic because of the need for public relations campaign work to evolve to work within, for, and toward a less neat, less predictable, less uniform generation of publics. Within the contexts of publics and the situational theory of publics, this study extends

public relations literature by way of *illuminating the discrepancies of the situational theory of publics, using alternative paradigms to initiate campaign development with publics' everyday complexities and tensions, and employing a feminist, situated, culture-centered approach to campaign development.*

The study also elaborates feminist cultural studies, for it contributes two significant, unique samples to body of knowledge about cultural meaning-making of women. First, the study provides insight into how cultures interact to make meaning, for this study illuminates the dialogue, conflicting relationships, and tensions that daughters and parents experience in living through the teenage years and making health decisions about seemingly adult-related topics. Second, the study provides significant perspective on the ways teen girls make meaning of mediated representations of their bodies and health. The teen participants of this study demonstrated that teen-girl-life – as one type of cultural meaning-making factor – is significantly influenced by stress to identify oneself, by everyday difference in friend, peer, and partner relationships, and by negotiations across the many blurred lines of their multi-faceted lives. In short, teen girls provide a perfect sample to understand cultural meaning-making, because of these natural complications of culture. Furthermore, the girls in this study provided insight into a concept called difference literacy, which may be a medium for future research in cultural studies.

Furthermore, as girls' bodies and health are represented and at times, manipulated by media texts, such as the cervical cancer vaccine campaign, girls perceived a number of governing rules that media, medical, sociopolitical, educational, and familial authoritative bodies constitute to them, such as health topics teens should be concerned about, social

rules, and a moral divide of sex. Specifically, these findings contribute to medicalization, a feminist media concept that refers to the teen female body as a site of struggle, the medical encounter as an interaction of power, medicine as a controlling interest behind risk politics, professionalization, and moralization. This study reveals that girls live amid a swirl of value-laden frameworks – such as the morals of sex and the politics of abstinence – which are instigated and continuously reinforced by vaccine, news, entertainment media, and social politics.

This study's findings may also be meaningful for other constituents. For public relations communicators of health information, the data provide insight into the complicated nature of decision-making for all publics involved. Health communicators can learn from this research about the budding health illiteracies that teen girls manifest, which is perpetuated and complicated daily by the intersecting authorities in their lives. Finally, the study provides implications for the study of health communication by way of data that reveal theory and practice problems at the core of multiple, intersection oppressions, which some of the participants suggest they experience, particularly when making meaning and seeking information about their health. Based on the stark contrasts of the everyday lived experiences of the participants – particularly in how they view sexual health related communication – this study called for a *feminist, multicultural critique on health communication*.

The study contains practical implications as well. For health care practitioners, particularly pediatricians, as they are the primary communicators of vaccine information to parents, the data aid in how to conduct conversations around potentially sensitive topics like cervical cancer vaccination. For policy-makers and community leaders of

health care regulations and projects, these data support the need for community-building education initiatives, particularly toward teens and parents about sensitive topics like reproductive health or controversial topics like vaccination.

### *Organization of Dissertation*

The literature framing the study's design and informing the construction of the interview protocol will be reviewed in the following chapter. The major sections are public relations research and the situational theory of publics; cultural studies and the circuit of culture; feminist media and medicalization of women's bodies; health communication and critiques of campaigns; campaigns toward teen girls; social studies of science and knowledge production theories; cervical cancer interventions; and vaccine risk communication. The third chapter describes the epistemology that frames the research as well as the qualitative methods and procedures I used to collect and analyze data. In this third chapter, I also delineate reasons why these methods were appropriate for this study, who I recruited to participate, and how I handled the interviews. The fourth chapter reports the results, and the chapter is structured according to the Research Questions. The fifth chapter covers interpretations of how the data relate to previous literature, theoretical implications, practical applications, limitations of the study, and future research suggestions. Appendix A provides the script that I used in recruiting participants for the study, and Appendices B and C are the final interview protocols I used as guides in questioning participants. Finally, references and figures are listed at the end of this dissertation.

## CHAPTER TWO: LITERATURE REVIEW

Several bodies of literature informed the development of this study. From public relations literature, theoretical paradigms, concepts of publics, and a theory used to segment publics – the situational theory of publics (J. E. Grunig & Hunt, 1984)—are summarized below. Then, cultural studies research is summarized, with a focus on meaning making, the circuit of culture, and particular studies on women. Feminist media studies are also described, and studies that address the following are included: global issues, development communication, medicalization, women’s health representations, and women’s reception of images. The literature on communication campaigns is then summarized according to cultural competency, critique, and particular campaigns that have focused on girls and sexual behavior. Then, theories of body knowledge production are described, with emphasis on biopower and risk politics, commodification, and marketing race. Finally, literature is presented on cervical cancer interventions and vaccination.

### *Public Relations*

Recent scholarship has highlighted two major gaps in public relations research: (a) that the field does not offer students, practitioners, and publics enough theories to learn from and employ in communication situations, and (b) that the theories that do exist are vastly hegemonic according to the western systems approach to strategic management (Cheney & Christensen, 2001). The recognition of these gaps has largely spawned from epistemological and ontological debates that suggest that the western, systems theory approach to strategic management tells only one story about descriptive and normative public relations.

Several theories have been purported as the standard theories from which other countries, practitioners, and publics should adopt as the mainstream public relations theories (Sriramesh, 2003). These are the excellence theory and principles (L. Grunig, J. Grunig, & Dozier, 2002); roles theory outlining the types of roles public relations practitioners variably fulfill in organizations (Broom, 1982; Broom & Dozier, 1986; Dozier, 1992); models of public relations (J. Grunig, 1992); symmetry as excellent public relations (J. Grunig, 1992); and theory from the organizational perspective rather than from the publics perspective (Karlberg, 1996). Critical scholars have argued that these theories should not dominate public relations research because it limits access to and practice of alternative ways public relations students, publics, and practitioners can imagine, implement, and evaluate public relations (Cheney & Christensen, 2001).

In order to provide more perspectives, theories, and stories of public relations, other paradigms have emerged in contemporary scholarship. These are the relationship management approach (Broom, Casey, & Ritchey, 1997; Ferguson, 1984; J. Grunig & Huang, 2000; Ledingham & Bruning, 2000); the rhetorical and philosophical paradigm (Bivins, 1993; Heath, 2001; Woodward, 2003); the global paradigm (Bardhan, 2003; Holtzhausen, 2000; Holtzhausen, Petersen, & Tindall, 2003; Sriramesh, 2003; Sriramesh & Verčič, 2003); ethics and obligations of public relations practitioners (Seib & Fitzpatrick, 1996); the critical paradigm that encompasses postmodern theory (e.g., Holtzhausen, 2000; van Heerden & Ströh, 2005), feminist theories (e.g., Aldoory, 2003; Aldoory & Toth, 2001; Hon, 1995; Creedon, 1993), and complexity theories (Murphy, 2007).

Some of these theories compete and some complement one another. For instance, feminist scholars argue that the systems approach to strategic management necessarily situates organizations as having increased power over publics (e.g., Rakow, 1989). Similarly, some scholars studying global public relations search for ways to build international public relations theory – which approaches understanding public relations within each country and culture, on its own merits – rather than comparative public relations, which evaluates a country's practice of public relations against other countries, and the baseline is typically the practice of public relations in the United States, according to the excellence principles (Culbertson, 1996; Sriramesh, 2003; Sriramesh, 2006). However, the relationship management approach proposed by Ledingham and Bruning (2000) – while originally was conceptualized in order to fill gaps in public relations research, that the actual relationships with publics were not being examined as they should although these relationships were purported to be the hallmark of public relations' value (Ferguson, 1984) – is conceptually complementary to the excellence theory.

*Publics-oriented public relations research.* Specifically, activist and feminist public relations literature lends significant insight to this study because these bodies of literature focus on the power differentials that exist in public relations relationships, and the current study is positioned to find alternative ways to develop campaigns according to more empowering publics-centered approaches. For example, Dozier and Lauzen (2000) examined the contradiction of activism and symmetrical communication and provided public relations scholars and practitioners with a model to step outside the home organization and into the mindset of the activist organization. By doing this, the authors

proposed, the public relations practitioner can more veritably practice two-way, symmetrical public relations by “walking around in the other’s shoes” in order to learn the activist’s expectations.

Similarly, Karlberg (1996) encouraged public relations practitioners to lend their communication skills and resources to publics in terms of media literacy programs and support of citizen groups in order to balance the paradox that he suggested exists between the two-way, symmetrical communication model and asymmetrical research and program interests. Likewise, Holtzhausen and Voto (2000) described a postmodern perspective in internal organization activism in which the public relations practitioner follows a “situational and local nature of ethical decision-making” (p. 77). According to this perspective, the practitioner focuses on marginalization and power differentials within the organization and through his/her power by choosing sides on behalf of the employees of the organization. Furthermore, the practitioner acts as only one scrupulous leader in the organization rather than assuming *the* dominant organizational conscience role.

*Feminist paradigm of public relations.* Some researchers that have focused on the role and status of women within public relations (Aldoory, 1998; L. Grunig et al., 2001; Hon, 1995) have also theorized what a feminist paradigm means for public relations as a practice (Aldoory, 2003; Aldoory & Toth, 2001). A feminist paradigm not only opens opportunities for women and people from so-called minority groups to practice public relations with more equal opportunity as Anglo, middle-class, western-thinking men, but it suggests that non-excellence paradigms can be implemented such that other ways of knowing can hopefully improve the practice of public relations. Furthermore, a feminist paradigm presents opportunities that practitioners and researchers can learn more from

the actual publics of campaigns rather than focusing almost wholly on organizations' goals and perspectives.

*Current study.* In this study I use alternative paradigms – and in particular, publics-oriented and feminist approaches – to guide my thinking by not limiting the framework through which I see the data merely according to the traditional public relations paradigms. Rather, my analysis and interpretations are based in alternative readings that reject hegemonic public relations practices and theories known to neglect power differentials, which is a key component in understanding cultural meaning making.

### *Publics*

In their book's introduction, J. E. Grunig and Hunt (1984) conceptualized publics as perceived by public relations practitioners:

Although 'public' is one of two words in the term "public relations," few public relations practitioners have a clear idea of just what a public is. Many practitioners use the term 'public' to refer simply to the opposite of 'private'; they do not use it to refer to a group of people. (p. 138)

To explicate publics more specifically in their relation to public relations practitioners and the discipline, J. E. Grunig and Hunt drew from sociologist Blumer (1948) and philosopher Dewey (1927), who distinguished publics according to their opinions and their problems. Blumer suggested that publics are distinct from masses in that publics are homogeneous rather than the heterogeneous, are confronted by a similar issue, may advocate for different approaches to the issue, and discuss the issue. Similarly, Dewey conceptualized publics as a group that detects and recognizes consequences (i.e., problems) from an organization's actions and then organizes to do something about the

problem (as described by J. E. Grunig and Hunt, 1984). These conceptualizations of publics have been typically employed in public relations scholarship (Aldoory & Sha, 2007).

The concept of publics is important in understanding the strategic management of public relations. J. E. Grunig and Repper (1992) explicated the difference between stakeholders and publics in a proposed process of strategic management of public relations: the stakeholder stage, at which “the behavior of the organization or of a stakeholder has consequences on the other”; the public stage, at which “public [*sic*] form when stakeholders recognize one or more of the consequences as a problem and organize to do something about it”; and the issues stage, at which “publics organize and create ‘issues’ out of the problems they perceive” (J. E. Grunig & Repper, 1992, p. 124; Rawlins & Bowen, 2005). J. E. Grunig and Repper (1992) prescribed that public relations practitioners should conduct formative environmental scanning to identify these consequences and stakeholders; perform research such as focus groups to identify and segment publics; and anticipate potential issues and manage the organization’s response around the issue (p. 124).

*Environmental scanning and boundary-spanning.* The first step in identifying publics is environmental scanning, a method proposed by Stoffels (1994) in which practitioners research a variety of people, objects, and events to gather data about political, economic, social, and legal trends in an environment around which publics are responding. Practitioners provide value to their senior management by being able to gather information from triangulated sources, organize that information meaningfully around the mission of the organization, and interpret the information so that management

can use that information as well as understand how the public relations function will respond to potential threats (L. A. Grunig, J. E. Grunig, & Ehling, 1992). Public relations practitioners have been identified as the personnel in an organization that perform these environmental scanning, publics identification, and issues management roles because research and strategic communication – the purported expertise of public relations practitioners – provide the necessary skills to span the boundaries between an organization and its publics. Public relations practitioners are able to access these sources and groups and collect this information because practitioners serve a boundary-spanning role between the organization and various publics. In other words, public relations practitioners exist in both worlds (as organizational employees as well as organizational consumers), so they provide information about publics' attitudes, knowledge, and behaviors – particularly around the organization or issue – to the organization, and vice versa (Dozier & Repper, 1992; White & Dozier, 1992).

### *Situational Theory of Publics*

*History and need for the situational theory.* J. E. Grunig and Hunt (1984)

emphasized that publics are not by definition permanent, static, or routine in relation to an organization or an issue:

Although the categories that public relations people generally use to define their publics may indeed contain important publics, those categories do not be themselves define publics. Publics come and go. Today, one community public may exist; tomorrow, it may be replaced by another. It all depends on what an organization does and how people and organizations in the environment react to that organizational behavior. (p. 138)

To address the shifting, dynamic nature of organization-publics relationships, J. E. Grunig developed the situational theory of publics (STP) (for an intellectual history and a comprehensive list of research studies on the STP, please see J. E. Grunig, 1997), a typology that practitioners can use to identify which publics are likely to communicate, when they are likely to communicate, and with which publics are the most strategic to communicate (i.e., the most time- and resource-efficient with which to communicate) (J. E. Grunig, 2006). Communicators can use the STP to answer questions like “With which publics is it possible to communicate and how can one communicate most effectively with each kind of public?” “When and why do members of active publics join activist groups?” “What communication effects are possible with each kind of public?” and “how do activist publics differ from publics that have an intellectual interest in an issue but do not get actively involved with the issue?” (J. E. Grunig, 2006, p. 8). As activists may be the ultimate threat to an organization, then using this framework can thus help practitioners identify which publics may become activists that could hinder the effectiveness of the organization.

*Variables of the STP.* The next step after information is gathered from a variety of sources in an environment is to organize this information in a meaningful way, using the STP to identify with which publics are most strategic to communicate (meaning which be the best use of organization time, money, and resources with which to develop a relationship). To identify which publics are likely to communicate first, three independent variables are measured: (a) *problem recognition*, the extent to which a public recognizes an issue to be a problem; (b) *level of involvement*, the extent to which a public perceives a personal connection to the problem; and (c) *constraint recognition*, the extent

to which a public perceives barriers in their way of behaving around the topic (J. E. Grunig, 1997; J. E. Grunig & Hunt, 1984). These independent variables are measured and organized such that certain correlations indicate different levels of communication behavior, which are conceptualized as two dependent variables that exist along a spectrum, or continuum. The two extremes are *active information-seeking behavior* (i.e., either seeking information about the topic proactively or performing some more active behavior, like planning a protest around an issue or getting a specific health concern checked by a doctor; for a study about what constitutes information-seeking behavior, see McComas, 2003) and *passive communication processing* (i.e., paying attention to a message but not necessarily stopping to think about it or connecting it to one's life) (see Aldoory & Sha, 2007). J. E. Grunig (1997) originally conceptualized a fourth independent variable – the referent criterion – which described “a solution carried from previous situations to a new situation...[which] reduced the need for a person to seek additional information in the new situation” (p. 11). However, J. E. Grunig later dropped this variable for lack of statistical evidence of its impact on communication behavior (J. E. Grunig & Disbrow, 1977).

Based on these different levels of the independent variables, publics can display communication behavior along a spectrum of activity, and thus, an organization can determine the extent to which it should communicate with that public. J. E. Grunig (1997) emphasized that people act around their perceptions of the *situation* they are confronted with, and thus, they may communicate differently in different situations, and they are rarely static members of the same publics. Therefore, based on these conceptualizations, four publics were conceptualized from the standpoint of the

organization, and four strategies were suggested to communicators for how to develop relationships with them, based on their specific displays of the independent variables (J. E. Grunig, 1997; J. E. Grunig & Hunt, 1984, see p. 153):

1. *Non-publics* are groups that do not have consequences on the organization, and the organization does not have consequences on those groups. Typically, non-publics have no problem recognition and no level of involvement (and the level of constraint recognition, thus, is not relevant). An example of a non-public could be college students as a public of issues around social security reform – college students most likely do not care at this chronological or situational point in their lives about policies that will impact them in 30 years. Communicators should not spend any time, money, or resources communicating with this group because the publics' behaviors are significantly unlikely to change around the issue or organization.
2. *Latent publics* experience consequences from the organization, but the publics also perceive multiple barriers to actively communicating with the organization about the consequence. Typically, latent publics have either high level of involvement, high constraint recognition, but low problem recognition, or high problem recognition and constraint recognition, but low level of involvement. For example, overweight children may be biologically and physiologically at risk for developing diabetes, but they may not know they are personally at risk, and they may experience significant barriers to acting around diabetes, such as not having access to information sources or money to actively work to reduce their risk. Communicators should conduct

education and persuasion campaigns to change the levels of two of the three independent variables, i.e., raising their level of involvement and reducing constraints.

3. *Aware publics* encounter consequences from the organization, but the publics experience a deficiency in one of the independent variables, and therefore, do not actively participate in the issue. Typically, these publics have high problem recognition and high level of involvement but high constraint recognition. For example, women from low income backgrounds may know that breast cancer is a problem and may realize their risk for breast cancer in their later ages, but they do not have money or insurance to have annual mammograms performed in doctors' offices. Communicators should work to lower constraints. In the example situation, communicators should inform these women about local clinics that perform free mammograms for women like them.
4. *Active publics* are groups that confront significant consequences from the organization. The publics perform active information-seeking behavior around an issue or organization because they perceive a problem to be an issue, they feel personally involved in the issue, and they perceive little to no constraints in acting around the issue. For example, survivors of breast cancer may be the most likely publics to perform breast self-exams every month and have annual mammograms conducted. Communicators should use these publics as assets in a communication campaign to help advocate for change among other less active publics. However, the categorization of active publics also includes

activist publics that are involved in changing the actions and make-up of an organization or issue because of the negative consequences the activist publics perceive from the organization or issue. In this case, scholars have recommended a bevy of negotiation, conflict resolution, and compromise strategies for establishing two-way, symmetrical communication relationships with activist publics (Fisher & Brown, 1988; L. A. Grunig, J. E. Grunig, & Dozier, 2002; Post, Preston, & Sachs, 2002; Susskind & Field, 1996).

*Elaborations on the STP.* Several studies have evaluated the extent to which the variables of the STP persist across different publics, environments, and issues and have extended the theoretical and practical implications of the theory. In their review of the current state of the STP, Aldoory and Sha (2007) designated these elaborations as either studies of antecedent factors or as reconceptualizations of the independent variables. Antecedent factors studied include culture (e.g., Sha, 2006), gender (e.g., Aldoory, 2001), perception of argument quality (Sha & Lundy, 2005), and motivation (e.g., Hallahan, 2000). Reconceptualizations of independent variables explored include personal dimensions of the variables (e.g., Cameron & Yang, 1991) and internal and external distinctions of level of involvement (J. E. Grunig & Childers, 1988). As the current study is not proposing an evaluation of the predictive ability of the STP, these previous studies' findings will not be reviewed here. Instead, as the current study's purpose is to explore how different groups' meaning making of vaccine communication, identity factors (like gender, race, ethnicity, age, and generation), and cultural beliefs about causes and risk groups of HPV and cervical cancer contribute to their health decision making processes, studies employing the STP to investigate dimensions of difference (e.g., according to

gender, culture, age, and other identity dimensions) as antecedents to communication behavior will be reviewed next.

*Race, ethnicity, and the STP.* Only a handful of studies were found that purposefully sampled participants from non-White/Caucasian races and ethnicities (Aldoory, 2001; ReVelle, 1995; Sha, 2006; Vardeman, 2006; Zhang, 2007). Sha, for example, tested the variables of the situational theory of publics to determine if the variables changed within different racioethnic contexts, particularly those according to self-avowed and externally ascribed identities of publics. Specifically, findings showed that non-white members of publics that consistently avowed their identities displayed higher problem recognition, higher level of involvement, and therefore more communication behavior around racioethnic issues (e.g., racial discrimination on college campuses). Furthermore, although constraint recognition did not emerge in this study as affected by racioethnic identity, Sha did re-introduce the fourth original independent variable of the theory, the referent criterion, because the data suggested that “if a person identifies with a given culture, he or she may behave according to that culture’s rules regardless of the situation at hand” (p. 60). As race and ethnicity have been little explored in public relations scholarship other than in the composition of practitioners rather than as publics or as a factor between organizations and publics, Sha suggested that practitioners “are encouraged to learn the salient cultural identities avowed by the publics, rather than merely ascribing identities to various publics” (p. 61). In summary, Sha recommended that to be truly effective in communication relationships, organizations must understand publics may not communicate the way the organization does based on different cultures, and that efforts toward intercultural exploration and cultural competency may be key.

Similarly, Zhang (2007) explored the STP's relationship with race, as she investigated computer-mediated support-group (CMSG) communication on individuals' levels of constraint recognition around health topics. Zhang found that CMSG communication de-emphasized the communication difficulties and inequalities based on race, class, and gender perceived by participants in face-to-face health interactions. As constraint recognition is reduced because of the anonymity provided by new media applications, Zhang proposed implications for health communicators – particularly those communicating about sensitive health issues – as technology is increasingly integrated into communication campaigns.

*Class and the STP.* In her study of women's meaning making of health messages, Aldoory (2001) sampled women from low-income backgrounds. The data revealed that class impacted these women's perceptions of neglect by the media messages around health, in that they felt magazines such as *Parent* targeted middle-class, suburban women, but not them. As the low-income women interviewed felt that class was intimately connected to their identities, they felt less involved with health messages sent by people of higher socioeconomic status than them. Implications addressed the contradiction that although many researchers and interventionists tout diversity and cultural competency according to race and class in campaigns, these data suggested that campaigns should be designed to address especially sensitive issues.

*Gender and the STP.* Very few studies have used the situational theory to understand gender or women as a public and information seeking behaviors (Vardeman, 2006). Aldoory's (2001) study initiated the development of a public relations theory specific to women and their health. Slater, Chipman, Auld, Keefe, and Kendall (1992)

also conducted a study testing the situational theory of publics and using only women as the sample. The authors explored women as primary buyers of produce to evaluate the effectiveness of campaign messages regarding pesticides. The authors advocated adding cognitive response approaches to the information seeking variable in order to develop more pointed messages; however, the motivation behind the sampling of women was limited to their purchasing patterns and thus does not advance any public relations concept specific to women as publics or women's health as a public relations issue.

As Aldoory (2001) pointed out, the situational theory is important in health communication because it can help campaign planners understand where a public sits on the spectrum of connection to a specific health threat in a sea of health messages, and when a public is likely to change behaviors in order to preserve health. Understanding the motivations and constraints a public feels toward a health issue can help campaign designers craft messages to help move individuals from latency to awareness so they will be more apt to adopt suggested health behaviors. She notes, however, that very few situational theory studies have used women as the sample in order to examine and embrace women's unique and specific health issues, which could provide a useful testing ground for the theory. Mendias, Clark, and Guevera (2001) asserted as well that gender affects health significantly because of power differentials (Stern, 1996), and factors have been found to lead to a higher utilization of health care facilities among women than men. Therefore, it is logical that women and health should increasingly become the focus of situational theory studies. Since women have unique power positions, and health is a common media topic that drives communication campaigns, women and health could

elaborate the situational theory as well as provide extensive practical applications to health organizations that communicate with women (Vardeman, 2006).

Vardeman and Aldoory (2007) also studied gender within the situational theory using in-depth interviews to discover how mothers from various racial, ethnic, and professional backgrounds perceived media about bioterrorism when the spokesperson shared in the involvement of the health threat. The authors found that participants made meaning of bioterrorism in the news with misunderstanding and confusion, but in order to better understand, they negotiated and considered their perceived susceptibility to risk, and they contextualized bioterrorism within their everyday lived experiences. Furthermore, many participants did perceive a shared involvement with a spokesperson who has similar characteristics as them, such as experiencing the same event, experiencing similar feelings, having similar backgrounds, and portraying caring above and beyond what organization expects. However, as the participants considered shared involvement due to personal or experiential connections, they were also skeptical of the worth of the information provided by an organizational spokesperson. Therefore, the evidence indicates that bioterrorism in news and perceptions of shared involvement with spokespersons are contested media terrain governed by the women's negotiated, everyday lives as food shoppers and providers. These findings also suggest that a socio-ecological approach might be warranted when attempting to predict effects of perceived shared involvement on risk prevention. The women's negotiated interpretations illustrated the need to consider mediated, organizational, community, interpersonal, and intrapersonal levels of meaning given to news about high-risk events. These women's words demonstrated the extent to which women may integrate news about risk into their

identities and their lived experiences, how this is manifested through their roles as parents, daughters, partners, and friends, and what implications these processes have on their perceived involvement with health threats.

Similarly, Vardeman and Aldoory (2008) used the situational theory to research how pregnant and nursing women, women with young children, and women of child-bearing age made meaning of conflicting messages about fish contamination warnings. For example, women expressed fear, anxiety, rejection of messages, and anger – as well as empowerment – when reading contradictory media messages. The findings indicate that the situational theory may vary in its ability to predict information behavior when publics are confronted with contradictory information rather than consistent information. Participants perceived themselves to be situationally involved and constrained by mediated warnings. Additionally, the caregiver role is significant for making meaning of health risks: when pregnant participants were faced with contradictory information, their roles as protectors became priority, and health benefits from eating fish were less important than potential risks of consuming mercury. This study extends our understanding of how conflicting information complicates caregiving situations, because the women made cognitive decisions based on the health of others rather than themselves. The authors also posed questions for communicators to consider: Are there ways we can better prepare women for understanding and responding to uncertainties of scientific research? Are there ways for improving health information presented in media?

*Health and the STP.* Some studies testing the situational theory of publics have used the context of health communication to determine activity of a public (Aldoory, 2001, 2005; Aldoory, Kim, & Tindall, 2007; Aldoory & Van Dyke, 2006; Cameron &

Yang, 1991; J. E. Grunig & Childers, 1988; J. E. Grunig & Ipes, 1983; McGrath, 1999; Pavlik, 1988). Cameron and Yang (1991) tested the level of personal distance participants perceived in regards to AIDS messages, and found that adding variable levels of personable closeness measurements to the situational theory could help practitioners better predict the activities of publics. Pavlik (1988) observed in heart disease campaigns that public relations practitioners should intimately research the complexity of knowledge within a public to determine the target levels of involvement to aim campaign messages.

In order to theoretically connect the STP to risk communication theories, Aldoory (2005) used the applied context of injury prevention communication. She highlighted the STP's nature of connecting the cognitive and emotional processes publics experience in the recognition of a potential health threat with the social context within which publics are situated, specifically for understanding how publics perceive intentional messages communication from organizations via health education/persuasion interventions/campaigns. She likened the STP variables to other risk communication theories (e.g., problem recognition is akin to perceived severity and perceived susceptibility from the Health Belief Model; categorization of publics is similar to the stages of adoption in the Diffusion of Innovations Model) to bridge these two major disciplines of behavior change and communication.

Risk communication theories and the STP have also been integrated in research around perceptions of bioterrorism (Aldoory & Van Dyke, 2006). Aldoory and Van Dyke (2006) found several linkages between media coverage of a potential health threat and the variables of the STP. For example, "problem recognition among participants was media dependent and media controlled" (p. 355) such that publics perceived a higher level of

involvement (raised perceived personal risk) if the spokesperson for an issue or organization shared in the involvement around the issue. Also, regarding constraint recognition, when the media covered the story too often or in too exaggerated ways, publics felt a sense of “information overload,” for which they cognitively stopped processing the message and denied performing the protective behaviors. The authors linked the use of STP in conjunction with risk communication theories, such as through integrating emotions into predicting communication behavior (using the Extended Parallel Process Model, Witte, 1992), which has not been significantly explored in STP research. The authors recommended that future research include investigations of “fear and cognitive constraints” (p. 358). Furthermore, the shared involvement concept led to future research in this vein (see Aldoory, Kim, & Tindall, 2007; Vardeman & Aldoory, 2007) because of the implications this concept has on public relations in terms of media spokesperson training as well as understanding how publics make meaning and communicate around a topic:

The desire for social connections and its influence on information behavior was also striking. There is little in situational theory literature to explain this phenomenon. However, research associated with the multi-step model of communication and diffusion theory and the role of personal networks in communication might be used in future research to explain how people rely on homogenous groups to share information and experiences in risk situations.

(Aldoory & Van Dyke, 2006, p. 358)

Finally, Muturi (2005) used the situational theory of publics, the excellence theory’s findings, and concepts from development communication to bridge a gap in

health interventionists' understanding of the knowledge and attitudes of Kenyan women and men around HIV/AIDS and the actual behaviors. Although the author did not extend the situational theory by way of correlating variables to other factors, themes found among the rural and urban participants – such as perceived lack of communication between sex partners, rupturing condoms, and youth at risk – indicated the STP's ability to organize information that will help communicators engage in community-based dialogue around HIV/AIDS, particularly since the theory emphasizes the inevitable nuances in awareness, beliefs, norms, attitudes, and behaviors between unique, disparate groups.

*Women's health and the STP.* Aldoory (2001) studied antecedents to involvement among various subgroups of women by examining their feelings regarding various health issues. Based on the women's experiences with media images of health, their interactions with medical practitioners as well as health insurers, and in discourses and experiences in their daily lives with acquaintances and close friends/family, the women made meaning of health through a consciousness of their everyday lives, their self-avowed identities, their preferences for sources and channels of information, their perceptions of their personal health, and the cognitive processes they used to understand message content. She found that level of involvement around health was both moderated as well as influenced by the media messages they received about health topics. For instance, although campaigners often tout cultural competency in their messages and strategies, participants from communities of color as well as lesbian and bisexual women believed that they did not see themselves and their particular health concerns reflected in the

media. Therefore, the participants felt their needs for information were not adequately addressed by news makers or campaign designers.

*Cervical cancer and STP.* Vardeman (2006) explored how women of different racial and ethnic backgrounds made meaning of communication around cervical cancer. She interviewed and conducted focus groups with African American, Indian, Latina, and white women who ranged in age between 18 and 75 years old. The situational theory's independent variables were used to structure the study, and cultural factors were found that comprised the types of publics these women represented: *grouping of women's issues* (association with breast cancer; personal relationships with women with health problems; menstrual cycle; sexually transmitted infections; women as target audience); *loss* (the loss of the ability to have children; the loss of female body parts and womanhood; the loss of sexuality; the loss of a relationship status; the loss of positive social judgment due to stigma); and *control* (active vs. passive diseases; empowerment; self-efficacy). Based on differences in problem recognition and level of involvement, the women in the study comprised two different publics according to age differences: the younger women represented a latent public because they had little knowledge of cervical cancer and felt indirectly involved to the problem, as they grouped cervical cancer into a reproductive health issue, which is their primary motivation, they felt, for performing annual Pap smears; and the older women represented an aware public because they had knowledge of the problem, felt moderately involved, and perceived low constraints.

However, the influence of accurate knowledge on problem recognition and the impact in behavior of indirect involvement with the issue raised questions as to the situational theory's ability to predict health communication behaviors among these

women. This ambiguity reveals opportunities for expanding the situational theory by way of innovating the definition of the level of involvement, particularly for publics of women regarding their meaning making of health. In other words, the current conceptualization of involvement may be too simplistic when researching women regarding their health because involvement may be dependent on culture and the particular health topic.

Therefore, Vardeman (2006) suggested that involvement for women and health may be *the extent to which women connect themselves to the cultural issues of being a woman and preserving qualities they perceive as representative of that cultural identity.*

Furthermore, she proposed that whether knowledge could operate alone or as a moderating influence on problem recognition, the data suggested that *the extent of the women's knowledge is related to the extent to which they perceive a health threat as a problem.* This, in turn, may determine the quality and the duration of the compliance to the suggested behaviors and information seeking about the health threat.

*Generation, age, and the STP.* Few studies that showed results and provided implications for theory-building and practice around age, one of which was Aldoory's (2001) study of women's meaning making of health messages. She found that younger women felt health messages were targeting not them, but older women. Likewise, older women felt they had grown in their awareness of health issues as they aged, particularly as they approached menopause. Similarly, in Vardeman's (2006) study of women's meaning making of cervical cancer communication, she originally sought to study potential differences among women's perceptions of media around cervical cancer based on the women's various races and ethnicities. However, instead, age emerged as the intervening factor between the independent variables of the theory and the dependent

variables. Specifically, the older women studied (between ~35-75 years) displayed more aware communication behavior around cervical cancer, whereas the younger women interviewed (between ~18-30 years) demonstrated latent public communication behavior because they exhibited low problem recognition, indirect level of involvement, and high constraint recognition. The age factor suggested implications to health communicators that may be creating campaigns around women from disparate age groups, particularly in that younger women tended to be more concerned about any problem that may threaten their ability to have children, whereas older women were more concerned about potential losses around relationship status, female body parts, sexuality, and womanhood.

*Current study.* The situational theory of publics provides a useful framework through which to conceptualize teen girls' and parents' activity as publics around cervical cancer vaccine communication. The variables in the situational theory guide my understanding of women's meaning making, and I use the variables to identify specific cultural symbols and concepts women use to seek information or perform behaviors regarding cervical cancer vaccination.

### *Cultural Studies*

As I examine the quality of a communication campaign according to the extent to which it employs cultural symbols to connect with its publics, I will review in this section the concepts from cultural studies literature that inform my understanding of the use of culture in media. In this section, I define culture, representation, and the process of meaning-making that cultural members perform through the multiple moments in the *circuit of culture*. I then review cultural studies in which women's topics and women consumers have been investigated to grasp the cultural factors that make women a unique

culture from men. Within this section, I also review cultural studies about women's health topics, for these studies largely inform the current study as to the previous methods used to investigate women's meaning-making of health as well as the ways in which women have traditionally and more recently come to know their health and their bodies in different contexts (e.g., in news and entertainment media, in education, in medical textbooks, etc.).

### *Culture and Meaning-Making*

Culture can broadly be understood as the collection of all manners of approaching life as well as the ongoing processes of human integration of meaning into the surrounding world (du Gay, 1997). In another sense, culture can be a group that shares “conceptual maps, shared language systems and the codes which govern the relationship of translation between them” (Hall, 1997, p. 21). Frow and Morris (2003) defined culture as the continual process that social groups undergo in explaining their identifications and existence in relation to the outside world. The authors defined cultural studies according to the never-ending tension social groups experience in self-identification in relation to external – possibly contradictory – forces. However, to clarify, although cultural studies can be many things, cultural studies researchers firmly believe that “cultural studies cannot be just anything” (Nelson, Treichler, & Grossberg, 1992, p. 3).

We represent “things” primarily through language, which is a collection of signs that we give meaning *to* and that we exchange to make further meaning – a process that is often also called signification (du Gay et al., 1997). Meanings are not inherent inside physical and intangible phenomena; instead, they are socially constructed by humans around and inside an object, event, or place; therefore groups of people who produce or

“make things mean” in similar ways can be considered a culture (du Gay et al., 1997; Hall, 1997). We use meanings and language to express complex ideas to others; therefore, we cannot look only at things to ask for their meanings – we must ask those who use them in their cultures what the objects mean to them (du Gay et al., 1997; Hall, 1997). By examining media and texts and people’s words and comparing current texts to previous texts, we can see how images and things do not carry meaning but instead how they interact with each other (Hall, 1997; Lindlof & Mia, 2002).

### *Circuit of Culture*

A framework used to examine meaning making from multiple perspectives is the *circuit of culture* (du Gay et al., 1997; see Figure 1). As cultural meanings are assigned by different cultural members, at different moments, through variable interactions, and in conjunction with a gamut of collective experiences and perceptions, the circuit of culture maps five primary “moments” within culture at which meaning is recognized, constituted, and negotiated (Acosta-Alzuru, 2003; Champ, 2007; du Gay et al., 1997; Johnson, 1986; Levine, 2001; Soar, 2000; Mia, Demont-Herinrich, Broadfoot, Dodge, & Jian, 2002). Put together, meaning making at these five sites provides a triangulated examination of how communication messages and constructed meanings are often obscured and re-configured in the evolving process of culture. Using the cultural artefact of the Sony Walkman, du Gay et al. (1997) conceptualized the process of *articulation* that is ingrained in the circuit of culture:

This book...analyses the biography of a cultural artefact in terms of a theoretical model based on the articulation of a number of distinct processes whose interaction can and does lead to variable and contingent outcomes. By the term

‘articulation’ we are referring to the process of connecting disparate elements together to form a temporary unity...it is a linkage which is not necessary, determined, or absolute and essential for all time; rather it is a linkage whose conditions of existence or emergence need to be located in the contingencies of circumstance....(p. 3)

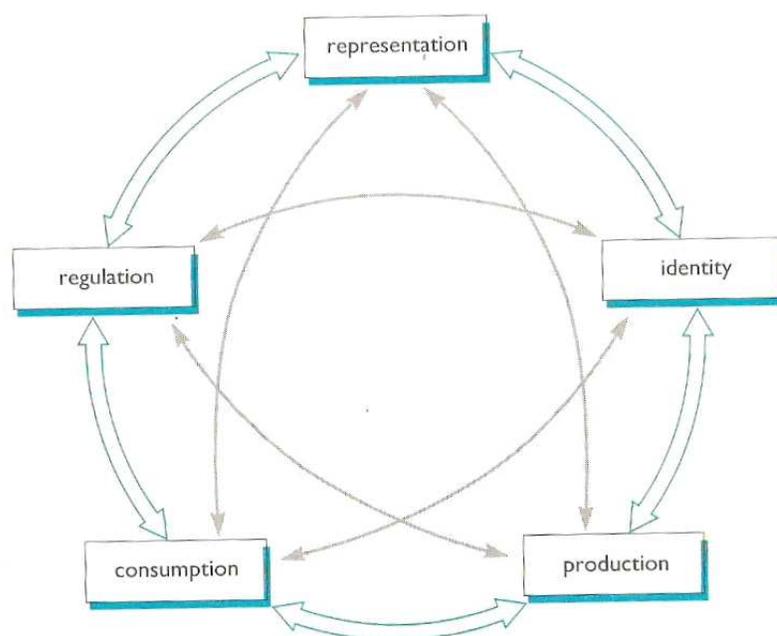


Figure 1: Circuit of culture, du Gay et al., 1997, p. 3

The steps in the circuit are *representation*, in which meanings are inscribed through symbols and language into texts (e.g., Acosta-Alzuru, 2003; du Gay et al., 1997; Mia et al., 2002; Vardeman, 2007a, 2007b); *identification*, which are the unintentional relationships and meanings linked to the cultural artefact that typically segment cultural members (e.g., Acosta-Alzuru, 2003; du Gay et al., 1997; Mia et al., 2002); *production*, which includes the limited perspectives that contribute to how the artefact is intentionally created, packaged, and marketed to others for utilization (e.g., Acosta-Alzuru, 2003;

Cantor, 1971; du Gay et al., 1997; Levine, 2001; Soar, 2000; Mia et al., 2002;); *consumption*, which details the meanings that emerge in the active or passive use of the artefact (e.g., Acosta-Alzuru, 2003; du Gay et al., 1997; Mia et al., 2002; Vardeman, 2006); and *regulation*, in which laws, policies, and governing bodies limit the proliferation of the artefact according to certain spaces or publics (e.g., Acosta-Alzuru, 2003, p. 274; Champ, 2007; du Gay et al., 1997; Mia et al., 2002). Some scholars study a cultural artefact's composition within one of the meaning making sites (e.g., Cantor, 1971; Levine, 2001; Vardeman, 2006) whereas other scholars study a cultural artefact's composition through each of the sites within the circuit of culture (e.g., Acosta-Alzuru, 2003; du Gay et al., 1997).

Modifications to the circuit of culture have emerged within the field of communication and culture (Champ, 2007; Levine, 2001; Soar, 2000; Mia et al., 2002; for a complete listing of *circuit of culture* studies, please see Champ, 2007). For example, Levine (2001) highlighted the media cultural studies bias of studying primarily media texts and media audiences rather than media production, which consists of not just cultural meanings but economic considerations as well. In her analysis of the media production behind the U.S. soap opera *General Hospital*, Levine proposed that the five factors shaping the U.S. broadcast network production process were *production constraints, the environment, routines and practices, characters and stories, and the audience in production*. Soar (2000) also analyzed cultural production, using the advertising discipline as a metaphor of the political economy of the media: "The short circuit posits that...the intermediaries' first audience, adherence their first source for inspiration, is themselves and their work. This effectively circumvents both consumers at

large and the marketing routines to which the intermediaries ostensibly adhere to reach them” (p. 433). Finally, Mia et al. (2002) conducted a study of Napster – similar to du Gay et al.’s (1997) study of the Sony Walkman – both of which assessed meaning making of these technologies within each moment in the circuit of culture. Mia et al. (2002) called for an updated version of the cultural circuit model based on the “rapidly evolving conditions of new media in ‘cyber-culture’” (p. 609). Although the authors suggested that Napster may not be the best case study of cyber-culture using the circuit model, they asserted that the history of the circuit of culture and cultural studies have consistently been reinvented based on ubiquitous cycles among technoscientific advancements and culture.

#### *Cultural Studies of Women*

Other studies have examined women and different types of media in order to position women in the contexts that set them apart from men, and these constitute cultural consumption studies even though they did not employ the circuit of culture model (Acosta-Alzuru, 2003; Aldoory, 2001; Bobo, 1995; Duncan & Robinson, 2004; Grodin, 1991; Letherby, 2002; Martin, 2001; Press & Cole, 1999; Radway, 1984). In her study of women’s meaning making of romance novels, Radway (1984) decided that instead of studying the actual texts of the novels, it is most important to see what leads women to actively place “sense to lexical signs in a silent process carried on in the content of her ordinary life” (p. 8), by studying what the characters, story lines, and romance elements mean to the readers. Her interviews and small group discussions indicated that women used these novels as ways to reject the patriarchal institution of marriage in which they tend to others’ needs before their own, and these novels represented a sort of

““declaration of independence”” (p. 213). Similarly, Grodin (1991) conducted prolonged one-on-one interviews with a diverse group of women to investigate their meaning making of self-help books in their lives. In her reception and audience analyses – two methods used within the cultural studies methodology that examine how consumers reconcile their common cultural experiences with their perceptions of messages within the media – she found that the women transformed the texts in order to make the texts meaningful in their struggles to find commonality (about their perceived problems) among other women.

In a study about women’s perceptions of media, Acosta-Alzuru (2003) looked at how Venezuelan gender roles heavily influence texts, which she saw in the ambiguities of images and meanings in the production, consumption, and representation of feminism in a popular Venezuelan soap opera. Using the circuit of culture (du Gay et al., 1997) as her framework, she found that although the producers, actors, and audience members respect the rights of women as equal to men, the terms *feminism* or *feminist* are generally rejected in Venezuelan society, even though the show provides many depictions of feminism: “Writers, actors, media executives, texts and audiences are caught in a ritual process of establishing shared meanings, which is embedded in culture and power differentials” (p. 288).

Press and Cole (1999) also studied women’s perceptions of health issues within the media. In their focus groups about how women construct meaning from entertainment media coverage of abortion issues, Press and Cole (1999) used grounded theory (Glaser & Strauss, 1967) to guide their study because they wanted themes to emerge rather than confirm or disconfirm a previously constructed hypothesis. The grounded theory and

cultural studies approaches helped them identify social class as well as societal power differentials as major determinants in these women's opinions – and divisions among each other – about abortion.

In terms of cultural studies conducted about African American women's meaning making, two studies explored women's perceptions of different types of texts. By using the grounded theory approach (Glaser & Strauss, 1967) to guide a focus group of African American women examining health/fitness magazine messages, Duncan and Robinson (2004) found that the women perceived gender and class to boldly interact with race in significant ways that shape these women's experiences and culture. Bobo (1995) used novels and films about African American women as her probing ground. Cultural studies approach guided her exploration into the pervasiveness of Black female culture in African American women's experiences with media around African American history, society, and relationships. She used a triangulated approach by analyzing texts herself as well as interviewing African American women about their perceptions of these texts. Her findings contributed to Collins' (1990) theory of Black female standpoint because the women she interviewed proved to be empowered, adroit, critical readers of the surrounding societal factors influencing their lives.

*Cultural studies of health and women.* Some cultural studies have examined how gender impacts with cultural meanings and how cultural meanings influence gender concepts. Feminist media scholars have approached cultural studies of women's health by questioning how women perceive their health, based on different media representations of various health topics and threats, and from these questions, scholars have found that women's perceptions of their health are often dictated or contradictory of media

portrayals. For example, Aldoory (2001) used grounded theory (Glaser & Strauss, 1967) to explore meaning making of health messages among five focus groups and 10 one-on-one interviews with women of different subcultures that varied according to race, class, sexual orientation, age, educational level, and professional position. She found that women use constructs like a consciousness of everyday life and personal health, media usage and preference, and self-identity as antecedents to how they make meaning of health messages. An important finding from Aldoory's study reflects the contradiction that although health communicators strive for and tout cultural competency, many women in the study did not see themselves reflected in many media messages, which is an illumination of Frow and Morris' (2003) argument that cultural studies examine the tensions and controversies among conflicting cultures.

Martin (2001) conducted a cultural study comparing two different cultures of women. She examined the similarities and differences in medical culture's and ordinary women's perceptions of the female reproductive system. She conducted extensive interviews with women to learn about the cultural assumptions they make about hormones, their menstrual periods, and also "the nature of women, of men, [and] of the purpose of existence" (p. 13). She assumed that (a) medical culture experiences women's bodies differently than do the women themselves, (b) these underlying assumptions about women's bodies are taken for granted in society, and (c) understanding these differences is essential to understanding the everyday woman's everyday experiences. By studying women and medical texts, Martin found that these "consequences of the medical lexicon about women's bodies" (p. 14) permeate in not only women's perceptions of how medicine views their bodies but also in how they view themselves.

By studying medical textbooks, attending medical lectures, talking to medical students, and immersing herself in the medical culture, Martin (2001) learned that women's bodies were often dichotomized as the "other" (Hall, 1997) to the male body as well as made to be the deviant, broken version of the male body, particularly because of the perceived problems that menstruation brings. After talking with a range of women that came from different SES backgrounds, races, ethnicities, ages, and points in their reproductive lives, she found that not only did women experience their bodies and reproduction differently than did the medical culture, but these self-perceptions were complicated by the fact that they believed their bodies were supposed to function as the medical texts said they should. This study – in which she employed qualitative interviews and observation – shows how women's knowledges have been relegated to the traditional views that are based on patriarchy and the male standard. Her research is used to empower women to produce their own knowledges about their bodies and to advocate for inclusion of women in more biomedical research, as researchers and as participants (Harding, 1991).

### *Feminist Media*

As media are the primary channels for information flow in this study, this section briefly describes three major areas of media research that feminist scholars have problematized: global and multicultural media contexts, development communication, and the medicalization of women's bodies. Then, as medicalization is an underlying assumption of a feminist perspective on health communication within this study, I also describe in more depth how medicalization occurs in the media, what media frames

feminist scholars have found around women's health topics, and problematic impacts medicalization frames have on women.

With the growing emphasis on the audience – which was largely studied using cultural studies (McQuail, 1997) and cultivation analysis (Gerbner, 1969/2001) via methods like audience and reception analyses (e.g., Ang, 1991/2001) – feminist perspectives on the agency of, effects to, and participation in media consumption, representation, and production emerged:

The questions raised by feminist writers relate not only to the key issue of representation, which has always been a central concern of the study of media texts, but also to wider examination of the place of women in the media industries, to women as audiences, and women's ideas and understandings of their own situation in relationship to the media...By problematizing this, feminism undermines these natural tensions. (Newbold, 2001, p. 388)

As feminism is grounded in exposing marginalization and power differentials in order to enact change (Olesen, 2003), media scholars have addressed the purpose of feminism differently. For example, van Zoonen (1994) questioned whether a new paradigm was necessary for media communication research and praxis, perhaps one that rejects the efficiency-valued transmission model of communication but still critiques the ritual transmission model (Carey, 1989) for its failure to recognize problems of “dominance and oppression – essential to the feminist and any other critical project – suggesting a more or less pluriform and unproblematic construction of social togetherness” (van Zoonen, pp. 37-38). van Zoonen, in response to this deficiency, suggested that a new paradigm for feminist media studies may be found in the

complicated method of cultural studies because the cultural approach rejects ideas of coherent meanings, languages, codes, and symbols – collectively known as “polysemy” in cultural studies (Hall, 1980/2001) – which acknowledges the often disjointed, complex, negotiated nature of gender in communication (van Zoonen, 1994, p. 41).

An early feminist analysis of women as television audiences was conducted by Tuchman (1978/2001), who introduced the concept of the “symbolic annihilation of women.” In her “reflection hypothesis,” Tuchman argued that the mass media reflect dominant societal values, and thus, the media symbolically represent values in programming that are consonant with mainstream U.S. values. In the presentation of these “socially approved” representations to audiences, the frequencies of women in programming are fewer than those of men, and the roles of women are problematic. Tuchman further highlighted the contradiction in television programming’s tendency to neglect women. Through the use of content analyses and social statistics, Tuchman suggested that young girls may model their behaviors based on television portrayals of women, which may narrowly show them to serve as housewives.

Addressing liberal approaches to feminist media studies – which typically focus change at the individual level rather than the systematic level (L. A. Grunig, Toth, & Hon, 2001) – Steeves (1987/2001) defined the liberal feminist media approach as the belief that women and girls should be afforded equal opportunities as men, and that this goal is possible in the current capitalist political economy. Furthermore, liberal feminist media scholars argue that current social science research methods are acceptable to accomplish media goals.

Steeves (1987/2001) explained that originally, there were large numbers of “images of women” studies, which revealed the presence or absence, stereotyping, or devaluation of women in media. However, these examinations of feminist literary texts have been criticized for over-focus on gender without considerations of intersectionality. Since then, separatist, semiotic, and Marxist-influenced analyses of women's writing have emerged as more prevalent than images of women studies. Largely, feminist media studies were condemned for lacking a developed theoretical framework to structure their studies. For example, studies called for eliminating stereotypes but did not theoretically elaborate on what a stereotype is and instead classified traits that are assumed to reinforce over-generalizations. Furthermore, within media effects studies, Steeves pointed out that studies using agenda-setting, cultivation, and uses and gratifications theories did not compare the relationship between time and space devoted to women’s issues in the media to actual salience among audience members. Finally, most feminist studies that adopted the media socialization perspective focused on media effects on children rather than on women.

Highlighting the radical approach to feminist media studies, Brown (1990/2001) explained that feminist cultural television criticism (FCTC) focuses on audiences’ meaning making of a text rather than on the production and representative elements of a text because language exists as the primary context through which meanings are differentiated and negotiated across cultural participants. As rooted in feminist and poststructuralist theories, feminist theories like FCTC assume that subjugated groups may perceive contradictions in their relationships with media, political, economic, and social systems, and that they can derive benefits from these relationships. Also, audiences of

media can maintain significant control over the way media impacts them via actively making their own meaning of the interaction and experience. Noting the contradictions of the traditional uses of content analyses in feminist media studies, radical feminist researchers employ primarily ethnographic methods, including participant observation, in-depth interviews, conversation analyses, and some content analyses.

### *Global Issues*

In more recent decades, feminist media scholarship has adopted concern for multiculturalism and global impacts. Rooted largely in postcolonial, multicultural feminist thought, writings exemplify multivocal feminisms rather than the second-wave emphasis on binary contradictions. Valdivia (1995) discussed how identity issues form and modify across different media, political, economic, and social systems around the world. An emphasis in her edited book is to deflect common attention on media consumption to media production, and to illuminate global women's roles in industries like news (e.g., Byerly, 1995), advertising (e.g., Frith, 1995), and community radio (e.g., Roth, Nelson, & David, 1995), among others. Finally, Valdivia (1995) also described limitations in doing and reporting global feminist media research because of lack of authors' technological skills to reproduce some of the works, lack of economic access to participants like publishers and recording producers, and academic restrictions for what constitutes as publishable work (i.e., how to "fit" some of the feminist artwork, music, collage, etc. into print journals).

### *Development Communication and Women*

Another contemporary feminist trend in media research that has largely been modified and popularized of late is development communication, which typically

characterizes international campaign work using the mass media to improve a community's health, safety, and economic welfare. The movement emerged in the 1940s in the United States as a technological response to the problems in rural communities and quickly moved to the international arena. The communication of development flourished in the 1960s, much with the help of the diffusion of innovations model (Vargas, 1998), and is increasingly enabled by the cost- and time-efficiency of communication technologies (Mowlana, 1985).

Critiques of development communication claimed that campaign designers neglect to properly contextualize media messages within the recipient culture (i.e., thereby imposing incongruent western political, economic, and social norms onto non-western environments) (Rogers, 1976), and that campaigners have assumed non-western consumers to be passive audiences of the media rather than active meaning makers of communication messages (Vargas, 1998). Steeves (1993) similarly advised revisions to development communication research in efforts to improve the social justice in programs by focusing on a particular segment of recipient populations: "Women's perspectives must ground development communication because women usually experience the most oppression and injustice and hence are in the best position to inform development strategies" (p. 221).

#### *Medicalization of Women's Bodies*

Medicalization refers to the process by which the medical industry takes jurisdiction over other aspects of society, and in particular, of humans' lives (Lupton, 2003). In other words, the medical industry – its jargon, its interests, its processes, its rules – pervade into realms of politics, economics, legality, society, and culture, such that

medicine redefines relationships within these realms under its terms. Based on this pattern, sociologists have conceptualized the body as a site of struggle, the medical encounter as an interaction of power, and medicine as a controlling interest behind the discourse, politics, economics, and biosociality of human culture (e.g., biopower, administration of life, technologies of the self, risk politics) (Foucault, 1977, 1978; Rose, 2001).

Clarke, Mamo, Fishman, Shim, and Fosket (2003) explained that medicalization emerged as industrialization and technology reemerged after World War II. They described the second and most recent movement of this trend – which is based on the increasing fusion of science and technology with medicine as well as the resurgence of the Internet and its tangential technologies – as *biomedicalization*. The authors asserted the difference between medicalization and biomedicalization: while both phases of this revolution explain how the self and the body are intricately intertwined with technology and science, medicalization explained how medicine impacted human lives, whereas biomedicalization explains how the bodies reconstitute and perpetuate the intricate relationships between biology, medicine, the body, and culture on a daily basis. Haraway (1997) explained this ongoing and evolving relationship explicitly in her metaphor of the *cyborg* – a person that is increasingly being transformed by the relationship between society, media, culture, politics, and medicine. The cyborg learns how its body is problematic because media portrayals, advertising, marketing, and cultural symbols (e.g., menopause as ending of productivity) commodify the body as a site of ongoing need for repair. As the self learns of these deficiencies, it concurrently learns of remedies for these deficiencies, which commercial interests (e.g., pharmaceutical companies, technology

companies, legal aid, hospitals and “heroic” doctors) can fix. Thus, the cyborg recognizes its body as problematic, understands that a fix exists, believes the fix should be applied, and seeks out the cure. In this process, however, the commercial interests inherently possess greater power than the humans, and thus, the body becomes a site of control.

Women’s bodies, in particular, have historically been a primary site of biomedicalization (Haraway, 1997; Martin, 2001; Pitts, 2005). For example, feminist scholars within the social studies of science discipline have investigated how female sexual dysfunction has emerged as a problem that is created and remedied by pharmaceutical and technology companies (Shim, 2005). Similarly, Martin’s (2001) cultural analysis of women’s meaning making of their bodies as compared to medicine’s meaning making of their bodies detailed how women’s bodies were seen as the “other,” broken version of male’s bodies.

The news media – as well as commercial media – have conglomerated reporting and framing of information about health and women’s bodies around the frame of medicalization. Kline (2003) outlined the four main ways the media have played a role in framing issues around health: *professionalization*, *moralization*, *individualization*, and *medicalization*. Professionalization portrayed by the media reflects the news value of novelty: the media highlight particular news items that are new, and in particular, sophisticated and innovative, in comparison to previous standards. Thus, an emphasis exists on new technologies, medicines, and scientific advancements. Moralization refers to the values the media integrates into the news pieces around health. For example, Kline claimed that an ethical standard that exists within the media that is pro-health in which few gray areas of negotiation are displayed. Individualization is also an impact of the

media, for a premium is placed on individual behavior and the individual changing her health situation for herself (which is reminiscent of “victim-blaming”). Individualization is also understood through a lens that communities are rarely the focus of news items. Finally, Kline described medicalization as the movement of the medical field into other parts of society.

### *Women’s Health and Media Representations*

Social scientists increasingly believe women’s health is influenced by and should therefore be understood in terms of social, economic, and political contexts, and framing research helps accomplish this understanding (Andsager & Powers, 2001). A way to comprehend the interactions of women’s health issues with multiple facets of society is to analyze the ways in which the media frame women’s health issues. The primary role of the media in the process of medicalization is through the process of framing, which explains how certain ways of reporting stories include and exclude certain pieces of information about a story. Framing consists of the selection and salience of frames (Entman, 1993).

Several studies have conducted content analyses of national newspapers, news and women’s magazines, and broadcast venues such as television soap operas and radio dramas to examine the frames employed by the media for various women’s health issues. Popular women’s health topics used in content analyses include breast cancer (Andsager & Powers, 1999; Andsager & Powers, 2001; Henderson & Kitzinger, 1999; Kolker, 2004), menopause (Hust & Andsager, 2003), breast implants (Andsager & Powers, 2001), and cervical, ovarian, and uterine cancers (Kilgore, 1996; Vardeman, 2007b). Regarding breast cancer, the following frames were found among news and women’s

magazines: coping with effects of breast cancer, personal experiences, and risk factors of breast cancer (Andsager & Powers, 2001). Henderson and Kitzinger (1999) expanded the risk factors frame with four individual risk frames: scientific discoveries, debates about testing controversies over patenting, human interest stories, and high risk families. In Kolker's (2004) study of national newspaper coverage of breast cancer funding activism, she found that the prevalent frames represented "breast cancer as an epidemic, breast cancer as a problem of gender equity, and breast cancer as a threat to families" (p. 825). In breast implants research, Andsager and Powers (2001) found that the media primarily used either the personal experiences of breast implant recipients frame or the concerns about how breast implants will impact the economics of the medical industry frame. In their content analysis of articles about menopause, Hust and Andsager (2003) observed that among women's and news magazines, a medicalization frame – which portrays menopause in terms of the symptoms of the cessation of the female reproductive system – was more often employed than was the adaptive frame, which views menopause as a stage of womanhood. In women's magazines, however, frames portraying social connections, methods to alleviate the menopausal symptoms, and the importance of communication were more likely to be used, whereas in news magazines, issues of fertility, hormone-replacement therapy, ovaries, and symptoms of menopause were more prominent.

Zoch and Turk's (1998) content analysis exclusively examined the link between journalist gender and source gender in a study of articles from three southeastern daily newspapers. Their findings provided support to Entman's (1993) proposition that journalism and media coverage is gendered in several ways: (a) women journalists used

more women sources than men sources as well as more than men journalists did (used women sources), (b) men journalists quoted sources considered in higher-ranking positions than did women journalists, and (c) women sources portrayed to not hold as many upper-level or important positions in organizations as male sources did, which may be because women managers may not be as visible and therefore accessible to the journalist. The authors concluded that women journalists were doing their parts to cite women sources, but the problem lies in the continued lack of power provided women journalists compared to men journalists.

Two studies were found that conducted content analyses to investigate how cancers of the reproductive system are portrayed in mass media (Kilgore, 1996; Vardeman, 2007b). Kilgore performed a quantitative analysis of the frequency with which cervical, ovarian, and uterine cancers were mentioned in newspaper articles. She found that based on relatively low morbidity rates of these cancers, there was a disproportionate rate of reporting these cancers in newspapers, and among the articles that covered the cancers, none of them informed readers about the causes, symptoms, prevention, and treatment of all three cancers. Themes found across the across the articles were *magic* – that scientific developments in diagnosis and treatment of these cancers were “an amazing miracle that solves an unsolvable problem” (p. 252); *moralism* around preventing behaviors (i.e., promiscuous sexual behavior) that lead to these cancers and that “violate conventional moral and religious codes and fashions” (p. 253); and *marginalization* because the medical language used in the stories may largely exclude lay readers from understanding them. In addition, there were prevalent “side issues” of

business interests (e.g., pharmaceuticals companies' success with FDA trials), environment, celebrity victims, and media victims.

Similarly, the purpose of Vardeman's (2007b) study was to discover the news frames used by popular women's magazines to report cervical cancer information. This study also explored what, if any, differences exist in the frames used for cervical cancer communication among magazines written for women of different races and ethnicities. Using the cultural theory approach as the underlying epistemology, a qualitative content analysis was used to learn how magazines read by African American, Hispanic, and white women provide a lens through which readers can understand cervical cancer. This study found five major frames used in women's popular magazines to report cervical cancer information: *consciousness-raising*, *confusion in abnormality*, *controversy*, *innovation/medicalization*, and *differences across identities*. Both studies' findings extended media framing theory because they added new frames to the range of frames around women's health news coverage as well as highlighting the contradictions in over-reporting of relatively low-incident diseases. These studies also contributed to the developing theory of women's health communication (Aldoory, 2001) into understanding better the gaps between women's understanding of cervical cancer and the ways the media position and write about cervical cancer in news stories.

#### *Women's Reception of Mediated Body Images*

Researchers have examined how women perceive the news about health topics, and what it means to them to read/see the meanings the media give to their bodies (Aldoory, 2001; Covello & Peters, 2002; Martin, 2001; Parrott & Condit, 1996; Roswell, Norris, Ryan, & Weenik 2000). For example, Covello and Peters (2002) found that

women responded with alarm, loss of credibility in the media source, and “confusion, hypervigilance, anxiety, stress, distrust of science and medicine” when the media reported contradictory information, overwhelming amounts of information, oversimplifications about disease, and/or inaccuracies about age-related diseases, including breast cancer (p. 392). They also examined how women’s personal experiences interact with media portrayals, and that unless campaign designers understand how target audiences translate risk into conceptions of their past experiences and predictions of future problems, the impact may be an overdramatization and exaggeration of the actual health problem.

Similarly, Roswell, Norris, Ryan, and Weenik (2000) found that women with breast implants did not trust the media sources and questioned the veracity of the media’s reporting on the side effects of breast implants because they felt the media had different agendas other than the women’s well-being in mind. Women were particularly discouraged from seeking help about breast implants since conflicting studies prevailed about implants – some of which were funded by implant manufacturers – and the studies did not consider what knowledge women already had about implants (Andsager & Powers, 2001). Overall, these studies found that the women perceived the media over-reported and over-exaggerated about the risks, contained conflicting information about the risks, and decontextualized women’s lives by extracting the topic of risk without understanding the women’s social, economic, cultural, and relational meanings they put to the risk.

In addition to disease, these effects of medicalization on women’s understandings, emotions, and behaviors have been investigated on many fronts. Common topics

addressed are how women make meaning of the technologies around childbirth, reproduction, and menopause (e.g., Avishai, 2007; Katz, 2003; Possamai-Inesedy, 2006); pharmaceutical use around sexuality and mental health (e.g., Blum & Stracuzzi, 2004; Lavie-Ajayi, 2005; McHugh, 2006); and women's social experiences, like domestic abuse (e.g., Noh, 2003). This body of research seeks to conduct and encourage women-centered approaches to theory and praxis, and they typically employ qualitative methods in order to elicit emic experiences of reading medicalization in various mediated contexts. Implications of such studies address improvements in reporting of health topics, shifting expectations of relationships like with men and physicians, and changes in framing by pharmaceutical companies.

Some scholars have theorized about the body, overall, as a site of medicalization. For example, Bordo (1993) explored women's physical and emotional relationships to their bodies through a feminist lens of media effects. In her collection of essays, she questioned historic binaries that have traditionally been used to categorize the female body: (a) as cultural expressions of the mind-body dualism (e.g., "the *construction* of body as something apart from the true self," original italics, p. 5); (b) women as comprising an active spirit/docile body, which she negated using evidence of women's obsessions with their bodies not "as bizarre or anomalous, but, rather, as the logical (if extreme) manifestations of anxieties and fantasies fostered by our culture" (p. 15); (c) that the women as oppressed and powerless to the (male) oppressor model is archaic – even in its initial criticisms for its simplicity and insensitivity to difference – because reading cultural mediated meanings is first to recognize that representations are homogenous, and second that "these homogenized images *normalize*—that is, they

function as models against which the self continually measures, judges, “disciplines,” and “corrects” itself,” (original italics, p. 25); and (d) that historically, women’s bodies were deemed as part of nature rather than culture, whereas in the past century, the understanding of the body has been shifted to being comprised of culture, and of late, the body is understood to be a site of intersectionality between race, class, sexuality, and gender, for “the body that we experience and conceptualize is always *mediated* by constructs, associations, images of a cultural nature” (original italics, p. 35). Bordo argued that we must oblige ourselves to learn and address the homogenized and the multiple “histories of embodied experience” or else we are likely to perpetuate the cultural dualisms that negatively influence women’s participation with their bodies.

### *Communication Campaigns*

As I will be studying a health communication campaign according to cultural meanings given to the concepts in the campaign, below I provide a framework – using extant literature on the topic – through which the campaign under study can be viewed. In this section, I define communication campaigns, delineate the concept of cultural competency within campaigns, and review criticisms around health communication campaigns based on their effectiveness as well as their cultural sensitivity. This section ends with a description of some particular campaigns designed to address teens and sexual behavior, a related health concern to the topic under study.

### *Definitions of Campaigns*

McQuail (2005) defined a campaign as “the planned attempt to influence public opinion, behaviour, attitudes and knowledge on behalf of some cause, person, institution or topic, using different media over a specific period of time” (p. 549). Similarly, Paisley

(2001) conceptualized public communication campaigns according to the objectives, methods, and reform used by the organization campaigning: a group has the objective to change the attitudes and/or behaviors of another group, using a mix of communication methods (i.e., brochures, advertisements, workshops), to make society and its individuals have a better quality of life, in some way (p. 5). Using a slightly different approach, Salmon and Atkin (2003) related the word campaign to its early use, when battles were fought on flat plains, and they use this origin to show the use of the battle lexicon in modern-day health promotion: “health ‘crusaders’”, ‘declare war’ on a particular disease, like AIDS, and health professionals enacting strategies and tactics, much like war generals do (pp. 449-450). They also highlighted Rogers and Storey’s (1987) collection of characteristics about campaigns:

... (a) a campaign is intended to generate specific outcomes or effects (b) in a relatively large number of individuals, (c) usually within a specified period of time and (d) through an organized set of communication activities. (Salmon & Atkin, 2003, p. 450)

Finally, campaigns are partially defined by their use of mass mediated techniques (Vargas, 1998). Campaigns involve mass media communication because these forms of communication are efficient and cheaper to implement, and with the increasing movement of mass media communication technologies, campaigns can be implemented more easily than ever internationally from a single geographical point, miles away (McQuail, 2005).

*Cultural Competency*

Communication messages are built from cultural icons, symbols, and language, and adapting health behavior messages to fit into culturally-specific contexts for diverse groups has become a fundamental consideration in health interventions (Ford & Yep, 2003). Campaign designers have learned that achieving an effective level of cultural competency requires significant research into the meanings individuals and groups place on their relationships, situations, and environments. Thus, campaign designers must understand the depth of these meanings and avoid imposing white, western, patriarchal, middle-class values and practices on disparate peoples (Diaz, 1998, as cited by Ford & Yep, 2003; Dutta, 2007; Edgar, Freimuth, & Hammond, 2003). Furthermore, maintaining cultural competency has become an ethical issue because environmental changes pressure communicators to constantly reevaluate the appropriateness of their messages, campaigns, and tactics for each audience (Guttman, 2003).

To this point, Lupton (1994) and Aldoory (2001) have argued that culture is often narrowly defined for campaigns, such that cultural symbols, languages, and meanings may be misunderstood in the transformation of the code from the culture to the campaigner then back to the culture. An example of this is when a campaign's materials (e.g., brochures, fact sheets) are written for the "general public" in English, then translated into Spanish, thereby assuming (a) that the only cultural consideration for Latinos is that they read Spanish rather than English, and (b) that they are the "other" to the non-Latino "general public." One common result when campaigns cross cultural boundaries is that those in the culture-to-be-changed feel campaigners are "talking down to them," and, thus, they reject the messages (see Vardeman, 2005).

Achieving “cultural sensitivity” involves conducting formative research to find out what the cultural symbols, languages, icons, relationships, and meanings a group creates and holds about a phenomenon. Then, strategies, tactics, and messages are built using these cultural meanings in order to be more persuasive via familiarity, trust, etc. (Ford & Yep, 2003). Critics of campaign work argue that it is unethical and condescending for one group to tell another group how to live, particularly when using invasive research and manipulated cultural meanings to coerce members into believing an attitude or behavior that is not natural to that group (Guttman, 2003). Critics believe change should come from intra-group rather than from an outsider force that may have their own ultimate agenda driving the project rather than the indigenous group’s best interest (Parrott & Steiner, 2003). For example, Fine, Weis, Weseen, and Wong (2003) proposed that researchers and educators should “work-the-hyphen” that separates researcher/communicator from participant/consumer using critical dialogue, co-creation, and shared meanings. Other critics believe that some campaigns encourage legitimate causes – such as developing a region to be more economically viable or encouraging a population to change a behavior in order to slow the spread of a health epidemic (Huesca, 2001; Moemeka, 2000; Rogers, 1976; Servaes, 1999). However, these critics argue that campaign designers should assume responsible communication practices as well as let the indigenous group create change for and within themselves (Guttman, 2003; Salmon, 1990).

### *Critique*

Criticisms of communication campaigns have largely emerged because of the demonstrated low effect sizes of interventions and campaigns, based on the initial goals

of campaigns. Snyder (2001) conducted a meta-analysis of more than 40 health communication campaigns which employed a mix of mass media and interpersonal venues to disseminate some health innovation message. She found that across the campaigns, an average of 7-10% of participants in the treatment changed their behaviors toward the suggested innovation more than those participants did in the control groups. Furthermore, of those participants that changed within the treatment groups, 12% of them were from groups that adopted behaviors, and 5% of them were from groups that ceased existing behaviors.

The overall effect size of the campaign seems small, but some social psychological and persuasion research has explained some of the reasons campaigns may not have large effect sizes, which helps explain why some persuasive attempts do not work. For example, there have been discussions around which types of appeals work best in campaign message design, such as fear, anger, guilt, happiness/warmth, humor, etc. Fear has been largely studied, and there seems to be a complicated answer as to the extent to which fear works in motivating individuals to change behaviors (Witte, 1992). Witte found that fear works in persuading people, but only to an extent (which is illustrated graphically as a curvilinear relationship between amount of fear in a message and the amount the participant was persuaded); if too much fear is instigated from messages, participants may actually act in the opposite way that the persuasive message suggests (i.e., by “turning off” attention paid to the message). Campaign designers thus attempt to determine the precise level of fear that instigates various audiences into action.

Another debate applicable to health communication that may impact campaign effect sizes is the relationship between emotions and attitudes, and the effects these two

entities have on persuasability of messages. The traditional belief was that emotions came after cognitions and attitudes, but Zajonc's (1980) research showed that emotion was primary in the sequence after an input, followed by attitude formation. Furthermore, Mitchell, Brown, Morris-Villagran, and Villagran (2001) showed a connection between mood and persuasion, that people who are in happy moods are able to centrally process a message but that they are not motivated to. Finally, Liska (1975) highlighted a primary criterion for persuasion in the proposal of the attitude-behavior inconsistency. It was previously understood that attitude change could directly indicate the amount of behavior change; instead, it was later proposed and accepted that behavioral intentions mediate attitudes and behaviors (Fishbein & Ajzen, 1975).

The actual evaluation of campaigns is a problematic site of campaign effectiveness. Because of logistical barriers in observation, privacy, and longevity of the study, many behaviors suggested in health campaigns are hard to measure, such as whether people actually quit smoking or ask their doctors about contraception. Some researchers have tried to conduct longitudinal studies in which researchers follow-up with participants at certain points after the intervention/treatment, but many participants drop out of the study or the effects of the intervention fade after only a short time (Rice & Atkin, 2001). To negotiate some of these logistical constraints, campaign evaluators ask participants about intentions to behave (e.g., how much do you believe you will not have a cigarette in the next day?) to evaluate the effectiveness of the campaign. However, research has also shown that behavioral intentions do not necessarily translate into actual behavior change (Liska, 1975).

Furthermore, conceptualizations and operationalizations of attitudes can be complicated in a number of ways. That is, researchers and participants can have different definitions of concepts that may be studied in the campaign (e.g., culture), and thus, these different conceptualizations could lead to rejection of messages by participants (Liska, 1975). Finally, participants may believe the experimental setting/procedures employed by the campaign to be “play-like,” and therefore, they may not take the messages and procedures (e.g., answering the survey) seriously. Communicators must consider all of these theoretical and methodological barriers within persuasion campaigns when designing a campaign, campaign messages, and studies to evaluate the effectiveness of the campaign (i.e., knowledge, attitude, behavioral intention, or behavior change).

Other criticisms have arisen because cultural, feminist, and rhetorical scholars have examined power differentials between organizations implementing campaigns and publics as targets of campaigns, and have suggested areas that need improvement in terms of equalizing how and what messages are sent to consumers. One of the most prominent scholars who has critiqued health communication research is Lupton (1994; 2003). Lupton (1994) discussed several reasons why health campaigns are problematic. First, most campaigns continue to rely on the individual-blame bias rather than examining the environmental contexts by which some groups of society are systematically denied the skills or resources to improve their situations because of intersecting, multiple oppressions (Zinn & Dill, 1996). For example, Lupton argued that blame is often attributed to African American teen girls from low-income areas for getting pregnant because they did not use contraception and are believed to be more promiscuous than other groups of girls in society. Instead, campaigns should examine the

social, political, and economic factors that (a) may be at work to perpetuate racist stereotypes about African American's sexuality, (b) keep campaigners scared of going into low-income, racially segregated areas in order to distribute information about contraception to these girls, and (c) deny administrative resources and support to legislators and policy-makers who are trying to make programs designed specifically to get education, access, and resources to these groups. Lupton (1994) also discussed power relations. Two different entities exist in a campaign relationship: those from a more powerful position of the campaigner/interventionist (with education, access, money, information, authoritative and influential relationships, etc.), and those from a group that "needs changing" (who is assumed by campaigners to be ignorant, "don't know what's good for them," and often may come from less privileged geographic areas and social environments).

Wallack, Dorfman, Jernigan, and Themba (1993) termed the "mass media fantasy," that campaigners can just put the message "out there," and the public will receive it and change their behaviors accordingly. Research has investigated this link and found that before behaviors change, people must intend to change; before they intend to change, they must have attitudes to support that change; before their attitudes support that change, they should be exposed to the idea of change and have knowledge around the change. Furthermore, just because the message is put out into a medium does not mean that anyone (a) saw it, (b) then paid attention to it, and (c) then was motivated to change, based on that message. Thus, Lupton (1994) highlighted several steps in the dissemination and campaign process that are socially, politically, methodologically, and ethically problematic.

*Knowledge production within communication campaigns.* In order to provide an introduction to the considerations of subjective information production, risk segmentation, and health education from a critical communication perspective, I will outline two major contributors' arguments: Rakow (1989) and Salmon (1990). Rakow and Salmon discussed the social effects when a more powerful group – like an organization – implements a change campaign among a less powerful group, which manifests in the more powerful group handing down to the change group a version of reality that is only one version and that may not be one that resonates or fits into the changing culture's reality at all.

Rakow (1989) suggested that social scientists – in their design of information campaigns – do not appropriately identify with the cultural assumptions they inject into their research and campaigns; thus campaigns for public consumption tend to be based on knowledge as understood and produced by the institution for the ultimately exclusive benefit of the organization sponsoring the research and campaign. Specifically, as “information campaigns arise out of a particular configuration of social relations in this country which gives institutional power over individuals” (p. 164), institutions will segment publics and produce campaigns in order to sell their commodity to the publics, and individuals “get the definitions of reality, the particular conceptions of the world, that the organizations are willing to provide to them” (p. 178). Rakow proposed a “new communication model to recover public participation” (p. 180) in which “we might envision the public at the center of activity, directing the action of institutions... [and in which publics] are in a position to ‘name the world’ in consort with each other” so that dialogue rather than monologue is possible (pp. 178-179).

In discussing the role of communicators and politicians in promoting self-serving issues in the marketplace of ideas, Salmon (1990) argued that the good of the public is used as either the motivation for improving some “social situation” for the general public or for self-serving interests:

Communicators treat issues as malleable raw materials that can be molded, forged and marketed to maximize the likelihood that the mass media will grant their cause legitimate; and in turn, that individuals will engage in some behavior desired by the advocate/sponsor of the message. To the extent that the marketing of issues constitutes a form of manipulation, it seems to be benign. After all, the argument goes, isn't it in society's interest that problems be rectified? (Salmon, 1990, pp. 24-25).

Salmon (1990) further pointed out that producers of socially-healing information campaigns are often directed by a handful of perspectives that limit the freedoms of those considered deviant or in high risk groups (p. 25). Media and organizational advocates typically construct messages to target segments at risk that say, “individuals are doing something wrong and they had to be ‘educated’ in order to be saved” (p. 27). Salmon suggested that instead of blaming individuals and imposing colonialist behavior change upon individuals, fundamental societal structural change can be the goal. Tactics used in benevolent manipulation include celebrity spokespeople and the use of cultural and social symbols (Salmon, 1990). In order to validate arguments to the media, advocacy organizations will often use supportive statistics from studies they have funded.

*Campaigns for Girls and Sexual Behavior*

A number of health interventions have been conducted to educate teen girls about STI prevention, such as through interventions like *Gonorrhea Community Action Project: Check Out That Body* (VanDevanter, Messeri, Middlestadt, Bleakley, Merzel, Hogben, et al., 2005), *Greater Options for Adolescents Lives* (Hacker, Brown, Cabral, & Dodds, 2005), and *All4You!* (Coyle, Kirby, Robin, Banspach, Baumler, & Glassman, 2006; Denner, Coyle, Robin, & Banspach, 2005). Abstinence has also been promoted as ways to prevent teen pregnancy through interventions such as *Baby Think It Over* (de Anda, 2006) and *Project AIM: Adult Identity Mentoring* (Clark, Miller, Nagy, Avery, Roth, Liddon, et al., 2005). Finally, some interventions have addressed teen dating violence, such as *Ending the Violence* (Jaycox, McCaffrey, Eiseman, Aronoff, Shelley, Collins, et al., 2006).

A search through teen-related literature produced little in terms of guides for talking to teens about sexual health and ways to prevent teens from experiencing anxiety during interviews. However, the literature on teens' campaigns, teens' usage of media, teens' learning of sex through sex, and counseling of teens provided some insight into communicating with teens about sexual health using appropriate levels of disclosure and description. For example, one article discussing strategies for counseling adolescents provided specific steps for in eating healthfully (Sigman-Grant, 2002). Despite the unrelated topic, the article provided useful guidelines in talking to teens, such as "build the group from within, establish ground rules, ask open-ended questions, encourage full participation, focus the conversation, correct misconceptions artfully, support an environment that accepts each person and all ideas, summarize the discussion, be patient, [and] have fun" (p. S37). Furthermore, although these counseling strategies promoted

existing eating behaviors that teens wanted to change, the author also provided useful sample questions to tap into behavior change factors such as *problem-recognition* (e.g., “What are the things that make you think this is a problem?”), *concerns* (e.g., What worries you about your food choices?”), *intent to change* (e.g., “What makes you think that you may need to make a change?”), and *optimism* (e.g., What do you think would work for you if you decided to change?) (p. S38).

Similarly, in an article reporting social cognitions associated with pubertal adolescents among urban, girls of color (O’Sullivan, Meyer-Bahlburg, & Watkins, 2000), the authors detailed their questioning, informed consent, and confidentiality processes, which provided useful information as to how to handle certain potentially sensitive situations. For example, instead of asking the 10-13 year old participants about their personal sexual activity status, the authors asked them to describe actions performed and attitudes their female peers held around sex. Also, in the informed consent process, the authors assured the girls that although their mothers were also participating in the study, they would not have access to tapes or transcripts of their daughter’s words.

Teen health studies have also investigated how teens feel and talk about sex. For example, one intervention studied the impact of comfortable conversations about sex on factors such as age of sexual onset and intentions to delay intercourse among Latino adolescents (Guzmán, Schlehoffer-Sutton, Dello Stritto, Casad, & Feria, 2003). Their evaluations showed that daughters were more likely to feel comfortable talking with their mothers about sex, that a direct relationship exists between comfortable sex conversations and abstinence, and that communication with non-parents increases teens’ risk for early pregnancy or STI contraction.

It is also important to understand the overall perceptions and feelings teens have about sex. For example, in the Pennsylvania Coalition to Prevent Teen Pregnancy forum in which teens were invited to participate to discuss the climate of how teens understand various sexual health topics, the key findings from the conference included that teens are more likely to talk to their friends than their parents about sex; “school sexuality education programs were judged by teens to be highly inadequate, irrelevant, and ‘too little, too late’” (p. 176); stigma around sex was typically reserved for those who had multiple sex partners, and talk around these people was “more derogatory for females than for males” (p. 176); girls and boys perceived contraception as the girl’s responsibility; girls experienced significant pressure to be thin and wear certain clothes; and although teens felt they were barraged with media about sex, their actions were not influenced by the media portrayals they received (Fay & Yanoff, 2000). Similarly, in a content analysis to learn what topics teen sought information about from two health bulletin boards, researchers found that teens most frequently asked questions about “their changing physical, emotional, and social selves,” romantic issues, and sexual health, particularly around pregnancy/birth control, interpersonal issues of sexuality, and sex-related techniques (Suzuki & Calzo, 2004).

Several studies also provided areas for future research as well as techniques for communicators developing messages or interventions for teen girls around sexual health topics. Techniques for sexuality educators included engaging teens in experiential exercises, real-life stories, and case studies; providing tips to teens about how to utilize health care resources as ways to get their questions answered; and reminding teens of these lessons around times when high-risk sexual behavior occurs (such as prom nights,

spring break, etc.) (Flowers-Coulson, Kushner, & Bankowski, 2000). Future research suggested for examining teens' use of media include deeper understandings of teens' sexual media diets, particularly around new media and digital technologies (Brown, 2000) as well as conducting research under the assumptions that "media are a dominate and influential activity of childhood and adolescence and in increasingly important force in the culture...youth are active media consumers who choose, interpret, and apply media in a variety of ways...and media are increasingly interactive and multisensory" (Brown & Cantor, 2000, pp. 2-3). Brown and Witherspoon (2002) also provide broad remedies for "helping turn the media into more positive forces for adolescents' health" (p. 153) through programs that address government and industry self-regulation; public health campaigns that focus on raising awareness, information seeking, and enhancing knowledge; media advocacy to refocus public health debates away from the individual blame bias to more systematic change; entertainment-education using embedded health messages to reach teens; and improving media literacy to teach teens about such media processes as symbolism and relationships media form with political and economic interests with potentially conflicting interests with teens' health.

#### *Theories of Body Knowledge Production*

Critical and cultural studies emerged as devices to deconstruct how science is used as an apparatus to maintain control over social and individual bodies (see Foucault, 1978). Methodologically, feminist social scientific studies use cultural studies methods such as ethnography, textual analysis, and archival research in order to highlight the normalization of and segmentation based upon "natural differences among human groups according to race, gender, and sexuality" (Hess, 1997, p. 115). As a boundary object

between science, culture, and technology and nature, Mamo and Fishman (2001) argue that the human body is a site where knowledge is produced differentially across types of bodies, and that the knowledges produced about bodies further complicate power relations. A variety of theories comprise this assumption, and I will review the theories of biopower and risk politics; commodification; and marketing race to inform the analysis of this study.

### *Biopower and Risk Politics*

Foucault's *History of Sexuality: Right of Death and Power over Life* (1978) introduced biopower in a modern, western system within which governments administer a number of intellectual and physical technologies upon citizens in order to preserve the health of the sovereign state. These technologies are used to control the lives of the populace such that an ending of life (e.g., disease, suicide, violence, famine, waste, etc.) is a threat to the sovereign body's existence and capital/production. As a necessarily concomitant process with capitalism, biopower prospers on the government's "controlled insertion of bodies into the machinery of production and the adjustment of the phenomenon of population to economic processes" (p. 141), succeeding primarily from the exploitation of the docility and reliance of the masses on the government's resources. This asymmetrical sociopolitical relationship – what Foucault dubbed "the administration of life" – evinces patent contradictions in some of the social disciplining and punishment technologies produced (e.g., the death penalty, the threat and power of suicide) as well as in the systematic segregation of certain bodies based on various threats to hegemony (e.g., sick and disabled bodies) (Foucault, 1977).

Although Foucault (1978) pointed to developments made centuries ago but which still socially apply today, Rose (2001) argued that the governance of life via discipline and surveillance has shifted from a collective effort to individual, organizational, and community levels. Specifically, in order to more deeply engage the populace and release the government of part of its financial burden of wholly disciplining the populace's varied lifestyles and health choices via constant surveillance, information about the body and risk are used to constitute "technologies of the self" so that consumers will self-govern their lifestyles (Foucault, 1977; 1978). Rose (2001) argued that "informed public health" is euphemistic for contemporary eugenics:

...[the] idea of activism in relation to one's biomedical condition becomes a norm...[the citizen is] to live his or her life through acts of calculation and choice...about current illness, but also about susceptibilities and predispositions...obliged to take appropriate steps, such as adjusting diet, lifestyle and habits in the name of the minimization of illness and the maximisation of health. (Rose & Novas, 2003, p. 22)

### *Commodification*

Clarke et al. (2003) and Rose and Novas (2003) addressed the perceived relationship among the selling, sponsoring, marketing/promoting, and tailoring of research to specific interests' needs across the sponsor, producer, and users of the research (Mamo & Fishman, 2001). For example, a study of the relationships between pharmaceutical companies, government regulation agencies, and academic researchers found that "researchers thus contribute to the commodification of new drugs and

diseases, while promoting and marketing their own medical expertise and legitimacy,” (Fishman, 2004, p. 188).

Explicit commodification practices exist among the ways in which multidirectional, multi-sited technologies are produced and promoted, like in the “infomercial as education” model, which Fishman (2004) claimed blurs the lines of education and commerce (p. 200); the use of Bob Dole as the celebrity spokesperson of Viagra to highlight traditional masculine sexual values and identity (Mamo & Fishman, 2001); and marketing racial difference (Mamo & Fishman, 2001; Shim, 2005) in racializing the Viagra user via perfunctorily incorporating diversity by portraying same-race couples but excluding mixed-race couples (Mamo & Fishman, 2001). The commodification of these new relationships between potential consumers, for-profit biomedical companies, biomedical researchers, and media technologies further sullies who gets to claim knowledge as veritable, although these relationships are “built on an assumed need for patients to become knowledgeable consumers in the marketplace” (Fishman, 2004, p. 208).

### *Marketing Race*

Race as a particular social construction of identity has been argued to be commodified in biomedical industries (Haraway, 1997; Mamo & Fishman, 2001; Shim, 2005). In the making and marketing of race, details of how race functions in the public discourse and across multiple communications reveal disconnects in perception, reception, and application. Problems such as stereotyping, profiling, other-ascribing instead of self-avowal, and systematic marginalization perpetuate the “errors” (Whitehead, 1929) of assuming social and cultural purity across genetics and biology. To

this point, Haraway hinted that, “in these zones, uninvited associations and dissociations are sure to undo one’s sense of the self same, which is always neatly pre-labeled to forestall moral, epistemological, and political scrutiny” (p. 215). Because of these crossed dis-associations of identity, ways of knowing are further racialized and thus privileged or marginalized among scientific and untrained understanding.

### *Cervical Cancer Interventions*

#### *Methodological Patterns*

Although the majority of cancer interventions aimed at women promote breast cancer prevention and screening, a sizable amount of studies have reviewed the extent of awareness, knowledge, screening, and follow-up behaviors of women. However, the literature reflects several demographic and methodological trends. First, the cervical cancer screening interventions and awareness surveys are focused exclusively toward women of color and mostly toward women of low income and of ages 40 and older, and the studies largely eliminate White women and women from racial and ethnic backgrounds other than African American and Hispanic women. As women from minority groups and women with low incomes tend to be at higher risk for cervical cancer because of lack of education about detection methods combined with lack of insurance or money to pay for the tests (Suarez et al., 1993), the majority of studies focused primarily on Latinas and specifically, Mexican-American women (Byrd, Chavez, & Wilson, 2007; Ell, Vourlekis, Muderspach, Nissly, Padgett, Pineda et al., 2002; Fernandez-Esquer, Espinoza, Torres, Ramirez, & McAlister, 2003; Goel, Wee, McCarthy, Davis, Ngo-Metzger, & Phillips, 2003; Harmon, Castro, & Coe, 1996; Hunt, de Voogd, Soucy, & Longworth, 2002; Ramirez & McAlister, 1988; Ramirez, Suarez,

McAlister, Villarreal, Trapido, Talavera, et al., 2000; Ramirez, Villarreal, McAlister, Gallion, Suarez, & Gomez, 1999; Suarez, Lloyd, Weiss, Rainbolt, & Pulley, 1994; Suarez et al., 1993; Wu, Black, & Markides, 2001; Yancey, Tanjasiri, Klein, & Tunder, 1995) as well as African American women (Dignan, Bahnson, Sharp, Beal, Smith, & Michielutte, 1991; Dignan, Michielutte, Jones-Lightly, & Bahnson, 1994; Dignan, Michielutte, Wells et al., 1994; Matthews, Berrios, Darnell, & Calhoun, 2006; Michielutte, Dignan, Bahnson, & Wells, 1994; Paskett, Tatum, D'Agostino, Jr., Rushing, Velez, Michielutte et al., 1999; Suarez et al., 1994; Yancey et al., 1995). Relatively few studies investigated cervical cancer knowledge and screening behaviors among other racial and ethnic groups of women, such as Chinese, Japanese, Vietnamese, and Korean American women (Fang, Ma, Tan, & Chi, 2007; Lee-Lin & Menon, 2005; Mock, McPhee, Nguyen, Wong, Doan, Lai et al., 2007).

In addition to promoting cervical cancer knowledge, prevention, and detection, cervical cancer studies to date mostly examined one or multiple aspects of cervical cancer interventions: (a) surveying the extent of knowledge and awareness of cervical cancer (Dignan et al., 1991; Dignan, Michielutte, Wells et al., 1994; Harmon et al., 1996); (b) measuring the extent to which certain populations have ever had a Pap test or to understand general screening behaviors (Fang et al., 2007; Fernandez-Esquer et al., 2003; Goel et al., 2003; Harmon et al., 1996; Lee-Lin & Menon, 2005; Mock et al., 2007; Paskett et al., 1999; Suarez et al., 1994; Suarez et al., 1993; Wu et al., 2001; Yancey et al., 1995); and (c) appraising follow-up screening behaviors after receiving abnormal Pap smears (Ell et al., 2002; Hunt et al., 2002; Michielutte et al., 1994). The majority of the studies used quantitative survey methodology to obtain data, although some studies used

qualitative interviews to explore constraints women face in obtaining Pap tests and following-up on abnormal Pap tests (Byrd et al., 2007; Dignan et al., 1991; Hunt et al., 2002; Matthews et al., 2006; Suarez et al., 1993), observational methodology to evaluate factors contributing to successful follow-up behaviors (Ell et al., 2002), and quantitative content analysis to assess the number of articles relating tobacco use to cervical cancer incidence in popular African American media (Hoffman-Goetz, Gerlach, Marino, & Mills, 1997).

#### *Landmark Interventions Programs*

Overall, cervical cancer interventions have seen an increase in cervical cancer prevention and detection behaviors in minority populations. One major intervention, the Forsyth County Cervical Cancer Prevention Project (FoCaS), aimed at African American women in Forsyth County, North Carolina, used a combination of quasi-experimental methods, surveys, monitoring of media coverage, and field qualitative interviews to improve screening rates and understand women's barriers to screening. Their intervention discovered that awareness of cervical cancer increased in all mass media except for newspapers (Dignan et al., 1991), that a combination of mass media awareness and direct education programs are an appropriate mix of techniques to increase awareness (Dignan, Michielutte, Wells et al., 1994), and that lack of awareness and lack of health care access are reasons women do not follow-up on abnormal Pap tests (Michielutte et al., 1994). Finally, the authors attributed the success of the increased screenings in the intervention city to the multi-theoretical framework used along with the combined tactical approach of mass media, interpersonal education, community involvement, and clinic-based needs assessment that were tailored to the unique needs of the city (Paskett et al., 1999).

Similarly, the *Su Salud, Su Vida* intervention program, targeted primarily to Mexican women and Mexican-American women in southern regions of Texas, found increased rates of screening for breast cancer and cervical cancer. One survey found that women younger than 40 years old had more information about cervical cancer because they were the ones to be more involved in family planning and other reproductive health issues, whereas older women were more likely to learn about cervical cancer from their doctors, although they did not necessarily visit their doctors as often (Fernandez-Esquer et al., 2003). These authors suggested that future cervical cancer interventions focus on women according to their age segments. Likewise, Suarez et al. (1993) conducted a baseline survey on the influence of social networks on women's screening rates, and the authors recommended that communicators use social networks to send messages about prevention and screening. Finally, the researchers also examined barriers to screening and found that modeling and use of interpersonal networks provide effective, low-cost interventions because they address the primary constraint women face in obtaining Pap tests, cost (Suarez et al., 1993).

#### *Relevant Findings*

A number of studies have examined whether mass media techniques would be effective in promoting cervical cancer among certain female populations. The interventions using mass mediated materials such as television public service announcements (PSAs), radio interviews (both in English and Spanish), posters, pamphlets, newsletters, public bus advertisements, newspapers, and culturally sensitive videos played in physicians' waiting rooms showed increased cervical cancer screening behavior among women targeted (Dignan et al., 1991; Dignan, Michielutte, Wells et al.,

1994; Fernandez-Esquer et al., 2003; Paskett et al., 1999; Yancey et al., 1995). Materials portraying models similar to the targeted populations were found to be more effective in increasing women's self-efficacy and motivation to obtain Pap tests (Paskett et al., 1999; Suarez et al., 1994; Suarez et al., 1993).

Several studies also tested interpersonal communication tactics for their effectiveness in increasing Pap screenings (e.g., Mock et al., 2007). A few studies analyzed the interpersonal networks in which women participated. For example, in the local health intervention in regions of south Texas called *Su Salud, Su Vida* targeted primarily at Mexican-American women and some African American women for increasing cervical and breast cancers screening techniques, Suarez et al. (1993) found a linear relationship between the size of the social network and the rate of Pap and mammogram screening; thus, the authors implied that the size of social networks, the frequency of contact, and the types of activities may increase screening among minority populations. In the same *Su Salud, Su Vida* study, Suarez et al. (1993) used social learning theory and the diffusion of innovations theory to build networks throughout the participating communities by recruiting volunteers to be trained to model to women how to get screened. Both participating communities increased in screenings. Other interventions focusing on interpersonal communication used interpersonal education programs in health clinics (Michielutte et al., 1994) and combined interpersonal approaches, such as the SAFe (Screening Adherence Follow-up) model which merges health education, individual counseling, and systems navigation (Ell et al., 2002). Finally, although not an intervention, Williams (1996) reviewed medical literature associated with cervical, ovarian, and uterine cancers and found that the psychological consequences of

these cancers addressed perceptions of social support and coping with cancer, experience of the woman's family, sexual implications, death and dying, and recovery.

### *Vaccination*

In 1986, Congress passed the National Childhood Vaccine Injury Act (NCVIA) to reduce vaccine manufacturer liabilities in the event of vaccine injuries (42 U.S.C. §§ 300aa-1 to 300aa-34). Other provisions in the NCVIA were the establishment of the National Vaccine Injury Compensation Program, which maintains a claims procedure for vaccine injury claims; the Vaccine Adverse Event Reporting System, to which health care providers must report any injuries due to vaccines; the National Vaccine Program Office, which is part of the U.S. Department of Health and Human Services and coordinates with the Food and Drug Administration, the National Institutes of Health, and the Centers for Disease Control and Prevention; and Vaccine Information Statements (VISs), which are documents that discuss the benefits and risks of each vaccine that are given to parents during a vaccination (U.S. National Vaccine Program Office, 2007).

Policymakers require specific types of information in order to agree with supporting policy for new vaccines. Public health policy makers include “legislators, ministry of health and ministry of finance officials, leaders of medical/health professional associations, and [in the case of cervical cancer policy] cancer/health institutes, and influential NGOs and women's health advocates” (Sherris, et al., 2006, p. 212). When advocates around a particular disease or vaccine approach policy-makers for support for the new medical intervention, they should realize that these policy-makers typically are not experts in that particular disease or vaccine. Therefore, communicators' and campaigners' roles are to provide up-to-date, accurate, clear information about the new

disease and vaccination, according to policy-makers' unique jurisdictions, levels of interest, and awareness that disease area (Sherris et al., 2006).

One of the provisions of the NCVIA federally mandated that health care providers share vaccination information with parents, using the Vaccine Information Statements (VIS), which are fact sheets that discuss both the benefits and risks of vaccinations at the time vaccinations are offered to children during a medical encounter (Sherris et al., 2006). The VISs do not require a parent's signature, although they are not meant to substitute informed consent (Ball et al., 1998; Davis, Fredrickson, Bocchini, Arnold, Green, Humiston et al., 2002; Stinchfield, 2001). In a series of studies evaluating the extent to which the VIS are used in medical encounters, Davis et al. (2001) found that 1 in 3 pediatricians do not give the VISs to parents, although there was a high observed compliance with VIS communication in public health clinics (Davis, Fredrickson, Kennen, Arnold, Shoup, Sugar, et al., 2004). The studies also found that the National Injury Compensation Program – another provision of the NCVIA – was not mentioned within any of the medical encounters observed (Davis et al., 2004). To improve this situation, Davis et al. (2001) performed interventions among health care providers to improve VIS usage. Employing an “Immunization Education Package,” which provides a poster in exam rooms titled “7 Questions Parents Need to Ask about Baby Shots” as well as ready-to-use materials to facilitate discussion about the VIS, Davis et al. (2002) observed improved communication around the VISs and other provisions of the NCVIA.

However, although there have been limited studies and interventions within the medical encounter to improve vaccine risk communication with publics, health care practitioners – particularly pediatricians – largely carry the burden of evaluating and

enforcing the ethics of informed consent, particularly when using the VISs. To make truly informed decisions, parents and teens need information that vaccines exist, why they are important, the limitations of vaccines, and what vaccines will *not* protect against (Sherris et al., 2006), and the medical encounter is the primary place for this interpersonal interaction to occur. Furthermore, as doctors and other health care practitioners are typically viewed as a highly trusted source for health information by patients, and providers often serve as advisors to policy-makers, health care providers are an extremely important group with which vaccine advocates should communicate (Sherris et al., 2006).

Ball et al. (1998) explained that with the options of immunization come the need to consider vaccine risk communication in a number of ways. These consist of *reasons* why convincing parents to vaccinate is challenging; *influences* over perceptions; *heuristics* that aid in vaccine decision-making; and *strategies* for effectively communicating with parents during a vaccine medical encounter. First, the authors delineated that the *reasons* why vaccine persuasion is difficult, which include a lack of disease awareness; belief that what follows immunization must have been caused by the vaccine; adverse effects associated with vaccines lack a clear causal relationship or data around possible interactions; disagreement among experts about the interpretation of data about vaccine and adverse effects; the media's sensational and over-reporting on controversial topics within the vaccination industry (Ball et al., 1998; Stinchfield, 2001); and new technologies in public health are typically difficult to understand, so introducing them takes significant education to reduce misunderstanding and misinformation due to (inevitable) conflicting information (Sherris et al., 2006). Finally, vaccines are a problematic communication encounter because when talking to parents about vaccines,

there is the “inherent tension between protecting public health and allowing individuals autonomy” (p. 454).

Ball et al. (1998) also described the numerous *influences* over perceptions of immunization: (a) that parents often make vaccination decisions within broader religious, personal, and cultural contexts; (b) voluntary, controllable risks are perceived differently than involuntary risks, such that “some parents may not accept vaccination recommendations because they perceive control over events in ways not recognized by the pediatrician” (p. 455); (c) man-made risks are generally less acceptable than natural risks, and the acceptability of risks considers what the risk incites; (d) perceived control, perceived susceptibility, and perceived severity of the risk influence whether a parent is willing to accept the risk; and (e) message framing – that is, whether the communication emphasizes the potential costs or the potential benefits of vaccination – has an impact on vaccination decisions, such that for questioning parents, risk and disease prevention may be a more effective frame than emphasizing the benefits of vaccination.

*Heuristics* also play a significant role in how parents make vaccination decisions (Ball et al., 1998). Humans often rely on heuristics – or cues – to provide mental shortcuts to decision-making around health issues. Thus, these mental cues related to vaccination decisions are: (a) compression, which is overestimating the incidence of rare risks or underestimating the occurrence of common risks; (b) availability of memories or information about a risk can lead to compression; (c) omission bias, which represents the belief that inaction will have less adverse consequences than action; (d) ambiguity avoidance, in which individuals focus more attention on common or known risks than

vague risks; and (e) freeloading, in which individuals trust they are safe in areas with high immunization rates because they have “herd immunity” (p. 456).

*Strategies* for communicating with parents about vaccines include communicating existing knowledge, recognizing parental perceptions and addressing vaccine heuristics, acknowledging potential problems with the vaccine, and engaging individuals appropriately in dialogue, particularly during the medical encounter with the pediatrician (Ball et al., 1998). The authors also indicated that vaccine communication will be problematic for practitioners at public health clinics – where about half of vaccines are administered in the United States – because these providers are often not trained with the communication skills required in this context, and that new vaccines will make difficult an “already full immunization schedule and may complicate risk communication efforts” (p. 457).

#### *Gardasil, the HPV Vaccine*

Specifically for cervical cancer vaccine policy, one group, PATH, conducted a study (2005) in which policy-makers from 12 developing countries were asked about their perceptions of the importance of a cervical cancer vaccine. The policy-makers reported they generally viewed a cervical cancer vaccine as important and said that technical information about the topic is vital in passing any policy around it (Sherris et al., 2006). Technical information used in policymaking decisions around cervical cancer vaccination include: natural history of HPV and cervical cancer; the burden of HPV and cervical cancer as well as health disparities; health outcomes and cost-effectiveness estimated (particularly in comparison with the costs to screen and treat those currently suffering from or at risk for cervical cancer); potential interactions and outcomes of the

HPV vaccine with current cervical cancer prevention and treatment interventions; rationale for choice of target group for intervention; and analysis of supply, demand, and affordability of the vaccine. Overall, policy-makers examine what are the costs and benefits ratios of prevention via immunization versus of screening and treatment of current at-risk or cervical cancer sufferers (Sherris et al., 2006, p. 213).

Little is known about how a cervical cancer vaccine will impact different women, particularly among vulnerable populations in developing countries. Additionally, governmental suggestions for vaccination can be complicated when the vaccine may have different benefits for different publics. For example, Gardasil may have different levels of effectiveness between sexually active girls/women versus non-sexually active girls/women, as well as between boys versus girls. Furthermore, as uncertainties remain about the efficacy and adequacy of long-term protection from the vaccine, cervical cancer screening continues, as the vaccine only prevents two strains of cervical cancer. These ambiguities and gaps in epidemiological and clinical knowledge impact not only the way policy is made but also the long-term cost effectiveness of the vaccine (Sherris et al., 2006).

*Communicating Gardasil.* Several communication challenges exist among health care practitioners around HPV vaccination. For one, health care practitioners may not be particularly trained to conduct persuasion communication, nor are they always able to keep current on the masses of data that are produced about rising rates of and interventions around HPV (Ball et al., 1998; Sherris et al., 2006; Stinchfield, 2001; Stoto et al., 1998). As a result, providers often do not have up-to-date information about new vaccines – such as that with the cervical cancer vaccine, as confusion subsists among

practitioners about the links among genital warts, HPV, cervical cancer, and condom use (Sherris et al., 2006). Another communication challenge doctors, policy-makers, and pharmaceutical companies face in persuading parents to vaccinate their daughters is that no established strategy exists for positioning the vaccine: do doctors explain to parents that Gardasil is a vaccine against cervical cancer? Or, is it against an STI? Also, health care providers – especially doctors – often feel uncomfortable talking to patients about sexual activity and sexually transmitted infections, so doctors must be trained to talk with parents and girls about these issues, particularly before sexual activity onset (Sherris et al., 2006).

Parents and other caretakers also encounter communication challenges. Research has shown substantial knowledge gaps about the relationships among HPV, cervical cancer, the Pap smear, and the availability of a vaccine (Centers for Disease Control, 2004; Sherris et al., 2006; Vardeman, 2006). Other constraints include (see Sherris et al., 2006, p. 211): (a) confusion between HPV, HSV (herpes-simplex virus), HIV, HBV (hepatitis B virus); (b) belief that a vaccine for HPV will promote sexual activity among youth; (c) need for continued emphasis on safe sex practices whilst addressing this sex-oriented concern around the vaccine; (d) concern by some parents that their children are receiving too many vaccines, which they perceive carry significant risks; (e) perception by some parents that mandates undermine their rights to informed consent or to philosophical or religious principles (Stoto et al., 1998); and (f) emotional and cognitive responses of confusion, anxiety, and stigma when thinking about HPV infection (CDC, 2004b).

*Consumer advocacy resistance to mandates.* Consumer advocacy groups have emerged around vaccine choice (e.g., National Vaccine Information Center) and informed health care decision making (e.g., Center for Medical Consumers), and these readings of the campaign are important to consider in knowing how all publics make meaning of the marketing and the messaging around the vaccine. These groups have initiated specific campaigns to illuminate questionable practices around the rise of Gardasil, Merck's lobbying and marketing practices, the CDC's addition of Gardasil to a mandated immunization schedule, and the almost-successful mandate of the HPV vaccination by Texas Governor Rick Perry (see Napoli, 2007; National Vaccine Information Center, 2006). These advocates posed questions around the unusually quick timing for the proposed mandate for Gardasil, when new vaccines typically become mandated gradually, a sign that may indicate pharmaceuticals companies' increasing influence over policy-making (Applebaum, 2007). In her article, "How Vaccine Policy is Made: The Story of Merck and Gardasil," Napoli (2007) argued that cervical cancer is not a public health emergency – unlike, for instance, TB – in which the disease is highly communicable. Napoli asked, "Why is there so little public discussion among doctors about the wisdom of vaccinating *all* young girls for a rare disease?" (original italics, p. 2), elucidating the point that although cervical cancer is globally a vast killer of women, in the United States, morbidity rates hover around 3,900 women per year. Napoli (2007) argued that there exists a pro-vaccination bias that seems to perpetuate among health care practitioners, policy-makers, and legislators. Furthermore, advocate groups like the NVIC and Napoli suspected that as cervical cancer is largely associated with factors like extreme poverty, smoking, and lack of education, the pharmaceutical companies are

problematizing cervical cancer as a bigger U.S. problem than epidemiological data report it to be in order to secure more money from a larger consumer base. Other consumers are accusing Merck that Gardasil injections received during their pregnancies caused adverse side effects like miscarriages and fetal abnormalities, which the FDA and manufacturer have stated have not been linked with any substantial evidence (Carreyrou, 2007).

### *Research Questions*

The purpose of this study is to explore how teen girls and parents of teen girls make meaning of cervical cancer vaccine communication. I investigate girls' and parents' consumption around the meanings they give to the messages. Given the literature and theory on the situational theory of publics, the circuit of culture, feminist media studies, campaigns and body knowledge production, and cervical cancer and vaccine communication, the following Research Questions were developed to guide the data collection and analysis for this study.

RQ1: How do teen girls make meaning of an HPV/cervical cancer vaccine communication campaign?

- RQ1a: What *personal* factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?
- RQ1b: What *familial* factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?
- RQ1c: What *educational* factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?
- RQ1d: What *sociopolitical* factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?

- RQ1e: What *technological* factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?

RQ2: How do parents of teen girls make meaning of an HPV/cervical cancer vaccine communication campaign?

- RQ2a: What *personal* factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?
- RQ2b: What *familial* factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?
- RQ2c: What *educational* factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?
- RQ2d: What *sociopolitical* factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?
- RQ2e: What *technological* factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?

RQ3: How do teen girls and parents make meaning of HPV/cervical cancer vaccine communication together?

RQ4: How do teen girls use health media like the HPV/cervical cancer vaccine campaign materials?

RQ5: What decisions do teen girls and parents make about getting a HPV/cervical cancer vaccine after viewing/reading the campaign materials?

- RQ5a: What factors influence their decisions?
- RQ5b: What barriers do they perceive in making the decision?

RQ6: What complications arise when an HPV/cervical cancer vaccine campaign problematizes a health issue that may be differentially understood by teen girls and parents?

RQ7: How do identity components of age, social class, and racial and ethnic background interact to create meaning differentially among teen girls around HPV/cervical cancer vaccine communication?

RQ8: How does an HPV/cervical cancer vaccine campaign contribute to the medicalization of the teen female body?

- RQ8a: What sources of information do teen girls use for health, and specifically, topics like HPV/cervical cancer?
- RQ8b: What governing rules do teen girls believe constitute the functioning of their bodies?
- RQ8c: What social systems do teen girls believe have authority over their bodies (if any)?
- RQ8d: How do teen girls feel about the ways their bodies are imagined in mediated and interpersonal health communication?

RQ9: How do teen girls and parents believe an HPV/cervical cancer vaccine campaign should treat teen girls' health?

## CHAPTER THREE: METHOD

Qualitative methods were used to gather and analyze data. In particular, I incorporated in-depth individual interviews, dyad interviews, and focus groups. My epistemology reflects a feminist standpoint theory, in which the researcher enters the research space from the perspective of situated knowledge. My methodology, epistemology, methods, procedures, and validity considerations will be discussed in more detail in this section.

### Qualitative Methodology

The qualitative approach to inquiry is complex, open to difference, and strives for multivocality. Potter (1996) argued that qualitative research is hard to define in a single conceptualization because of the approach's constantly changing structure and make-up as well as its multiple backgrounds, origins, and existing forms. On a more individual level, Lindlof and Mia (2002) conceptualized qualitative research as approaches interested in "human understanding" (p. 19), with attempts to study how humans internalize, analyze, interpret, incorporate, articulate, produce, and share phenomenon in society and relationships around them, using their collective meaning making enabled through talk, gestures, and interactions as the units of measurement. Researchers and theorists agree that qualitative research is interpretive and naturalistic because it allows participants to show researchers what the world means to them (Denzin & Lincoln, 2003; Emerson, Fretz, & Shaw, 1995; Lindlof & Mia, 2002; Potter, 1996). As vaccine communication is an area of risk communication that has been largely neglected compared to other risk communication areas (Stinchfield, 2001), and the cervical cancer vaccine is a relatively new and unexplored topic, particularly from publics' perspectives

(Sherris et al., 2006), this study will explore publics' knowledge, attitudes, and behaviors around this inchoate sector of risk and public health communication. To do this, I used inductive methods – rather than deductive methods – because I want to take a relatively situated, contained concept – one that sits at the site where persuasion and communication, gender, risk and health, policy, science, and economics intersect – and expand on how those disciplines interact within a particular cultural environment.

### Feminist Standpoint Epistemology

One particular epistemology that guides my research is feminist standpoint. Feminist epistemology involves research conducted *by women, for women* (Olesen, 2003). The advocacy of research conducted by women reflects long-term, structural, methodical negligence by political, economic, social, legal, academic, and biomedical systems of women's particular knowledge (Harding, 1991). Theoretical assumptions include: (a) women's standpoint in society and knowledge are different from men's; (b) women's knowledge has not been considered equal in most official, legitimized social systems; and (c) women's knowledge has been relegated to a very few sites within society, such as the home and around children, rather than in public sites (Acker, Barry, & Esseveld, 1983; Reinharz, 1992).

Based on this fractional presence in public spaces, censorship of women's voice, and historic blockades to access to certain informational sites, such as politics, legal privilege, education, and even within the home, women have come to know the world from a partial, situated standpoint (Haraway, 1988). Women care for children, keep the home proper for the family, and maintain the man's life (e.g., washing his clothes,

preparing his food) so that man lives in his realm, while women live in both realms, thus enhancing but concurrently relegating her consciousness of dual worlds (Smith, 1987).

*Intersectionality.* Furthermore, women – and in particular, women from historically oppressed groups like African American women and Chicanas – learn subaltern, yet multiple layers of partial knowledge because of the intersections of oppression based around gender, race, ethnicity, class, and sexual orientation (Moraga & Anzaldúa, 1983; Zinn & Dill, 1996). Some women cross these identity chasms in the systems of work that provide for them a unique standpoint, granting them outsider-within status (Collins, 1990; hooks, 1984). Smith (1987) – a sociologist – wrote in *Everyday World as Problematic* that women's everyday, everynight experiences were unique and situated, and to access these particular knowledges, women must learn from women. She called upon women sociologists to conduct feminist research that examines the power relations that compress women's everyday lived experiences into only a few functions in a few spaces.

Feminist research has typically adopted qualitative methods because of compatible assumptions. Feminist researchers deny the possibility that a researcher can observe and understand a phenomenon from a position that does not have a relationship to the participant. Haraway (1988) calls this the "God trick," which is the position that a researcher assumes to have – a view from a far, disconnected to the research topic, setting, participant, and findings, and therefore, without influence to those research and phenomenon's elements.

The value of subjectivity inherent in the methodology of qualitative research is echoed (and perhaps largely influenced by) feminist epistemology, for relegating women

during an interview process to a subaltern position (in relation to the more powerful researcher) would deny feminist claims to the women's unique, special, situated knowledges and need for emancipatory research. Feminist researchers have confronted subjectivity in numerous ways. For example, Harding (1991) proposed that feminist epistemology actually provides for a "strong objectivity" in the research process. Specifically, she wrote that when researcher and participant accept that they have a relationship – that they influence one another in their presence, conversation, and meaning making process – then they can actually obtain a more true sense of the participant's experience than if the research process were to deny the relationship, thereby risking that the participant would feel especially vulnerable to reveal information. Acknowledging the subjective relationship and process, discussing varying standpoints and finding common ground, and self-revealing information on a more mutual basis leads to a stronger objectivity than does traditional, supposed value-free research, according to Harding.

Similarly, Collins (1990) has enhanced feminist understanding of the values of research that lead to more truth of the lived experiences of women. She provided four guidelines for why feminist research should examine women's experiences that sit at the intersections of multiple systems of oppression. These strategies for research are (a) to understand that everyday lived experience – particularly for U.S. Black women – is the primary criteria for meaning making; (b) to recognize that critical dialogue is productive and structured within historical and social systems; (c) to incorporate the ethics of care into research, which imply that researchers should communicate with women with empathy because of shared situations of oppression; and (d) to embody the ethics of

personal accountability, which argues that researchers should actually invest in and be held responsible for changing social systems because they are not interested in the material results but rather for the emancipation of oppressed peoples.

Actual methods that illuminate the relationship between researcher and participant as well as those that reduce power differentials throughout the research process have been explored in a number of ways by feminist researchers (e.g., Eichler, 1988; Letherby, 2002; Reinharz, 1992; Wolf, 1996). For this study, qualitative in-depth interviews are particularly useful for feminist research because therein lies an intimacy between research and participant that can be neglected in survey research. Qualitative dyads are important for de-centering power around the researcher in relation to the participant. Focus groups are also important emancipatory methods because the power is held primarily among the participants instead of the researcher (Wilkinson, 1998).

*Dilemmas, contradictions, and critiques.* As one of the goals of feminist research is to investigate the relationship the researcher and participants have in order to reduce power differentials and avoid performing sexist research, the notion of self-critique, reflexivity, and improvement is an intellectual requirement within feminist methods and writing (Eichler, 1988). Therefore, feminists have been very open about their ethical dilemmas and contradictions in their research. For example, in an influential essay, Stacey (1991) questioned whether there could actually be a feminist ethnography, since the principles of each contradict one another. Specifically, feminism works to reduce power differentials and emancipate women from oppressive structures, whereas ethnography requires a researcher to enter a site, observe, question, probe, and evaluate participants, make assumptions in analysis and writing about participants' lives, and then

leave the site (which is often an oppressed, underdeveloped, or marginalized environment), which is a freedom the participants typically do not have. Fine et al. (2003) elaborated on the concept of "working-the-hyphen" in which the researcher should examine the site where the Self-Other have commonalities, but also where they converge because of different positions in society. Fine et al. explain that the way to work the hyphen is to deliberate among participants and researchers, and ask "messy" questions about how the research is approached, where improvements can be made, and for whom the research is conducted.

### Cultural Studies Approach

The cultural studies approach is a type of methodology that observes how cultural members use symbols, language, and texts to represent meaning (Potter, 1996). The genre of cultural studies has a less defined methodological standard because it draws from numerous disciplines, including sociology, anthropology, social psychology, humanities, and the like. Therefore, many methods are acceptable in the cultural studies' search for how cultures make meaning of the world around them. For example, Nelson et al. (1992) argued that all methods of discovery – including “textual analysis, semiotics, deconstruction, ethnography, interviews, phonemic analysis, psychoanalysis, rhizomatics, content analysis, survey research” (p. 2) – can be useful in learning about a culture. The following characteristics are common among cultural studies: although the genre looks for relationships between different cultural domains, the researcher examines all determinations; cultural studies are interested in the everyday of a culture as well as the ways “cultural practices speak to, of, and for” participants' lives (Nelson et al. 1992, p. 11); and often, cultural studies assess the cultural relations, elements, meanings, and

outcomes of those disempowered (and in power) within a society (Hall, 1993). The tendency to examine the everyday in conjunction with power relations from the vantage of those removed from political, societal, and economic privilege resonates with the purpose of this study.

A cultural approach was appropriate to use in this investigation because risk messages may be perceived differently by different groups, as they can be socially constructed variably across different environments and cultures (Ball et al., 1998; Dutta, 2007; Sherris et al., 2006). To expand upon public relations and health communication theories in meaningful ways for women and other disempowered groups, I had to learn what meanings they give to risk messages. People collectively give meaning to objects, events, ideas, and relationships (du Gay et al., 1997), and language is used to translate these meanings to one another (Hall, 1997). A process of encoding occurs in the production of messages – that is, producers of messages insert codes and symbols into channels – which are then decoded by consumers – that is, audiences of messages deduct and re-imagine codes and symbols from these channels (Hall, 1993).

### Interviews

This study employed qualitative, in-depth individual and dyad interviews. I used semi-structured interviewing, which is a tool used to learn about participants' feelings and experiences (H. J. Rubin & I. S. Rubin, 1995). The interview process seeks to know better the cultural communication methods, language, forms of actions between cultural players, processes, and thoughts that are otherwise hard to observe without intimate, in-depth, private, trusting conversation (Lindlof & Mia, 2002). The purpose of the semi-structured interview is to let the participant do the majority of the talking and the guiding

of the conversation according to what she finds most important (H. J. Rubin & I. S. Rubin, 1995). This desire to reduce interviewer control and promote participant interaction during the interview reflects a feminist standpoint (Letherby, 2002). Semi-structured interviews are appropriate for qualitative, cultural studies investigating women's meaning making because the technique is "consistent with many women's interest in avoiding control over others and developing a sense of connectedness with people" (Reinharz, 1992, p. 20). Finally, my purpose with research is to aid in empowering oppressed groups by providing a forum (my research) for which women can speak; therefore, it may be important for women to speak with a woman researcher when providing intimate details (such as may arise in speaking about cervical cancer) because of issues of trust and gender equality (Grodin, 1991).

#### *Dyad Interviews*

Qualitative dyads were helpful for catalyzing dialogue between participants that may induce richer detail of the topic (Kashy, & Kenny, 2000). I initially set out to interview teens in dyads because I assumed some participants may feel wary, vulnerable, or anxious about communicating information to a researcher in a one-on-one setting. I feel in some cases, this was because the teen girls I interviewed are approximately 12 years younger than I am, so they may have perceived me to be an authority figure rather than a person who wants to hear their honest perceptions in order to improve communication sent to them about an important topic. Furthermore, as someone they did not initially trust or feel relaxed with, some teens may have felt uncomfortable talking about topics like cervical cancer, HPV, STIs, reproductive issues, Pap smears, or other related topics with someone they do not know. In fact, a few teens were reluctant to use

words like “sex,” “cervix,” and “abstinence,” although I do not know if it was because of my presence, of a parent’s nearby presence, or simply because they are not used to using those terms yet in their everyday lives. However, based on research about teens and my own predictions, I believe that the teens may be more apt to have a conversation about these topics if they have a friend of their age in the interview setting with them because they may perceive, then, that the interaction is more realistic and about them relating to one another rather than feeling they are being quizzed about health topics (Sigman-Grant, 2002). For health studies, dyads have been used in studies examining relationships (e.g., Sarna, Cooley, Brown, Williams, Chernecky, Padilla, et al., 2006), medical encounters (e.g., Ungar, Mirabella, Cousinsa, & Boydella, 2007), and communication interventions (e.g., McKee, 2006), to name a few.

#### Focus Groups

The primary purpose of conducting focus groups was to achieve the “‘chaining’ or ‘cascading’ effect – talk links to, or tumbles of, the topics and expressions preceding it” (Lindlof & Mia, 2002, p. 182). The researcher uses the dynamics of interaction to encourage deeper, constant discussion. Furthermore, the researcher often hopes participants like each other will feel trusting of the fellow participants so they will speak more intimately about the topic (Morgan, 1988). In audience reception studies, texts are often provided to the participants in order to catalyze their reactions to and discussion about the topic (Lindlof & Mia, 2002).

#### *Advantages of Focus Groups*

From a feminist perspective, focus groups are especially advantageous because participants outnumber the researcher; thus, power naturally shifts from the researcher to

the participants, and participants are able to more freely discuss their concerns about the topic than having the group dominated by the researcher's interests. Further benefits of feminist-driven focus groups include consciousness-raising about the topic (in this study's case, the cervical cancer vaccine); creating a collective self-empowerment; and allowing participants to actualize with their own languages and their personal frameworks. Finally, focus groups help garner more intricate data because not only is the researcher able to study the interactions and languages among the women, but the women often aid in leading the group by asking each other questions and pointing out each others' discrepancies that individuals may not notice alone (Wilkinson, 1998).

In a one-on-one interview, a researcher may be able to obtain rich description (Geertz, 1960) with intimate details from a participant, but there may not be ways for the researcher to know whether the participant is telling the truth, or the researcher may not have the ability to "call the participant out" on her contradictions. However, in the focus group method, participants – particularly those who know one another prior to the focus group – will call one another out if they are telling untrue stories or exaggerating in the focus group. Furthermore, other members may be able to entice information out of each other better than would a researcher, either because of her dissimilar social location or simply because of a lack of trust and familiarity (Wilkinson, 1998).

#### *Disadvantages of Focus Groups*

Logistically, focus groups do also exhibit drawbacks. First, they are time-consuming to gather because of the difficulty often in finding participants as well as scheduling an appropriate time and mutual site for all participants. This logistical complication sometimes leads to not being able to convene a focus group of those

cultural members. Furthermore, power differentials can still be problematic in the focus group in which participants perceive the moderator to hold a different (or higher) privileged position than the participants, which can create issues for rapport-building (Wilkinson, 1998).

In the current study, I was not able to convene a group of parents, but I was able to conduct teen focus groups. All of the parent interviews were conducted either individually or in dyads either with another parent of a teen girl, the parent's spouse, or the teen daughter. Parents who served as my informants attempted to help me convene focus groups of multiple parents of teen girls. However, they reported back to me that they were unable to do so because either other parents had too many time constraints or, as a few parents speculated, other parents did not want to talk about the subject.

### Participants and Procedures

#### *Summary of Participants*

I recruited from two consumer publics of the campaign: (a) 14-17 year old girls, whom I interviewed in dyads and in focus groups; and (b) parents of teen girls, whom I interviewed in dyads (with other parents or partners) or with their daughters. The purpose of interviewing the 14-17 year olds was that this age group of teens is being targeted by Merck and the government agencies as the recommended ages for vaccination. The parents of teens are being targeted because they largely permit their minor children to be vaccinated (Stinchfield, 2001).

I interviewed a total of 54 participants for this study: 40 teens and 14 parents. Below, I summarize the demographics of the participants of this study as well as the methods employed to interview them. I have also matched participants with their

vaccination status as well as their relationships to one another in Figure 2: Summary of Interview Participants, Participants' Relationships, Vaccination Status, and Methods Used.

*Gender.* Of the 40 teens interviewed, 39 were female and one was male. The male was a "boyfriend" of one of the teen girls, and they both wanted to participate. I received approval from both my advisor and the boy's parents prior to interviewing him. In this interview, I spoke to the pair together, and then I spoke to the girl alone. Of the parents, 13 participants were mothers, and one was a father.

*Age.* The teens ranged in age from 13 to 18 years old. The 13-year old was the younger sister of a 17-year old girl I interviewed and the daughter of a set of parents I interviewed. They asked if I could interview her, and with their permission, I did so. The 18-year old was a senior in a high-school parenting class for teen mothers. The remaining teen participants were between the ages of 14- and 17-years old, which means they were all in high school. Ninth grade was the largest grade group, with about five teens in each of the subsequent grades.

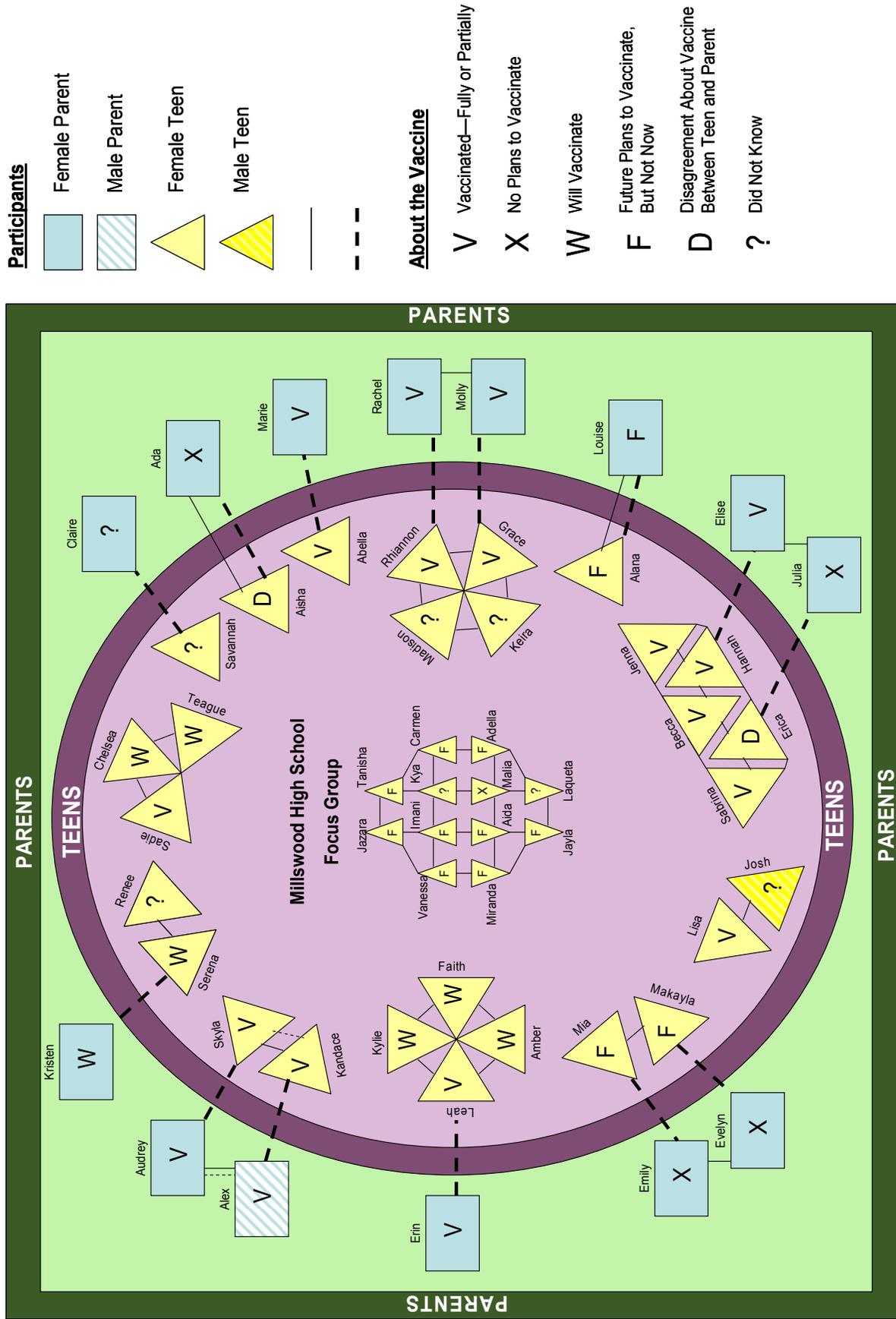
*Race and ethnicity.* Of the 40 teens, 25 were White, seven were Black, six were Latina, and two were biracial. Of the 14 parents, 13 participants were White, and one was Black. One significant limitation of this study is the lack of racioethnic diversity among the parent participants. The lack of diversity may be attributed to several factors. First, I used primarily convenience and snowball sampling strategies to recruit participants, and as I have more contacts that are of my same race, my sample was thus largely White. This is a limitation in my study of using convenience and snowball sampling. Furthermore, I did attempt to go outside my acquaintances to recruit, such as posting

flyers and ads in online and community bulletin boards. However, when these methods did produce interested participants, many were also White. In a future study, I would post information in neighborhoods outside of my own and in predominantly non-White areas to ensure maximum variation in my parent sample.

*Geographic location.* Of the teens, 23 live in Maryland, 13 live in Texas, two live in Virginia, one lives in New York, and one lives in Iowa. Of the parents, three live in Maryland, seven live in Texas, two live in Virginia, one lives in New York, and one lives in Iowa. The vast majority of the participants live in suburban communities in these states, with the exception of the New York family – who live in an urban area – and the Iowa family – who live in a rural area.

*Location of interviews.* Most of the interviews were conducted in the participants' homes. A group of pregnant teens or teen mothers was conducted in a high school in which I visited their parenting class and interviewed them as a class (to be discussed under 'parenthood status' soon). One teen and one parent interview were conducted via telephone. Finally, one teen focus group and one parent dyad interview were conducted in the parent's place of work.

Figure 2: Summary of Interview Participants, Participants' Relationships, Vaccination Status, and Methods Used



*Interview composition.* Originally, I planned to conduct dyad interviews with the teen girls and focus groups with the parents. However, the original goal of the composition of the interviews was not met with each of the interviews because of constraints on the participants (and the composition of the interviews subsequently altered the data collected method employed; see Figure 2). For example, some parents could not get interest from other parents or could not coordinate a mutually-beneficial time with other parents in order to form a focus group. Instead, in all instances, I interviewed parents in either dyads or individual interviews. Furthermore, although I had planned to conduct dyad interviews with teens, in several instances, the teens with whom I was coordinating the interviews with wanted to invite more than one other interested friend. Thus, based on the nature of needing participants for the study and the allowance that convenience and snowball sampling procedures provides to qualitative data collection, I did not believe that being flexible with the composition and method of the interviews would impede my ability to collect data to adequately answer my Research Questions. Perhaps these complications in recruiting and varied compositions of interviews better reflects reality.

In two instances, a parent and her daughter were interviewed together. Although I had requested in my solicitation email to participants that I interview parents and teens separately, two parents still remained in the room when I began interviewing the daughter, and they participated in answering the questions as well. Again, although this was not the original plan for the composition of interviews, I thought the parent-daughter interviews would contribute interesting data to the Research Questions, particularly in helping answer RQ3 of how parents and teen girls make meaning together around a

cervical cancer vaccine campaign. Although both parent-daughter interviews elicited data that help answer the Research Questions, it is a limitation of mine as a researcher that I was apprehensive about asking the parent to leave the room. I felt conflicted because not only were the parents giving me their family's time but I was also in their home, and I felt anxiety over assuming that power in their space. Finally, reading from one of the parent's demeanor in her email exchange with me to set up the interview and her demeanor in the interview, she seemed somewhat wary and controlling from the beginning about the process (although I had sent her the Interview Guide, Informed Consent form, the commercial, and information about the Human Subjects/IRB approval process from the university).

Finally, 14 teens were interviewed whose parents were also interviewed. Again, two of these interview settings consisted of parent-daughter interviews, but 12 teens whose parents were also interviewed were not interviewed with their parents present. The remaining 28 teens who were interviewed did not have parents participate in the study (although all but the emancipated teens' parents gave consent for their daughters to be interviewed, to be discussed next).

*Parenthood status.* Twelve of the teens interviewed were also parents or expecting mothers. Through my personal contacts, I connected with a person who is the director of the Agency for Pregnant Women (APW)<sup>2</sup>. I explained to her the purpose and methods of my study, and she connected me with one of the APW's social workers. The social worker visits high schools in the area to make presentations to pregnant teens and teen parents about how to provide appropriate care and health lifestyles for the baby and

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<sup>2</sup> This is a pseudonym for the agency through which I worked to interview the group of pregnant teens/teen mothers. For purposes of confidentiality for the participants, I have concealed the location, name, and director affiliation of this group.

family. I contacted the social worker, and she met me at one of the local high schools – Millswood High School<sup>3</sup> – in which a parenting class was in session. She had contacted the teacher of this class ahead of time to allot time for me to interview the girls. This group interview lasted an hour and 15 minutes, and the social worker, two of her interns, and the teacher were present in the focus group I held with 12 girls – two of which were currently pregnant and 10 who were already parents. Prior to my entering the classroom, I worked with the university’s Institutional Review Board to add an addendum to my project in which I could interview emancipated teens. Once these girls become pregnant, they are considered emancipated from their parents. This means that I would not need their parents’ permissions to interview them – only their own. I learned that this would be necessary when I initially approached the director of APW about the study, when she told me, “oh no, it will be impossible for you to get their parents’ signatures,” for reasons such as they do not live with their parents any longer but instead may live with their boyfriends, their parents are no longer involved in their lives, their parents are not often available, or their own lives are so hectic that they likely would not remember to get the permission form signed. Thus, I researched the laws in the state around emancipated minors – including the procedures from the UMD IRB – and I submitted an application to allow these girls to participate based on their own consent. I received approval. Instead of providing these girls with the standard \$20 incentive I was providing to other teens, I gave them the \$30 incentive that the parents were receiving because they are parents.

*Household composition.* The majority of the girls lived with both their mothers and fathers and siblings, and some lived in different household/family compositions. One girl lived with her grandmother and grandfather because her mother gave her parents

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<sup>3</sup> This is a pseudonym for the high school.

custody. As noted earlier, some of the emancipated teens lived with their parents, while others lived with boyfriends. Finally, a few teens lived with only their mothers and siblings.

*Schooling.* The vast majority of the teens interviewed attended public school. A couple attended private school, and a few others attended magnet schools to which they had to apply to and be accepted by the school. I did not collect information about parents' highest level of education.

*Socioeconomic status.* I did not ask teens or parents for their income bracket because teens – without their parents' involvement – likely would not be able to accurately provide this information. Furthermore, I find asking for income a sensitive subject for both participants and for myself. If I had asked, and a family did not have the money to pay for the vaccine, the participant still could have concealed that inability to pay for the vaccine was a primary concern for her. Furthermore, in my experience, most participants seem willing to talk about whether they have money to pay for certain health expenditures and whether they have insurance to cover certain costs. Finally, I realized that had I asked for participants to indicate their income bracket, determining the income ranges to bracket on a participant information sheet may have proved difficult and misleading because of a potential discrepancy between the brackets I provide, my delineations of different income levels, and participants' access to insurance or money to pay for such health services as non-mandatory vaccines. For example, would I have provided a bracket that indicates participants that live below the poverty level in the various states from which the participants lived (which may have been different for

different participants) *and* asked about their type of insurance? Participants may not have known whether their insurance or aid would cover such services.

For these reasons, I relied primarily instead on whether participants explicitly said income was a barrier. If participants believed that they could not afford the vaccine – regardless of the technical income bracket they fit into according to their state’s poverty level – I felt this was a more accurate signal to their cultural meaning-making of economics and health than the traditional method of asking participants to indicate their income levels and matching their ability-to-pay data to such classification. I also casually observed participants’ income level. I want to emphasize that my observations did not explain whether a family could pay for the vaccine, and I do not tout in my findings and implications in this study that I achieved a significant range of participants from various income levels. However, these observations provided justification that the participants lived differently: Based on the locations and appearances of their homes, the appearance of their schools, their explanations of the activities and schools the daughter participates in, and the type of job the parent(s) had, I believe I interviewed people that have varying abilities to pay for luxury health services. However, again, these observations are merely complementary to the various comments I received from parents like, “money is super tight right now,” “we would not have been able to get the vaccine had it not been for insurance/clinics,” “does insurance cover this?” and in some cases, a shock when they learned the cost of the vaccine.

### *Recruitment*

*Teen girls.* I used maximum variation, convenience, and snowball sampling strategies to find, approach, and recruit these participants (H. J. Rubin & I. S. Rubin,

1996). I approached acquaintances and informal contacts in order to identify participants for the study. In the areas to which I have access (Maryland, Virginia, New York City, Iowa, and Texas), I began by asking people I know if they personally know any people with daughters who are between the ages of 14 and 17. My original participant quota was to interview 30 teens, for I thought these participants may be the hardest group for me to gain access to because (a) I do not normally come into routine contact with teens in high school, and (b) some parents may be wary for me to talk to their minor children about a topic that they perceive could be sensitive.

To allow myself the most time to recruit these girls, the teens were the first group I started recruiting. Furthermore, I set out to interview a maximum range of teen girls to obtain perceptions of teens from various racial, ethnic, sexuality, and class backgrounds (Fine et al., 2003). However, I do not know if I interviewed any girls who were not heterosexual, for their sexuality did not always emerge as a topic in the interviews. Furthermore, although I tried recruiting in areas in which I thought may not be higher SES, I received limited interest in interviewing outside of my personal contacts. I tried recruiting using a number of venues, such as placing an ad in my apartment community newsletter, putting up flyers in my apartment and neighboring public places, approaching a public school district with whom I have personal contacts (although the committee within this district that reviews and permits researchers requesting to conduct research among the district's students and employees denied my request because they thought my study would detract from instructional time, although I requested to conduct my research after school), requesting recruiting help from the APW, and posting recruitment bulletins on CraigsList.org and a MySpace page. Aside from the participants I interviewed through

APW and through my personal contacts, most of my recruiting efforts garnered approximately one participant each.

In some cases, my personal contacts emailed me names and contact information of people they knew who may be interested in participating. In other cases, my personal contacts introduced me via email to potential participants. Finally, in some cases, my personal contacts forwarded my study information to their personal contacts, and people continued to pass on my study and contact information to others they thought may be interested, for there were several instances in which parents contacted me because they read about my study in a community newsletter to which I had not communicated (which was awesome!). Once I obtained contact information for potential participants, I contacted girls/parents via email or phone, using the solicitation script, which was approved by the university's Institutional Review Board (see Appendix A). If the teen was interested, I asked her to ask a friend of hers to participate in the study with her. This constitutes the dyad method, which I believe engaged the girls in the discussion because they have a same-aged and same-gender friend that they trust with them (Kashy & Kenny, 2000).

I informed the girls ahead of time that they would need their parents' signature on the Informed Consent Form, and we will work out together how to obtain that signature prior to the interview. In several cases, this involved me first obtaining verbal consent from parents over the phone, and then mailing the form to their homes before/after the interview. I offered to the parents that I share with them the entire interview schedule of questions I would ask their daughter as well as the materials from the Gardasil campaign I would be showing their daughters during the interview (and in several cases, parents

wanted to see all my materials and asked me questions about my process as well as the importance of the Gardasil commercial; it was important here for me to explain to parents and teens that I was not working for Merck or the government but rather for my personal interest and my academic requirement). I also informed the parents that I was conducting interviews with parents, and whether they were interested in participating in those.

Using phone or email to communicate, I scheduled a place where I could meet the teen girls. The majority of the interviews took place in teens' and parents' homes, although a few took place either in a parent's workplace or in a high school classroom. Since many of the interviews were conducted at homes, I knew there was a possibility that parents would want to be present when I interviewed their daughters. In this case, I was prepared to conduct the interview using the same questions I normally would (from the interview protocol). I also noted the presence of the parent in the room when I analyzed and reported the data.

Overall, the experience of recruiting for this study taught me the challenges in seeking research participation outside the college walls and in real-life, everyday settings. Although I may have received greater interest from female college students had I recruited through the university (for students are often interested in participating in studies to receive extra-credit for some classes), I believe the sample is more reflective of the diversity of perspectives, given the numerous and varied means used for recruitment of teens and parents. Furthermore, I believe the challenges in recruiting a diverse sample (as demonstrated in this study) are connected to the challenges health communicators face in garnering interest and promoting motivation among mass, diverse groups.

*Parents of teen girls.* I used convenience and snowball sampling also for recruiting parents of teen girls. I approached acquaintances and informal contacts in order to identify participants for the study. In the areas to which I have access (Maryland, Virginia, New York City, Iowa, and Texas), I began by asking people I know if they personally know any people with daughters that are between the ages of 14 and 17. These people served as my informants, and the purpose of informants was to provide me with information about the culture, environment, and people that I need in order to gain access and build trust with the participants whom I did not personally know (Lindlof & Mia, 2002; H. J. Rubin & I. S. Rubin, 1995). My goal was to interview a maximum of 36 parents, for I initially hoped to conduct three focus groups, with 6 to 12 participants in each. As mentioned previously, focus groups were not logistically possible, and instead, I interviewed parents in dyads or individually. For the purposes of this study, I was still able to obtain thick, rich data using individual and dyad interviews to help me understand parents' meaning making about the vaccine campaign.

Upon receiving potential participants' contact information, I invited the parents via email or by telephone to participate, after which I explained the nature of the project and the procedures. I also informed them that their participation is voluntary. Once the parents agreed to the interviews, we determined a place for the interview, which is always the participant's choice.

### *Procedures*

*Interviews/Focus groups with teens.* At the beginning of the interviews and focus groups, I presented the girls with the Assent Form (the modified form meant for minors) and the parents with a Parental Permission Form (for them to sign if their daughters were

also participating in the study). In the case that the parent was not present, I obtained their permission verbally via the telephone, and then I mailed them the Parental Permission Form with a self-addressed stamped envelope for them to return the form to me. I read each part of the Assent Form with the teen(s) slowly and carefully, and checked often with them to answer any questions they had. After they signed the form, I gave them the incentive (\$20 for non-pregnant teen/non-teen mothers and \$30 for teen mothers/pregnant teens) and asked them if I could record the conversation (all participants said yes). I reviewed with them that they could decline from participating at any time without penalty, that there were no right or wrong answers to the questions, that they could ask me as many questions as necessary about my questions or about the topic, and that I did not work for a pharmaceutical company or the government but rather, this was for a “school project.” I reminded them also that I am not a medical professional, and therefore, I could not dispense any medical advice to them about this or other health topics. After the interviews and focus groups, I thanked the girls and asked if they have any questions for me or needed any information about what we spoke about. I also distributed information about cervical cancer and the vaccine to the teen girls, which I downloaded from the Centers for Disease Control, titled “HPV Vaccine Questions and Answers” (CDC, 2006) and “Genital HPV Infection” (CDC, 2004a).

*Interviews with parents.* At the beginning of the interviews, I presented the parents with both an Informed Consent Form (for themselves) and a Parental Permission Form (for them to sign if their daughters were also participating in the study). I read each part with them slowly and carefully, and checked often with them to answer any questions they had. After they signed the form(s), I gave them the \$30 incentive, and I

asked them if I could record the conversation (all participants said yes). I reviewed with them that they could decline from participating at any time without penalty, that there were no right or wrong answers to the questions, that they could ask me as many questions as necessary about my questions or about the topic, and that I did not work for a pharmaceutical company or the government but rather, this was for my graduate school dissertation. I reminded them, however, that I am not a medical professional, and therefore, I could not dispense any medical advice to them about this or other health topics.

After the interviews, I thanked the parents for their time and asked if they have any questions for me or needed any information about our discussion. I asked the parents if they knew of any other parents of teen girls who may be interested in conducting the same type of interview. This recruitment technique is called snowball sampling because I built my sample based upon references of parents I already interviewed (although girls did not provide any names, parents helped me recruit other parents of teen girls) (Lindlof & Mia, 2002; Potter, 1996).

### *Interview Guide*

An interview guide helps an interviewer through the discussion and generally outlines the main points the interviewer would like to explore. An interview guide “consist[s] of groupings of topics and questions that the interviewer can ask in different ways for different participants” (Lindlof & Mia, 2002, p. 195). The interview guide for this study was framed using theories/concepts from four different disciplines. First, I used the situational theory of publics to design questions to explore the level of involvement, constraint recognition, problem recognition, and information seeking behavior of the

participants in order to gauge their personal connectedness and decision-making factors around the cervical cancer vaccine based on the communication they have received (J. E. Grunig & Hunt, 1984). Second, I used the cultural studies approach because it helped me develop questions about how the parents and girls made meaning of media and campaigns. Cultural studies literature also helped me explore cultural meaning-making concepts like symbols, relationships, use of cultural texts, conflict, and preferred representations (Hall, 1997). Third, I borrowed from Price (2002) who provided protocol development advice about approaching African American women with health promotion messages and materials. I found her advice to be useful in developing identity and difference questions to ask women from different racial and ethnic backgrounds that I may not have otherwise thought to ask about, such as cultural perspectives, family influences, and social support. Fourth, I consulted feminist media and body knowledge production literature (e.g., Clarke et al., 2003; Foucault, 1977, 1978; Kline, 2003; Lupton, 2003; Martin, 2001) to understand the concepts of medicalization. I was able to draw from this literature to craft my questions about governing rules, authoritative social systems, and ways participants perceive their bodies are represented in the media. Finally, I wrote two different interview guides: one for the teen girls (see Appendix B) and one for parents (see Appendix C). The guide for the teens was adapted to ensure the language used was at their level rather than at a more adult level.

*Teen interview guide.* All of the Research Questions except for RQ2 (How do parents make meaning of an HPV vaccine communication campaign?) applied to teens' meaning-making and thus were explored using the questions in the Teen Interview/Focus Group Guide (Appendix B). As mentioned earlier, the Research Questions drew from a

number of theories and literature sources, including from the situational theory of publics, cultural studies, identity/difference studies, and feminist media.

The Research Questions dealing with teen girls' cultural factors that contribute to meaning-making of the vaccine campaign were *personal, familial, educational, sociopolitical, and technological and media factors* explored in RQ1 ("how do teen girls make meaning of an HPV/cervical cancer vaccine communication campaign?"); *relationships* that teen girls have and use for information, explored in RQ3 ("how do teen girls and parents make meaning of HPV/cervical cancer vaccine communication together?"); *media use of cultural texts*, explored in RQ4 ("how do teen girls use health media like the HPV/cervical cancer vaccine campaign materials?"); *cultural conflict* explored in RQ6 ("what complications arise when an HPV/cervical cancer vaccine campaign problematizes a health issue that may be differentially understood by teen girls and parents?"); and *identity and difference*, explored by RQ7 ("how do identity components of age, social class, and racial and ethnic background interact to create meaning differentially among teen girls around HPV/cervical cancer vaccine communication?").

Example questions from the Teen Interview/Focus Group Guide that were employed to garner these types of information were "When I say the word health, what do you think about?" (RQ1-personal factor); "What do you talk about with your mom?" (RQ3-relationships); "What kinds of things do you read about and do on the Internet?" (RQ4-media use); "Do you feel like you are doing what the commercial is asking you to do in order to avoid getting cervical cancer? If so/not, why?" (RQ6-cultural conflict); and

“Do you think Black/Latina/White teen girls like you see this commercial in the same way or in different ways than teen girls who are other races?” (RQ7-identity/difference).

The Research Questions dealing with communication factors that contribute to knowledge, attitude, and behavior change were based in the situational theory of publics’ factors of problem recognition, constraint recognition, and level of involvement. These Research Questions explored *factors and barriers* in participants’ decision-making processes in RQ5 (“what decisions do teen girls and parents make about getting a cervical cancer vaccine after viewing/reading the campaign materials?”); as well as teens *re-creation of the campaign messages* explored in RQ9 (“how do teen girls and parents believe health campaigns should treat teen girls’ health topics?”). *Problem recognition* was explored using questions from the Teen Interview/Focus Group Guide like, “have you seen or heard anything about a cervical cancer vaccine?” and “Do you think this commercial is important for you to know? If so, why?” *Constraint recognition* was explored with questions asking about barriers participants saw to keeping themselves free of HPV and cervical cancer, such as in “Do you think it would be easy or hard to avoid getting cervical cancer? If hard/easy, why?” Finally, *level of involvement* was explored through many of the cultural meaning-making questions as well as by asking questions to understand the primary factors that motivated participants to obtain the vaccine or information about the health issue, such as “Do you feel like this commercial is talking to you personally? If so, why?” Girls’ ideas for how they would re-create the campaign from within was determined by asking them questions like, “If you could change the commercial so that you like it more, what would you change?”

Finally, *medicalization* of teen girls' bodies and health was explored in Research Question 8 ("how does an HPV/cervical cancer vaccine campaign contribute to the medicalization of the teen female body?"). Factors explored were the hidden guidelines girls feel they abide to in their lives ("what governing rules do teen girls believe constitute the functioning of their bodies?"), and the extent to which problematic discrepancies exist between the way girls believe their bodies work, look, and feel, and the ways they believe their bodies *are told* they should work, look, and feel ("how do teen girls feel about the ways their bodies are imagined in mediated and interpersonal health communication?"). The Teen Interview/ Focus Group Guide explored these concepts through questions like, "What are some of your major health concerns today?" "Do you think health is important? Why?" "What do you think the commercial wants you to do now?" and "How do you feel about the way the health topic is being sent to you?"

*Parent interview guide.* The same bodies of literature contributed to the questions asked of parents (found in Parent Interview Questions in Appendix C), although fewer Research Questions were used to explore parents' meaning-making. Only one Research Question (2) uniquely explored parents meaning-making as separate from teens' meaning-making, which investigated the *personal, familial, educational, sociopolitical, and technological and media factors* of how parents make meaning ("What does the word health mean to you personally? What does it mean to you as a parent?"). Research Question 3 explored *how parents and teens made meaning together* of the campaign, as discussed in the previous teen interview/focus group guide section. *Factors and barriers* to parents' decision-making processes were explored in Research Question 5, as discussed also in the previous section. Finally, *parents' opinions of how they would like*

*communication* and messages sent to them and their daughters were explored in Research Question 9, which also was discussed in the earlier section.

*Structure of guides and types of questions asked.* From previous experience with in-depth interviews, I have learned that people respond differently to questions through their individual styles regarding pace, order, control, patience, and interest. For example, some participants like to move quickly through the questions and some like to elaborate on each question. Therefore, I embedded probes in the guide, which I could choose to use in different places. I also found it important to remain flexible with the participants' styles and preferences to interview, which is why my interview guide has general, open-ended questions that can be easily transformed and re-ordered (please see Appendices B and C for the interview guides). In certain areas, I also had to un-learn some of the rules qualitative research methods taught me. For example, I officially learned in class/textbooks to always use open-ended rather than closed questions in order to elicit richer responses from participants. I learned quickly – through my experience interviewing teens – that asking teens open-ended questions sometimes did not work. Instead of asking, “to what extent have you seen or heard anything about a vaccine?” (because some participants said they did not understand that question), I reframed the question to “have you seen or heard anything about the vaccine?” and then based on their response, I probed with questions like, “how many times have you seen it?” “Where did you see it?” and “What did the commercial say?” Also, I found that teens often had trouble identifying a feeling when I asked them, for instance, to tell me how the commercial made them feel. Thus, I broke down my questions by asking about the component parts of the campaign, such as “how do you feel about the girls in the

commercial?” Also, since some girls had trouble identifying feelings or continually provided attitudes as responses to my feeling questions, I occasionally would list a number of feelings they may have about the commercial (e.g., do you feel happy about the girls? Sad about the girls? Do you feel you like them, like you would not want to talk to them?) to see which feelings stuck with them.

The interview guides initiated the interviews/groups with several rapport-building questions, particularly with the teens, for they were more apt to act reserved and not as comfortable talking with me as the parents were. Based on the guides, I also asked open-ended questions about the participants’ perceptions of health and then posed open-ended questions about the general topics of cervical cancer and the HPV vaccine. Although the topic is cervical cancer vaccine communication, I also asked parents and teens to discuss other major health concerns to them, if they felt other health topics are more important to discuss than cervical cancer vaccine communication. This, I believe, helps me understand better how their health impacts their *everyday lived experiences* (Smith, 1987).

*Pilot testing the guides.* I pre-tested the interview guides on three personal contacts (one teen girl, one parent, and a friend my age) by reading the questions aloud and asking the practice participants to provide brief responses. The purpose of this pre-test was to evaluate the flow of each question and the order of all the questions put together. I amended the guides based on the pre-test participants’ suggestions about questions that sounded confusing or redundant. I also incorporated feedback from my dissertation committee members, based on attempts to make the teen guide less formal. Finally, I modified the teen guide somewhat as I interviewed, for teens had difficulties understanding some of the questions.

## Data Analysis

Qualitative research suggests that a saturation point should be attempted, a technical postulate within grounded theory (Glaser & Strauss, 1967; Morgan, 1988). This concept refers to the point at which each single interview no longer adds unique information to the collection of data. According to H. J. Rubin and I. S. Rubin (1995), reaching this point can help the researcher gain completeness when each participant's responses are contributing significantly to answering the research question. As the authors put it, "what is important is not how many people you talked to, but whether the answer works" (p. 73). In my data collection, I reached saturation once I heard considerably consistent answers from the participants, for the data collected up to that point cogently answered the research questions since I was not finding any unique information. At this point, I sent a status update to my committee, explaining that I believe I reached saturation, and they approved that I was ready to move to the data analysis stage and stop collecting data.

*Reflection.* After most interview sessions (once I left the interview site and was out of range of the participants), I spoke into a digital recorder as a form of journaling my initial reactions and feelings. In these journal entries, I spoke about the success of each interview, prevalent themes I noticed, and any areas I needed to examine more closely or interview techniques to improve upon for the next interview/focus group. As I transcribed each interview, I also listened to the journals at the end of the interviews, wrote down any themes and ideas, which typically translated into initial data analysis as well as points for my discussion section. These are "reflective remarks" suggested by Miles and Huberman (1994) to "strengthen coding, in pointing to deeper or underlying issues that deserve

analytic attention” (p. 66). In the journal entries, I also reflected upon my fears, judgments, stereotypes, and anxieties about the study, topic, or participants. I used this as a way to clearly organize and understand my relationship to the topic, the study, and the participants, and to ensure that participants had the room to speak for themselves instead of my leading their comments, a goal of feminist standpoint research (Emerson, Fretz, & Shaw, 2003; Reinharz, 1992). Finally, I kept a written, personal journal throughout the study so that I could map my personal growth as I worked through my complications with the subject matter and the participants (i.e., reflecting on my own adolescence, shedding light upon my personal struggles as a teen, and deconstructing that time in order to understand my participants’ decisions better).

*Transcribing.* All of the interviews were audiotaped for purposes of transcribing later details from the dialogue and personal narratives. I personally transcribed most of the audio tapes from the interviews; for about six interviews, I hired transcribers so that I could save some time and allow more energy and efforts toward my own analysis. The transcribers both signed confidentiality forms, and using these individuals helped me because I was able to talk about my data with others who had reviewed the data. After I received the transcripts, I read through them and inserted my observer comments (OCs) (Miles & Huberman, 1994) throughout them, which are personal notes I made about emerging themes throughout the interviews, linkages to other interviews, my interactions with the participants, and ideas I had for future interviews.

*Coding.* Data analysis began at the transcription stage. I modeled my data analysis after Miles and Huberman’s (1994) data analysis approach and with analytical techniques derived from grounded theory (Glaser & Strauss, 1967). During the transcription process,

for example, I used open-coding procedures to look for emerging themes. Then I used axial coding to determine how responses and themes relate to each other as well as how the responses relate to the variables and concepts informed by the literature review. Axial coding is part of the integration process of the grounded theory approach, and it uses codes that form linkages across disparate but meaningfully-similar codes in order to dwindle down the number of codes and understand overarching themes more easily (Lindlof & Mia, 2002). Codes are used to reduce the ambiguity of the data collected and then to combine the data to develop meta-themes in the participants' comments (Miles & Huberman, 1994).

After I assigned codes to comments in the transcripts based on the themes found, I used the process suggested by Bogdan and Biklen (1998) to organize and categorize data by theme. I developed a codebook, which contained more than 300 codes, each of which was put into categories that mapped loosely back to the research questions. The categories were *life/health*, *commercial/media*, *family*, *politics*, *economics*, *vaccine*, *HPV/cervical cancer*, *method/observations*, *social*, and *school* (and some codes belonged to more than one category).

As I transcribed interviews into Word documents on a computer, I inserted OCs into the transcripts. Then I printed the transcripts on hard copies. I read through each transcript, inserting codes where they indicated a theme. I used stickers to symbolize codes, and I put the same type of sticker in the codebook to indicate the corresponding code within the overall category. If the quote from the transcript was an exemplary representation of the code, I marked a "Q" next to the sticker (indicating to me to "quote" that data in the report as evidence of the theme). Finally, after a new code was denoted, I

created an index card for it, on which I wrote the code, the category it belonged to, the number of the transcript where the code was found, and the page on the transcript where the code was found; and if it had a “Q” next to it, I highlighted that entry (e.g., “T3(9)”). Compiling the occurrences of the codes on index cards was not only immensely helpful when I wrote the results so that I could quickly find an exemplary quote to evince my finding, but it also helped me visualize the extent to which certain codes persisted across parent and/or teen interviews versus codes that were outliers. This process helped me organize, measure, and assess the data in meaningful, useful ways, so I could affirm with greater validity that certain themes emerged whereas others had not.

*Constant comparison.* The constant comparison and integration methods of the grounded theory approach allow for continuous evaluation of themes with each new set of data in order to elaborate on whether the data are salient with each other in order to posit larger, emerging themes. In this study, there were two ways that data could have been compared using grounded theory: across samples (by combining, comparing, and contrasting teen girls’ data and parents’ data) and across types of methods (by combining, comparing, and contrasting individual interviews, dyad interviews, and focus groups). Regarding cross-sample comparison, I considered that parent and teen data may not be comparable. However, I compared teen and parent data only when Research Questions called for a combination of the data, as in RQ3 (how teen girls and parents make meaning of the campaign together), RQ5 (what barriers and factors teen girls and parents perceive in making their decisions to vaccinate), and RQ9 (what recommendations teens and parents have about how to improve the campaign).

Although data gathered from interviews, dyads, and focus groups produce different types of data, using the grounded theory approach (Glaser & Strauss, 1967) allows for the data derived from the different methods to be combined and compared together. The data from interviews is thick and rich in that the data are exclusive to one participant's perceptions without influence from other participants. However, in dyads and focus groups, the data obtained is less thick from individual participants but rather rich from a collective perspective. Individuals' perceptions could be biased because of other participants' influence, whereas in individual interviews, the information may be more independently pure.

### Validity

Validity is the extent to which the research accurately measures the value of the unit of study (Wolcott, 2001a). Since validity considers that credibility and accuracy of the research— and the research instrument which in qualitative research is the researcher rather than the questionnaire or experiment (Cheney, 2000; McCracken, 1988) – then the validity of a qualitative study tests the “trustworthiness, credibility, dependability, and conformability” (Kvale, 1995, p. 21, citing Lincoln & Guba, 1985) of the research.

The researcher should take as much effort as possible to display “craftsmanship” to the audience of the study, which is to continually check, question, and interpret the findings according to the theory used in the study (Kvale, 1995, p. 27). Kvale argued that the researcher should be aware of the validity question during each step of the research process, from the conceptualization of the research through to the reporting phase.

Tactics he suggested include:

...checking for representativeness and for research effects, triangulating, weighing the evidence, checking the meaning of outliers, using extreme cases, following up surprises, looking for negative evidence, making if-then tests, ruling out spurious relations, replicating a finding, checking out rival explanations, and getting feedback from informants. (p. 27)

An important term in this collection of tactics is triangulation. In order to ensure the researcher is testing “a right interpretation” rather than “the right interpretation” (Lindlof & Mia, 2002, p. 240), it can be essential for the researcher to strengthen his/her argument for interpretation (Potter, 1996) by using multiple sources, multiple methods, or multiple researchers to evaluate the unit of analysis (Lindlof & Mia, 2002). Triangulation has the potential to reduce researcher bias that may influence the recruitment, collection, and analysis of data. I triangulated my research by collecting data from multiple samples, using multiple methods, and by having others’ eyes (i.e., participants, in this case) verify the data I believe I collected. These multiple approaches are used to “build a confirmatory edifice” of the interpretations of the data (Fine et al., 2003, p. 118).

I worked hard to not to impose my personal and cultural meanings onto the data provided by the participants (Emerson, Fretz, & Shaw, 2003). To do this, I deliberated on my craftsmanship in several ways. I wrote journal entries throughout my study in order to purge some of my biases toward the study, participants, and data. Writing my journal entries gave me tremendous opportunity to identify and manage my feelings about the study in order to remain faithful to my commitment to validity. I have also provided as many details as possible about my study so that readers will not have many questions unanswered about my study, regarding my methods and my position on this controversial

issue. I am triangulating my study by incorporating multiple methods and sources. I am employing multiple methods by conducting focus groups, dyad interviews, and one-on-one interviews. I talked with multiple sources – teen girls and parents of teen girls – all of whom are consumers of the campaign. I worked to interview women from heterogeneous backgrounds and identities. Finally, I conducted member checks throughout the study. Member checks are procedures to ask members – or participants – to review the researcher’s end analysis to ensure the researcher accurately portrayed the participant’s data in the report (Lindlof & Mia, 2002, p. 242). I typically performed member checks in two ways: during the interviews/dyads/focus groups, I periodically “checked-in” with the participants to ensure I understood them correctly, and I summarized at the end of the interviews what I believe I heard from them. I also sent the parent participants an email containing an attachment of the summary of my findings (i.e., the first few pages of Chapter Five: Discussion and Conclusion, Summary of Study) and asking if they had time to review my findings and provide any feedback and changes they felt were important for me to consider in my report. I heard back from two parents, and they both felt that the findings were representative of the discussions they had with me. Having members’ feedback validates the findings because they confirm that the data I propose I found was indeed the information they provided to me.

### *Reflexivity*

As mentioned earlier, reflexivity is a marker of craftsmanship (Kvale, 1995), which shows the audience of a study that the work is credible because the research instrument is valid. In feminist research, Smith (1987) called for researchers to be highly reflexive in order to realistically understand the relationship of the interviewer to the

study and to the participants. Wolcott (2001b) suggested beginning research reporting with telling the reader how the researcher came to experience the problem in the study in order to help readers understand the necessity of the research. In a phenomenological study I conducted, I worked through the meaning of health to women. Below describes how I came to the current research:

From these circles women have been excluded or admitted only by a special license granted to a woman as an individual and never as a representative of her sex...They have never controlled the material or social means to the making of a tradition among themselves or to acting as equals in the ongoing discourse of intellectuals...The universe of ideas, images, and themes—the symbolic modes that are the general currency of thought—have been either produced by men or controlled by them...This is why women have had no written history until very recently, no share in making religious thoughts, no political philosophy, no representation of society from their view, no poetic tradition, no tradition in art. (Smith, 1987, pp. 18-19)

What is the lived relation of the body to health for women? What does it mean to connect knowledge and power with health? What are women's lived experiences in receiving health care? Does it mean sickness or maintenance, a first line of defense or last resort, empowerment or embarrassment? What does health mean for women differently than for men?

As a health researcher, these are the questions I explore to uncover the essence of a system of scientific and administrative attention to a livelihood particular to women. Ultimately, I want to discover the nature of how health and the care for health exists,

specifically for a gender that has a realm of significant, unique applications for care. I want to illuminate the lived experiences of women with their health in the minds of policy-makers and complicate the current taken-for-granted assumptions about what defines women's health uniquely from men's health or health as an interdisciplinary site for economics, biology, medicine, technology, science, knowledge, and politics. I believe this is vital for closing the gap between what is required to adequately address women's needs for their health and what is currently allocated to address women's health needs. The special-ness of uncovering the gendering of the phenomenon reveals the epistemology by which I am interested in health care, which is as a feminist.

As a researcher, I start from the perspective of women because they have been the second – the *other* – gender in scientific, medical, and cultural research for decades. Also, as a researcher, I'm on a life journey to expel myself as much as possible from the scientific research process in order to learn how women will take the reins and conduct more participatory action research. As an educator, I think constantly about how I can reduce the power differentials in my class so that students are not privileged based on the stereotypes we have all learned in the systems of "normal" society. However, I continue to feel the gaps in accessing difference in my research and classroom, and I perpetually see my limitations as a middle-class, white, western, educated woman that questions, I don't get it, AND I want to find my role in improving equality in health and communication.

*Addressing health through feminism.* It's hard to read about the developments of the feminist movement without reading about difference within the U.S. health care system. Dating as far back to the Hippocratic era, history and modernity are laden with

ways in which diverse bodies are systematically perceived, treated, and maintained differently from the "normal body" (Foucault, 1978). Historically, the woman's body was understood as the other to the male body, the deviant body to his normal body (Martin, 2001), and thus, research, laws, and medicine were applied as such (Harding, 1991). This phenomenon of understanding is still very much under construction. For example, we know very little about the phenomenon of what it means for a woman when she has to reveal her sexual and non-sexual behaviors on every doctor's visit information card and worry about being branded by the nurse and doctor as sexually deviant or socially inappropriate? What does it mean for a woman to decide which feels right for her – a woman or a man gynecologist – and then defending that to women who believe differently? And what does it mean that a woman wants to refill her birth control prescription when she wants, but the insurance company will not let her because they believe they know what's best for her maintenance of her body?

Only recently have women's bodies become unique and not just the male version but with female hormones and the tools and capability to reproduce. But, the treatment of women's bodies by multiple forces – politics, economics, biology, the media, criminology, psychiatry, and the law, to name only a few – still lacks equality. Modern applications of such discrepancies include the laws that dictate the autonomy of bodies, the laws that mandate which programs are and are not enabled by budgets, biased ways that diagnoses are made and prescriptions allocated. Thus, policy around access to care remains largely discrepant for women. For example, middle-aged and older women are twice as likely to not have health insurance as men, less likely to obtain insurance

through their employer, and pay significantly higher premiums than men (Alexander, LaRosa, Bader, & Garfield, 2004).

*Interest in the current study.* I came to research cervical cancer vaccination because cancer is part of my life: my father has worked as a cancer researcher my whole life, multiple relatives have died of cancer, and my stepmother is in remission from an almost-lethal bout with leukemia. Although cervical cancer is a disease neither I nor a loved one has experienced, its relation to women's health, in particular, is important to me, as a feminist. Furthermore, as I have learned more about policy-making and the relationships that politics and biomedical and technological industries have, I am committed to improving the access women and those in marginalized groups experience in receiving adequate recognition of their problems, and thus, sufficient care. This desire to bring women's voices to policy-makers is complicated with my concurrent role as a communication campaign designer.

I began my public relations career after undergraduate graduation, and I worked as an account representative at a high-tech public relations firm in Austin, Texas. When I came to Maryland for graduate school, I starting working at Winter Research Inc.<sup>4</sup>, an international communication and consulting firm that primarily provides marketing and strategic management counsel to federal agencies. In all, I have worked in public relations now for more than a decade, and I have learned the practices of public relations I do not like as a communicator who believes in efficiency and productivity, but believes more that communicators can achieve those qualities without neglecting and belittling

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<sup>4</sup> This is a pseudonym for the organization to which I have provided communication and research services and have consulted with for the past four years. I choose not to release the name of this organization, for although I feel some of their communication and research practices are less than humbling and public-oriented, the organization overall provides good work to its clients, and I would be remiss to unintentionally scar its reputation.

publics. I have participated in countless meetings over the years in which a homogenous group of people (typically White, late 20s to late 40s, middle-class, heterosexual, educated, suburban, U.S. citizens) discuss what behaviors another group needs to adopt/cease, what the messages should say to change these people's minds, and what venues should be used to communicate these messages.

From my experience, the problems inherent in this traditional campaign goal-setting process include (a) the people determining who should change and how they should change are typically living extremely different lifestyles and come from very different backgrounds than those who will receive the messages; (b) in few cases, formative research is conducted to find out the group's attitudes, current behaviors, media preferences, etc., although in most cases, formative research is not conducted, but rather, heuristics that the organizing group determines are relevant, interesting, and motivating are incorporated into the messages; (c) when formative research is conducted, the research methods chosen and how they are implemented are largely determined by limits on timing, budgetary constraints, and efforts to avoid the requirements of the U.S. government's regulating body, Office of Management and Budget (OMB)<sup>5</sup>; (d) when campaign designers listen to members of publics speak, some talk about the perceived stupidity of the participants, ask questions like, "why don't they just understand what they are doing is stupid...?" exhale sighs of bewilderment, perceive they understand why others perform risky behaviors and why they themselves are above those actions, and in general, build a framework about *us* (educated, knowing, responsible, healthy people)

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<sup>5</sup> OMB research regulations state that no more than nine people from the public can be asked the same set of questions without the researchers being required to go through the rigorous, time-consuming process of getting OMB approval to obtain data from larger samples of the population. OMB is akin to an institution's IRB except OMB takes much longer than IRBs.

*versus them* (stupid, in denial, irresponsible, don't care about their health); and (e) the research and campaign work is not conducted in efforts to empower people but rather to fulfill client expectations and continue to meet the organization's bottom-line.

I am not saying only dispassionate people develop these campaigns who do not empathize with others' circumstances and who do not truly want to help others through communication. I am also not saying that campaign work goes without its own set of non-human, systematic realities with which often times are hard for communicators to contend. But compromises can be made toward more power-reducing, cultural approaches to campaign development in which members of publics are included from the campaign's onset to ensure that the cultural voices, needs, preferences, and practices are being heard and used in the campaign rather than the values, lifestyles, experiences, and norms of the producing organization.

I conduct this current research with the desire to problematize and improve communication campaigns targeting women about health topics. I have sat in many strategy meetings, planning communication programs for audiences that "don't know better" and "need" to change their behaviors in some way. As a white, middle-class, educated, American woman, I acknowledge my privilege to sit on the side of the table that has the power to make knowledge, initiate communication, and form policy. However, the many women that I have spoken with over the past five years in my training as a feminist researcher have humbled me to not "sit still" on that side of the table. Rather, women – whether by their words in direct conversation with me or in their written words, which I have read in class – have encouraged me to leave my safe place of

privilege, and go out into communities, talk to people, confront racial tension, acknowledge difference, and work to improve conditions for women.

A poem I read from Cherrie Moraga and Gloria Anzaldúa's *This bridge called my back: Radical writings by women of color* (1981) has stuck with me because it helps me imagine how campaigns can miss the audience in communication. Jo Carillo's "And When You Leave, Take Your Pictures With You" illustrates the humility, I believe, policy makers, researchers, practitioners, and community leaders should adopt – and live – when trying to empower and aid those less privileged.

This poem does not drive me to condemn communicators and policy leaders, but rather, it encourages me help others – and myself – continue the transition toward a more equitable global community in which women know, have access to, and make decisions independently about their health:

And When You Leave, Take Your Pictures With You  
By Jo Carillo

Our white sisters  
radical friends  
love to own pictures of us  
sitting at a factory machine  
wielding a machete  
in our bright bandanas  
holding brown yellow black red children  
reading books from literacy campaigns  
holding machine guns bayonets bombs knives  
Our white sisters  
radical friends  
should think  
again.

Our white sisters  
radical friends  
love to own pictures of us  
walking to the fields in hot sun  
with straw hat on head if brown

bandana if black  
in bright embroidered shirts  
holding brown yellow black read children  
reading books from literacy campaigns  
smiling.

Out white sisters radical friends  
should think again.  
no one smiles  
at the beginning of a day spent  
digging for souvenir chunks of uranium  
of cleaning up after  
or white sisters  
radical friends

And when our white sisters  
radical friends see us  
in the flesh  
not as a picture they own,  
they are not quite as sure  
if  
they like us as much.  
We're not as happy as we look  
on their  
wall.

## CHAPTER FOUR: RESULTS

Before describing how the data answer the formal Research Questions, I believe the data are best understood within the context of how parents and teens made meaning about the actual health threats (HPV and cervical cancer) and the actual biomedical preventative technology (the vaccine). This summary of how teen girls and parents make meaning of the health threat/technology does not answer how participants perceive communication about the threat/technology, but rather, it contextualizes meaning making of communication within participants' antecedent and subsequent levels of awareness, knowledge, involvement, and barriers to avoiding HPV/cervical cancer.

### *Teen Girls' Meaning Making of HPV, Cervical Cancer, and the Vaccine*

Teen girls said they had/have a low awareness and knowledge of HPV, cervical cancer, and the vaccine before *and* after seeing the vaccine media. They often attributed this lack of awareness to little coverage in the media, by not knowing anyone who has had cervical cancer, and not learning about it in school. There is also a pattern among the girls that HPV and cervical cancer are “new” or epidemic-proportion health problems. Although they know little about the specific health issue, many of the teens use the experiences they have had with other vaccines as a benchmark to understand the HPV vaccine. Similarly, girls commonly connect cervical cancer to a gamut of beliefs about cancer in general, like that “cancer is everywhere,” that no cure or prevention for cancer exists, and that cancer is purely genetic.

The origins or causes of HPV and cervical cancer also contribute to girls' meaning making around the disease. About half of the girls said they understand the link between HPV and cervical cancer before the interviews, although some of the knowledge

expressed by the girls was inaccurate. Furthermore, girls still have a significant number of questions about the nature and relationship of HPV, cervical cancer, and the vaccine, such as “how do you get it?” Girls also discussed which groups of people they believe are at risk for getting cervical cancer, like all women, sexually active girls, and older people. Understanding that sexually active people are at risk for getting HPV, some girls add a value to at-risk girls, like that they are promiscuous, “bad,” and “don’t care” about their health.

Additionally, participants do not wholly understand the connection between cervical cancer and its detection method – the Pap smear – although more of them understand that safe sex or abstinence were ways to prevent getting HPV. However, some girls see barriers to continuing routine screenings for cervical cancer, such as a lack of insurance or money, forgetting, or “not knowing that you’re supposed to get it.” For example, when I asked the teen mothers/pregnant teens whether they think it would be hard or easy to avoid getting cervical cancer, Malia, Jayla, and Tanisha voiced different reactions and links between the Pap test and their abilities to avoid getting cervical cancer:

Malia: Hard. Because you never know. Let’s say the doctor that does the Pap smear doesn’t do a certain thing, and you do have it, then you can’t do anything about it.

Jen: Do you tell your doctor that?

Malia: No, because they might get offended. Like they’re not doing their job right.

Tanisha: It would be hard to avoid getting cervical cancer. Because you don't always know what your partner is doing.

Overall, more teen girls feel cervical cancer would be easy to avoid rather than hard to avoid getting. This sense of efficacy in avoiding cervical cancer is largely related to whether the girls had been vaccinated or whether they are sexually active. Although some girls who are not sexually active still said it may be hard to avoid, and some of the pregnant teens/teen mothers said it would be easy to avoid, all the girls who received the vaccine believe it would be easy for them to avoid because they had been vaccinated and they were not sexually active at the time of the interview. Although most of the girls interviewed would not have to pay for the vaccine themselves, some are still concerned that cost could be a problem in preventing cervical cancer. Coupled with this sense of efficacy are participants' assessments of their own personal risk to HPV and cervical cancer and their calculated need to obtain the vaccine. Overall, many of the girls – both vaccinated and not vaccinated – said that they do not need the cervical cancer vaccine because either they are not sexually active, they are not “out there like that right now,” or they are too young and “don't even care about it right now.” However, girls – mostly those who were already vaccinated – said the vaccine is good to have “just in case.”

#### *Parents' Meaning Making of HPV, Cervical Cancer, and the Vaccine*

Parents seem to have fewer questions about the nature of cervical cancer and the link between HPV and cervical cancer than do the teens. However, several admitted they had little awareness of it prior to the vaccine availability, as many of them pointed to their perceptions that HPV and cervical cancer were not major health concerns for them when they were growing up, as displayed by Rachel and Molly:

Rachel: And I never heard of that growing up. Did you hear about that?

Molly: No!

Jen: Of what? The HPV?

Rachel: Yeah. I never heard of it.

Molly: Yeah, has it always been around?

Although parents also make meaning of cervical cancer through general cancer beliefs as the teens do, parents seem to have less extreme attitudes and feelings around cancer in general than do teens. However, one of the main ways parents perceive cervical cancer was as surprising. A few said that they were shocked or astonished to learn that a cancer can be caused by a virus and that cancer can result from having sex, as one parent put it: “Deadly, the things you can get from having sex. So it’s scary, I think. I mean, you get a virus that causes cancer? That’s scary!”

Like teens, some parents also perceive cervical cancer as an urgent health concern. For example, Marie, Abella’s mother, feels that she and her family had to make a decision quickly when there was “a flurry of information” about the vaccine, and that she and her family were confused about whether they should get the vaccine “right away or not.” Finally, some parents feel that the threat of cervical cancer is severe. For example, Erin said the commercial does not seem to effectively communicate the severity of cervical cancer to teens.

*RQ1: How do teen girls make meaning of an HPV/cervical cancer vaccine communication campaign?*

*Summary of Findings*

Teen girls in this study largely make meaning of the media around HPV, cervical cancer, and the Gardasil vaccine more so through the sociopolitical, technological, and media factors in their lives than the personal, familial, and educational factors.

*Sociopolitical* factors were conceptualized in this study as the cultural and social factors that are characterized primarily by relationships of power differentials with girls outside of familial and educational factors, and *technological and media* factors were conceptualized as influential elements that include non-interpersonal and manmade systems in which girls take and receive information, typically according to their proactive outreach to these systems. Although all factors are important to the comprehensive ways girls read the media, the relationships the girls have with friends, peers, partners, technology tools, and media are far more influential in the dominant meanings they ascribe to the media than other factors like their personal health philosophies, their discussions with their parents about the vaccine, or the lessons they learned in school about such health risks.

For example, sociopolitical factors like friendship dynamics and celebrity influence are largely influential in how girls perceive communication about the vaccine because many feel they cannot talk about such topics with peers, boys, and other girlfriends because, for instance, “guys would be like, I don’t care, I’m gonna go do the nasty this weekend anyway.” Furthermore, the media about the vaccine instigated a flood of varied perceptions about HPV, cervical cancer, the vaccine, the girls in the ad, and who the ad is targeting. For example, on one hand, girls think the ad applied to them because the actresses seemed “normal, like us. We’re not really super star people. They’re not really different,” whereas other teen girls feel the ad is not realistic, does not

portray real girls, and is not a piece of media that captures their attention. To this point, the report below also discusses that girls actively form their identities in part by how they use and critique entertainment and health media. As some of the findings here complement findings to other Research Questions (such as RQ4 in which different identities complicate meaning making of the campaign as well as RQ8 about how girls imagine their bodies are portrayed in health media), the findings below specifically address RQ1 about personal, familial, educational, sociopolitical, and technological and media factors influencing teen girls' meaning making of the campaign.

*RQ1a: What personal factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?*

The personal factors that make up how the teen participants perceive the vaccine communication and the issues they know to be related to that campaign are a *personal health philosophy, perceptions of health, their self-concept, and their choices around sex and relationships.*

#### *Personal Health Philosophy*

Teen girls' personal health philosophies consist of their recognitions that *health is something they need* in order to live the active lifestyles they want, that being informed and *knowing* the status of their health and the risks presented to them are important qualities girls should possess, and their *active decision-making* to keep themselves healthy and living as they want.

*Needing health.* Most of the girls interviewed seem to have a strong sense that health is important. Abella explained that health is vital to "being able to do what you want and not have bad side effects from your body...not do what you want, but basic,

everyday stuff, like going running, being able to stay up for 12 or 14 hours a day, and still being able to sleep well and get up the next day and be fine.” The vast majority of the girls relate health to being able to do the physical activities that they enjoy, such as sports, social activities, hanging out with friends, or being able to work on their schoolwork. A handful of girls mentioned that health involves some kind of mental health-related quality, such as self-confidence. For example, Sadie said that learning to eat healthy foods and dealing with body image issues are “a part of starting out high school and being comfortable with yourself.”

*Knowing.* Several girls also talked about knowing, and it seems that being informed is a very important, consistent trait among these girls. For example, Lisa mentioned several times in her interview that it is important for her to be informed about topics like the cervical cancer vaccine, even though cervical cancer is not a major health concern for her and she is vaccinated: “I mean, I wouldn’t want to get cervical cancer now that there’s a way to prevent it. So, it’s important to be informed...now I’m just really informed about it, which I think is better.” Makayla believes that even though she is not going to get the shot anytime soon, she feels it is still important to research and have information about health decisions:

I think that’s the problem with everything. If somebody’s not – if they don’t understand something – they’re like, well, even though they didn’t say this, they did say this, so it’s OK. But it’s not. You need to know the pros and the cons about everything before you make your decision. Especially about shots – you could be allergic to that shot and you would have no idea. That could get ugly. I just think you need to know.

*Active decision makers.* Teen girls actively make decisions about a range of health risks, and in the interviews, they cogently explained why they make their decisions and how the decisions make them feel. For example, Makayla and Mia described what they decided to do when mono was widespread in their school:

Jen: So, what have you done to make sure you don't get these STDs and mono?

Makayla: Don't sleep with anybody!

Mia: Yeah. Like, with one of my really good friends, I'm like, girls, like, we don't share drinks with each other. That's how you get mono. So I don't share drinks anymore. I don't care who you are. I will pour it in a cup...

Makayla: I only share drinks with close, close friends that I know don't have a boyfriend or is just the same way as me. So I will share a drink with her.

Josh and Lisa discussed that they make decisions to eat healthy foods based on the way different foods make them feel when they participate in their physical activities:

Josh: When I eat junk food, I just feel bad.

Lisa: I feel guilty.

Jen: Why do you think you feel guilty?

Josh: Because I know it's bad for me. I can feel it. When I eat something bad, and then I go out and play soccer, I can just feel it in my stomach. Versus when I eat a tomato or something, I don't feel that.

One focus group of girls said they are abstinent and do not enjoy partying because they "did not need that to be cool." They talked extensively about "smart" and "stupid" decisions, which entails making choices around having premarital sex, drinking alcohol, and using illegal drugs. When I asked them what they can do to stay healthy over the next

couple of years, they focused their responses around the social decisions they will have to make:

Amber: Not be sexually active, like, soon, while you're young, until you get the vaccine.

Kylie: And not making stupid decisions.

Amber: Make smart choices.

Kylie: If you were not like using alcohol – like if you were using alcohol, stuff bad could happen. Or drugs or whatever – you could do something you don't want to do.

Faith: Like, there's other things – like, it's not just cervical cancer you can get when you have sex. It's other things.

Finally, girls make health decisions based on helping their friends. For example, one of the teen girl small groups told me how they made the decision to “seek adult help” when they realized that their friend was bulimic; they realized they were very young with little knowledge of managing such a significant health effort:

Teague: And we didn't know what to do at first, like, should we tell the counselor? Or should we talk to her first? So we just decided to get adult help first.

Chelsea: Because we didn't know how to deal with it at like, 12... We kind of went straight to the adult, sort of thing. We didn't really know how to confront her about it.

*Perceptions of Health*

The girls interviewed hold perceptions of health that colors how they make meaning of the vaccine campaign. The patterns of perceptions are the ways in which girls *conceptualized and lived health, their uncertainty in defining health, their feelings about health experiences, and the barriers they perceived in being healthy.*

*Conceptualizing and living health.* Almost without nuance, when I asked teen girls what they think about when they think of health, they said the doctor, exercise, eating, health class, and weight. Other images or thoughts that girls have when discussing health are “people running,” medicine, “being athletic, fit, and skinny,” “taking your gummy bear vitamins,” “your general well being,” “body functions, and how the body should function,” AIDS, STDs, and “if you’re sick or in good shape.” Some of the healthy things they said they do are “wash my hands a lot,” “every morning I eat vitamins,” run outside, go to the gym, dance, “do our sports,” “eat Subway,” and “try and eat healthy – I don’t drink cokes and stuff.” The vast majority of the girls interviewed who are not pregnant or mothers play a sport or are involved in some kind of activity based around physical effort, such as dancing or cheerleading. In fact, many of the girls interviewed play multiple sports.

*Uncertainty in defining health.* Although the girls are able to voice concepts and images that they give meaning to around health, there are still health areas that they are uncertain qualify as health topics. When I asked the girls what some of their health concerns are at the moment, Faith said, “I don’t know if you would consider this, like, healthy, but getting hurt. I have really bad knees, and it’s killing me.” Similarly, when I asked this question of another group of girls, Chelsea said, “I don’t really know if this is health, but sleeping. I don’t get a lot of sleep.” Other topics that girls are not sure are

related to health are bulimia (in response to Sadie saying that she's seen bulimia addressed in a television show, Teague replied to her, "but how is that, like, a health issue?") and safe sex (Mia discussing a commercial she saw: "I don't know if it would be health-related, but it talks about if you're going to have sex, use condoms").

*Feelings about health experiences.* When prompted with questions about what teen girls' health topics they have seen in the media or to explain a time when they had to seek information about a health topic concerning them, girls talked about their feelings from memorable health experiences in which they were shocked and scared by something that happened to either a friend or to someone they saw in the media. The girls also told me how they used information from those experiences to grow and understand themselves better. For example, when Kandace learned that a childhood friend had an eating disorder, she "sent her a letter asking about her health and how she was feeling because she was recovering at that point." When I asked her how she felt, she said the experience was "shocking" because it did not seem like a real health issue to her:

That was kind of a "hit home" moment. When you realize that someone you once knew really, really closely... would have an eating disorder... And then talking to someone and knowing someone, it just made it a little bit closer to home versus someone you just hear about in health classes. I didn't really think it affects that many people.

Fear was also discussed many times among the girls when they thought back to memorable health experiences. Chelsea, Teague, and Sadie were also scared when they sought adult help to report that their friend was bulimic: "It was kind of scary just cause like, you wanted her to be healthy and doing well, and it was kinda hard to feel like we

were telling on her.” Similarly, one group of teen girls explained their projected feelings of fear and embarrassment and lessons they learned about anorexia, bulimia, and teen pregnancy while watching shows like the *Real World* and *DeGrassi*:

Rhiannon: It makes you learn about it, grow from it. Like how they are dealing with it.

Keira: It depends on how it is presented. Sometimes it is presented as if it is okay and as if it is not a big deal. But it is.

Madison: It makes you not want to do it. Get involved...

Rhiannon: It is ridiculous, that girls our age are wanting to like... Stuff like a girl's worst fear. That would kill me. Like physically and in the head.

Keira: And you have a bump to prove it. It is so embarrassing.

*Barriers to being healthy.* In addition to the girls' conceptualizations of health, they also perceive barriers to being healthy. A few girls are concerned with not having money to join a gym, while a few said they “get bored” running and working out. Some said their lives are “stressful” because they have too many activities going on (i.e., sports, games, clubs) and too much homework (Abella reported that “a lot of people stay up late because of homework”). Other girls are unable to exercise as much as they would like to because they are experiencing sports injuries. Finally, the most common barrier to not being healthy that the girls conveyed is eating fast food too much or not eating healthfully enough.

*Self-Concept*

Teen girls showed that they make meaning of topics like health and being healthy from their personal concept of self, which includes *pride and happiness in self; reflecting upon self; learning control; being independent; and owning my future.*

*Pride and happiness in self.* When I probed into the girls' school and social lives, many of them were quick to tell me their accomplishments or the efforts they undertook. For example, Carmen told me that school is going good because she made the honor roll, and other girls told me that they are doing well in their classes. Makayla and Mia were excited to tell me about a program they are participating in called *Shattered Lives* in which they are assigned roles and enact a drunk driving accident that involves the entire community, and that they are proud of themselves for doing this because a school friend had died the year earlier from a drunk driving accident. Similarly, one focus group of girls told me that it was "our idea...that it was a good idea" that their parents bought them "purity rings" that tells themselves and others that "true love waits" in their commitments to wait until marriage to have sex. Other girls explained that their sports teams are doing well, and they told me about their roles on the teams.

*Reflecting upon self.* Although the girls typically found something they are excited to talk to me about, many of them revealed ways they feel others see them in negative ways. They seemed to sometimes use their perceptions' of others' perceptions of them as a lens through which to understand themselves. For example, one group of girls discussed how they feel others see them since they do not party like they believe most of the kids in their school do:

Jen: What are some of the hardest things from being – like different – than from the majority of kids that are into partying and having sex?

Sabrina: Losing friends.

Hannah: We've lost a lot of friends.

Jenna: In 8th grade, we were so close to everyone. Now everyone drinks. We still don't.

Jen: Are they still friendly with you, they just don't call you to go out?

Becca: They are probably like, wow, they are stupid.

At other times, girls see themselves in comparison to others. For instance, Serena made a comment that she is "not as open as [Renee]" when explaining why she does not know who she would turn to if she had any questions about cervical cancer. Similarly, in discussing what they do to stay healthy and potentially continuing sports into college, Amber said, "I love sports, but I don't know if I could ever be as good as people who play in college. I don't have any urge to..." In relation to the Gardasil commercial, Kandace made a connection to one of the girl's activities, and in her description, she explained how she see herself differently from other people:

The one with the flag girl, I liked that. I'm a band geek. I thought it was interesting that they had flag girls in there because that was really surprising because that is not a normal activity that a lot of people do.

*Learning control.* Gaining control also seems to be a theme that the girls are learning about themselves, particularly among the older girls who are preparing for college. Furthermore, gaining control is a way that the girls connect to the vaccine issue because it means they were "protecting themselves." More specifically, Kandace believes the commercial to be speaking to this need for women to gain control of their own health: "You get a little bit of female empowerment vibe from it. It is very much women

protecting their own health. So I receive that edge. It's relatively positive and relatively upbeat." Similarly, Lisa emphasized the importance of getting the shot and staying informed, and I asked her how she would do that:

Lisa: You can go out of your way to be informed, like looking up latest vaccinations, or latest health issues.

Jen: Would you do that personally?

Lisa: Well, I feel like if I really wanted to maintain my health if I was in the situation...like, when college comes around, I won't have my mom to tell me things like how to stay healthy, so I will probably want to take care of myself and look up things I could do.

*Being independent.* Similar to the movement of learning control in the older teens is a theme of being independent. Many of the older girls talked about starting to perform large and small activities on their own and enjoying the autonomy. For instance, Kandace mentioned that she loves taking the metro into her D.C. internship because "it's a little bit more freedom for me." Mia and Makayla also delineated all the ways that not only are they independent from their parents but how they are distinct from the other teens they know regarding their self-sufficiency. The following dialogue is their response when I asked them why they feel they know more about cervical cancer than other teens their same age:

Makayla: We have this plan. We're gonna go to this college, have this many kids...

Mia: We're on the like, same type of families. We are both going to be the first people in our families to go to college.

Makayla: Nobody in my family even graduated high school. And a lot of our friends have a lot of money...And me and Mia are like, well, we have a job.

Mia: Yeah, I support myself.

Makayla: Yes, I'll rely on my parents for money. If I have to ask them, I pay them back.

The girls continued to talk about that they both have bank accounts and both pay for their own gas, so they have to budget their money. For instance, they have to withhold from spending money on clothes in order to buy gas. Their parents do not have college funds like other kids do: "They are all about scholarships and grants, or else I'm not going to college...you can't do anything without going to college, so that's not an option."

*Owning my future.* Many of the girls – and again, mostly the older girls – talked often about their futures, and in particular, their near futures in college when connecting the cervical cancer vaccine campaign to their lives. For example, Abella said that getting the vaccine makes her feel "better" because "it makes me feel like I've done something to protect myself from some really bad things that can happen in the future." Likewise, in discussing other health advertisements that have caught her attention and encourage her to think about how she may be at risk for a health issue of great consequence, Mia described a teen pregnancy prevention ad bearing the slogan, "not what you pictured for your first crib" (with a baby crib in the scene):

I just think they are really catchy and it makes you think about it in a different way. Like, I know when I think about my life, like down the road, I think like, ok, I'm gonna have a house like this one day, and I'll be doing this, and I'll have this many kids. And to like, think about it, like if something else were to be thrown

into that that you weren't expecting or you weren't planning for, you weren't picturing to happen in your life, it could totally be such a change, and you would have never saw it coming.

### *Choices around Sex and Relationships*

Girls make meaning of the cervical cancer/HPV discussions largely through discussions about sex. According to girls' self-proclamations about their sexual activity status, the data show that *sex is divisive*. The girls that self-identify as abstinent perceive that *sex is scary* and that *sex is immoral*. The girls that were teen mothers/pregnant teens talked about *sex as a complex* situation between girls and their partners.

*Sex is divisive*. Sex – although portrayed by these girls as very common among the general teen population – has very different meanings for these girls, and they reiterate their feelings and attitudes about sex as they make meaning around the threat of cervical cancer/HPV. One of the main divisions among how girls discuss and what girls believe about sex is related to whether they have already had sex. Abstinence and girls' reasons for abstinence – such as the risks and consequences of having sex and promiscuity – are the primary topics among girls who were not among the Millswood focus group. Many of the girls interviewed proactively offered their sexual activity status (I did not ask any of them for this information), and none of them admitted to being sexually active except for the teen mothers and pregnant teens. A few girls did not say anything about their sexual activity status. However, in seven of the interactions, there was a general consensus – and almost group bonding – around abstinence.

*Sex is scary*. First, several girls feel that sex is scary. Some girls feel it was scary because of the consequences. Rhiannon explained that sex is scary because of “how fast

things spread,” and in order to prevent this, you should “know who you are having sex with, and not have one of those one night stands.” Sex is also scary to some girls because of the pain the girls perceive sex would incur, as evidenced in Serena and Renee’s dialogue about what cervical cancer means to them:

Serena: That’s why I don’t have sex. I’m not sexually active, so I don’t really care. I’m scared. I’m terrified! [Renee is giggling a lot, and Serena is too a little bit]

Jen: Of what? That it will hurt?

Serena: Yeah! And all the consequences that come with it. My mom, she is like, you know, whenever you have sex, you need to tell me so I can put you on birth control or something. I know you are going to do it. I don’t want you to do it, but you’re gonna do it. But there are chances – like, to get pregnant, or you know, there’s all kinds of stuff, like people don’t clean themselves right. So just think about that.

Renee: Yeah, and everybody at school is pregnant. It’s gross.

*Sex is immoral.* Some of the teen girls also believe that sex is bad, or immoral. In one of the discussions in which the topic of cervical cancer morphed into a discussion about pregnant girls at school, I asked what they think about girls their ages that are pregnant:

Jenna: BAD!

Becca: I feel bad because they are not smart enough.

Jenna: They’re not smart enough to know.

Hannah: It’s just like – I don’t want to use distasteful words – but, like, slut.

Sabrina: You just did.

Hannah: That's the name they get called. That's their reputations now.

Becca: If they knew, if they knew...if they had a different influence...they wouldn't.

In this vein, some of the girls interviewed believe that sex is something to be reserved for marriage. This same group of girls believes that "true love waits," and as a symbol of this belief, they each wear a "purity ring," which their parents bought for them. The girls wear these rings in following one of their favorite music bands and celebrity role models, the Jonas Brothers, who they perceive are unique because they are deciding to wait until marriage to have sex.

*Sex is complex.* Sex is seen differently from the perspective of the teen mothers and pregnant teens, for many of them expressed that sex is a complex situation between girls and boys. For example, as mentioned earlier, some of these girls are afraid that their boyfriends will pass an infection on to them because they are not being monogamous. When I asked the girls how easy or hard they feel it is to talk to their partners about STDs, the girls explained why they believe it is hard:

Jayla: It's hard to talk to your boyfriend about it.

Vanessa: They get offended. When you tell them to get themselves checked out, they say, what, you think I'm sleeping around or something? You think I'm dirty?

Jen: Are you then afraid to ask them about it again?

Vanessa: No.

*RQ1b: What familial factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?*

Familial factors are those contributions from intimate and extended family members that teen girls employ when considering media around the cervical cancer vaccine. These factors are the *dynamics of the family from the teen's point-of-view*, the *family as sources of health information*, and *vaccine-related discussions*.

*Dynamics of the Family: Teen's Point-of-View*

From the teen girls' perspectives, it is largely their mothers that participate in their social, physical, and health activities. Aside from Alex, who takes his daughter, Skyla, to all her softball games and trips, all the teen girls who are not pregnant/mothers talked significantly more about spending time with their mothers and talking with their mothers about health topics than their fathers. The teen mothers and pregnant girls talked very little of their parents, although a few girls mentioned their parents' roles in their health lives, like reminding them to get their Pap smears or who they would go to with health questions.

There is a wide spectrum of how the teen girls perceive the quality of their relationships with their parents. Some of the girls said that they have good, close, and open relationships with their mothers, and that they talk about "everything" with their moms. In fact, one group of girls attributed their values system around sex to their parents:

Becca: We were raised not to [have premarital sex]...

Jenna: We're not like that.

Sabrina: Our parents would turn us around.

However, other girls do not feel like they can talk to their mothers about "anything." I asked one group of girls what they talk about with their moms, and although Jenna would

address her mother with questions, she still does not perceive the relationship as some of the other girls do with their moms:

Hannah: She'll give me like really good advice on what to do.

Jen: What about you, Jenna?

Jenna: She'd have to ask me. I wouldn't just tell her.

Jen: Who do you talk to if you like have a question for an adult?

Jenna: My mom, I guess, but she doesn't give good advice. She's like, let's do this, and I'm like, no, no. She's not a cool mom.

When probed for more details – particularly around whether it was comfortable to talk to their moms about issues that related to cervical cancer – nuances in these relationships emerged. Earlier in the discussion with Lisa, she mentioned that “whenever I have a question – like, I can actually ask my mom anything. We have a pretty close relationship, so anything I'm worried about or anything I'm thinking about, I'm pretty open with that kind of stuff.” However, when we talked about their relationship and discussing sensitive subjects further, she explained her reason for feeling more comfortable talking to her older sister, who does not live with them but does live in the area:

Lisa: There are some things that I would rather – not that I think I couldn't talk to my mom about – but that it's just easier to talk to my sister. She's closer in age, and she's not my mom.

Jen: Like what?

Lisa: Like sex. Or just things in general – it's sometimes just easier to talk to someone with someone else that doesn't live with you

When asked what were some of their other concerns in addition to sports injuries, another group of girls talked about how their parents may be disappointed in them if they got a bad grade or failed on their report card:

Amber: Doing good in school means a lot to me. I don't want my or my parents to be mad at me. I hate when my parents are mad at me.

Faith: Me too, it makes me feel so bad about myself.

Amber: I cry a lot.

Jen: What do you think your parents think when they are mad at you?

Kylie: Disappointed.

Finally, many girls enjoy being at home because they enjoy being with their families or they are able to escape from stresses of school and activities and just relax. However, some girls reported dissent among their families. For example, Keira said, "I don't like going home that much [because] it is boring. I would rather be with my friends." Furthermore, although Mia perceives she has a positive relationship with her mother, Emily, she makes meaning about her family life through their disagreements because of their similarities:

I don't know. I mean, I am very strong-headed, and I like to have my way. And my mom's the same way – that's how she taught me to be. So if we ever fight about something, we're both like, I'm not giving up - I'm going to win this. It can be stressful, and she's usually right. I just don't like to admit it.

Makayla also makes meaning about her family life through the fights she has with her grandmother, who is raising her, because she is independent. When she does not get what she wants, she approaches her grandfather, which angers her grandma:

Me and my grandma, we fight a lot. It hasn't been as bad as it used to be because I am older, and they all realize that I am very mature because I make my own decisions. But my grandma doesn't like it because I get my way with my grandfather...he raised me since I was a baby, so I'm like his own daughter. So anything I want, I can just go ask him, and I'll get it. And she doesn't like that because I'm the spoiled one and she's not. So that starts fights...Other than that, we're OK. We just keep our lives separate from each other. Like a hi, bye, how are you doing? That's it.

#### *Family as Sources of Health Information*

Overall, teens discussed a range of topics with their parents. Several of the girls said they talk with their parents about "how the day goes" or "day to day happenings" as well as occurrences in their sports, social activities, hobbies, and preparations for college. From the teens' perspectives, they also talk about health problems that one party wants to end: for Aisha, she often encourages her mom to quit smoking, whereas Keira's parents want her to stop tanning so much: "My parents always get mad at me. Like laying out and stuff. Like this weekend we went to the lake house, and I got really burnt, so my parents got mad." Teens also seek advice from parents about their social relationships: Serena talks to her mom about boys, and Mia asks her mom "if I have a question or am confused about, like...[if] I don't know how to tell my friends, I don't know what they will say or how much they are gonna react." Finally, one set of mother and daughter – Aisha and Ada – discussed topics like pregnancy, contraception, and abortion in our interview because one of their acquaintances had recently had an abortion and told Aisha about it.

Few teens explicitly said that they cannot approach their parents about particular health topics, although in larger focus groups, the ones that are unable to discuss sensitive topics with parents may have been overshadowed by girls who discussed the open, close relationships they have with their parents. Thus, a few teens indicated what types of topics they think would be difficult to bring up. For instance, in explaining that her friends would probably come to her mom to talk about sensitive topics rather than their own moms, Lisa described why sensitive topics are taboo in those relationships:

Lisa: Yeah, I think there's always those questions that you would Google, just to see what comes up...Just in general, they would be able to talk to my mom. None of their moms – I don't know how to put this. If it came to it, I guess they would be supportive.

Jen: But it might be something that would have to be more urgent?

Lisa: It would have to be something that was more urgent. You wouldn't want to talk about something that just later would cause just an awkward situation, You and your mom would have a loss of trust. It could be talked about with someone else.

#### *Vaccine-Related Discussions*

Most of the girls who had already been vaccinated described that their mothers told them they were going to get the vaccine. In some cases, the girls proactively told their mothers that they did not need the vaccine because they are not sexually active. After seeing the Gardasil commercial, Faith “turned to my mom and told her it wasn't necessary.” Somewhat similarly, Skyla questioned her mom's pursuance of the vaccine because she is abstinent:

Jen: What did your mom say when you went to get the shot?

Skyla: I think she said it was like cervical cancer, and she said it was like sexually transmitted. I was like, why do I need this? I'm not sexually active and I don't plan on being sexually active for a long time. She said it takes a few years to kick in or something.

Furthermore, several of the girls brought information their mothers gave them about the vaccine into the interviews. Amber reported that, "My mom was telling us that we might not need it now, but it's not like...she said it wasn't effective until you were like after you're 35. And it takes like a year to get all the shots." Similarly, Erica reported to her interview group about her mother's struggle with the decision to give Erica the vaccine:

I think about my mom, and how she's not sure if she wants me to get it because my mom's heard that you can like, die from the vaccine...What if there's like a symptom? That's what my mom said, like what if I get sick and die from it. So she's just not sure she wants to take the chance.

Finally, when I asked Aisha how she feels about the way the health topic is sent to her, she said that she prefers the television commercial to other channels because it gives her an opportunity to talk about it with her mom: "I like getting it better on commercials than in school. Like, the commercials, like, my mom is watching it, and we have a talk about it. But like in health, I wouldn't want to talk about it with like everyone around me."

*RQ1c: What educational factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?*

Educational factors are those contributions that come from what teen girls learn in school and through school activities about health, their bodies, and topics like the cervical

cancer vaccine. The factors that make up how they perceive Gardasil media and the issues they know to be related to that campaign are *school as source of health information* and *feelings about school*.

#### *School as Source of Health Information*

School as a source of health information is somewhat of a blurred concept because many of the lessons that girls reported they learn at school about health are not learned in the classroom. While obvious factors like *health, biology, and parenting classes, teachers and coaches, and memorable health interventions* in the classroom all contribute to teen girls' concepts of health, other experiences are central to girls' understandings of the cervical cancer vaccine. These *non-obvious health interactions with school* are the integration of media and school, pregnant girls at school, and seeking adult help.

*Health, biology, and parenting classes.* When asked about where they learned about health, cervical cancer, or about the vaccine, most of the teen participants initially said health, biology, or their parenting class. The girls often gave me bits of information they have garnered from their health classes around these topics: Sabrina said she had heard of HPV because in health class, it was used as an example of a virus, and Jayla explained to me her understanding that viruses are usually dead when they are put in a vaccine. Furthermore, Leah even said that her teacher showed the class the Gardasil commercial. However, when probed about their experiences and attitudes about their health classes, many of the participants seem to have negative perceptions. They often mentioned that health class is easy, boring, or a “blow-off” class. Abella said that health class “didn’t really teach us interesting things – just like diseases and stuff,” and Lisa

described why she believes sending teen girls information about the vaccine through a commercial or through the doctor was a much better channel than through health classes:

Lisa: I don't remember everything in health class, mainly because health classes are an easy class to get through and get an A in, and like, I guess if my doctor told me, this is a really good idea, get the HPV vaccine, I'd take her word for it...

Jen: You mentioned health class. Was it just like a blow-off class?

Lisa: For me, yeah. Like in middle school, it's just like a funny class... You would take the test, and since it was such an easy class, you might not retain all the information, especially if it's information you've heard before.

Similarly, as mentioned earlier, Aisha feels that she was much more comfortable learning about health from an ad at home since she can talk to her mom about it, whereas she does not feel comfortable talking about some health topics "with, like, everyone around me."

*Teachers, coaches.* Several of the girls expressed frustration or dismay with their teachers and coaches because the girls feel like "they don't care." For example, after the interview, Serena asked about why I am talking to teens for my project, and I explained to her that I believe that teens have important opinions that people should listen to. She and Renee seemed to believe this was not the case with their teachers:

Serena: Like when our teachers talk, we don't really listen because they are not interesting to listen to.

Jen: Does it feel like they are interested in you?

Serena: No. They just teach us...

Renee: because they have to.

Serena: A lot of teachers don't like their job.

The girls also gossip about their teachers' lives, appearances, and personalities. In one focus group, the girls talked about a teacher having a baby as well as another teacher they thought had "cankles." This gossip also seems therapeutic for some girls, as Makayla pointed out that she talks about "stupid girls, teachers" with Mia when they are just hanging out because "I have a really bad attitude, so if a teacher says something I don't like, I'm not afraid to speak my mind." Some girls also think that teachers treat them differently than classmates from other races. Amber and Faith described why they feel that racial difference is a problem in their school because people of different races receive different punishments by teachers:

Faith: In our high school, it's definitely noticeable, like the racial...I still feel like at our school, teachers are racist sometimes. If I were to get in trouble, ok, well, you have detention, but I feel like they are scared of black people. Like, if they were to get in trouble, they would be like, ok, don't do it again.

Amber: Or like treat them differently. Because it's mostly black people who are getting in trouble, and they are scared to do something about it.

The girls made some mention of teachers in their health classes or coaches as influences to their healthy behaviors. A few girls talked about the positive relationships they have with their coaches, like, when Alana explained to me that her coach is a major influence about health information for her: "Yeah we talk about that a lot. She is always reminding us to eat healthy. Our coach. She looks like one of us. She is 25...we had a sleepover, and she made us eat healthy." However, not all girls feel that teachers and coaches are sources of health information they feel comfortable approaching about certain topics. Lisa feels a vibe that the coaches who taught her health classes were "kind

of uncomfortable talking about it,” and she explained why the teachers in physical education class are not people she would talk to:

We just had a month is PE where we had to watch a bunch of videos. The teachers were always like, if you have questions, of course you can always come to me. And we were always like, ehhhh. [She made a sound that indicated an awkwardness or repulsion with that suggestion.]

*Memorable health interventions.* Although health classes and teachers are perhaps not the most significant sources of information for the teen girls interviewed, several of the girls proactively talked about some type of experiment, lesson, or activity they did in school that made them think more about a particular health topic. The health topics the interventions addressed included CPR, drunk driving, HIV, and teen pregnancy. For example, when I asked Becca what she was learning in health class, she said that they were taught to perform CPR to the beat of the song, “Staying Alive,” and in the interview, she imitated the teacher showing them how to do it. Similarly, Serena described a class experiment that showed the students how easily HIV can spread across sexual partners:

Serena: Everyone gets a little cup of water, and you mix the waters and stuff, and she puts this drop in there and it shows – if it turns pink, then you have HIV. This guy – he had HIV. I didn’t have HIV, like I mixed with him, but I didn’t get it.

Jen: How many people in the class ended up having HIV?

Serena: 14 or 17...she was like, see guys? The exchange of body fluids – this is how it can happen if you don’t know if your partner has it or not. Pretty crazy.

Renee: You should have asked him before he poured it into your cup.

Other interventions included Makayla and Mia's participation in the community-wide *Shattered Lives* program to provide experiential learning about the consequences of drunk driving; the girls that wear "purity rings" as a sign that they are committed to waiting until marriage to have sex; and an "egg project" in which students had to "care [for an egg] like it was a baby" for a weekend...it's supposed to show you that having kids is not fun...and that abstinence was the way to go." Finally, even something as small as feeling comfortable asking questions in class about health concerns was a school experience Alana remembered:

[Her Human Relations History class] is pretty cool. It's boys and girls. Everyone knows each other pretty well, and if you do have a question, and you don't really feel comfortable saying out loud, then you can just ask the teacher. We all write down a question on a piece of paper, and we turn it in anonymously, and they will read some of them out at the end for like 10 minutes. Our teacher for HUR is my history teacher. He's cool. And he's funny too.

*Non-obvious health interactions with school.* The lessons girls seem to garner from the school setting or in an education context are the *integration of media and school*, *pregnant girls at school*, and *limited adult help*. The *integration of media and school* refers to teen girls' use of mediated technologies to either check their grades online, to conduct research for school projects, or to communicate with classmates and friends while at home about homework assignments and projects. For example, Abella said that Facebook is "always on in the background" so that she can ask peers questions about an assignment, and Lisa said that using Google is sometimes much easier and quicker than watching the news to learn about current events.

*Pregnant girls at school* – an issue that comes up often in this study as a seemingly natural segue from discussing cervical cancer to STDs to girls considered promiscuous to pregnant girls at school – seem to serve as affirmation to many of the teen girls interviewed in this study as to their choices to remain abstinent. This is also a way that girls identify themselves, as comparing themselves to girls that seem far different from them. Some of the girls try to identify with pregnant girls’ experiences, as Becca did with pregnant girls at school: “I feel bad for them...if they knew...if they had a different influence, they wouldn’t.” However, in the group settings of the interviews, the discussion often turned to the morals of sex acts as well as the values around seemingly related topics, like drinking, doing drugs, smoking, and partying. Although some of the teens interviewed said that they see issues like teen pregnancy in the media they use, almost all interviews consisted of the mention and in some cases – at-length discussions – around pregnant girls at their schools. Finally, the idea of teen pregnancy seems to provide some kind of “worst case scenario” for many of the girls, and it reiterates to them why they make the decisions they do about sex.

Finally, *limited adult help* is something that many of the girls did not discuss. The most significant mention of this came from Teague, Chelsea, and Sadie’s telling me about when they had to “seek adult help” from a school counselor about their friend’s bulimia. They are the ones that gave me this phrasing, but other participants did not use this exact phrasing. Furthermore, it seems that although some girls said they had an adult – either a parent or a coach – that they could talk with if they “really had to,” very few actually seemed confident that they had multiple adults they could approach with sensitive information or questions. I noticed their uncertainty with my questions like, who

would you turn to for information about cervical cancer or HPV, when they provided responses like, “my mom, I guess” or “I don’t know” or “I would just Google it.”

*Feelings about School*

Overall, the teen girls interviewed described school in two ways: either as “good” or as “stressful.” The ones that felt school is going “good” explained that they are getting good grades, and that they had changed in some way recently, particularly by moving schools (e.g., from middle school to high school, from a more challenging to a less challenging school). For example, Teague explained that ninth grade is stressful because of the change in friends:

Well, the first couple of weeks, I, like, loved high school because you didn’t have to do any work, and it was like a big change and lots more people and new people and new friends. But, like, as it progressed, it like, got really hard, and you could tell a big difference between middle school and high school.

When girls responded that school was “stressful,” they explained that they feel pressured to make good grades, that they have a lot of social and/or physical activities and homework assignments, and/or are preparing for college, including taking entrance exams.

*RQ1d: What sociopolitical factors contribute to teen girls’ perceptions of HPV/cervical cancer vaccine communication?*

I conceptualized sociopolitical factors as those cultural and social systems that are characterized by relationships of power differentials with girls. In addition to discussing friendships, girls also talked about other social relationships, like school peers that were not their friends. In these discussions, difference typically emerged as a major source of

health information. To focus the discussion according to the Research Questions, only friendships will be discussed in Research Question 1, and perceptions about and feelings around difference within peer networks will be discussed in Research Question 4, which explores how meaning is made differently across variable identities. To answer this piece of Research Question 1, teens make meaning through the sociopolitical factors of *friendship dynamics* and their understandings of *celebrity influence*.

### *Friendship Dynamics*

Friendship dynamics that relate to how the girls make meaning of the campaign emerged as the *types of talk* participants engaged in during the interviews, which were *friend assurance/encouragement; girls educating each other; girls correcting/challenging/“checking” one another; and gossip*. Other friendship dynamics that contribute to girls’ meaning-making of the campaign are the *limited health discussions* held among their friendship networks and the *responsibilities of friendship*.

Many of the girls talked also about how they *assure and encourage* their friends, particularly when they are not feeling confident about themselves or are feeling sad about a recent event. Teague, Chelsea, and Sadie revealed their encouragement of one another when they discussed how they will talk about health:

Sadie: Like, Chelsea’s always saying, we should run again. Or someone will say, I’m fat, and we’ll all say, no you’re not.

Jen: What does that make you think about when a friend says, I look fat?

Chelsea: I think we’ve all said that. And we’ll say, no you don’t, you’re just like making that up. Because you know, it’s like when a person looks in the mirror

and sees themselves, they think differently. Like, you see yourself differently than you see others.

Teague: You imagine it.

In the interviews, some of the girls *educated each other*. For example, they answered each others' questions about cervical cancer, HPV, and the vaccine, like when Kylie did not know what cervical cancer was:

Leah: I think of doctors.

Amber: I don't really think of anything.

Kylie: I don't even know what it is.

Faith: I haven't gotten it. I don't need to.

Amber: You can have it by having sexual contact with someone.

Kylie: Oh my god, is that that thing...I think I've seen that commercial.

Leah: They have like 3 shots.

The girls would also *correct, challenge, or "check" each other* when they felt that another girl was not being totally honest or they were being misrepresented by the other girls. For example, Renee and Serena mentioned that people would need to know what HPV is before seeing the commercial to really be able to pay attention to the commercial:

Serena: I don't think anyone really listens to what they say. I just think they listen to like what Renee listens to – the very ending.

Renee: Hey, I knew that...I knew from the commercial that it had HPV.

Serena: But you didn't know what HPV was.

Renee: Cervical cancer!

Serena: Do you know what cervical cancer is?

Renee: Cancer! I didn't know [before], but I did know that because Nicole told me. When I was singing the song in the locker room.

Finally, one of the most consistent ways that the teen girls talked was using *gossip* to discuss other people – and in particular, girls – at their schools or from their recreational activities who had done something they considered to be extreme or unacceptable. Mia said that she and her girlfriends talk about health with one another through gossip, “Like if someone missed their period. Like, oh my gosh, did you hear? She’s pregnant.”

Likewise, one group of girls gossiped in the interview about a pregnant girl:

Faith: Like, there’s a girl in my class that keeps asking me to be her baby’s godmother.

Amber: That’s weird.

Faith: Yeah. I’m like, I don’t even know you. But she’s like having her baby soon. And she isn’t with the guy that she’s having the baby with.

Amber: She’s really pretty. She’s really nice and stuff.

*Limited health discussions.* Many of the girls said that they do not discuss health topics like STDs, questions they have about sex, and cervical cancer to people at school, including other friends, and especially not boys. Serena and Renee described why this is the case:

Serena: Some of them would probably think we’re gay!

Jen: Your girl friends or your guy friends would?

Serena: Both. They would probably be like, why are you talking about it?

Jen: Oh, because you don’t talk about like health stuff?

Renee: Yeah. The guys would be like, okaaay.

Serena: Yeah, they guys would be like, I don't care, I'm gonna go do the nasty this weekend anyway.

There are a few health topics that are acceptable to discuss: eating, weight, and abnormalities. Lisa described that, "Food issues come up, because like people tease each other for eating something really bad. But it's just teasing," and Skyla explained how she and her friends discuss weight: "I have a friend who, I know she is always kidding, but she is always saying she is so fat and stuff, although she is really skinny." Finally, girls reported – and demonstrated in the interviews – that they discuss people they see or hear about that exhibit extreme health problems. Keira said that she and her friends do not talk about health, "Unless you see someone who is really unhealthy and then you start talking about it. If you see anything extreme, like an anorexic girl, you'll be like, 'Check that girl'."

*Responsibilities of friendship.* Three patterns of interactions among friends in the interviews suggested that the participants feel some basic responsibilities to their friends, such as *caring for a friend*, *the act of telling*, and *passing along information*. One group of girls explained what they do to care for a friend when she is upset:

Amber: Talk to them, let them know if they need to say something...just go and hang out with them. Don't question them about it.

Leah: Try and keep their mind off of it.

Amber: When my grandpa died, like, last weekend, I called her, just so I wouldn't have to think about it and hearing my mom and dad telling people.

Kylie: I always like write cards, take pictures from previous times, make a big poster of it. Bring them balloons. Just like, come over if you want – you can do anything you want.

However, sometimes caring for a friend may mean *telling* if she is doing something dangerous to herself, and this act of telling is a thin line to walk. In Teague, Chelsea, and Sadie’s experience with seeking adult help about their friend’s eating disorder, Sadie said that they did so “because you want her to be healthy and doing well,” although “it was hard to feel like we were telling on her.” However, the act of telling did not emerge always in a tattletale situation, but rather, as a way to *pass important information along to others* that they care about. For example, at the end of the interview with Sabrina, Jenna, Hannah, Becca, and Erica, Becca made the comment that she enjoyed participating in the interview because she believes such topics are “good to talk about”:

Jen: Why do you think it’s good to talk about these things?

Becca: Because you’re just more aware of things.

Jenna: Because then we can tell our friends, and they can tell their friends...

Becca: Because then if something happens, you’ll know how to talk to them.

At times, however, the act of telling and passing information along become somewhat problematic when girls exert peer pressure on another in order to gain compliance from someone with a dissenting perspective. This was demonstrated when Erica brought up that her mom was unsure about whether to give her the vaccine, and the other girls in the group applied significant peer influence on her to encourage her to do what everyone else had already done:

Hannah: You might die if you don’t get it. So why take the chance?

Erica: What if there's like a symptom? That's what my mom said, like what if I get sick and die from it... It kind of makes me think, like, what if I did get HPV or something, and like, I know my mom for sure would like regret me not getting it.

Jenna: Why don't you tell her that?

Erica: I DID!

Sabrina: Ask her, would you rather me get it or have a chance to prevent it?

Jenna: We were 11 and 12 years old, and here you're 14, almost 15.

### *Celebrity Influence*

In almost every interview with teen girls, celebrities were brought up, and they were either discussed in a critical light, or in a way that they are role models. For example, Mia said that she loves reading celebrity news because, "I just like finding out about people's lives... what they're up to, what they're doing, what they shouldn't be doing." Similarly, one focus group of girls critiqued the lives and health of celebrities. When Nicole Ritchie's weight loss was brought up, the girls said that it was "sick," and that they "feel bad for her." Also, many of the girls feel they looked up to certain celebrities as role models. For example, Alana felt that Madonna "seems like a person to look up to [because] she's always reinventing herself." Similarly, Hannah and her friends feel that the Jonas Brothers reaffirm their decision to wait for marriage to have sex:

Sabrina: They say, we're not married, they're purity rings.

Jen: And do you think that that is something that a lot of people in bands...

All: No! [unison]

Sabrina: Yea. That's why we look up to them. They keep their head around them...

Jen: So do y'all think that they gave y'all the idea to wait, or...

Hannah: Well, it influenced more. Like we were thinking about it, but then when we saw Jonas Brothers, we were like, definitely! We really want to!

*RQ1e: What technological and media factors contribute to teen girls' perceptions of HPV/cervical cancer vaccine communication?*

Technology and media are significant meaning making sources for teens around the different facets of their health, such as their self-concept, their approach to relationships, and ways they protect themselves from health risks. This section describes teens' *everyday media usage*, the specific *mediated sources of health information*, and their *cervical cancer vaccine (CCV) media-specific meaning making*.

#### *Everyday Media Usage*

Overall, teens use a variety of mediated information sources – perhaps more so than interpersonal sources. They said they use mostly watched television and work on the Internet when they are not going to school, participating in sports, or hanging out with their friends. The most commonly cited television channels they watch are MTV, Nickelodeon, the major networks, Disney, BET, and Noggin. They also watch television shows on the Internet. The other major media source they use are the social networking sites of Facebook, MySpace, and Youtube, although, different groups of girls seem to align more with one of the two major networking sites than the other. For example, some girls prefer Facebook because “it’s better ‘cause you can like look at people’s pictures of whatever...” Girls expressed preferences between the two for reasons around safety as well:

Amber: Facebook is so much safer.

Faith: I feel like it's not that safe because you're saying like your first and last name.

Amber: But you can choose who you want to be friends with, so no one can really hack onto you. No one can just see your page, unless you're friends with them. And you can't see anyone else's unless you request a friend.

Leah: But people can hack onto MySpace.

Girls also use magazines such as *Seventeen*, *People*, and *Cosmopolitan*, and a couple of girls said they read the newspaper. Finally, girls often use the Internet for school purposes to conduct research for projects (e.g., Lisa said that, "For a lot of our school assignments, it's just easier to Google something versus watch it on the news"); to check their grades online through a school district system (to which Teague said, "I get, like, so nervous logging onto it!"); and to ask each other for help or information about assignments, as Teague, Chelsea, and Sadie described their usage of Facebook to do homework:

Chelsea: Use MySpace, Facebook, for probably a couple hours a night.

Sadie: It's like on and off. Like sometimes I'll be doing my homework, and I'll have it on in the background, and I'll just kind of check to see if I've gotten any new messages.

Teague: You can refresh the page to see if you have any new messages.

Jen: Do you ever use Facebook for homework?

Chelsea: Yea, definitely. We like e-message each other all the time, like, what was the assignment? And, did you understand this?

*Mediated Sources of Health Information*

Although most girls said they do not actively search for health information, they make meaning through the *health and social news* and *other health campaigns*. Similar to the theme that girls discuss abnormal or extreme health and social behaviors, they obtain some of this information from *news that reported on health and social happenings*.

Serena, for instance, believes that “everybody is doing it” because “just on the news they are talking about girls as young as 4-years old getting their periods,” to which Renee remembered that, “we were watching this thing about teachers having the hots for their students. Like a 14-year old kid and their teacher.”

Also, when I asked girls what teen health issues they had seen in the media, many of the girls brought up *other health campaigns*. The most commonly cited campaign by far was the anti-tobacco *Truth* campaign. They seem to feel like this campaign does something unique compared to health campaigns they have seen previously, and because this campaign encourages them to look at the issue from a different perspective, they feel it gained credibility with them. In the following dialogue, the girls discuss how *Truth* gains their attention in ways that other health ads – including the Gardasil ad – have not been able to:

Rhiannon: [*Truth*] get[s] your attention because it is geared towards you.

Madison: Well so is the Gardasil, but the Truth ones give you examples of something we do everyday... You can get meningitis in a classroom from someone sneezing or coughing, and that is when you are like ‘what’?

Keira: Truth says stuff like, look at all these people who are smoking.

Grace: They are like this could easily be you – look at all the people who like...

Keira: They use things to get your attention. It might sound stupid but it makes a point.

*CCV Media-Specific Meaning-Making*

The vast majority of the teens had already seen the Gardasil ad prior to our interview. One girl had not because her family does not own a television, and some of the other girls thought they had seen it but were not positive. Before (in many cases) and after watching the ad, girls expressed extremely varied perceptions of the ad and opinions about the opportunity to vaccinate themselves, based on what they had seen in the commercial. The section reports on the ways the girls make meaning of the commercial alone, which consist of *raised awareness, varied perceptions of and feelings from ad, and perceived susceptibility and desires to vaccinate.*

*Raised awareness.* As mentioned, almost all the teens interviewed had already seen one of the versions of the Gardasil commercial before the interview. In fact, most girls either sang the commercial's jingle or chanted some version of the "one less" slogan before we watched the ad online, as demonstrated by Renee:

Renee: And of course the Gardasil commercials. I wanna be one less. [singing the jingle]

Jen: Actually, we can start talking about that. Um, so you remember those. Why?

Renee: The little cheer? I wanna be one less, o-n-e-l-e-s-s. I have a bad job spelling. [singing jingle]

Jen: How come you think you remember that, Renee?

Renee: I think it just kind of stuck with me. It's kinda catchy. I want to be one less! And then they start cheering.

However, although many of them were familiar with the commercial and its slogan, many also said they had not heard of cervical cancer or the vaccine before they saw the ad, as evidenced by Alana's explanation:

Yeah. I didn't really know what cervical cancer was before the commercial, but after I saw the commercial since there is a vaccine it didn't really...like breast cancer that worries me because a lot of people get that. But I had never heard of cervical cancer before, and there is a vaccine so I would just be able to get that whenever I need to. And I wouldn't get cervical cancer if the vaccine worked.

Overall, most of the girls said they had never heard of these topics, but they feel now they were hearing a lot more about them. So, some girls perceive it is a new disease or affecting people in epidemic proportions, as understood by Lisa:

Jen: I think it's a really important question that you're asking, Lisa, because I think it's something that is...I mean, are you perceiving that it's an epidemic?

Lisa: Well, no, it's just obviously something that needs to be brought to the attention of the public, I guess. I don't know a better word than epidemic.

Jen: Why do you get that feeling?

Lisa: Because all of a sudden there's attention around it until now.

*Varied perceptions of and feelings from ad: The girls.* Girls' perceptions of the girls in the ad range significantly. In fact, there are considerable different types of girls – or characteristics of girls, like race, age, sexual activity level, attractiveness, and hobbies/interests – that participants feel the ad represents. For example, several people feel the ad portrays a variety of girls from different races and girls doing different things, as Serena noted after watching the ad: “they tried to get a variety of everybody, to try to

show that anyone can get it...because there's like all three races." However, some of the White teen participants noticed that the girls in the commercial were White, as Mia noted: "I did notice that all the girls in the commercial were like, White."

Some of the teen mothers and pregnant teens feel like, "[other girls] think that it's not for them, that it's only for people who get pregnant." To this point, some non-pregnant/parenting teens did feel that the girls portrayed in the ad are all sexually active and have HPV or cervical cancer. For example, Aisha perceives that the girls in the commercial already have HPV or cervical cancer:

Jen: How do you feel about the activities the girls are doing?

Aisha: Basketball, jumprope. I mean, they seem like just regular teenagers going on in their same, normal life, that they have before they got the HPV.

Jen: Oh, so you...you're kind of getting that the girls have HPV.

Aisha: Or cervical cancer. Or HPV, which turns into cervical cancer.

Jen: How do you think they got it?

Aisha: Having unprotected sex, probably.

Also, about half of the teen girls feel that the girls portrayed in the ad are teens their age, as Lisa noted, "I mean, all those girls are like, my age. It makes them look powerful because they are all doing something successful. Like one girl can horseback ride, and one girl can twirl a baton." However, other teens do not necessarily see girls their age in the ad. For example, other groups the teens think are being targeted in the commercial are older teens, young adults, men and women, all women, mothers and parents, "good" and "bad" girls, and all girls.

Several girls also said that they feel the commercial represents girls who do not seem like actors. Instead, they perceive them to be people like them, as exemplified by one group when I asked them how they feel about the girls in the commercial:

Jenna: They're good.

Hannah: They're normal. Like one's doing gymnastics. Like doing high school kind of things.

Sabrina: They are like, our age activities. Yeah, something we would do.

Jen: Hannah, earlier you said they were normal. What do you mean normal?

Hannah: Like, normal, like us. We're not really super star people. They're not really different. They're painting like pictures, like, one less!

Although less common, a few girls believe that the girls represented were actors, as Skyla mentioned: "They are not normal people. They are actresses. I know that people in commercials are not normal. Usually the people who do commercials are Hollywood people. They are probably not even getting the vaccine." Furthermore, a few participants also believe that the girls are portrayed doing "girly" things, which does not appeal to them, and another participant believes that the girls portrayed are "too pretty...[because] we are a big family. We are not skinny. So they should have a fat mother and daughter. The people were too perfect."

Finally, many of the girls relate to and like something the girls in the ad are doing, such as horseback riding, playing soccer, and playing in the band. Several girls said they like the ad because the girls seem to be leading positive lives, similar to how they are leading their lives. For example, Abella feels the commercial assures her that she can maintain her active life if she got the vaccine: "They were all active and healthy seeming,

so because of that, I felt that if I got the vaccine, I would be able to stay that way.” Lisa feels similarly that the girls are “powerful” because they received the vaccine:

Lisa: I mean, all those girls are like, my age. It makes them look powerful because they are all doing something successful. Like one girl can horseback ride, and one girl can twirl a baton.

Jen: So you feel this is important to you to know why?

Lisa: So you can succeed, so you don’t get sick.

*Varied perceptions of and feelings from ad: Who’s targeted.* Based on these perceptions, about half the participants believe they are targeted by the ad. For example, Abella feels the commercial is talking to her personally: “A little, yeah. I’m active like the girls were in there, like with playing sports and running and horseback riding. Doing stuff they love, and I’m like that.” The other half of the teen participants feel they are not targets in the commercial for various reasons, such as they think the ad is intended for other teen girls, for their mothers, and for other types of girls. Several participants also feel that the activities the girls in the ad are doing are not realistic portrayals of what teen girls their age do. For example, Serena feels that girls making sweaters is not something “anyone would do”:

Renee: I think it relates because most of the people look like they are teenagers.

Serena: Maybe not making a sweater.

Jen: Because it doesn’t seem like something you would ever do?

Serena: I don’t think anyone would.

Renee: The losers with no life would make a sweater... They have nothing better to do.

Serena: Um, they can go read a book!

Renee: Or they could go to make a sweater.

*Varied perceptions of and feelings from ad: Cervical cancer/HPV portrayals.*

Based on the ad's portrayals of cervical cancer and HPV, the girls understand the virus and disease along a spectrum of severity. Many of the girls believe that cervical cancer is urgent (e.g., "it's a serious thing if you actually end up getting it") and the cause of significant pain and suffering for someone their age, as Abella pointed out:

It makes me realize that that could happen to me eventually, and how cancer isn't necessarily something you'll get when you're old. It's kind of scary. I don't feel like I would be – not necessarily ready to have cancer because I would never be ready – but that it could happen to me in five years. That's kind of shocking.

However, after seeing the ad, some girls believe cervical cancer and HPV to be less severe and avoidable. For example, Madison believes the ad to portray HPV and cervical cancer as "bad enough to the point that you can't help yourself." Finally, some girls believe that the disease and STI are topics they still did not understand, for the interviews were laden with questions from the girls about the nature of HPV/cervical cancer. For example, several girls believe that cervical cancer is an epidemic or a new disease because they feel they would not be seeing a wealth of ads and discourse "all of a sudden" without it being an emerging, widespread disease. Abella demonstrated this thinking in her questioning of the commonality of cervical cancer:

Abella: I have a question: is cervical cancer common?

Jen: [I explained cervical cancer rates domestically versus worldwide.] But in the US, it's not the biggest cancer killer. So, what do you think about hearing those statistics?

Abella: It made it seem more common than it is, which might be a good thing, because it might influence more people to get it.

Jen: What made it seem more common?

Abella: They just said "one less" during the commercial a lot.

Finally, most girls feel that the ad omits or simply does not include pieces of information they feel are important for them to hear about in order to fully understand their risk and their need to get the vaccine. For example, Mia has several areas of information she still needs answered by the ad:

I think it's – they haven't talked about if it's worked, or if it's actually prevented it. I mean, there hasn't actually been – or I haven't seen anything that's been like, it's been test...out of the people who got it, to this day, have not gotten cervical cancer. Or, out of this many people who took it, this many had side effects...or a little bit of error. Because everything is going to have an error – I just think they need to bring out the scientific side of it. And just inform people.

*Varied perceptions of and feelings from ad: The vaccine.* Again, the girls perceive the ad's portrayals of the actual vaccine in a range of ways, such as something that will help them, something that they need, something that is optional to obtain, and something that is not ready yet in terms of its efficacy. First, several girls feel the ad demonstrates to them that the pharmaceutical manufacturer "cares" about girls' health enough to make the

vaccine, and some feel that the vaccine shows that it would help with cancer, as discussed among some of the teen mothers:

Jen: How does this commercial make you feel?

Tanisha: Good because you can do something to prevent from getting cancer.

Miranda: It makes me feel happy because you know for a fact that you are healthy.

Imani: It makes me feel important because it's not something everyone would do.

However, some girls feel the vaccine was optional, and several said that they do not need it right now because they are not sexually active. They think, though, that they will get it in the future once they become sexually active. Alana, for instance, said that she does not think the ad is talking to her personally because "I don't feel a need to get it right now, so I just kind of put it in the back of my mind." She later said that she perceives the girls in the ad are sexually active, and although they look like "they weren't worried about it because they had the vaccine," she does not relate to the ad because she is not sexually active. Furthermore, some of the girls feel the vaccine is not ready to actually help girls prevent cancer effectively right now because of its novelty and because the ad does not report certain pieces of information, as discussed by Makayla and Mia:

Makayla: There's not enough information on it. It's like, oh, let's do one less...okay!

Mia: They are a new product and they are research and testing. But still, they should at least have some information on it by now about it or at least some tests that have run. I know some people who have taken it and have it done...

Makayla: I know people that have taken it and died. That's the only fact that I know of.

Jen: What? You know personally or you have heard?

Makayla: I don't know personally, but that's the only thing I've heard.

Finally, girls even perceive the requested behaviors of the ad differently. For instance, most of the girls think the ad wants them to get the vaccine, but some think it is also suggesting that girls seek additional information about cervical cancer, HPV, and the vaccine as well as be abstinent.

*Perceived susceptibility and desires to vaccinate.* Overall, 11 girls interviewed are fully or partially vaccinated; three of the girls do not have plans to vaccinate; seven are going to be vaccinated soon; two want to get the vaccine but their mothers are not going to give permission; and 15 plan on getting the vaccine but they do not know when.

Perceived susceptibility to cervical cancer and HPV and the girls' desires to be vaccinated are not mutually exclusive factors because perceived higher susceptibility to cervical cancer/HPV does not necessarily create a greater likelihood that the girls either were or would be vaccinated. In many ways, in fact, these concepts are incongruent. For example, many of the girls who are already vaccinated do not feel they were susceptible to getting HPV and cervical cancer because either they already got the vaccine, they are not sexually active, or they believe they are not the types of girls that would put themselves at risk for needing the vaccine, based on their morals/values system.

Differently, some girls have not received the vaccine but feel they are susceptible to cancer because they feel that cancer can happen to anybody without provocation besides genetics or the random nature of cancer. Makayla and Mia are prime examples of this

belief because they were the most adamant about cancer being something that cannot be prevented or cured, and they were the most passionate participants about needing more proof about the vaccine's effectiveness and more information to convince them that the vaccine is worth the risks of the short- and long-term side effects and costs.

*RQ2: How do parents of teen girls make meaning of an HPV/cervical cancer vaccine communication campaign?*

### *Summary of Findings*

Differently from teens, parents largely make meaning of the communication around HPV, cervical cancer, and the vaccine through personal, familial, and educational factors over sociopolitical, technological, and media factors. In this study, *personal* factors were conceptualized as those that come from within the person and their concepts of themselves; *familial* factors come from their immediate and extended families; and *educational* factors constitute how parents learned about health and HPV, cervical cancer, and the vaccine outside of themselves and their families, including lessons learned from other areas of education in their lives than school. One of the most significant patterns among parents' meaning making is the sense of nostalgia and contradiction to their pasts, that cervical cancer and HPV were not health risks when they were growing up. As part of this, parents feel protective of the new challenges facing their daughter, as being a parent and assuming the responsibilities of raising a teen girl emerged as consistent and significant in how they observe the campaign media. Finally, despite parents' responsibilities to keep their daughters safe from such health threats, many parents perceive conflict about how to know their daughter's choices about sex and relationships as well as how to confront their daughters about such topics. This is

particularly difficult for some parents who made decisions about the vaccine based on their own sexual health histories. As some of these factors also point to how daughters and parents make meaning of the media together, pieces of the findings to this Research Question overlap and complement findings that answer Research Question 3. Below, findings specifically address the questions in RQ2 that determine the personal, familial, educational, sociopolitical, and technological and media factors influencing parents' meaning making of the campaign.

*RQ2a: What personal factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?*

Several factors contribute to parents' perceptions of the cervical cancer vaccine communication, which are their personal *understandings of health* and parents' *involvement in their daughters' health*.

#### *Parents' Understanding of Health*

Parents often discussed their attitudes and overall comprehension about health maintenance and how to combat health risks when asked about the specific topic of the cervical cancer vaccine campaign. Parents' understanding of health is comprised of their *personal health philosophies* and their *perceptions of what constitutes health*.

*Personal health philosophies.* Parents' personal health philosophies seem barely distinct from their parenting philosophies and their feelings around their children's health. However, when asked about what health means to them, parents talked about health obligations, the need for positive health, and an overarching guide for health that they established based on their personal experiences. Parents seemed to develop personal health philosophies that they dispense as ways to explain choices they make routinely or

per event about their health and their families' health. For example, when I asked Emily about the sources of information she uses for health concerns, she explained that she talks to doctors but “researchers [her] butt off” because “you should be in charge of your own health care.” In another sense, Julia – after researching the nature and risks of HPV and cervical cancer after giving her oldest daughter the first two shots in the series – said the information from the commercial confused her because she read elsewhere that if a woman has HPV, it may never develop into cervical cancer: “It depends on your body. And every body is different – we don’t think they are, but they really are.” Parents also often pointed to the absolute need for health in order to live the life they want their families to have. Julia, for instance, feels that the vaccine is “dollar-driven” because of the pharmaceutical company’s motivations, and that this angle became important when she chose to stop vaccinating her daughters with Gardasil:

Julia: If you don’t have your health, you don’t have nothing. Absolutely nothing.

Jen: Yeah, because you can’t participate in other life activities.

Julia: Why have your money if you don’t have your health?...And a lot of it, I have fallen for because it just sounded better than the disease. But I don’t know about this one.

*Perception of health.* Much more so than teens, parents typically had a definition of health that seemed more comprehensive than teens’ definitions. Parents also had definitions for which they did not question, as many of the teens did. For example, whereas when I asked teens what they thought of health, many replied with single concepts, like “doctor” or “eating right” or “being skinny,” parents like Marie had a fuller definition: “I think to me it really means wellness. I think I have a total health approach

to the word. It's feeling good and able, and willing to face the challenges of the day.”

Parents also often mentioned mental health in their definitions, which is an area of health that none of the teens used to define health. Finally, parents discussed some of their health concerns for themselves in relation to their daughter's health. For instance, in telling me about some of the things Molly and her daughter, Grace, talk about, she said that her daughter is educated about food and encourages her mother to eat better, a topic which Molly reflected on in the interview: “I never ever from when [her children] were born, I've never made them eat anything. I let them eat if they're hungry. If not, they don't. Because I struggle...” Several parents also had reproductive and sexual health related concerns for themselves, which largely influence their decision-making around their daughter's vaccination status. For example, Kristen told me she has venereal warts, which is why she felt involved with the commercial for herself before she connected to it in terms of her daughter's health:

That's what got my attention. I remember years ago when they came out with...they said that the, uh, so many of the, uh, venereal warts so many times, the virus, is what caused the cervical cancer. So I was very concerned, so I asked my doctor, and he said I didn't show any signs and not to worry about it.

#### *Involvement in Daughter's Health*

Parents make meaning of the vaccine media in several ways that largely represent how they are involved in their daughter's health. The ways parents express their involvement with their daughter's health are *the realization that their daughter is older and susceptible to risks, concerns and feelings for their daughter's health, and knowing their daughter's choices around sex and relationships.*

*Realization that daughter is older and susceptible to risks.* In talking about the connections the parents make between cervical cancer, sex, and their daughters, several of them reflected on their realizations that their daughters were no longer young enough to be sheltered from more adult health threats and discourse around such topics, as Marie put, "...because it is linked to an adult behavior, and they're in that...it's not like a little kid getting a chicken pox vaccine – they're getting this because they are nascent adults, and this is an adult-related decision." Most of the parents with whom I spoke asserted that they recognize that their daughter may be sexual active or will be in the near future, as Emily explained because sexually transmitted diseases was the first health concern she noted for her daughter, Mia:

...because everything else, I can stay on top of and take – this is going to sound horrible – but take control of and prevent. But she is the guardian of her own body, and I'm sorry, they've got free time – like I said before – and hormones and spur of the moment stuff.

*Concerns and feelings for daughter's health.* Parents seem fairly consistent in the health topics they are personally concerned about for their daughters, which include being sexual active, STIs, HIV/AIDS, Hepatitis, weight, not eating fast food and eating healthy, skin, drinking alcohol, doing drugs, driving and car accidents, smoking because of the threat of cancer, exercise, and pregnancy. Kristen, for instance, is concerned for Renee's sexual health above all else because her older son has a baby from an unplanned pregnancy at an age that Kristen perceives as too young: "I hope they stay plenty scared of [having sex]...but all it takes is one minute to get stupid. Or to put yourself in a situation where you don't have control. I cannot emphasize that to them enough."

Overall, parents also expressed fear when I asked about their feelings about the health threats they perceive their daughter faces. Molly said, “I guess there’s fear – fear of the unknown, of what might come later.” Parents feel the fear of the unknown in relation to the Gardasil topic, as Kristen is curious about why Gardasil is being targeted to 11- and 12-year olds: “I guess it’s because you don’t know when they are going to become sexually active. It’s so scary.” Finally, many of the parents attribute their feelings of fear to comparisons of the health topics they worried about when they were growing up, which seems incongruent to them, as Elise expressed when telling me what her doctor said to her to convince her to have her daughter, Hannah, vaccinated with Gardasil: “That it covered most STDs – that virus and, I think, some other ones – can’t remember. I think that’s scary, because cervical cancer and STDs are so much more scarier now than they were when I was her age, to me.”

*Perceptions of their daughter’s choices around sex and relationships.* When asked about their concerns for their daughters’ health or when discussions about cervical cancer, HPV, and the vaccine turned to sexual activity, the vast majority of the parents gave their assessments of whether they think their daughters are sexually active. Every parent either said their daughter is not sexually active or they do not think she is sexually active yet. A few parents are even surprised that their daughter is not sexually active yet or are expecting her to be sexually active “sooner rather than later.” However, many parents talked about their hopes to prolong sexual onset as long as they can, as Julia talked about since her daughter, Erica, is one of the girls that wears purity rings and has vowed to wait until marriage to have sex:

And I have found, at this age, and I only know because I have an older daughter, you buy one day at a time. You think, are they going to be like this when they are 18? Who cares! We'll deal with that then. If we can buy today as being pure, and tomorrow as being pure, we've won two days. That's my goal is to buy one day at a time.

Almost all the parents explained they believe in “education and open communication,” as Emily described her approach to talking with Mia about her major health concerns for her. Parents also discussed their fears that their efforts to discuss the consequences and reasons for prolonging sexual onset may not have resonated with their daughters, as Claire expressed: “I'm just nervous about sexual activity – if they can't come to me about it...I'm afraid they feel they can't be open about it. Which I don't think any child is open with their parents about. That's my experience.”

Other factors that parents said contribute to their knowing their daughter's choices about sex and relationships include (a) their daughter's reasons for obtaining oral contraceptives (usually because the daughter wanted to lessen menstrual cramps); (b) their daughter's first trip to the gynecologist; (c) in some cases, signs of abstinence, like for Elise and Julia's purchasing purity rings upon their daughters' requests that symbolize their daughters' decisions to wait until marriage to have sex because of the Jonas' Brothers' “true love waits” promotion; and (d) conversations in which daughters tell their mothers they are not sexually active (although this proactive revealing was not the case for all parents and daughters).

*RQ2b: What familial factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?*

Parents make meaning of the cervical cancer vaccine media through several familial factors, which are the *parent's perspective on the dynamics of the family*, *family as sources of health information*, and *being a parent*.

*Parent's Perspective on the Dynamics of the Family*

Within the context of talking about the cervical cancer vaccine campaign, parents often talked about how they perceive the dynamics of their family. In particular, parents' perceptions of the family consist of the *parent's perception of relationship with daughter*, *wanting to know* the status of the daughter's health, social life, and sexual activity, and *the act of asking*;

*Parent's perception of relationship with daughter.* Of the parents interviewed, all are living with a partner and their children except for two single mothers, and most parents said their relationship with their daughters is somewhere between "pretty good" to "remarkable." Parents said that in their everyday interactions with their daughters, they spend time with their daughters by taking them to the girls' sports events, practices, social activities, and "just hanging out," like watching television, driving around, and eating together. When I asked parent participants about what are some of the things they talk about with their daughters, almost all of them said that they have "open" and "close" relationships with their daughter. An open relationship is something some parents expressed they wish they had more of with their daughters, as in Claire's case in her uncertainty about whether her daughter and son would feel they could talk to her about sexual activity. Similarly, Emily pointed out some of the things she told her daughter, Mia, to encourage her to be open rather than feel scared to share intimate issues with her:

The sad thing is that the relationship you have with Makayla and I have with Mia is rare in this day and age – the openness, the closeness of communication. I’ve said, you know, there are things that you’re gonna come and tell me that I’m not gonna like – I will not judge you, it’s my job as a parent to direct you and get the help that you need. I may be disappointed, but I’m not gonna tell you that you’re the lowest thing in the book because you’ve made this decision.

*Wanting to know.* A central theme of parents’ attitudes toward their daughters’ lives is wanting to know what their daughter is doing in terms of friends, social life, sexual activity, illegal substances, health, and schoolwork. Parents talked about the ways they go about learning about their daughters’ lives, like through incorporating values of respecting their daughter’s independence and privacy, as in Claire’s retelling of how she approached Savannah when she saw that Savannah had received mail from Planned Parenthood:

...and I respect your privacy – because I don’t want to be a mother who goes through, reading her journal – I want to be a mother – I don’t know how to say it – I don’t want to be naïve. I want to be on top of things. And I just told her, I would rather you have come to me because I would rather have taken you to the doctor so we could have got the doctor’s and not just some...

*Act of asking.* Similarly, Evelyn talked about asking Makayla often about “what’s going on” to impress upon her to “know what you’re getting into,” although Evelyn repeatedly said that she does not want Makayla thinking she is accusing her of doing anything inappropriate:

Evelyn: Look, I'm not accusing you of this, I'm asking because I want you to be careful if you choose that way. I'm not being a nosy old grandmother, I just know that things can happen. I need you to know you can.

Emily: So many of the kids don't have that...

Evelyn: And they may snap back and say, you're accusing me of...I say, Makayla, I am not accusing you of anything. I'm simply asking you a question...I'm just trying to protect you. My job is to protect you.

### *Family as Sources of Health Information*

Parents use present and past information about their family to make meaning of the vaccine media. Using family as sources of health information included discussions around *family genetics* and their *partner's opinion of the vaccine*.

*Family genetics.* The primary factor that parents use to make meaning around the vaccine media is family genetics. Almost every participant in the study told me that "cancer runs in my family." One participant's husband has rectal cancer, and several participants' parents have died of some form of cancer. In fact, Evelyn and Kristen both connected to cervical cancer intimately because in Evelyn's case, her grandmother died of it, so it scared her "tremendously...anything female cancer can grow so quickly, and if it sits dormant...any female cancer – cervical, ovarian..." In Kristen's case, her biological mother died of cervical cancer, which rapidly progressed as well:

When I think about cervical cancer, I know a lot of people...my mother had cervical cancer. She's not my natural mother, but she adopted me. She had cervical cancer, and they removed a good portion of her cervix. Probably 30 years ago, and they

had to...so much I guess that they had to sew her up when she got pregnant with my sister so the baby wouldn't fall it. I thought that was quite interesting...They discovered it on a pap

*Partner's opinion of the vaccine.* Several of the parents said they discussed the vaccine with their partners. In most cases, the parent participant was a mother (only one father participated in the study), and the mothers said that they take primary care of the health of the family (and in Alex and Audrey's interview, Alex said to Audrey, "Maybe part of the problem for me is the idea that my children might be sexually active at that age, I probably have more of a block concerning that. Maybe as a father more than a father. You certainly are a lot more open to sexual discussions than I am."). In the case of vaccinating their daughter, most of the married women said they approached their partners about the decision, as Rachel and Molly did:

Molly: [My husband] was like, you really think she needs to do that? And I was like, well, I don't know, but I would rather do it than face HPV or cervical cancer or whatever. To me, the greater value is in prevention. Why not? And he was like, ok, whatever you think. And he has actually looked up information on the Internet. It's his baby girl, so...

Rachel: I mentioned it to my husband, but he lets me take care of all those...he doesn't deal with any health issues.

However, not all women discussed the topic with their husbands. Erin, on the other hand, did not talk with her husband because he does not participate in the decision-making about the children's health. I asked her if she thought this health issue was more in the jurisdiction of mothers than fathers because her suggestion for the commercial was to target parents more:

More than dads? Yes. I think there are few dads taking kids to check-ups. My husband has no idea where the office is. He's never taken the kids. That is 100% me, at least in this house. I think with most of the people I know it is the same.

*Being a Parent*

Finally, parents often spoke of their responsibilities of being a parent when we talked about how they perceive and make decisions about the cervical cancer vaccine media. Being a parent consists of *protecting daughters*, *helping daughters learn independence*, and *sorting through conflict*.

*Protecting daughters.* In talking about their role in their daughter's health, most of the parents backed up their decisions with overarching responsibilities they feel toward their daughters, which are to protect their daughters, to let their daughters' grow and gain independence, and to sort through decisions to make the one best for their daughters. Marie, for example, said that the vaccine is "one of the things we [parents] think about is if we can protect our daughters from becoming a statistic, then we should because that is our job." More generally, Emily talked about some of the ways that she tries to ensure she is protecting Mia, her 17-year old daughter:

Health – as far as being a parent – it's my responsibility to make sure that everything that's available to keep them healthy and on the right track to good health – it's my responsibility either through work to achieve good insurance to keep good health and get what they need, and provide a safe environment.

*Helping daughters learn independence.* Additionally, parents take responsibility for letting their daughters make some health decisions on their own, as Claire did when she let Savannah talk to the nurse practitioner and the doctor without her being present,

telling Savannah “you are old enough that you can talk to [them] by yourself.” Similarly, Evelyn – Makayla’s grandmother who is raising her – feels that she should not pry too much into Makayla’s life – so that Makayla learns independence – but enough to guide her to make healthy decisions:

You try to talk and find out. I sort of say, I know this is a really touchy subject...because you don’t want them to get the idea that you’re saying that they are doing something. You know you feel in your heart you feel that they’re not, and that no matter what...it’s a hard line to follow because you don’t want them to feel like you’re intruding on their life. But at the same time, you wanna know these things. And like I tell Makayla, I’m not trying to say you’re doing these things, but IF you were to, please let me know because I want to keep up with your health.

*Sorting through conflicts.* Parents also often discussed conflict when they talked about the role of being a parent and making decisions for their family. For example, Julia feels significant discord about whether to give her daughters the vaccine or whether she should have already given her oldest daughter the first two shots in the series. When she walked through her thought processes and the actions she took to gather information about the vaccine, she indicated multiple times that she doubted her choices as a parent: “I’m torn as a mother – what do I do for my daughter?” and “Well, just shoot me now, I’m thinking – what did I do? Trying to help her, I might have hurt her.”

*RQ2c: What educational factors contribute to parents’ perceptions of HPV/cervical cancer vaccine communication?*

The educational factors that helped parents make meaning of the vaccine media are distinct from teens in that teens typically learn about cervical cancer and vaccines from school, whereas parents typically do not have additional or current training from traditional learning systems (aside from the few who work in the medical or health fields). Instead, parents learn about vaccines in alternative ways like *reflecting on knowledge from other vaccine experiences, conducting personal research* about the vaccine, and *comparing* the health problem to what they know to be true *from their past*, which consists of nostalgia and contradiction in tradition.

#### *Reflecting on Knowledge from Other Vaccine Experiences*

In order to understand Gardasil better, almost all of the parent participants talked about their experiences with other vaccines they had permitted for their children, such as the chicken pox, measles, meningitis, and hepatitis B/C vaccines. On one hand, parents look to news, policies, costs, logistics, and studies about other vaccine to judge whether issues like the potential mandate for Gardasil seem appropriate, as Marie explained when I asked her what her response would be to a mandate:

I would say, I don't know just because it is still so new. What I don't know, that I want to know, is what the kind of history of mandat[ing vaccines] is, I'd be interested to know how the other vaccines got mandated. What kind of process and how that went. It's certainly a little bit different in that a public health epidemic that spreads differently, from you know, airborne epidemics, but it's mainly about the evidence and enough time passing to get comfortable and know it's safe.

Similarly, Julia reflected upon her experience with the spinal meningitis vaccine to understand why her decision with that vaccine was so quick and sure whereas she vacillated more about if she should vaccinate her daughters with Gardasil:

Elise: Otherwise, why would they be making such a big deal? All the other vaccines...

although those were more like airborne plagues.

Julia: Although spinal meningitis. All I had to do was read about that disease, and I went into orbit, like, my kids are getting that shot. There are some that I don't have a problem.

Jen: So what made that vaccine different?

Julia: I think I was so afraid of the disease – and I probably shouldn't have been because it's the same thing as HPV.

### *Conducting Personal Research*

Every parent emphasized the importance of knowing the risks and benefits of the vaccine and either already doing their own research in order to feel confident with their decision or planning to conduct more research after the interview about the vaccine, like in Claire's comment that "these commercials make you want to find out more information – makes you want to read up more on it. Makes me want to call the doctor now and find out more about it, now that the conversation is out there." Likewise, Julia talked about some of the research she did online to learn more about the risks of the vaccine, which were studies upon which she had several questions:

Like, if you get this vaccine, you are 50% chance less of getting cervical cancer.

But instead, the vaccine handles four out of, how many? They don't really tell

you. Four out of four million? How many HPVs are there? Then those four – it says it takes care of those four, if mind you, it makes you resistant. They’re not even sure about that. But if they do, then it takes care of those four, then those four attribute to 70% out of all the cervical cancers. So if you start drilling it down.

### *Comparison to the Past*

Parents frequently compare health risks such as cervical cancer and STIs that their daughters face to the health risks that concerned them when they were younger as ways to make meaning of the vaccine media. For example, Molly and Rachel spoke several times about how they did not know about HPV and cervical cancer until the vaccine emerged, which was very different for them from what they knew about at their daughters’ ages:

Molly: I had heard of cervical cancer, but not HPV. Maybe it’s because...when I was growing up, nobody really talked about it. It was sort of off-limits...

Jen: You mean like STDs?

Rachel: Anything – sex, at all. Not in my family...

Molly: It was scary to me too, but I was very sheltered. There was a lot I didn’t even know until I got married. It surprises me all the time, the things I learn. You know, I guess, it was a big shock to me that things can be so costly. Like, decisions...

Other differences parents talked about in a nostalgic way around this health topic were the inability for parents to spend time “bond[ing] with your children the same way it was when we were growing up. So we have to make the time, when we can – make the

conversations in the car or on a shopping trip”; the trend in today’s society to want medicine to fix health issues, which is different from “our parents’ generation – if it wasn’t natural or holistic, you didn’t put it in your body”; and being able to access contraception instead of needing parental permission, as Emily described: “I could go to the Planned Parenthood in my neighborhood, on my own, with my own money, and pay three bucks for a pack of pills...I didn’t realize that students can’t get contraceptives without consent now.”

Related to nostalgia, parents also perceive a contradiction in how traditionally, people have helped keep themselves healthy, and how medicine now is becoming more of the default solution. Two participants discussed how their father and husband only use natural remedies and do not believe in some vaccines because of the potential side effects. One participant described that her husband is healthy because he does not over-medicate:

[He] does not take medicines, antibiotics, and he’s overall healthy...he says, all this stuff you’ve taken, you find out what’s wrong with it, and you’re gonna die because you took that to fix this! He said, I don’t want to take something to fix this, and then have five more things go wrong with me.

*RQ2d: What sociopolitical factors contribute to parents’ perceptions of HPV/cervical cancer vaccine communication?*

Parents talked about relationships they have with other parents of teen girls or their friends, which influence their meaning making of the vaccine media. However, parents also have sociopolitical factors that are based in more traditional social, political, and the related economic systems in the United States. Parents make meaning of the

campaign amid their *observations of the teen population*, their *morality*, the *medical environment*, and *their parent network*.

#### *Parents' Observations of Teen Population*

Parents make meaning of the vaccine media by talking about how they keep tabs on their daughter's behaviors as well as *knowing* the actions, lifestyles, and trends of the daughter's *friends* and larger teen environment. Part of this observation of the larger teen population is parents understanding the *characteristics of interactions across difference* among girls and parents of teen girls that are not the same race or ethnicity as them.

Parents make observations about how teens operate, and thus, how they should approach their daughters about particularly sensitive topics, as Evelyn described in her philosophy of trying to stay informed about Makayla's health:

I just try to watch for any signs that something is going on because they don't always want to tell you everything, even if it's like a little cold or something.

They're just a little more distant when they're teenagers. So when they are at that age, you really have to pry, whether they get mad or not....there's just so many things that they don't speak about then that they are open about now. So I really try to watch for any...especially with health...just make sure everything she needs is there.

*Knowing daughter's friends.* In order to understand teens better, several of the parents feel it is important to know what their daughter's friends are doing as a barometer of what their daughters may be doing but not revealing to them. Emily even said that one of their major topics of conversation was "who's doing what with who, and are you OK?"

Emily also relayed an experience she had in which she had to help one of Mia's friends with information about contraception:

Mia and I have had the discussion. I got very scared because I have here this monitoring device on the computer to know what sites she goes to. A few weeks ago, I came across the Planned Parenthood and the birth control issues. I grabbed her and said, do we need to talk? Do I need to know something, do we need to go somewhere? She said, no, it's for Robin. So I text messaged Robin and said, do we need to talk? I knew she was active with the current boyfriend she has – and she was like, yeah, I need help, I don't know where to go or what to do. And it kills me. God, stupid parents!

*Characteristics of interactions across difference.* Finally, as race and ethnicity are identities and elements of media interpretation explored in this study, I asked parents to what extent they thought parents of teen girls from other races or ethnicities perceive the Gardasil information differently than they personally perceive it. Overall – and differently from the teens' perceptions – parents said they did not feel like race is an issue when reading media about the vaccine. For example, when I asked Claire if she predicts there may be differences, she said she did not, but that the difference lies in gendered identities:

Claire: Oh, I think the same way. Well, that would be kind of prejudiced or racial.

Jen: If you thought it or if they sent it that way?

Claire: Well, both. I think – I didn't take it any racial or any different way. I

didn't think, oh, Black people get cancer more because they're dirtier, or

Vietnamese people get it more because they're dirtier, or they live different than

us. I didn't take it any other way other than a woman is a woman, or a child is a child. Is that the way you mean it?

Several parents also said that race does not make a difference because “we all care about our kids – we all want our kids protected” and “I think [parents from other groups] worry about the same stuff we do.” Specifically, Elise pointed out that income, culture, and religion may play a larger role than race in how different people perceive their needs for or their abilities to get the vaccine:

I think, um, the only different groups that might see it differently are more groups, like income...there's people that can't afford it, so they might just block it out. But I would think they worry about the same things. Although, there are some cultures – I guess races or religions – from like the Middle East, like Afghanistan...like some cultures don't believe in premarital sex. They believe it's all going to be ivory, perfect, pure thing when their daughter gets married. And he's never gonna...and if he does...if neither one have been anywhere, there's no need to have it.

### *Morality*

Similar to the teen participants, some parents talked about values and morals that they hope they instilled in their children and from which they hope their daughters use as guides in their decision making. Marie, for instance, felt that Abella “has a really strong sense of self and values. I think that the kids she spends time with, for the most part, share her values, and seem to be good kids.” Elise also talked about the morals she believes Hannah uses in her reasoning processes, and she reflected on a personal experience in which her values guided her:

When I was 15, I had this steady boyfriend for two years. And my mother gave me birth control and said, here, because you have a steady boyfriend. Well, I didn't use it for a year. I mean, I was out of high school before...but I mean, I guess it was her way of protecting me, but it was like, well, I'm not ready for that, to do that. So, I hope my kids would make their own decisions on if they are ready. If they're 11 or 12, I don't really know if they would understand what it was. I sort of think, if their moral standards... Unfortunately, I think at that age, they are already making those decisions.

Religion and spirituality also play a factor in how some parents make meaning around the cervical cancer vaccine. Julia, for example, said that after she gave her daughters the vaccines she was told they needed, she "prayed like a son-of-a-gun before and after because I thought, please don't let ME be doing something harmful to my child." Also, when the topic with Julia and Elise turned to the Jonas Brothers and their daughters' decisions to wait until marriage to have sex, the moms said that when they were the girls' ages, a woman who had sex was considered a slut, and that the nuns would "beat it into you." Now, Elise said, the Catholic Church calls virginity a "gift from God for your husband – a totally different approach to waiting." Finally, Claire uses spirituality to work through her experience with her husband's cancer and to understand cancer and her control with it, overall: "You know, Jen, it's God's will. God's will be done. Unfortunately, it sucks."

### *Medical*

Unlike their daughters, parents have deep and numerous feelings about their family doctors as well as their experiences with the medical community. Regarding the

actual family doctors or doctors in general, parents hold mixed feelings about the trustworthiness and validity of the doctor's advice. On one hand, some parents love their family practitioners and are very reliant on their doctors for health guidance, as with Claire using her doctor to get information from Savannah about her sexual activity as well as planning to go to her husband's chemotherapy doctor to get her stance on the cervical cancer vaccine. Similarly, Erin relies on her doctor to provide a third-party, objective opinion on health topics to her daughter, since she believes teens want guidance from more than just their parent:

I feel fairly confident but I know that kids her age sometimes prefer – and that's why I was really a-ok with [this interview] – talking about things like with someone else. Hearing their peers' opinions and their teachers' opinions, the doctor's opinion. That's why when I go to the doctor I'll come up with questions even though I know what they think about it. She wants to hear it from someone else...I think my kids need to hear from me and then it needs to be someone else.

I think they need to learn some of these things from school and elsewhere also. Others are skeptical, as in Emily's comment that "just because they've got a white coat – if a doctor suggests it, people will usually go ahead and do it," and Molly doubts that some doctors would even suggest and administer the cervical cancer vaccine to her daughter: "Some of the are very old fashioned and they think – they wouldn't dare suggest [getting the vaccine]."

Specifically, a few parents said that they would go to their gynecologists if they wanted information about the vaccine. Mothers also talked about their experiences with the gynecologist, that some of the women could never "fathom going to a woman doctor"

as their daughters want to, and that gynecologists seem to take women's health – like PMS – more seriously than they used to. Some of the parents talked about that they have already started talking to their daughters about the impending visit to the gynecologist as well as their daughters' reactions to doing so. For example, Julia told about Erica's response when Erica asked questions about the vaccine, and Julia told her that the gynecologist dispensed it:

The first time she asked, it was, what is HPV, and how do you get it? I said, well, it's sexually transmitted. And she said, who wants to be a peep doctor? She meant a gynecologist, but she calls it a peep. I said, well I don't think they think of looking at v-jay-jays all day, they're trying to help people. I said, it's hard enough to look at your own. And she goes, MOM, you don't look at yours, do you? And I said, sometimes I take a look at it. So, we didn't get to that subject...[Regarding] the peep doctor. I said you are doing that at 18 whether you like it or not. She said, we're not going there, mom.

The daughter's first gynecological visit spurs emotions in the parents as well. Evelyn said that she was not looking forward to Makayla's first gynecologist appointment the following week because she will not have as much access to information about Makayla's health that she used to:

She has an appointment next Friday – her first real gynecologist ordeal. And it's not like when she was little – she would just go in there and sit, and the doctor could ask her something, and I could jump right in and tell him. Now it's, stay out of the room, you don't get to come into this one. So it's, what are they saying, what are they talking about? So, uh, is she telling something to the gynecologist

that I really need to know. So I'm not looking forward to that one. I liked it much better when they were this big [moving her hand to near the ground].

*Parent Network*

Just as teens have their own friends to talk about health-related topics with, parents have their network of friends and other parents of teen girls with whom they talk about health and in particular, their daughters' health. The parent network discussions consist of talk *about their girls' friends' lives* and about their *friends' opinions of the Gardasil vaccine*.

*Parent talk about girls' friends' lives.* Parents talked about how they converse with one another about what their daughters and their daughters' friends are doing in order to know whether the teens are keeping away from risky behaviors. Audrey, for example, said she talks about her daughter's sexual activity status with her friends, who she reported are surprised that Kandace is 17 years old and not sexually active yet. In another case, to discover if what they heard from their own daughters is true, Marie explained a type of checking-in talk she and her husband have with their best friends (who are the parents of their daughter's best friend) about their daughters' actions:

Marie: [We talk about] the risk behaviors, drinking, sexual activity, together.

Jen: Do you talk about it to find out like, what are you saying to the girls?

Marie: Yeah, like, "have you heard anything...do you know what's going on?"

What have you heard? Who's doing what?" Over the course of the years there have been conversations about how are you handling this or about some things we have made a point to try and deliver the same message when it is comfortable.

During the interviews, parents gossiped about the goings-on at their daughters' school, with their teachers, and among the other girls who attend school with their daughters. For example, Elise and Julia spent a good amount of time discussing Erica's hesitance to try out for the cheerleading squad because she did not want to lose her old friends. The parents whispered about other girls' "bad SAT scores," "cheer drama," and Julia's opinion that the cheerleading coaches try to "get on [the girls'] levels," which Julia felt was wrong: "They stir up shit with these hormonal girls. What's so distributing is that they can mess with these kids' minds. Those kids are just silly putty, and they can...by having favorites, by doing things that are not ethical, not right."

Parents also retold stories about abnormal or extreme cases of risky teen behavior, similar to how the girls did. Pregnant teens at school was also a topic parents talked about with one another and in the interviews. For example, when Kristen and I talked about what she had seen in the news about cervical cancer, the conversation turned to the target of the Merck ads, the early sexual onset of children, and then to a pregnant girl on her daughter, Renee's, basketball team:

It's amazing, it's scary. I don't know if they told you, but a girl on the basketball team – two years ago – the kid's three!...Same age as Renee. She didn't tell anyone she was pregnant the whole time. She played BB the whole summer and didn't tell anyone. She was a big girl anyway. Near the end of the season, we're about to go to nationals, and she kept, like, falling. She never fell – we were watching her, and I said to the mom next to me, do you think Sandra's pregnant? Her balance was all off.

*Friends' opinions of the Gardasil vaccine.* Several of the parents said that they had not talked about whether to get the vaccine with other parents of teen girls. Elise and Julia, Emily and Evelyn, and Rachel and Molly were sharing their opinions of the vaccine with one another in their interview together for the first time, which is similar to Erin obtaining a quick scan of other parents' opinions as she solicited them to join in the parent focus group. However, some parents said they discussed the vaccine with other friends, although they could not remember if they proactively sought their friends' advice on the matter. Kristen, for example, said "I think most people I've talked to think it's pretty cool. One of my friends, I think her daughter just finished her 3<sup>rd</sup> round. She got the vaccine." Similarly, Rachel remembered that she felt persuaded by a co-worker that contracted HPV from her ex-husband, and that when the vaccine emerged, the co-worker insisted that Rachel get the vaccine for her daughter, Rhiannon.

*RQ2e: What technological and media factors contribute to parents' perceptions of HPV/cervical cancer vaccine communication?*

Technological and media factors were conceptualized in this study as factors that include non-interpersonal and manmade systems in which parents take and receive information, typically according to their proactive outreach to these systems. Factors that help parents make meaning of the vaccine media are the *media channels used; feelings about health in the media; and recall of, perceptions about, and feelings about cervical cancer vaccine media.*

#### *Media Channels Used*

Parents use different media for health information than do their daughters, primarily because parents do not use online networking sites or the television as much as

their daughters do. Some parents said they go to Internet sites like WebMD, Google, federal websites like the CDC and HHS, and organizations like the American Cancer Society for health information. Other parents reported that they use discretion when they go to the Internet because of the question of credibility on some sites, and Claire, for instance, does not go to the Internet for health information at all:

Claire: I do not use the Internet. Mostly I talk to doctors...Even through all of Tom's stuff, I never went on the Internet.

Jen: How come you don't use the Internet?

Claire: I was told that a lot of it is not accurate. You can get really depressed looking at it. A lot of it is negativity. The doctors told us, just ask us. The doctor said, I can give you one site that I use, and I said, no, I only ask you. I think people put too much stock in the computer. We will sit in the [doctor's] office and write down questions.

Other media parents use include handouts at doctors' offices, medical journals, the newspaper, radio (e.g., National Public Radio), and some television, such as *Good Morning America*. Erin, for instance, recalled the Gardasil commercial well because of the presence of television in her life: "All the time on the TV. The 'I want to be one less.' I'm a stay-at-home mom, so the TV is just usually on. So, I seem to just always hear it."

#### *Feelings about Health in the Media*

Parents have a number of negative opinions about the way health topics are portrayed in the media. For example, Marie (whose family does not own a television), labels teen health topics in the media "pop-health hysteria" because she feels the media dictate which health topics are "in":

...the cutting...and the food health disorders. I don't want to belittle those concerns for kids who are involved with them. I feel that we have made choices as a family that insulates us from some of that anyway. I'm not real in touch with it because that is all television driven, I think, so I don't see all those "disease of the week" shows and the talk-shows, the "blah blah blah." So maybe I am not as worried about them as I would be if I consumed all that media.

Differently, Rachel feels fearful when she sees how pharmaceutical companies are required to include disclaimers in their advertising: "When I see ads in a magazine about drugs and they have all these disclaimers, I think, oh my gosh, why in the world would I take your medicine?" However, there are representations in intersections of health and media that parents appreciate. For example, several parents recall messages from *Truth* ads and feel these are constructive channels to send health messages to teens because they are "teen driven."

*Recall of, Perceptions about, and Feelings about Cervical Cancer Vaccine Media*

Like the teens, most parents have fervent feelings about the Gardasil commercial, although parents do not all have consistent feelings about their recall of, perceptions about, and feelings about the cervical cancer vaccine campaign. Prior to the interview, most parents had seen either the commercial I showed them or one of similar versions to the commercial from the campaign<sup>6</sup>. Parents' perceptions and feelings about the ad can be summarized according to the *catchiness of the commercial, hyping up the vaccine, problematic pharmaceutical advertising, race in the commercial, lack of useful information, and improving by targeting parents.*

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<sup>6</sup> In all, there were about three or four different television commercials for the vaccine at the time of the interview that had been running since the onset of the television campaign.

*Catchiness of the commercial.* As most of the parents were familiar with the Gardasil commercial(s) prior to the interview, most also associate the “one less” jingle with the topic of cervical cancer. Some parents very much feel this association is a positive way to reach teens because – as Erin put it – “it doesn’t give you any scary feeling that a child might have. It is upbeat enough. It doesn’t push them away. I think it should draw them in a little bit.” Claire also feels the commercial accurately reaches teen girls:

Horseback riding. To me, that represented high school girls. And I don’t know why, but that one didn’t really catch my attention. I just liked that one better. I love the catchy phrase, I wanna be one less, one less. I love the commercials. I just never thought about it. You brought it to my attention.

However, not all parents think the commercial is positively helping teens with the topic by using the format of television advertising. Emily, for example, believes that the advertising is effective in getting girls’ attention but not keeping their attentions enough to really educate them about the health risk:

[The commercial] makes you want to research it more. I’d like to think that’s what people are thinking, but honestly, I don’t think they do. I think it’s like, oh, that’s interesting. Then *American Idol* comes back on, and they’re into that. But I don’t think it says anything except Gardasil, Gardasil, Gardasil, Gardasil, Gardasil, Gardasil, until BAM, it’s in your head and you’re familiar with the product...It shows them in situations that girls can relate to – riding a horse, a drill instructor, a swimmer, a drum major – it ties in with, oh hey, that’s me. They can put themselves in that situation.

*Hyping up the vaccine.* Again, parents hold mixed perceptions about whether the media campaign should be as strong as they perceived it is in raising awareness about cervical cancer and advocating that girls be vaccinated. Julia, for example, feels the media is responsible for making her daughter feel left out because Julia is not comfortable giving Erica the vaccine: “The media’s pushing it, and I don’t like that. Because now she feels like I’m not giving her something that everybody else is getting, and that doesn’t sit right in her. I don’t know.” Differently, Claire feels positively about the way the media raised her personal awareness about the topic:

I appreciate your bringing me aware of it. Now my daughter is probably going to get this done. You could probably save your life down the road. It makes me feel good! It makes me feel really good actually. It makes me feel calming, and I’m gonna start telling people about it. I think when I go to Iowa City with my husband this week, I’m going to really ask my chemo doctor about it. Talk to her and see what she really has to say about it.

*Problematic pharmaceutical advertising.* Even among the parents that did get their children vaccinated and do like particular elements of the commercial, there was consistent talk about the problems that pharmaceutical advertising to consumers – and in particular, to teens – brought to the health issue of the cervical cancer vaccine. For example, when I asked Alex and Audrey the extent to which the commercial meets their needs for information, Alex talked about his general distrust for “[advertising] to answer questions I have about this sensitive topic”:

I’m very suspicious of advertising...specifically pharmaceutical advertising. I found it interesting that you didn’t see Merck plastered all over that. It was

produced by Merck, but it was cast more as a public health advertisement...so it's a very different animal, which could be viewed as misleading. Usually there's some type of tag attached to it. It did do some things pharmaceutical ads do, which are caveats – the caveats were designed a little more cheerfully and smoothly than in other ads. You have the ad, then you have someone speaking very quickly, saying four or five different things about what it does.

*Race in the commercial.* Although few of the parents recognized any nuances of race or ethnicity in the commercial, even among the few, there are differences among those perceptions. Emily, for example, believes that the commercial is “predominantly White,” which she finds problematic in relation to the epidemiology of cervical cancer: “[teens] may look at it and say, well, this is a predominantly White disease. Maybe there was one African American girl – I can't honestly remember because mostly I saw little White girls. That's not cool because cervical cancer is color-blind.” Differently, Audrey and Alex feel the ads are “multicultural”:

Audrey: I had seen another one. I think that one was more multicultural. I think the one I've seen is targeted more at the White middle class.

Alex: That actually struck me too. It was very multicultural. It's such a sensitive subject: sexual behavior and race. A very, very sensitive topic, and there are a lot of prejudices. For me, looking at it, it raised some of those issues because it seemed to be almost minority-driven and socioeconomic and ethnic... You see a lot of minority faces.

Audrey: And the last thing you see is the chanting and the double-dutch. All Black girls.

*Lack of useful information.* Another consistent problem parents have with the commercial is that it leaves gaps in its explanation of HPV, cervical cancer, and the risks and benefits of the vaccine. For example, Emily wishes that the commercial included a 1-800 hotline number that teens could call to get more information about the topic, if they needed. Additionally, Elise and Julia feel the ad neglects explaining the risks and the studies of the risks of the vaccine:

Elise: It just looks like an advertisement. I don't really think it has information in it.

Julia: Well, it says that it takes care #6, #11 – four types which cause the cancers, which I think is important to know because you start weighing your risks, you know? But I don't think they are telling you all the reactions – I think they're holding back. Because I just don't think they know. I don't think they've correlated it yet, and that makes me nervous to be the first person out of the box with it.

Elise: Yeah.

*Improving by targeting parents.* Finally, although most parents agree that the ad does a good job of targeting teens (although several mentioned that no teen girl is going to actively seek a shot based on a commercial), parents also believe that the commercial should target them as well targeting teen girls since parents are the ones granting permission and paying for the vaccine. Kristen, for instance, thinks that there should be a separate commercial for parents, showing mothers talking casually with one another about the vaccine. Erin also feels that parents need education from the campaign:

That commercial seems to be talking more to the girls, which is okay, but the mom or the dad have to be the ones taking them. Maybe even that also as far as having someone in the past in the media who has had it, to talk to people my age. I think that that commercial speaks more specifically to the girls... You can talk to the girls and have the girls ask for it but I doubt that a teenage girl is going to ask for shots. It needs to be a mom or dad who is educated.

*RQ3: How do teen girls and parents make meaning of HPV/cervical cancer vaccine communication together?*

As the acquisition of the cervical cancer vaccine for a minor teen is dependent on the permission and payment by a parent, I sought to understand the extent to which teens and parents made the decision together or separately about the vaccine. Overall, parents and teens made the decision separately to get the vaccine, although some families demonstrated that the decision was mutual. Insight into parent-teen decision-making processes helps communicators understand the extent to which teens participate in decisions about their health. Thus, this section describes findings across *parent-daughter interactions about health* and *parent-daughter interactions about the vaccine*. I note that not all teens had a parent participate in the study. However, all participants were asked about their relationships with their daughter/parent, and what was discussed about the vaccine.

#### *Parent-Daughter Interactions about Health*

Parent-daughter interactions about health consist of patterns of *open discussions about sexual health, the types of health topics discussed, discomfort talking about sex-*

*related topics, and parents' hesitance to reveal their personal lives/past to their daughters.*

*Open discussions about sexual health.* Parents shared their philosophies about how they talk with their daughters about sexual health and related topics like contraception, pregnancy, and sexually transmitted diseases. Furthermore, most parents indicated that their relationship with their teen daughter is “open” and “close,” as many parents seemed to feel that they wanted their daughters to know about health and social risks, as exhibited by Ada in her description of her relationship with Aisha: “We talk about sex...quite a bit. [Aisha laughs] We talk about pretty much everything. I don't believe in keeping any secrets from her.”

*Types of health topics discussed.* While teens widely reported that they discuss “everything” with their parents, parents said they talk specifically about health topics like weight gain, vitamins, skin care, menstrual cycle issues, birth control, abortion, and going to the gynecologist, among others. Furthermore, some parents emphasized that a initiating a dialogue is an important approach to talking with their daughters about adult topics like sex. For example, Audrey and Alex said they encouraged open discourse with their daughters, like when to have sex and with whom: “I haven't been saying don't have sex until you're married because I don't think it's realistic...So what I have told both of my children, why have sex with a teenage boy? What's in it for you?”

*Discomfort talking about sex-related topics.* Parents range in their level of comfort in talking about sexual health topics with their daughters. As exhibited by some parents, sex talks are “perfectly normal conversation[s].” However, not all parents are as at ease with enabling these dialogues. For example, Rachel and Molly explained their

difficulties in initiating conversations about sensitive subjects, and that instigations from school topics are helpful:

Molly: I think 5th grade, and the reason is because they teach a – remember the class they teach? And you have to sign a consent form... That's when I was really like, now there's questions. That was the trigger. And it also makes it more comfortable for them to talk to you about because somebody else brought it up. You have to sign the papers...

Rachel: With all the right terminology.

Molly: So you have to read the papers, so it's not like they are bringing it up first. So then you kind of have to talk about it.

*Parents' hesitance to reveal their personal lives/past to their daughters.* Finally, several parents were open to telling me about their sexual histories and concerns. For instance, several women talked about abnormal Pap smears, HPV, unplanned pregnancies, their current forms of contraception, and that they had been raped. I asked them if they had shared these experiences with their daughters, and most reported that they had not. When I asked why not, parents said they feel their daughters may need to hear such stories from a third-party and not a parent. Similarly, Kristen explained that although her experience with genital warts prompted her to want to vaccinate Renee, she is hesitant to tell Renee about her experience:

Well, I had venereal warts, and that was not fun. That would be really nice if she didn't have to go through that... You wonder when it's appropriate to cross that line because they think we're so perfect. Like, I wouldn't have any problem telling my boys. But with Renee, she's still 16. There's a fine line between

when... they need to know we're human and that we're not perfect...but we don't want to give them too much information because then they like to use that as excuses for their inappropriate behaviors.

*Parent-Daughter Interactions about the Vaccine*

The ways that parents and daughters make meaning together about the vaccine are through parent *the daughter questioning the parent*; through *trust*; through *teens' lack of participation in decision-making*; and through *mutual decision-making*.

*Daughter questioning the parent.* In a few cases, daughters had approached their parents about the vaccine, and only in two cases does the daughter want the vaccine but the parent has decided against vaccination. As Evelyn put it, Makayla started questioning her about the vaccine, so she had to pay attention to the commercial to understand the vaccine: "We'll see it on the TV, then Makayla will really question me about it. Then I'll really catch myself really watching the commercial really good so I can see and hear what they say."

*Trust.* Several parents said that because their daughters trust them, there was no need for a significant amount of discussion about the vaccine. Rachel and Molly feel the quality of their relationships with their daughters warranted their daughters' compliance with getting vaccinated:

Jen: What did your daughters think when you told them that you wanted to get the shots?

Rachel: I told her a guy was coming to do this, and I wanted her to do it. And she was like, ok! She trusts me.

Molly: I said, Grace, I know at this point, there's no reason to think you're gonna deal with this yet, but you know, I don't want that to be an issue later. And she was like, ok. We're like they are – we talk about everything. There's no subject off limits.

Rachel: Mine was like, ok. She just trusted that I knew.

*Teens' lack of participation in decision-making.* In slightly more than half of the cases, the teens did not have an active role in deciding about their vaccination. Instead, several parents and daughters indicated that the parent decided to get the vaccine, told the daughter she was/not getting it, and there was little discussion around the decision. The main issue that parents said their daughters had with getting vaccinated was the actual shot because of the pain their daughters associated with the vaccine. Elise's retelling of Hannah's first vaccination exemplifies some of the teens' lack of participation in the decision-making: "You know, [Hannah] doesn't like shots at all so she didn't seem psyched about it. She seemed to agree – she didn't really ask a lot of questions about it. You know, I mean, she saw me ask all the questions." Finally, in a few households, the discussion about vaccination was not held at all. Erin, for example, felt that the topic was too uncomfortable to breach with Leah, but rather, she hopes that celebrities will bring to light such issues because they may carry more credible in teens' opinions: "It is not uncouth for a mother and daughter to talk about it, but it is probably just, eh...And they know more than we think they know. It's just not a comfortable situation to talk about. I think they could have someone in the limelight they could relate to..."

*Mutual decision-making.* In other cases, teens had a significant say in the decision to vaccinate. Marie explained Abella's retort when Marie began discussing the downsides

of the vaccine: “We did have a conversation with Abella about, ‘It’s brand new...’ and something about it being expensive. And she said, ‘Aren’t I worth it to you?’ So she was pretty clear she wanted it.” Similarly, both Skyla and Kandace and their parents described that there were dialogues about the vaccine in their household, as told by Audrey and Alex:

Alex: And we sort of wanted Skyla to be a little bit older than the minimal age.

Audrey: Right, so that she would have...like, it’s not like you give a toddler a choice between getting vaccinated for measles or rubella.

Alex: Right, but you discussed it with her. It wasn’t a matter of, this is what you’re doing. It was a mutual decision that was acceptable.

*RQ4: How do teen girls use health media like the HPV/cervical cancer vaccine campaign materials?*

To fully understand how teen girls make meaning of a cervical cancer vaccine campaign, I also probed into how girls used that campaign as well as other health media. Although girls *did not actively seek out health media, their awareness about teen girl health issues is raised* when they see health issues on the entertainment media they do seek. The girls also *reaffirm their self-image with the media* they select, and they actively *analyze and critique the media forums* they participate in as ways to form their identities.

*Health Media not Sought, but Awareness Raising*

Overall, the teen girls do not actively search for health information from the media. For example, Mia explained that she does not generally recognize teen health issues in the media:

Not really, unless I'm like looking for it or I'm actually researching it. If I'm on the normal web sites or like flipping through a magazine, I mean, usually magazines, I don't really see anything. They are like, stop smoking, or like...that's basically all they have, the don't smoke campaigns. So, um, that's like the only one I've seen that I'm not, like, looking for. Now, with TV, there's a lot a lot more.

Instead, the teens interviewed access media for school projects, entertainment, and social relationships, and these uses often blur together. For example, Abella described to me why she uses the Internet: "To contact people – Facebook; if I'm doing a project for school, I can just send them a message. I'm always pretty sure that people are on Facebook – it's on in the background." Although the teen girls did not report that they actively seek health information for their personal use, Chelsea, Teague, and Sadie explained how the media raise their awareness of certain health issues that became salient later in their life:

Chelsea: With like stuff. Like mrsa [staph infection] and stuff. People at our school ended up getting it. And it was scary because like literally just before we found out that it was in our area, we saw these movies about people dying from it.

Sadie: It was really scary.

Jen: You saw this in health class?

Teague: Yeah. And we got really scared. So in gym, Chelsea and I cleaned our mats. They only clean the mats every two days.

*Reaffirming Self-Image with Media*

Although the girls interviewed do not regularly seek health information from the media, they seem to use other media to hone their identities. In other words, they take the information and representations they receive from the media and used them as proof or benchmarks off of which to explain their personalities, attitudes, and behaviors. Two major themes emerged in the girls' use of the media to reaffirm their self-image as *different from the norm* and as *powerful and successful*.

*Different from the norm.* Being different from the norm or the larger teen population or the average teen seems important to most of the girls interviewed. For example, Mia appreciated the *Truth* commercials because "I think they are eye-opening and appealing in a different way than most commercials are." Similarly, some girls want to be different from celebrities in the media because they seemed unhealthy:

Jen: So are there things that you see in like magazines and stuff about health?

Sabrina: There's like health sections in my magazines.

Hannah: The people in *People Magazine* are like super skinny though.

Sabrina: I don't care about being *that* skinny.

Hannah: If you're healthy, you're ok.

*Powerful and successful.* Although girls did not talk about how they seek media in order to feel powerful and successful, per se, some felt the Gardasil commercial made them feel that way. One primary theme that emerged across the girls that appreciate the commercial was the idea that knowledge is power and being informed is important. Kandace, for example, likes the idea that the commercial encourages women to protect their own health: "You get a little bit of female empowerment vibe from it. It is very much women protecting their own health. So I receive that edge. It's relatively positive

and relatively upbeat.” A few girls also said they feel the commercial reinforces their health decisions to get the vaccine, such as in Abella’s case: “Better. It makes me feel like I’ve done something to protect myself from some really bad things that can happen in the future.” Finally, the commercial makes them feel like the vaccine is for girls like them because they perceive the commercial represents successful girls, as Lisa pointed out: “I consider myself a hard worker and into hobbies and activities. And I think they definitely are like my demographic.”

#### *Analyzing and Critiquing Media Forum*

Girls did not explicitly say that they use the media that they do in order to analyze and critique the mass mediated forum. However, the participants seemed very clear about their media preferences and how they prefer media to be sent to them (their overall recommendations will be discussed in more depth in RQ9). It also seems that various media are pieces of society and culture and their lives that the girls feel capable and credible around which to opine and affirm their preferences, according to their needs for information. Girls were quick to offer critiques of the commercial in ways differently than some of the other media channels they said they use, like television shows (e.g., why they enjoy certain shows over others, lessons they learn from shows), networking sites (e.g., which site is a better connection to friends, which site is safer), and magazines (e.g., their opinions of celebrities’ behaviors and appearances). For example, Grace feels that the media does not realistically reflect how teens her age perceive a health topic like cervical cancer/HPV because “even though there are younger girls, [the Gardasil ad] wasn’t really conveying the way that teenagers this day would really take it.” Girls were also able to explain what factors in an ad like Gardasil they find credible or ways the

media “get our attention,” such as jingles/memorable slogans, fear appeals, statistics, and testimonials. For example, Kandace reasoned why she perceives the Gardasil commercial to seem less like an ad and more like an “awareness thing”:

Well it would seem a little bit more like an ad. It would make it like here, here is some random doctor. Let him talk to you about how good this is. It doesn't really talk about, you know, this guy passed through med school. What kind of doctor is he? Does it really matter? It is a little bit more cheesy. I tend to not like the testimonial stuff because it doesn't necessarily mean it is good for you. I like that in the commercial that it is more of a general awareness message than an actual commercial.

Finally, some of the girls question the accuracy of the information sent to them in ads and believe that health ads tend to be dishonest about fully disclosing information to audiences. For example, when I asked one focus group what their health concerns were, the group said weight, and Jayla pointed out that weight is a problem because of the influence of advertising:

Jayla: Because most of the commercials are about weight pills, getting your weight down.

Jen: What do you think about weight pills?

Imani: They don't work.

Jayla: Like you said, about weight. They show those commercials about weight, and it's like, yeah they work, but they keep advertising so you have to keep taking them in order to keep the weight down. You should be able to use things that are natural – like the way people used to lose weight – in order for it to be effective.

*RQ5: What decisions do teen girls and parents make about getting an HPV/cervical cancer vaccine after viewing/reading the campaign materials?*

Parents – and to a lesser extent, teens – make their decisions to vaccinate their daughters based on a significant number of factors. Parents who are going to vaccinate their daughters or who have already vaccinated them have a number of factors and barriers that influence their decisions, as did the parents who have decided against vaccination for the time being. These factors and barriers are discussed below, and the findings are categorized according to whether the parent was favorable or unfavorable toward the vaccine at the time of the interview. The findings suggest that parents from both groups share some factors and barriers in common, and what is a motivating factor for some parents may be a barrier for other parents.

When this Research Question was originally posed, it was divided among two sub-Research Questions: RQ5a was *what factors influence parents and teen girls' decisions about getting the vaccine?* and RQ5b was *what barriers do parents and teen girls perceive in making their decisions?* However, the findings do not reflect this distinction. Instead, the findings emerged along a demarcation of overall favorability toward the Gardasil vaccine, and as participants' stances are distinguishable, their factors and barriers are not discernible. Below, the findings are described according to participants' stances toward the Gardasil vaccine as either *favorable toward Gardasil* or *unfavorable toward Gardasil*. In other words, since not all participants want the Gardasil vaccine, their factors and barriers are not the same or mutually exclusive. Participants' application into one of these categories does not necessarily reflect their overall

favorability to other vaccinations, but rather, this categorization is limited to the Gardasil vaccine.

To understand the extent to which participants are divided on this subject, I will review the girls' vaccination status. When I speak about the girls here, in most cases except where noted, the girls and parents were in agreement about the teen's vaccination status. For a pictorial representation of the vaccination status of the teens in the study, please see Figure 2. Twelve girls are already either fully or partially vaccinated; 18 girls are planning to be vaccinated in the near future; six girls do not know whether they are going to get vaccinated; one girl does not have any plans to be vaccinated in the near future or is against the cervical cancer vaccination; and two girls want the vaccination but their parents do not want to vaccinate them.

#### *Favorable toward Gardasil*

Parents who are favorable to the Gardasil vaccine have either fully or partially vaccinated their daughters or who plan on getting the vaccine in the near future have a number of factors that motivate them to vaccinate. These factors are *perceptions of benefits the vaccine will provide; others' endorsements; feelings, attitudes, and perceptions of cervical cancer and HPV; family history; a spectrum of self-efficacy; and the influence of the media*. Parents and teens favorable to Gardasil also experience barriers that make them hesitant to get the vaccine, and these constraining factors are *doubts about the efficacy of the vaccine, barriers in everyday life, and potential long-term costs*.

*Perceptions of benefits the vaccine will provide*. Parents and teens alike hold a number of positive perceptions about the benefits they think the vaccine provides. These

perceptions revolve around motivations for safety (e.g., “its better safe than sorry”), relief from anxiety, prevention, and protection. In many of the cases, participants said they are motivated by the sheer health innovation of the vaccine, and that they got obtained the vaccine, “just in case.” Some participants expressed that they see the vaccine as a win-win decision for their health, like as Leah and Kylie expressed when I asked them if they thought the commercial was important for them to know:

Leah: It’s a good message, because if you get it, it’s true, you would be one less person with cervical cancer.

Kylie: I think you should just get it. I mean, for me, it’s just a little shot. For them, I guess it’s a big thing. You should just get it, just in case.

Leah: Nothing bad would come from getting the shot...

Some parents also see the vaccine as a win-win, as Elise believed after her pediatrician told her there is no “down side” to getting the vaccine:

Then when I talked to my pediatrician, whom I love, and we’ve had for over twenty years, and he recommended it, said you know, there’s not really a down side to this, you know, but there’s a down side if you don’t get it. You know, it could happen. So we talked about it, and he gave us some information, and we went ahead.

Participants also see the vaccine as a kind of trade-off: for the cost of three shots right now (and all the pain and uncertainty some participants associated with the vaccine), the vaccine provides security for the future health of the teen. Teague, Chelsea, and Sadie talked about this trade-off when I asked how they feel that they are complying with the ad’s suggested behaviors:

Sadie: Well, we're probably going to get it – the shots.

Jen: Why do you think you might end up getting it?

Sadie: Well, I mean, it's a serious thing if you actually end up getting it, and like, I don't think it's worth the pain of the shot.

Chelsea: You might as well get the shot.

Teague: When you think about it, getting the one shot wouldn't be half as bad as like, getting, just like the IV alone. Yeah.

Finally, for a few participants, the fact that there was a vaccine to prevent a type of cancer was reason enough to get the vaccine for their daughters, as Marie justified her decision: “I will say that the fact that this is the first cancer vaccine, is hugely exciting, very exciting, is unbelievable. I will say that had something to do with our decision to participate.”

*Others' endorsements.* Third-party endorsements such as doctor's recommendations, friends receiving the vaccine, and media hype around the vaccine are largely influential to some parents' and teens' decisions or desires to get the vaccine. The most influential is the doctor's recommendation. Regardless of participants' favorability to obtaining the cervical cancer vaccine, many participants described that their doctors suggested they vaccinate them/their daughter with Gardasil. Claire, for example, had taken her daughter, Savannah, in for a physical, when her doctor recommended the vaccine: “She said it is three shots, and it is recommended. I thought, I'll have to talk about it. She said, any time we can prevent a cancer, that's a good thing. I was like, oh yeah, you are so right.”

Likewise, friends who had vaccinated their daughters or who had received the vaccine themselves influence parents and teens alike to obtain the vaccine. For example, Erica very much wants the vaccine because all her friends have been vaccinated, and they pressure her to convince her mom to get it. Similarly, Aisha wants the vaccine because her friends have received it but her mother, Ada, does not plan on giving it to her: “My mom won’t let me get an HPV shot because she said she doesn’t know what kind of stuff’s in it.” As a parent, Kristen said that she has seen the commercial but never made the connection that the girls in the commercial were meant to represent girls her daughter’s age until she talked to one of her friends who had vaccinated her daughter. Finally, Julia feels there is a significant amount of media hype around the vaccine, and based on that, she said she “jumped on the bandwagon” by giving it to her older daughter immediately:

Well, I’m gonna be a weird subject. I jumped on the bandwagon. I saw the commercials, and I thought, awesome!...something that will help my girls later in life because I know of some people that their daughters are in their early 20s, and their daughters have come up with bad Pap smears. And they have it, or, they got a Pap smear that said they had it, and that scared the heck out of me.

*Feelings, attitudes, perceptions of cervical cancer/HPV.* Parents’ and teens’ perceptions around cervical cancer and HPV were discussed in earlier sections several times. The perceptions of the disease and virus that seem to be the most compelling factors when parents decide to vaccinate their children are when parents perceived that HPV and cervical cancer are severe, urgent, and “new” health threats that scare them because of their uncertainty about it. Rachel, for example, feels that the media attention

around the vaccine and the messages she previously received told her that she should get the vaccine for her daughter immediately because of the danger of the health threat: “I feel like I rushed it now, but they made it seem like, oh my god, it could be with the first person you have sex with, so get protected now before you become sexually active.” Julia and Elise also feel that since they grew up not knowing about HPV, it was not a health topic about which they needed to warn their daughters:

Julia: But before the lipstick brochure, I didn’t even think about it twice.

Jen: Oh, about getting the vaccine?

Julia: No! About getting HPV! It wasn’t something I was going to sit down and discuss with them because I didn’t know that much about HPV. I didn’t ever get it.

Elise: HPV wasn’t something we specifically discussed, but we talked about STDs...

Julia: It wasn’t one of them that I ever put...

Elise: Yeah, no, it wasn’t one of them.

*Family history.* A family history of cancer or a parent’s experience with cancer or STDs also motivate parents to give the vaccine to their daughters. For example, Alex’s and Kristen’s mothers both had cervical cancer, and Evelyn’s grandmother died of it. Differently, Claire thinks Savannah should get the shot because “Savannah is adopted, so we don’t have a lot of history there.” Several parents also revealed to me their own health concerns or histories that make a vast difference in their decisions to vaccinate their teens. For example, Kristen has genital warts, so she does not want her daughter, Renee, to have to endure that. Likewise, Erin described to me the fear she experienced when she

was told she had an abnormal Pap smear when she was younger, and how that experience swayed her to give Leah the vaccine:

Me, myself, before I was married, I did have an abnormal Pap smear, and it was HPV. And to tell you the truth I can visualize that whole thing, and I was scared to death...So there I was, like 27, thinking I'm never going to get married, I'm never going to have children, I'm going to die...that memory came back, and I thought, "Wow. Okay that was the HPV virus. I remember." And I had to get a colon biopsy. And I thought it would have been nice not to have to go through that. And I know I was scared to death because of everything on top of it, but if there is a chance that that can be prevented...

*Spectrum of self-efficacy.* Parents' self-efficacy to help their daughters avoid cervical cancer exists along a spectrum: some parents are uncertain about the choices they have made, and others are confident in their choices. For those who gave their daughters the vaccine or are planning on obtaining the vaccine, some talked about doing enough research and waiting long enough to "make sure" that the vaccine seems safe, although some felt that sense of urgency to get the vaccine before it is "too late." Marie, for instance, feels that the campaign designers must have had a difficult time designing the ad because "parents don't want to hear it, that fourteen may be too late [to give the vaccine to their daughters]." Other participants have little concern over the safety of the vaccine and feel the vaccine is a good idea because they perceive less urgency around cervical cancer than they do about other cancers, as Alana and her mother, Louise, discussed when I asked them if they thought the commercial is important for them to know:

Alana: Yeah. I didn't really know what cervical cancer was before the commercial...like breast cancer – that worries me because a lot of people get that. But I had never heard of cervical cancer before, and there is a vaccine so I would just be able to get that whenever I need to. And I wouldn't get cervical cancer if the vaccine worked.

Louise: It wouldn't work if you had cervical cancer and you got the vaccine after.

Alana: I know but I'm healthy right now. I'm not having sex, so I wouldn't get that STD, HPV.

*Influence of media.* Several parents who vaccinated or plan on vaccinating their daughters feel that the ad is “scary” because it illuminates the threat of cervical cancer to their teen daughter, which, to many of them, is a threat they had not considered prior to learning about the vaccine from the commercial. For example, Rachel explained that she felt pressured by the media overhaul about the vaccine to get the vaccine because she perceived the media was telling her that it was an urgent matter of her daughter's health:

Like, I've seen the commercials...and I fall into that, getting influenced by media – and like, it's on the TV a lot, it must be true. It must be something – it must be a big deal. It's that panic factor, trying to get your scared. Like, oh god, your daughter's going to get cancer if you don't give her the shot.

The commercial also influences parents' decisions because some parents feel the commercial directly relates to them. Elise feels the ad targets her because she has seen it on MTV, which is a channel she watches with her daughter, and the ad portrays both a mother and a daughter: “It looked like it was targeted to both of us because there were mothers talking to their daughters and then daughters talking too. It's talking to both of

us.” Similarly, Claire feels that it targets her exactly, and she feels the manufacturer is doing something caring for them: “Right on. They’re targeting me right on the target because I have a daughter that age. I mean, it’s just like right at me. Like they are doing something for my daughter. Like somebody is actually caring.”

*Doubts about the efficacy of the vaccine.* Parents who vaccinated their daughters are still uncertain about the vaccine’s effectiveness because the vaccine is new. For example, Audrey, who vaccinated both her daughters, described what made this new drug different from other new drugs, in her opinion:

Normally - having worked for FDA briefly, it was always my conviction that I wouldn’t take a brand-new drug. If it had been approved in Europe for a while...I just perceived that FDA is often at the pressure of Merck and other companies before they get a chance...there’s so much litigation now with respect to various drugs having deleterious effects. But I was pretty firmly convinced that this was not one of those cases. And my pediatrician, you know, seconded that.

Some parents second-guess their decisions to vaccinate their children because of the girls’ age range the CDC and FDA recommend be vaccinated. Some parents felt that the media pressed them to get the vaccine now but then later realized that they may not have needed to vaccinate their daughters at a young age. Molly described this when I asked her how she felt after she vaccinated her daughter, Grace:

Molly: I think I felt like, oh, I hope I did the right thing.

Jen: What would be the things that would make you feel you didn’t do the right thing?

Molly: Probably the level of maturity as far as the subject. Like, is she really going to be exposed to anything. I don't know. I guess for me...I didn't know, like, am I jumping the gun a little bit? You know, she was 14 at the time. And is this really hype, or is this the real deal? And, is there really a huge possibility...because I really never knew or had heard of it until last year.

Parents also doubt getting the vaccine based on the information provided to them in the ad. Claire, for example, said that she would like more specifics about the nature of cervical cancer because she feels that part was left out of the commercial:

Jen: How would you change the messages if you could make them “talk” to you better?

Claire: I guess they could give more background information because it's so new.

Jen: How does it make you feel, that it's so new?

Claire: It's kind of an experimental drug or an experimental shot. And they talk about the side effects – that's a little scary. I always hate when they talk about the side effects, but I guess they have to say that. All in all, I don't think they're bad commercials. I think they're OK.

Some parents feel they had not recognized the ad to be targeting them prior to viewing it in the interview. Kristen mentioned several times that she did not make the connection of the commercial to her daughter: “I think it gets to the point. However, I still didn't make the jump to my daughter being the one less.” Similarly, Alex and Audrey both said they were not targeted, but for different reasons:

Alex: Data heavy ads don't really go very far. I imagine settings I might react to more positively, like kids in a movie theater or kids in a mall. This was very urban.

Audrey: Kids at a softball game ...kids sitting the bench! [laughing]

Jen: Would the people [in the commercial] be teens or dads?

Alex: Targeting is to the teens.

Audrey: Not for me. It's, I'm vaccinating my child – don't you want to protect your daughter?

*Barriers in everyday life.* Several barriers make parents hesitant to get the vaccine, or, at the very least, make getting the vaccine a complicated event in their lives. As in Alex and Audrey's case, Alex explained that their family has a "very hectic life," and that trying to get both of their daughters in to the doctor's office for three shots each, "from a planning standpoint, that's tough. Trying to schedule that and try to get that to happen. I'm sure quite a few people start the series and never complete it." Cost is another barrier for those obtaining or wanting the vaccine. In the case of the teen parents, they want to know how they can get the vaccine if they do not have the money, and their insurance does not cover it. A few other parents noted that they could not have paid for the vaccine if their insurance had not covered it or the clinics they visited did not carry the vaccine. Finally, some parents found that their daughters' were resistant to getting a shot because of the pain they felt from previous shots. In one focus group of teen girls, a couple of the girls discussed their fear of needles and getting shots:

Jen: How do you feel about the fact that they are telling you to get the vaccine?

Faith: I think it's good, but I think some people... first of all, I'm terrified of needles. It's my biggest fear. Like, I had to get injected the other day, and I cried for like, six hours before, and they had to get another nurse to hold me down.

Amber: I pass out when I get shots.

Jen: Why are y'all so scared of needles?

Amber: I don't know.

*Potential long-term costs.* Many of the parents and some teens talked about the various controversies amid the release and marketing of this vaccine, and this perceived controversy seems to make some of the parents reluctant to get vaccinate their daughters. More specifically, the controversies seem to cause them to question motivations of pharmaceutical companies and governments about the mandate, about the cost, and about the pharmaceutical companies lobbying politicians. An additional controversy focused on the perceived possibility that getting the vaccine may encourage some girls to think their parents are giving them a license to have sex, or that the vaccine will provide girls with a false sense of security in that they will not need to continue routine Pap smears or safe sex practices. Rachel and Molly discussed the former potential long-term cost they momentarily felt with giving their daughters the vaccine, which was likened to their fears of giving their daughters birth control:

Rachel: We talk about it... with the boyfriend she has right now, she's in no rush to have sex. He knows she's on the pill, and it's not ok. That was her dad's concern, that she thinks it's OK to have sex now because she's on the pill.

Molly: That was the same thing my husband thought too [with] the pill. With the vaccine, he was like, why do we even need to talk about this? Once he saw that there was a real...

Rachel: With the pill, it's still not going to protect her [from STDs], and I've talked about that with her. So, it's really not safe – it's really not OK to have sex.

*Unfavorable toward Gardasil*

The parents who were unfavorable toward Gardasil decided they are not going to vaccinate their children at this time and do not have plans to vaccinate their daughters in the foreseeable future. Factors that motivate these parents to reject Gardasil are *doubts about the efficacy of the vaccine* and *systematic problems*. Parents and teens also feel the primary barrier to their rejecting the vaccine is the *possibility that the vaccine may work* and help the teen from developing cervical cancer someday.

*Doubts about the efficacy of the vaccine.* Although none of the parents that oppose the cervical cancer vaccine described themselves as opponents against vaccinations (in fact, most parents talked about the other vaccines they had given their children when they were babies), the primary reason that some parents did not give their children the vaccine is because of the newness of the vaccine and the significant amount of doubt they feel around the effectiveness of the vaccine at this time. Some parents pointed to the lack of information they perceive the ad portrays as a sign that the vaccine is unreliable at this point. For example, some parents cited the ad for not including pieces of information they needed, such as the percentage of U.S. teen girls that get cervical cancer, data from clinical trials, detailing the chances that side effects will occur, or data about the actual effectiveness of the vaccine, as Emily pointed out:

My reaction is that it's great, but I need more time to see the public's reaction to it and the longevity of how long it lasts. There's just not enough information out there to feel comfortable enough to warrant sticking another live virus into my daughter.

Although Makayla had been curious about obtaining the vaccine at one point, she is now more uncertain that the commercial is proffering valid, complete information about the vaccine's efficacy:

And I think since they haven't informed people, maybe that's a sign to people that it's not working. Because they are not getting the facts and actually knowing the truth. Ok, like, out of this many people, this is how many people it worked on, and this many people it did not work on. Like a ratio. Like you were saying, nobody is seeing that. So, that's the perfect, like, if they are not showing us, they don't want us to know.

Finally, some parents are skeptical of the vaccine and the advertising around it because of their overall belief that the drug manufacturers are not going to provide the down-side of the vaccine in the commercials, as Ada explained:

Well, I'm wary. I have issues with the media and with advertising. And with a commercial paid for by the drug companies. You know, I wonder. What are the long-term results? What are the odds of me getting that, you know, if I don't have HPV. First of all, what are the odds of me getting HPV? That would be my very first question. Then Gardasil doesn't treat every type of HPV? Wait, HPV or cervical cancer?...So, you know, in the back of my mind, it's a money-making

venture. So that leaves me a little skeptical or leery of how accurate the information is. And so much of the entire picture in my head.

Finally, some parents seemed somewhat astounded by the idea that a vaccine could prevent a type of cancer. For these parents, the innovation impresses them enough to have their daughters vaccinated. For a few other parents, such a vaccine seems like a contradiction between how the body works naturally and how biochemical technology can disrupt normal functioning, as Emily and Evelyn discussed:

Emily: Something as small as whopping cough, if it got a hold of my little baby, it could kill her. And children don't generally die from chicken pox. That's why I don't go there.

Evelyn: And they were afraid that the chicken pox vaccine could sterilize children.

Emily: I don't get flu shots either. As evidenced by that everyone that got the flu shot last season, it's a different strain. So you just injected something into your body for absolutely no reason. And so many say, well, it's not a live virus they are injecting into you – well, how many people do you know that get the shot but still come up sick?

*Systematic problems.* Parents who decided against vaccination in the foreseeable future also feel negatively toward the vaccine because of problems they perceive exist within the multiple systems that develop, test, and market vaccines. In this case, these systems refer to the pharmaceutical company processes, the relationships between pharmaceutical companies and doctors, and the political actions taken to promote the

widespread use of the vaccine. For example, Elise and Julia talked about the problems with pharmaceutical companies promoting the vaccine among doctors:

Elise: Well, they're getting multiple loyalties pushed on them. They give you free things – our doctor does.

Julia: What she's saying is, the pharmaceutical companies are kind of courting your doctor. And I guess, if my doctor hadn't said that he would do that for his own children... I guess I just believe, in general, the medical field is on the bandwagon with the drug companies. I just don't know if that's the right direction, because that's what they are taught. And they start that in medical school.

In the same vein, Emily felt that pharmaceutical advertising significantly contaminates the usefulness of teens seeking information about their health:

I do see the commercial a lot. There's a ton – that seems to be the way to market, to get your pharmaceutical out there – instead of having the reps go to the doctor's offices and dropping off the pills and saying, here, get your people to try this. The new ploy is, hey let's do a commercial about it and have the patient go in and demand from the doctor what medication they want...I can see why people would feel pressured because the Gardasil commercial is like all over the place right now. The magazines in the doctor's offices, the posters and pamphlets in the doctor's offices...

In regards to potential mandating the vaccine, even Elise – who did get Hannah vaccinated – was initially suspicious of the political actions around the vaccine: “I thought because he was a Republican, he must have stock in the vaccine company. Then I

thought, maybe that's a good thing. Maybe he's motivated by someone in his family who had cancer, and he felt real strongly about that."

*Possibility vaccine may help.* A few parents seem at a standstill for not knowing what the proper decision is for their family, as in Claire's case: "We've thought about it. But, you know, I don't know. I just don't know. We talked to the nurse last night, and she said, I don't see why not. If there's something you can do to prevent it, why wouldn't you?" Similarly, a few parents seem to project regret they would feel if something were to happen in the future either with their daughter getting cervical cancer because she wasn't vaccinated or with their daughter experiencing a negative side effect to the vaccine, as Evelyn and Emily discussed:

Evelyn: Makayla's thought about it. I said, well, that's something we really need to discuss a little but more, because I don't want be to the one that does anything – or OKs something – and something happens, I have to live with that later. I don't want to be the one it comes back on to haunt...say something went wrong...

Emily: Like an FDA recall.

Evelyn: And something happens with her again – you can go both ways. I don't want to be the one to...like say Makayla took it, she'd say, now I've got this wrong...

In this same vein, some parents rely on their gut or their intuition to help them decide what is best for their family. Although Julia gave her older daughter (Gina) two of the three shots, and her second daughter (Erica) wanted the vaccine, Julia relies on her gut to halt the vaccinations:

And we've been so sheltered from it, you know? And of course the health department doesn't want anything taken off because then there will be an epidemic, so how are they gonna deal with that? So, it's really a fine line, and I don't know why my gut just told me, I'm not sending [Gina] back for that third one. And Erica's like, when am I getting mine? And I'm just, I don't know if you're getting one. We don't have to worry about that right now, hopefully – you're only 15 years old. But I sent her to college and I just thought it was the right thing to do!

*RQ6: What complications arose for the participants in their assessment of a campaign that problematizes a health issue that may be differentially understood by teen girls and parents?*

Participants confront several complications regarding the cervical cancer vaccine. Complications here constitute any discomforts, barriers, disagreements, or problems that occur between parents of teen girls and the teen girls around whether the teens would/will be vaccinated. The major themes that emerged as complications were *unanswered questions, misperceptions and missed targets, and opinions about public debates.*

#### *Unanswered Questions*

Overall, teen girls asked me many more questions about HPV, cervical cancer, and the vaccine than did the parents. Among the teen interviews, a significant amount of time was dedicated to answering questions teens had. However, these were questions that both parents and teens feel were not answered by the Gardasil ad, and that they continue to have unanswered by their other everyday sources of information. The questions are

detailed according to questions about HPV/cervical cancer and questions about the vaccine.

*Questions about HPV/cervical cancer.* Teens have more questions about HPV and cervical cancer than parents do, but overall, the questions center around the *pathology, detection, epidemiology, causes, symptoms/consequences, and other related topics*:

1. *Pathology:* Although some parents said they were not aware of cervical cancer or HPV before Gardasil emerged, they still generally understand the pathologies of the virus and the disease. Furthermore, although some teens did not have questions about HPV/cervical cancer in the interviews, most did. Some asked me to explain to them what cervical cancer was, either before or after viewing the commercial. For example, when I asked one group of girls what the words *cervical cancer* made them think about, Kylie said, “what’s that?...when you get it...[sigh of frustration]. I still don’t get what it is. Like, if you don’t get the shot, you don’t get this disease, or whatever?”
2. *Detection:* Several girls asked about how they would know they had HPV or cervical cancer, particularly since some have trouble understanding exactly where and what the cervix is because – as one girl commented, “you don’t see it.” For example, Rhiannon asked, “would you know you have it?” and Elise, Hannah’s mother, is not sure of the point at which HPV turns into cervical cancer and becomes detectable: “But you know I sort of equated it to HIV and AIDS. You know, like, at what point do you get it? At what point do you get the cervical cancer? How do you know?”

3. *Epidemiology*: Many of the questions addressed the morbidity and mortality rates of cervical cancer, such as Abella's question of "is cervical cancer common?" Differently, parents are more interested in the cervical cancer rates as compared to more prevalent diseases. For example, when Julia asked how many people get cervical cancer, and I told her the U.S. rates, she commented that the rates were "NOTHING compared to heart disease, [which] I think is like the number one..." In another vein, Ada questioned the epidemiological rates of cervical cancer among Black people as compared to White people, since she perceives the commercial to be targeting minority girls. Similarly, in comparison with the commercial's depiction of the incidence rates, Rachel wants to know how much the vaccine protects against the cancer versus how many get the cancer:

They said it protects against 70% of some...cervical cancers. But they don't really say how many people get cervical cancers. So, how many women get that? Is it really a big deal? I didn't ask, so I don't know. I guess one would be too many if it was my daughter.

4. *Origins and causes*: To understand why this health threat seems new to them, some participants asked if HPV "has always been around?" Also, participants asked various questions about the link between sex and HPV and cervical cancer, like in Sadie's inquiry: "So, you couldn't use like a condom or a pill [for prevention]?" Participants also asked about the extent to which boys could get HPV. Like, Carmen asked if it was possible "for the girl to not have it but the boy to have it?"

5. *Symptoms/Consequences*: Girls want to know what would happen if they got HPV or cervical cancer, like Faith who confirmed “don’t you stop having your period?” Similarly, Renee asked, “can you die from it?” and Madison wants to know “does cervical cancer hurt to get it?” Likewise, Julia, a parent, wants the commercial to give her more information about the odds of developing cervical cancer:

What I would like to know is, what are the odds of your body getting the virus and your body taking care of it yourself? They make it sound like once you get this virus, you’re probably going to get this cancer.

I’d like to know the flip side.

6. *Other related topics*: Other topics participants inquired about were whether the actors in the Gardasil commercial have cervical cancer and if there is a cure for cervical cancer. Also, the HPV conversation occasionally opened up discussion about other STDs, as it did among one focus group when Rhiannon asked me about the difference between genital herpes and herpes and whether “you can pass it by mouth.”

*Questions about vaccine*. Although parents had minimal questions during the interviews, those who did ask me questions had more questions about the vaccine than they had about HPV and cervical cancer. Parents also had more questions about the vaccine than did the teen girls. Vaccine questions revolved around *obtaining the vaccine*, *benefits of the vaccine*, *costs/risks of the vaccine*, and *how the vaccine works*.

1. *Obtaining the vaccine*: Participants asked about the ages of people who should get the vaccine as well as logistics about obtaining the vaccine. For example,

one participant asked, “Are all [three shots in the series] the same?” Also, Makayla and Mia wonder about the recommended ages for girls to get the vaccine:

Makayla: What about older women in their 30s and 40s that could get cervical cancer?

Mia: And they never had this option because it wasn't around then. I think if you have this option that's gonna work, what's the difference between someone who's nine and who's 26?

Makayla: What's the difference between someone who's like 10 and someone who's 70? You know?

2. *Benefits of the vaccine:* Teens and parents alike wonder about the longevity of the vaccine, such as in Alana's questions: “Does it work? How long does the vaccine last?” There were also several questions around the disclaimers made in the commercial about the relative effectiveness of the vaccine, as in Teague's confusion: “It said it doesn't really prevent the cancer. I don't really get that.” Similarly, Mia asked why get the vaccine, based on the information they received from the commercial: “...it said Gardasil doesn't treat it and it doesn't prevent it. So why get it? It says it causes nausea and redness at the injection site. Eh!”
3. *Costs/risks of the vaccine:* – Teens had several questions around the risks of getting the vaccine. For example, Abella wanted to know “Is it possible that the vaccine will give you cervical cancer? Similarly, Faith tested out a scenario: “What if you're in the middle of your shots – you know, I have to

get three of them. And you're in the middle and you have sex a lot. Will it not be as effective?" Pregnant teens/teen mothers asked a handful of questions about the actual costs of the vaccine: "Does it cost money? Does insurance cover it? How do you get it if you don't have insurance?" Finally, parents are much more concerned about the risks of getting the vaccine. Elise and Julia talked about a report that Julia had heard about that linked Gardasil to "deaths and blood clots" in girls in Japan.

4. *How the vaccine works*: Teens and parents alike clarified with me and their fellow participants how vaccines work, as in Jayla's question: "So, when it's a vaccine, they actually put that thing inside you in order to prevent it?" Aisha also wanted to make clear the difference between HPV and Gardasil: "Wait, what does the HPV shot do? I'm lost. Doesn't it protect against getting the virus?... Wait, Gardasil has to do with HPV? Now I'm confused!"

#### *Misperceptions and Missed Targets*

Participants voiced some possible perceptions they thought their daughters may have about their sexual health and what is permissible for their choices if parents permit their daughters to get Gardasil. These concerns arise mainly among parents (although among some teens as well) from information that has been published and made available about the nature and risks around HPV, cervical cancer, and the vaccine by the CDC, FDA, and Merck Pharmaceuticals. The primary misunderstandings that parents are concerned their daughters or others may perceive about their daughters in obtaining the vaccine are beliefs around *perceived promiscuity*, *false sense of security*, and *contradictions in the epidemiology of cervical cancer*.

*Perceived promiscuity:* Teen and parent participants alike brought up promiscuity as linked to the vaccine. As mentioned earlier, the group of teen mothers/pregnant teens feel that others may perceive the commercial to be “only for people who get pregnant.” In fact, Tanisha believed that the vaccine is for everyone and not just the “good girls,” but that girls who are not pregnant or mothers may think the commercial “tells you that young girls are more likely to get the virus because you are not married to the person that [you had your baby with].” On the other hand, several of the teen participants who are not pregnant or mothers feel that the commercial speaks to them but that it should target girls who are promiscuous. Largely, these girls feel that sexually active girls “do not care” about their sexual health but instead are concerned with “being slutty” or “being nasty.” Becca, for example, believes that the girls she perceives as promiscuous would not care about the Gardasil commercial: “The [girls] that could have already [have had sex], they might blow it off and be like, oh whatever.”

Somewhat similarly, one parent revealed a worry that the public perception is that the vaccine is only for promiscuous women. For example, Julia and Elise discussed Julia’s feelings that by getting her older daughter the vaccine, she in some way validated others’ negative beliefs that her daughter may be sexually active:

Julia: You know, I kind of worried about that a little bit for [her older daughter].

Like, am I telling the world that I think my daughter is going to be promiscuous? I didn’t really talk to anyone else who was doing it. And I just thought, am I saying to the world, well, she might be out there sleeping with whomever, so I better get her this shot! You know?

Elise: But things are different than when we were young, you know?

Julia: Yeah, it is a lot different. It's best they don't have a boyfriend. Then there's a whole group of things you don't have to worry about.

*False sense of security.* Several parent participants talked about the possibility that the vaccine may give teen girls a false sense of security that if they get the vaccine, they do not have to continue to get annual Pap smears or practice safe sex. Evelyn and Emily, the mothers of Makayla and Mia, respectively, discussed this concern:

Emily: Even with the Gardasil, not being able to catch all of the cervical cancers – still, I would hate for somebody to get a false sense of security because they have gotten the Gardasil, like stop getting their annual. Like, I've gotten the vaccine, I don't need to get my annual anymore. I could see that happening...Like, the doctor putting in the vaccine and forgetting to add, but you still need to come in and get checked.

Evelyn: [It's like] to go out and have a relationship and firmly believe that if you use a condom or whatever, that there's no way that you can have a baby or you can't get this.

*Contradictions in the epidemiology of cervical cancer.* As indicated previously, teen girls picked up on potential contradictions between the epidemiology of cervical cancer and the perceptions of who gets cervical cancer suggested by the commercial. For example, several girls think that the commercial should also target boys since they often pass HPV to girls, as pointed out by Lisa: "They've been campaigning about it a lot for girls but I think guys should get it too [because] guys can still get it. I mean, they can't get cervical cancer, but they can get the whole HPV thing." One group of girls also

believes that guys do not care about the threat of STDs because “they don’t think they can [get it] right now” and “I’m young, I don’t have anything.”

Participants also perceive differences between the actual threat of cervical cancer and the represented threat of the disease in the commercial along racial and ethnic lines. Participants question the rates of the disease among non-White girls because some either think that the commercial targets minority girls or some think the commercial should target minority girls. For example, several White participants across multiple interviews/focus groups believe that Black girls’ main concern is AIDS and that “I don’t think they would care about something like this.”

Finally, many of the parent participants and some of the teen participants perceive age as another contradictory factor. For example, Lisa does not feel susceptible because “when I think of cancer, I don’t really feel scared for myself because I think I’m too young,” and Abella was surprised to hear that cervical cancer was something that could happen to her in the near future:

It makes me realize that that could happen to me eventually, and how cancer isn’t necessarily something you’ll get when you’re old. It’s kind of scary. I don’t feel like I would be – not necessarily ready to have cancer because I would never be ready – but that it could happen to me in five years. That’s kind of shocking.

Among parents, the age factor surprises them as well. A few parents had seen the commercial but had not made the connection that the vaccine was being promoted to girls their daughters’ age because, as Claire put it, “I don’t think of teenagers as having it.” In fact, several parents said they do not relate their daughters to the girls in the commercial or to being at risk for HPV/cervical cancer because their daughters were their “little girls”

or their “babies,” and not at risk yet for the things the commercial suggested they may be at risk for. When I asked Kristen what she thought when she saw the commercial, she said she did not make the connection that it was about her daughter, Renee, and that she needs to stop seeing her daughter in that way so that she can help protect her:

I thought, that’s a really cool thing. Everyone should get that. But I didn’t make the jump to the fact that my daughter would be in that age group because I don’t think of her as being in that age group. You know, she’s my little girl! I think I might need to branch out a little bit and realize that she’s gonna be 17 in a couple of weeks. My thought process didn’t move that far. Until I was talking to my girlfriend this weekend whose daughter just got finished her 3rd round, I thought, hmmm, I should have Renee get that shot. I just really hadn’t gotten that far in my thought processing, because it was so new.

Finally, several parents see contradictions around the cervical cancer commercial and the availability of the vaccine for young girls because of their experiences with learning about STDs when they were younger. Elise described this when I asked her what the most compelling argument was that her doctor gave her for giving her daughter, Hannah, the vaccine:

[The doctor said] it covered most STDs. I think that’s scary, because cervical cancer and STDs are so much more scarier now than they were when I was her age. [Why?] For one, because they are my children! But, it just didn’t seem that the cancer rate was as high at my age. Or that there were as many STDs when I was her age. I was in my 30s before I remember hearing about herpes and AIDS being so prevalent. You were more worried about pregnancy. Just being aware of

that the last 20 years and knowing she's a teenager now, stuff just started to make sense.

### *Opinions about Public Debates*

Discussions about debates in the public discourse emerged in the interviews, including debates around whether the vaccine gives teens a *license to have sex*, whether states should *mandate the vaccine*, and whether *pharmaceutical companies should be able to market* directly to girls and have lobbying relationships with doctors.

*License to have sex.* A similar theme to the false sense of security idea was that the vaccine may provide a “license” to teens that having sex is now accepted by the parents, and that this “license” belief is linked to the perceived public controversy about the vaccine, as Lisa, a 17-year old girl, described:

Lisa: I've seen some controversy around it, like that some moms don't want to give it to their 12-year olds, since they are reaching out to younger girls. They are like, well I don't want my daughter thinking she can have sex already. When, like, that's not really what it's about.

Jen: What do you mean, that's not really what it's about?

Lisa: I don't think that just because you give your daughter a vaccination for cervical cancer that she's going to be like, oh, OK, it's time to start...

However, none of the parents said they believe this, but that either it was a thought they had in their decision-making or a theme they hear from other parents and with which they disagree. For example, when I asked Erin what she thought the vaccine means to other parents, she indicated that she assumed other parents' doubts about the vaccine when she tried rounding up other parents to participate in the focus group:

I haven't really talked to the whole bunch. I do know that when I talked to one of the moms I said 'Has she gotten them?' and she said 'No I wasn't quite sure about it. I'm kind of holding off.' I think the same thing I was saying: Not knowing in the future, what they are going to say about it. And I think some parents think that by giving them this vaccine they're safe guarding one part of having sexual relationships, in a way. They're saying well if I do that then I'm taking away a bit of a risk. And maybe the risks should all be there and then they won't.

Finally, several parents link this "license" fear to similar feelings they have/had about putting their daughter on contraceptives to help ease their daughter's menstrual cramping. Emily and Evelyn talked about this fear, which spurred from a conversation about having the knowledge of sexual relationships, partner, diseases, and protecting yourself as the key to staying healthy:

Evelyn: Makayla's been on birth control since she was, like 14, because when she started, she had horrible cramps and severe moodiness.

Emily: It's every parent's thought, if I give her birth control, am I giving her the right?

Evelyn: So I sat her down and said, Makayla, ok, I'm not giving you the OK to go out and [have sex]. But either way, you'll be protected. Now that you know we're doing this for health reasons, but I'm not giving you an OK to [have sex]. I want to make sure that when you do, you're ready, or think you're ready.

*Vaccine mandate.* The potential vaccine mandate among the states created myriad perceptions among parent and teen participants. First, some of the parents in Texas had only heard about the vaccine and the threat of cervical cancer initially from hearing about

the news that the governor of Texas (Rick Perry) was trying to pass a mandate that 11- and 12-year old girls be vaccinated in order to attend public school, as Rachel described:

Then we heard that Governor Perry was going to make it mandatory, so we were all getting in an uprising – or an uproar – about that. And the teacher was like, get it, get it. But then the cost was so expensive, and insurance wasn't going to cover it. So I was like, oh, I'm not gonna do it, I'm not gonna do it. Then they came to school, so I did it.

Similar to Rachel, Kristen also had not heard about the vaccine until hearing the news about the mandate, which she thinks “would be a good idea” because “you don't know when they are going to become sexually active. It's so scary.” Kristen also thinks the vaccine mandate would be a good idea because of the perceived high cost of the vaccine:

Jen: What did they think about the governor trying to mandate it?

Kristen: My one friend said, man, I wish [Gov. Perry] had gotten that through – because her kids are on WIC. So it would have been paid for. Not WIC, [S-CHIP]. So, she would have liked that! It would have been covered. Leslie said it was quite expensive.

Jen: Yeah, I think it's like \$400 for all three.

Kristen: Are you serious? That is a lot. With a lot of these shots, they don't cover them right away.

Differently, Marie felt that the controversy around the mandate may have been linked to the possibility of early sexual onset:

Which I think is part of the controversy with the vaccine, is “we don't want our girls to get it because that gives them the license to ‘blah, blah, blah’” whatever.

That's just not part of my value system... I think the district was going through discussions of mandating the vaccine for girls starting at twelve or thirteen, it was in the idea or coverage of mandates and parental outcry against mandates, and the coverage just seemed to be more loaded than if we were talking about measles. In that it's not just the anti-vaccine fears, that it's because of sex.

Some of the teens also made comments about the public debates about the vaccine. Becca, for instance, thinks that "doctors should require it. I mean, there's no harm in it." Similarly, Lisa earlier perceived cervical cancer was an epidemic because "things like the governor of Texas making every girl going into public school getting it – that makes it seem pretty urgent. Like something that needs to be treated."

*Pharmaceutical marketing and relationships.* Many of the parents talked about skepticism and doubt about the relationships among the pharmaceutical companies, doctors, and the government agencies that regulate the vaccine (i.e., the Food and Drug Administration). Although not all parents have negative perceptions of all three of the parties, many parents do have some opinion about how the workings among the three may create problems for the development and marketing of the vaccine to teens and parents.

*Merck and state governments.* Based on the news that Texas Gov. Rick Perry tried to pass legislation mandating that 11- and 12-year old girls acquire the vaccine before entering public school, some participants feel that a mandate may be positive because they were told it meant that the vaccine would have to then be covered by insurance. Others feel it is positive because a vaccine for cancer is an important health innovation. However, more parents feel unconvinced that this relationship is positive for

their daughters, as in Marie’s comment, who is someone that said she is not a “built-in skeptic”:

I will say where my skepticism kicks in, well, I won’t say skepticism – outrage might be a little strong – was Merck’s pushing state legislation, and that’s not right...may even be in Texas, the initiatives in the state houses had revealed that Merck had subsidized or had even been involved in drafting the legislation.

Rachel and Molly also discussed cost and problems between what they perceive from the commercials and public discourse and their relative ability to pay for the vaccine:

Rachel: Nope – it was covered with my doctor’s visit. She’s covered it that way.

Otherwise I couldn’t have done it - \$600? No way.

Molly: That made no sense to me that they would make everyone feel like you have to get it, then it’s very expensive.

Jen: You said they would make everyone feel like you have to get it. Who is they?

Molly: Commercials. The news. That’s where I heard most...

Rachel: Gov. Perry.

*Merck and doctors.* Even more disturbing to several of the parents is the possibility that Merck personnel are lobbying their doctors to encourage doctors to encourage their patients to get the vaccine. Several parents – such as Julia – pointed to the idea that the vaccine is ultimately for profit rather than being created for the best interests of their daughters’ health: “I think it’s tied to the pharmaceuticals, so I think it’s dollar driven...it keeps the world going around and the money flowing, and I just don’t think we need to have our health dollar-driven.” When I asked Emily and Evelyn where

they would turn for information about the vaccine, they seemed wary about which doctors they would pursue:

Evelyn: Doctors you know, not someone who's got a big thing going with the pharmaceuticals...

Emily: Not someone who's in bed with the Gardasil folks. That's hard to do.

Jen: So how do we know when someone is being lobbied by pharmaceutical people?

Evelyn: Find someone in the medical field that will steer you in the right direction. Because they are going to tell you what you want to hear. They're part of this. Quite frankly, I don't want to help pay for someone's new vehicle payment with part of my life.

*Merck and direct-to-consumer marketing.* The sheer act that Merck took in advertising directly to teenaged girls about the vaccine upsets several parents, as Elise remarked:

Drug companies – I understand why they advertise – they want to make people aware that there is something out there – it's mainly to prod you to ask your doctor about it. I don't know – it's just kind of disturbing. It's almost kind of unethical, like ambulance-chasing attorneys.

In fact, many of the parents understand – as Elise noted – the need for advertising by organizations; but in the Gardasil case, parents feel that there should be another way to reach teens and parents. Furthermore, parents like Rachel and Molly believe that the commercial made the threat seem imminent, which they later observed was not as urgent.

This made them both wonder if they needed to get their daughters vaccinated soon after they learned about the vaccine and at what they considered to be a young age:

Rachel: I feel like I rushed it now, but they made it seem like, oh my god, it could be with the first person you have sex with, so get protected now before you become sexually active. But now, I look at them and go, they look older. I'm still glad I got it – I'm not changing my mind about that. But I'm wondering, did I have to do it when she was 15?

Molly: It is for marketing purposes. Right now they are targeting older girls, but earlier, maybe they were targeting younger, especially more vulnerable... makes you more fearful... Well, especially the younger girls are more vulnerable to a lot of things.

Finally, Ada, Aisha's mother, talked about her caution with using new pharmaceuticals without knowing the actual threat to her daughter because of their being Black:

Jen: Aisha mentioned while you were upstairs that the doctor talked about the vaccine.

Ada: I told her no. Like, what's in it? That's another thing. I hate to sound all conspiracy theory, like what's in that shit? Like Tuskegee Airmen part two.

Because they're marketing it to minority girls.

Aisha: Marketing? You mean, selling?

Ada: Yeah. You hardly saw any White girls in that commercial. You saw Hispanic girls, you saw Black girls...

*RQ7: How do identities of age, social class, and racial and ethnic background interact to create meaning differentially among teen girls around HPV/cervical cancer vaccine communication?*

To discover the phenomenon of how teen girls perceive and feel about difference, I asked the girls how they feel the commercial and the topic of the cervical cancer vaccine might be understood differently by girls from different races or ethnicities than themselves. About half the girls responded that they feel race matters among teen girls like them and unlike them, according to how they identify with race and ethnicity. About half of the girls also feel that race does not matter, because they feel, for instance, that all girls are impacted because cervical cancer can affect any woman. From this discussion, conversations emerged in which girls expressed significant dissimilarity to peers they perceive of different identities or characteristics like age, sexual activity status, pregnancy/parenthood status, and gender. Based on their observable and ascribed identities, there seemed to be little differences in how the participants believe others *not* like them perceive cervical cancer, HPV, and the vaccine. However, some variations emerged, primarily around the varied perceptions between girls who are not pregnant/mothers and teen mothers/pregnant teens. Overall, dynamics of interactions across difference consist of *teens' observations of difference, teens' talk about difference, teens' perceptions about others' beliefs, and parenthood status as differentiating factor.*

#### *Teens' Observations of Difference*

Teen girls notice difference among one another according to their observations of *racial and ethnic differences, socioeconomic difference, and age differences.* These

observations contribute to how they constitute their and others' identities, which is one way they make meaning of the concepts around cervical cancer vaccine communication.

*Racial and ethnic differences.* Among several of the interviews, the teen participants said they feel that race does matter when considering whether teen girls from different races look at the cervical cancer vaccine media differently from how they look at it. Girls also said that other girls would perceive related issues like sex, STDs, and pregnancy differently as well. In the group of teen mothers and pregnant teens, Aida and Imani explained why they feel that race does matter among these issues:

Aida: Maybe other girls [from other races] don't care about it.

Imani: I think people think that Black people get HIV more. The commercials and stuff and like MTV, like that AIDS commercial. It's more on MTV than other channels.

Jen: What do you think about that? Do you think it should be on other commercials?

Imani: I think it might be true – it's mostly Black people. Around here, AIDS is bad because of DC.

Many of the girls interviewed also observe difference through racial tension in school and in the media, based on their observations that more White people are shown in the Gardasil commercial:

Faith: I feel like, they look at – or they would get mad if – or they wouldn't pay attention if their race wasn't...

Amber: They wouldn't care about it.

Faith: Like, Black people don't care about White people, really.

Amber: Like, some people are genuinely great people. Like, I've known a lot of Black people, and I love them to death. Some people don't care – they're like, whatever, you're white. They'll push you in the hallway, so you'll accidentally bump into them.

Girls also make meaning of difference because they use difference as a benchmark for their own behaviors. For example, in one focus group, the girls (all White) perceive that girls of a different race from them do not care about their health and schoolwork, which is why girls different from them may need more than a television commercial to convince them about important health topics. In this group, the girls said that the commercial should show a girl that had already had HPV to show the consequences of not getting the vaccine:

Becca: [Others' perception of the ad] I should be like this girl, I should be able to do that.

Jenna: But they're different. I'm just gonna say this as a race thing, but Mexicans try to act all cool and, you know. And like us, we're different – we dress more preppy, and do our work. And some would be like, oh they don't - they're cool.

Sabrina: They wouldn't care – they don't already care about their schoolwork. So why would they pay attention to that all of the sudden.

Becca: It's a better way of getting them to...because I bet you their parents don't care.

*Socioeconomic differences.* In the interviews, none of the teens considered how girls from different income backgrounds may perceive the issue and ad differently. However, some of the girls asked about the cost of the vaccine and whether insurance

covered, and they considered that ability to pay may be a factor in how others are able to access the vaccine. For example, Mia mentioned several times that “people don’t have that money” to pay for the vaccine and go to the doctor three times to get all the shots. Likewise, Lisa said that the vaccine was easy for her to obtain because her mom works at a community clinic and can get vaccines for free, although she realizes that some girls would not have the money to get the vaccine.

*Age differences.* None of the girls perceive that girls of other ages are more susceptible to cervical cancer or that they might perceive the commercial differently. Instead, whenever they discussed age, they all said they do not feel susceptible to cervical cancer because they are too young, as displayed by Lisa’s comment: “It doesn’t worry me or concern me. It’s just like, might as well get the shot, might as well be safe about it – cool. When I think of cancer, I don’t really feel scared for myself because I think I’m too young.” The only other occasion that age factors in the meaning-making of the vaccine media is when some girls perceive the girls in the ad to be of older ages than them and thus, the targets of the vaccine and not girls their same ages.

#### *Teens’ Talk about Difference*

Significant patterns emerged among teen girls about how they actually speak about difference, either in describing how they feel difference exists or how they dialogue about difference with one another. These patterns are *taking offense*, *disclaiming racism*, and *joking*. The participants are cognizant in their everyday lives of making accusations of others about their sexual activity, their beliefs about STDs, and other related topics because they believe they might make others feel alienated. However, taking offense is an extremely nuanced concept across the girls interviewed. For example, offense is a

particular concern and theme among the group of teen mothers and pregnant teens, which is a reason why this particular group is less inclined than others to resort to racial differences and consider other differences, like culture and religion:

Tanisha: I think it's harder to talk to girls of different races because most of them have not had the HPV virus. If they don't have the knowledge, when you talk to them about the HPV virus, they will be like, what are you talking about?

Jayla: I wouldn't say it's different races. I think it's different cultures, because like, a lot of people have different beliefs about certain things. People get offended. Like, you think I have it because I'm light, I'm of this complexion, or where I'm from? I think it would be hard to talk about it with, like, different religions, or whatever, but not really race.

Interestingly, in my interview with Aisha and Ada, Aisha seemed to consider that I may be offended when her mother discussed her perceptions of race in the Gardasil commercial. She corrected her mother in hopes that I would not be upset, and applied the rules of etiquette she perceives should accompany race talk:

Ada: Yeah. You hardly saw any white girls in that commercial. You saw Hispanic girls, you saw Black girls...

Aisha: Hey! Shhhhh.

Ada: What?

Aisha: You said white girls in the commercial. You were supposed to say, no offense, and [Jen] would have said, none taken.

Finally, one girl takes offense herself when she perceives other are being racist toward others and toward her. Rhiannon explained that she is upset when she feels that a group has been singled out because of their race:

If you look at different ads they are mainly white, as someone of a race would be. I can't stand racism. I actually freaked out on someone the other day. I look at it as why make it look like it s only some of us. When really it is all of us. I know racism and all that stuff is inevitable, but I get offended very easily because I have a lot of Black friends, and Asians and whatever. I take it personally because I love them for who they are not because of the color of their skin.

Another major theme in teens' talk about difference is their tendency to disclaim racism. Almost without fail when they explained racial difference, they accompanied their argument with a *disclaimer* that they are "not racist," as Faith made note of before she talked about the racial difference she perceives: "I'm so against racism, like, I hate it so much, but I feel like..." The final pattern of talk about difference is through *joking*: some of the girls pick on each other through race when examining racial make-up of commercial:

Serena: I didn't see an Asian in there.

Renee: That's because Asians are losers. They don't deserve to be in a commercial. Same thing with Mexicans.

Serena: Whatever.

### *Teens' Perceptions about Others' Beliefs*

When I asked teens how they feel about people who see health differently than they do, many of them provided me with their beliefs and perceptions about what they

think people different from them believe. They perceive that *others don't care* about their health and that *others are uninformed*. For example, when Makayla and Mia explained to me why they feel girls of different races are not concerned with cervical cancer and HPV, the conversation led into how they feel some girls of different races are also promiscuous:

Makayla: I don't think they care. Black people, their main thing is AIDS.

[agreement]

Mia: I don't think they would care about something like this. They'd be like whatever!

Jen: What about Hispanic girls? What do you think they are concerned about?

Mia: STDs. Being slutty.

Makayla: They're gross. They don't care. They flaunt it around and they wear the tightest pants I think I've ever seen...I just think they don't care. They'd probably be like, whatever, it's my life, I'm gonna do what I want.

Some of the girls interviewed also feel that girls who are different from them – either in their sexual activity status, the amount they party, or their parenthood status – are uninformed and have negative influences in their lives that do not give them information on how to protect themselves or how to live a life without risky behaviors. For example, Lisa explained that she believes family support is different across cultures:

I definitely think White teens are more informed about things like this, or maybe more concerned. I definitely have more pregnant Hispanic girls at my school than White, and I think that overall, I guess, I can't generalize, because I don't really know, but as just what I've observed and what I've heard, I definitely think there's more family support for the situation where like a girl could say, I should

take the vaccination... I think that sucks for them because I think if they knew how to prevent certain things like pregnancy and certain diseases, they would definitely go out of their way to do it.

Although most girls talked about how they think others perceive health, a few were able to identify with actual feelings about how difference and tension impacts them personally. However, none of them actually feel positively around racial, ethnic, or parenthood status difference. The only positive feelings they described when talking about racial difference was either telling me that they had some friends of different races and that for some, they feel reaffirmed in their decisions when they compared themselves to, say, pregnant girls. However, more girls expressed feelings of alienation or hurt. For example, Rhiannon, a White teen, does not want to be criticized for having something nice, which she feels is also a critique on her race: "And that is what really bothers me a lot of times is when people of different race automatically judge White people to be stuck up and just because you have something nice. Like you are not cool or nice and don't mess with them. I don't know." Similarly, Tanisha feels that the commercial may be perceived to only be for people like them who have babies, and that other people look down upon them because they have children: "They think the worst of you because you have a baby." Finally, a handful of girls interviewed seemed to feel apathetic toward girls who are different from them. For example, when pregnant girls in magazines were discussed, Mia commented that, "I think they're stupid." Faith also seemed to have feelings about others' situations without considering their circumstances: "I hate it when people are like, I'm so fat, and then they eat a lot. I'm like, why don't you do something about it, like go exercise?"

*Parenthood Status as Differentiating Factor*

The topic of pregnant girls at school or girls who already have babies emerged in almost every single teen interview. Furthermore, although many of the girls have some beliefs and feelings about how race influences girls' perceptions of cervical cancer, HPV, and the vaccine, the topic of pregnant/mothering girls at school surfaced as an almost greater differentiating factor to how pregnant/mothering teens and non-pregnant/mothering teens make meaning of the health topics and media around them. On one hand, the participants from Millswood make meaning of the vaccine because they seem to be more concerned with cost of and insurance for the vaccine than were non-pregnant/mothering teens, who did not make mention of how to pay for the vaccine. For example, near the end of the focus group with the girls from Millswood, Imani and Tanisha had several questions about how they would pay for the vaccine if they did not have insurance, and Tanisha mentioned that she had Medicaid before she had her baby, but not how, after the birth.

As stated earlier, these girls also have concerns about other people looking down on them because they have a baby and that the vaccine would then be "only for people who get pregnant." When I asked the girls if they also perceive the commercial to be targeting them alone, Jayla replied, "it clearly says it's not for pregnant people, it's for everybody," to which Tanisha commented that it's "for anybody – as long as you have a cervix." Finally, the mothering/pregnant teens are also more apt to make meaning that it is not race but cultural and gender differences through which different perceptions of the vaccine and commercial emerge. For example, when I asked the girls how they feel about the way the health topic is sent to them, the issue of gender differences emerged:

Imani: I think that all STD commercials – they need to attract boys more.

Jen: How come you think boys should be attracted more?

A: They don't pay any attention to it.

A: My boyfriend, he worries about stuff like that. But most boys, they don't.

They're like, I'm young, I don't have anything...

Jen: Why do you think guys don't care right now about STDs?

Carmen: They know that they can get it, but they don't think they can right now.

Among the non-pregnant/mothering teens, the topic of pregnant teens/teen mothers at school emerged in almost every interview without my asking about it. More specifically, there was a pattern of the conversation flowing from a cervical cancer/HPV/vaccine discussion to talk about pregnant girls at school, as exhibited in one focus group when I asked how they feel about the way the topic was being sent to them:

Erica: And they could hang signs everywhere, like, HPV...

Becca: A lot of girls actually do like, have sex and stuff, so they need more encouragement than a little commercial.

Jenna: Not to be racist, but they should ask people who are more apt to do that stuff. Or ask like one girl who's pregnant or something or more apt to get pregnant. And ask, do you know what HPV is, and they'd be like, no, don't care. And after a person tells them, they'd be like, oh, I want to get that.

*RQ8: How does an HPV/cervical cancer vaccine campaign contribute to the medicalization of the teen female body?*

In this study, I defined medicalization as a process by which medical culture assumes jurisdiction over women's bodies as well as sublimates women's meanings of

their bodies for its own. I conceptualized medicalization as medical culture's jargon, interests, processes, and rules, and how the medical culture redefines relationships in the political, economic, legal, social, and cultural sphere according to its terms. As teen girls' health is the topic at hand in the study, this piece of the results section reports how the medical culture uses power to redefine teen girls' health issues and bodies according to its rules, processes, and interests.

Originally, this Research Question had four sub-Research Questions, which were RQ8a: *What sources of information do teen girls use for health, and specifically, topics like HPV/cervical cancer?* RQ8b: *What governing rules do teen girls believe constitute the functioning of their bodies?* RQ8c: *What social systems do teen girls believe have authority over their bodies (if any)?* and RQ8d: *How do teen girls feel about the ways their bodies are imagined in mediated and interpersonal health communication?* As in an earlier Research Question reworking, the data that answered some of these sub-Research Questions also answered other Research Questions. For example, data responding to RQ8a (girls' sources of health information) were largely revealed in the answer to RQ1e about teens' technological and media meaning making factors, and data responding to RQ8c (authoritative social systems) were already reviewed in RQ1b, c, and d, as family, educational, and sociopolitical factors have already been established as having significant influence on girls' meaning making of the campaign. Thus, for purposes of length and clarity, RQ8a and RQ8c are removed from this results section, and only RQ8b (governing rules) and RQ8d (how girls feel about the ways their bodies are imaged in health communication) alone are reviewed.

*RQ8b: What governing rules do teen girls believe constitute the functioning of their bodies?*

The process of medicalization often works by enforcing guidelines upon consumers' bodies that may not be natural or appropriate according to the identities, cultures, and customs native to that group. In this study, teen girls perceive a number of governing rules that media about health – such as the Gardasil campaign – and other sources teens explore constitute within teen girls' personal and social lives. These are *health topics teens should be concerned about, social rules, and the moral divide of sex.*

*Health Topics Teens should be/are Concerned About*

The main health concerns for teen girls in this study are weight and body image issues, eating disorders, healthy eating, exercising, and cancer (skin). For example, weight and body image were so prevalent across these girls' interviews that many of the girls conceptualized health as “being fat or skinny” when asked for their meanings of health. When probed about the importance of being skinny among one group of girls, they associated their weight with negative images of their bodies and of their lack of physical activity<sup>7</sup>:

Jen: So I heard you earlier say that staying skinny is important. How important is that to you guys right now?

Hannah: Very important.

Erica: Bathing suit season coming up.

Jenna: Gross.

Jen: What's gross?

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<sup>7</sup> My observation of these girls' weights are that they are exactly where they should be for their age and heights, and perhaps, some of them may have been on the lower end of their healthy body mass index. In other words, in my opinion, none of the girls should feel their bodies were not healthy and thin.

Jenna: I don't know. I haven't worked out in a while, so being in a bathing suit is gross.

Based on these girls' descriptions, it seemed that healthy eating and exercise are intricately tied to the weight and eating disorder issues in their minds. However, as mentioned in the previous section, girls seem to know they need to eat healthy foods, and most admit to not always eating healthy foods or being able to exercise.

Other health issues that the girls discussed were infections of some kind, like staph/mrsa, mono, or the flu, which many are aware of because people at their schools were sick with such infections. The girls have tactics – like Makayla's and Mia's experience with telling people they would not drink from their cups – while other girls explained that they joke about situations when an infection is moving around school, as in Abella's experience that, “we joke about how if one person gets mono, we're all going to get mono because we share food...[so she tells people who have the flu] oh, get away from me!”

Finally, some of the participants from Millswood have some significantly different concerns from the other girls interviewed. They, too, are concerned about their weight and not getting infections; however, a few girls are also concerned about keeping their boyfriends from spreading sexually transmitted infections to them, as discussed when I asked them about their health concerns:

Miranda: Not to get sick with anything. To protect myself from my boyfriend – either way. He says he's not with other girls...

Jen: So he doesn't give you...

Miranda: ...any kind of disease.

Jen: How do you do that? Do you ask him to wear a condom?

Jayla: Yeah.

Furthermore, several of these girls voiced concerns about how their eating impacts their child. For example, Jayla said that eating is not so much of a concern for her, but “of course, you have to think about what you eat for your child.” Likewise, Carmen – a pregnant teen – said she thinks about “if I’ve eaten enough for the baby.”

### *Social Rules*

It was difficult to parse out the health from the social lives of teen girls because the ways that girls talk about health topics are intricately tied to the rules they seem to believe are assigned to them for their social relationships with other teens, their friends, and boys. Specifically, the social rules girls recognized in talking about or understanding their health are *girls’ solitude in STD prevention, barriers in discussing health with peers and boys, knowing the influence of friends, and questioning norms.*

*Girls’ solitude in STD prevention.* In several groups, the topic of boys’ involvement in cervical cancer emerged. Many girls asked questions like, “boys can’t get cervical cancer, right?” “can boys give you HPV?” and “why aren’t there boys in the commercial?” Some girls feel gender tension, and they said that they feel that it is a problem that boys “don’t think they can get [cervical cancer] right now”:

Kya: Boys can’t give you cervical cancer, right?

Jen: Right, boys can’t give you cervical cancer, but they can give you HPV.

Imani: Can they carry it in their...?

Jen: Yeah, they can carry it and pass it just like other STDs, like herpes, syphilis, etc.

Tanisha: It's not fair that since they are the ones that give it to us, they should be the ones that get the cancer, not girls, because it doesn't affect them, it affects us.

*Barriers in discussing health with boys and peers.* Teens feel that topics like healthy eating and exercising are appropriate topics to discuss with people at school and boys, but topics about sexual health and cervical cancer are less accepted. Furthermore, some girls feel gender discrepancies around sex because they feel they cannot talk to boys about STDs because boys do not perceive themselves to be vulnerable to disease at this point in their lives:

Imani: They think that gay boys have it. Like when they are messing with drugs and stuff.

Jayla: I think that boys are kind of dumb when it comes to that. It's like, they know about it and they've heard about it at school, but they are like, I'm gonna do what I want to... They're thinking about, as some people say, they're thinking with the wrong head. Basically, they're thinking about what they tell girls – it's better this way, but they're not thinking that this way, they could get these types of diseases.

Melia: It's always been a problem.

Additionally, some of the girls suggested through their actions in the interviews that sex is embarrassing or uncomfortable to discuss. For example, when I spoke with Serena and Renee, I answered their question about why I was too old to get the vaccine, and in their response, Serena made a joking reference to sex, and she said she was embarrassed talking about sex:

Serena: So does that mean when I start to do the nasty... [we laughed at her phrasing]

Jen: Is that what you are going to call it when you start doing it?

Serena: I don't want to say it! It's embarrassing. [still laughing] So, you're saying that if I started to do the nasty in like, the next two weeks, I would need to get it?

*Knowing the influence of friends.* Many of the girls spoke fondly or were affectionate with their friends in the interviews, and many gave situations in which they help one another during problematic times. However, girls also indicated that judgments happen within friendships by which girls learn the standards for health, beauty, and appropriate living. For example, when I asked Kandace what she and her friends talk about usually, she seemed to imply that she watches her friends' diets to keep track of their healthy behaviors:

We talk about what other people are doing in terms of – I have a couple of friends that are naturally very, very thin. So maybe I will keep tabs. We will occasionally talk about, it sounds really nosey but, what they ate making sure that it is a matter of their body types versus some people that you see that they are like not really eating a lot during lunch or when you go out with them. So mainly at this age it is body issue problems. Eating disorders. We talk about health topics and stuff.

*Questioning norms.* Complying with social norms seemed extremely important to the participants, although some talked about being comfortable with acting against the norm. In fact, among many of the interviews, there seems to be a premium placed on questioning norms and being somewhat different. For example, Mia and Makayla feel proud of themselves that they were some of the few people their age that have jobs and

work for the money they use. In other cases, the groups of girls do not like to drink alcohol and do drugs like they perceive many of the people in their school do. Here, a group of girls talk about why they look up to some older people they know because they perceive these people do not need to conform to the norms of partying to feel good about themselves:

Jenna: And we go to a Christian campus. The counselors there are like good. They are really cool, and they are still good. I don't know.

Sabrina: Everyone at our school is like, we got drunk Friday night. And we're like, we don't need beer to have fun, seriously.

Hannah: You wonder why we never come.

Jenna: And they call us crazy when we don't any. We're more hyper and outgoing.

Becca: We don't have any like beer and stuff. They drink beer to get hyper and stuff.

### *The Moral Divide of Sex*

As sex emerged in every discussion in this study, within the discussions also emerged moral guidelines for how participants feel sex should be conducted. In addition, girls make meaning of sex very differently according to how they feel about sexually active teens, pregnant teens, and teen mothers. Specifically, several of the girls who are not sexually active, pregnant, or mothers talk about premarital sex as "bad" because some of them are waiting for marriage to have sex, some believe that girls who have premarital sex want to be "slutty" and promiscuous, and that girls who have premarital sex do not care about school, their health, and their reputations. Furthermore, the negative value that

some girls place on premarital sex is often paired with talk about monogamy in that once marriage is established, a monogamous relationship was guaranteed, which eliminates a woman's risk for contracting any STDs.

Alternatively, some girls see premarital sex as realistic and not problematic. Some girls who were pregnant or had babies see sex as something that they know they are misjudged on by other girls, in that other "good girls" see them as "bad." However, some girls who said they are not sexually active did not speak of sexually active teens, teen parents, or pregnant teens as morally incongruent. Instead, some girls try to empathize with pregnant girls' situations or they simply see sex as a responsibility that they have decided not to take on yet.

*RQ8d: How do teen girls feel about the ways their bodies are imagined in mediated and interpersonal health communication?*

This piece of understanding the medicalization of girls' bodies and health related specifically to the ways these social and mediated systems of health make girls feel about themselves. I need to note that although these emotions are written as if the categories are mutually exclusive and discrete, the emotions expressed by the girls are instead overlapping and often contradictory: in many of the interviews, girls felt concurrently responsible and confused, normal and different, curious and skeptical. Furthermore, none of these feelings are exclusive to one group of girls; instead, many of the emotions were expressed across different types of girls – younger and older, non-pregnant/mothers and pregnant girls/mothers, Black and White and Latina. The emotions girls feel about how interpersonal and mediated communication portray their health and bodies are *guilty*, *neglected*, *normal*, *different*, and *thoughtful*. These emotions are reported in no particular

order, and the list and examples of emotions do not comprise an exhaustive list but instead simply reflect the primary patterns of emotions felt across participants.

### *Guilty*

In almost every interview, girls expressed guilt and anxiety about the foods they eat. Often, this guilt is accompanied by an obligation they feel to exercise, based on how much food they have eaten. The food-guilt girls feel about health issues like eating was discussed a couple of times throughout this report. However, in this example, I probed one group to find out the consequences they perceive in gaining weight:

Madison: Your self esteem drops.

Rhiannon: You want to lose it.

Keira: There are days that I freak out and days that I really don't care.

Madison: If your weight comes then everything goes down with it, like your complexion, and you get really stressed out. Your friendships get worse.

### *Neglected*

Some girls seemed to feel that they are not being listened to or talked with in the media they have seen, but rather, they are ignored or talked “down to.” I learned about these feelings at the end of my interviews when some girls asked about why I was conducting this project, and I explained to them that I believe teens are important to talk to about this topic since it affects teens' bodies. Kandace, for example, feels that teens' health issues are often overlooked: “That's interesting because usually [the topic of teens and health] gets boxed. I've never thought of how we might be impacted in terms of what medications you are taking.” Similarly, Lisa feels that sometimes teens are not given the credit they deserve: “I think a lot of teenage girls are more informed than a lot of adults

give us credit for. Like, I have friends that are absolutely brilliant. And I think it's good to get a more under-aged opinion."

### *Normal*

Normalcy has been discussed previously in this report several times because many of the teen participants perceive the girls in the Gardasil commercial to be "normal," "regular" teens that do not have Hollywood-type lifestyles. To this point, several girls valued media that represented "normal, regular teenage girls." For example, when I asked Alana what she feels about the girls in the commercial, she replied, "they seemed normal. They didn't seem like models. They seemed like normal people."

### *Different*

Although teens appreciate the normalcy that is portrayed in the commercial, they also feel that the commercial conveys an appreciation for different thinking. This emerged in conversations when girls revealed that they believe themselves to be different from the larger teen population. Often when I asked about how they discuss health among their friends or how they perceive the Gardasil commercial, the girls responded with generalizations about the larger teen population. Furthermore, they often highlighted the negative trends they feel are prevalent among people their age. Finally, they explained to me how they feel they are different – and in most cases, better – than most of the teens they observe or know. The primary trends that girls commented about that exist among teens are that sex is common, teens are not concerned about health or being healthy, that teens are not aware about cervical cancer, HPV, and the vaccine, and that "everyone parties." For instance, Serena and Renee feel that because more people are having sex, there will be more STDs:

Serena: It seems like now sex is becoming more common with younger...

Renee: With everybody.

Jen: What do y'all think about that, that sex is becoming more common with younger...

Serena: Everybody's doing it.

Renee: It means more people are getting STDs.

Also, although some believe that a lot of teens are dealing with eating, body image, and exercise concerns, several girls made note that teens, in general, are not concerned about health or being healthy because – as Madison explained it – “everyone has the mentality that it won't get me.” Lisa elaborated on how teens feel they are invincible:

And I feel like teenagers, overall, are not that health savvy. At my school, I feel like, the girls are a rare example of how to really care about your body. I mean, when you're a teenager, you feel like your body is going to continue forever – it's invincible and you can eat whatever you want. Because really, when you're a teenager, you can. You're active and you have a high metabolism, and you don't really start to think about your body until college or when you're 25.

As an extension of this lack of awareness of overall health, several girls pointed out that not only would most teens not be aware of or know about cervical cancer, HPV, and the vaccine, but that the commercial may not work well among teens because teens may not pay attention to it without knowing about HPV, cervical cancer, and the vaccine. To this point, Chelsea suggested that the Gardasil communicators, “Educate more. Because some people are like...what?” Finally, most of the girls I interviewed said that they do not party (which involves drinking, smoking, and doing drugs), and they feel that they are

different from the overall teen population because of this choice, as one group of teen girls explained:

Leah: But like, some people, like, it's like not cool – they just do it because like they can.

Amber: What's the purpose?

Kylie: It's not to be cool. Well, maybe they think it's cool...

Amber: People think they are so cool because they have that opportunity to do because it's something they're not technically allowed to do.

Leah: They're like rebels.

### *Thoughtful*

Girls expressed a range of emotions related to their thoughtfulness of the commercial and media like the Gardasil campaign. Furthermore, the emotions expressed rank differently along a spectrum of thoughtfulness according to the extent to which girls are critical of the ad. For instance, some girls are curious about the ad because they want to understand more about how the vaccine works, as in Abella's questions to me: "Is it possible that the vaccine will give you cervical cancer? Because I think that would be a main issue of people not wanting to get it because they might have a fear of contracting the virus." On the other end of the thoughtfulness spectrum, a few girls are skeptical of the validity of the vaccine, as is Mia: "It's trying to sell you on a product...to hear that it doesn't prevent it, it doesn't treat it, it could cause this and this. Seems like a lot of work and money for something that may or may not work." Finally, some girls feel cautious of the vaccine. They feel there may be risks and benefits with the vaccine, and they said they will/wait(ed) (along with their parents) to make sure the decision to vaccinate (or

not) is/was the best decision. As in Lisa's case, I asked her if she had any concerns when her mom brought the vaccine to her:

Like, I didn't want to take it immediately just because I wouldn't want any...because you hear about symptoms of birth control – you could go blind or get a blood clot or something. You know – just crazy things happen. So I guess I just thought it would be a good idea to wait. But other than that, no.

*RQ9: How do teen girls and parents believe an HPV/cervical cancer vaccine campaign should treat teen girls' health?*

Overall, most of the girls and parents enjoy the “catchiness” of the commercial as it helped participants remember the commercial. Furthermore, several of the participants feel the ad is a “good start” in catalyzing the conversation about the cervical cancer vaccine, as Lisa opined that seeking help from a doctor is still more informative than a commercial, which is potentially more informative than her health class:

I thought it was an easy class, but I learned a lot more of information and details than from commercials. I think the commercial would be a good way to give people the very basic idea and start them thinking about it. Because I don't think it's a replacement for seeing a doctor. A brochure would have more details. But a commercial would get you thinking about it.

Although most of the participants remember the ad, garner information from the ad, and think the ad has positive aspects to it, there are a number of recommendations across teens and parents about the target(s) of the ad, the girls portrayed, the activities portrayed, the information provided about cervical cancer, HPV, and the vaccine, and the way the information is sent to teen girls and parents. Overall, teens recommended

changes more in the representations of the girls and activities portrayed, and parents suggested changes at systematic levels. Recommendations are reported below according to teen girls' suggestions first, then parents'.

*Teen Girls' Recommendations*

Teen girls provided a wealth of recommendations for how to adapt the commercial to be more interesting, usable, and targeted to them personally. In fact, in several interviews, the girls seemed to enjoy and have fun brainstorming and imagining ways to improve the ad. Specifically, girls made suggestions according to *increasing the ad's credibility, targeting and representing girls better, and improving recognition of the topic on a systematic level.*

*Increasing the ad's credibility.* The girls made many suggestions about how to make the ad more credible to them so that it would grab their attentions better. For example, one group of girls feels that stories from girls who have HPV or cervical cancer would make the issue more salient to girls their age:

Erica: It should show something like a fictional character actually like getting cancer or something. Like how it changed her life.

Hannah: Yeah, I think that would be good. Like someone who had HPV and their story.

Jenna: They should go and like – like a commercial, video-taping it, like looking like they are actually going into a school, telling people about it.

Erica: That'd be good because everyone goes to school.

Jenna: Like asking people, do you know what HPV is, and they'd be like, what?

Similarly, Makayla and Mia feel that hearing from actual girls that have cervical cancer and the statistics around how many girls get it would impact their decisions to get the vaccine:

Makayla: I think they could do more than one commercial. Just like showing that we told them that it may not prevent it or it's gonna keep you away from it, then maybe we should start showing some statistics. Like, well, I took Gardasil, and I have been cancer free, or I got rid of it.

Mia: Like a testimonial of people who have taken it.

Makayla: Or one could be people that it didn't work for. Like, as a person, I'd rather know people it worked for and people it didn't work for.

Several girls also said they need more information about cervical cancer, HPV, and the vaccine than what was made available in the ad. For example, Chelsea said the ad should compare the risks of the vaccine to the larger risk of getting cervical cancer: "...a way to balance that, I think, would be to put the risks of the cancer so you could see that the risks of the vaccine are lower than if you got the cancer, kind of thing." Likewise, another group of girls just want general information about cervical cancer, which they feel was lacking in the commercial:

Leah: I think on the commercials, they should show more of the facts on it.

Because I didn't even know the symptoms and like what happens after until you told me.

Kylie: I think it like it should just say in more detail about like what happens to you, like what are the causes of it, how you get it and stuff, because people don't know...

Amber: Like, how do you know if you have it? I guess you could go see a doctor and have a check-up appointment and stuff like that. I don't think it's bad enough to the point that you can't help yourself.

*Targeting and representing girls better.* To target them better, some girls made suggestions about the physical appearances of the girls, as in Skylar's comment: "More homely people...we are a big family. We are not skinny. So they should have a fat mother and daughter. The people were too perfect." Some girls also want to see the girls in the commercial doing activities they feel were more representative of what girls their age do, like "girls at the mall" or "just sitting around...like talking and laugh[ing]," and not doing activities like knitting a sweater or jump roping, which several girls said they do not do.

Several of the groups also made note that boys are not in the commercial, upon which they had questions about the relationship of the cancer and the vaccine and boys (e.g., "boys can't give you cervical cancer, right?"). They also feel that boys should "have [a] commercial, but a different one, because I like the 'one less'." One group of girls feels the interaction between boys and girls in a commercial would be effective: "It should be like a girl, she should be like dancing, and her boyfriend should come up and like, I didn't use a condom and I have HPV...I forgot, or something. And then she would be like, oh crap...That would relate to A LOT of teenagers."

Finally, some girls feel that the commercial should portray girls from other races because the girls feel those are the groups that should be getting the message about the vaccine. For example, one group of girls feels that sexually active girls need to hear the

message, and those they feel were more promiscuous are girls who are not White, like them:

Becca: They didn't put, like, all races in the commercial. They need to put, like, a Black girl dancing or something. Not to be racist, but...

Jenna: Because Black people may look at it and be like, well, if White people are going to get that, then I don't want to.

Hannah: If I saw that commercial, for Gardasil, I might be like, that's kind of weird.

Becca: Not all those girls are like that. But the ones that could have already have done that, they might blow it off and be like, oh whatever.

*Improving recognition of the topic on a systematic level.* A few girls wondered why there was not more publicity about the vaccine, as there had been around other vaccines, as pointed out by Mia:

Like, when flu shots were out, it was everywhere. Like on the news – you need to go get your flu shot, you need to go do this, you need to go do that. So, why isn't it the same for this, if this is supposed to be something that can help somebody so much, why aren't they talking about it more, why aren't they helping people with it?

In response, several girls feel that the ad should be placed in additional venues to the television forum, such as in music, on Facebook, a website, and in celebrity charity concerts, as suggested by one group of Miley Cyrus fans:

Leah: If they got someone famous – like Miley Cyrus or Ryan Sheckler – to talk about it, like, say Miley would have like a benefit concert or a fundraising concert – people would pay, and all the money would go to...

Amber: Yeah, and like during that concert, people would talk about that disease, and you would learn about that disease...

Jen: Would you guys go to a Miley Cyrus concert, even if it was for cervical cancer?

All: YEAH!

Many of the teen participants also believe that Gardasil communicators should bring the message into the schools for increased recognition of the topic:

Amber: I think they should hang posters in schools.

Faith: Because the poster [at the doctor's office] like got my attention because there weren't a lot of other posters hanging on the wall. People would finally look at them, and they would ask their teachers about it. They could even have class discussions about it. Like, if they brought it up in class, I'm sure people would start talking about it.

Finally, some girls have suggestions on a systemic level so that girls could be informed better about the vaccine. For example, Becca commented that, "I think doctors should require it. I mean, there's no harm in it." In another vein, Mia explained that she thinks girls should be the ones to make the decision about getting the vaccine:

I think ultimately, it said it's for kids aged 9-26. Ultimately, it should, parents should wait until it's the kid's decision if they want to get the shot because this is something that's gonna affect them. I mean, you don't have to go through, as a

parent. They are gonna hit that age that they can make that decision for themselves before it's too late to go get it done.

### *Parents' Recommendations*

Several parents perceive that teens would never proactively ask for the vaccine based on seeing the Gardasil commercial, as Alex argued: "The kid's not going to come up and say, mom, dad, here's my skateboard, put that aside, I've got to have this series of three vaccinations, please drive me there. It's not going to happen." Instead, parents feel they should be the target of the commercials since they are the ones who will actively seek the vaccine and give permission for their child's vaccination. In fact, Kristen did not even perceive the ad to be applicable for her and her daughter, Renee, when she originally saw the ad before the interview opportunity arose:

Well, I would think that might be better because they're the ones that are gonna get the kids their shots. Kids aren't gonna go ask their parents to get them the shot...It just didn't occur to me until Monika told me that Sophia had just finished the series. And I thought, shoot, Renee needs to get that shot. And maybe that's the commercial they should have. One parent telling another parent that they just got their daughter the shot. Because it never occurred to me...I think it would do the thing with the moms sitting around, talking. Just a casual conversation, like Penny and I had.

Some parents also feel they would relate to the ad more if there was more objective information in the ad. For example, Audrey wants to hear more statistics, but Alex feels that the limitations of the vaccine should be highlighted:

I found troubling about the ad: They say, listen, this vaccine is not going to prevent you from getting cervical cancer; but they don't say, the vaccine also has a limited ability to prevent you from getting this virus. If the ad is going to have value, it's going to be an opener, to initiate something. These public service ads...they're inundated – people have seen it so many times. I'm trying to imagine what they believed might occur when people saw this ad: did they believe people were going to turn the car around and go right into the doctor's office? We're over-targeted.

Furthermore, a handful of parents want to see the marketing tactics of the pharmaceutical companies revised because of limited transparency about the risks of the vaccine and the vulnerability of the teen targets of the ad. Parents like Emily and Evelyn feel the ad does not address their needs for information because of this shortcoming:

Evelyn: It's more entertaining to get their attention, long before it gets your attention.

Emily: And that scares me because the children and the young girls and the young adult girls...they are an act first, think last generation. So I think it's crappy that Gardasil is marketing that. They would love to have everyone in that generation get vaccinated because it's more money in their pocket.

Evelyn: Put a commercial out there that's more to the parents and gives them the answers instead of making it all cute.

Furthermore, a couple of parents feel that obtaining celebrity testimonials would be an important way to grab teens' attentions about the severity of the topic, as in Erin's suggestion:

Aren't there movie stars, a couple of famous people, who have died of cervical cancer? It seems like kids nowadays relate to people in the media. It seems like every time someone in the media or the limelight comes down with a condition and comes out, that brings more awareness. I hate to say it, but I think kids this age that gets their attention even more. If they could just put a name or a face. They think they know these people on TV. You know, Miley Cyrus.

## CHAPTER FIVE: DISCUSSION AND CONCLUSION

### Discussion

This study employed qualitative methods to explore how teen girls and parents of teen girls made meaning of a cervical cancer vaccine campaign. Theories of publics, cultural and feminist studies, and media helped frame the study, and several factors that can influence meaning-making were emphasized in analysis: personal, familial, educational, sociopolitical, and technological and media factors. Forty teens between the ages of 13- and 18-years old and 14 parents were interviewed in five states. Participants were White, Black, and Latina and came from a variety of socio-economic backgrounds. As this was an exploratory study, individual and dyad interviews and focus groups helped obtain thick, rich details that merged into themes. A grounded theory approach to data analysis was used to allow for previously unexplored themes to emerge.

Below is a brief summary of the major findings. I then interpret the findings according to how they fit within the extant literature reviewed in *Chapter Two: Literature Review*. In particular, I discuss how the data confirm or disconfirm previous understandings of the situational theory of publics, the circuit of culture and cultural studies of women and their health topics, feminist media on medicalization and women's reception of media images, communication campaigns and the critiques of cultural competency, theories of body knowledge production, and cervical cancer interventions. In the conclusion, I explain some of the limitations of the study, suggestions for future research, and implications on theory, method, and practice.

### *Summary of Findings*

Results revealed that participants – teens and parents alike – were very familiar with the vaccine campaign, to the point that both parents and teens often sang or repeated the “one less” jingle and slogan during the interview. However, among both groups, little knowledge of the pathology of cervical cancer and HPV as well as of girls’ personal risk to cervical cancer emerged. Furthermore, although some parents and teens were unfavorable toward the vaccine at the time of the study, many participants were either already, partially, or planning to be vaccinated. Factors that influenced parents’ and teens’ decisions to be vaccinated were *perceptions of benefits* the vaccine would provide; *others’ endorsements; feelings, attitudes, and perceptions of cervical cancer and HPV; family history; a spectrum of self-efficacy; the influence of the media; doubts about the efficacy of the vaccine; and systematic problems*. Barriers parents and teens cited that stood in their way of vaccination or that made them hesitant to vaccinate were *doubts about the efficacy of the vaccine, barriers in everyday life, and potential long-term costs*. The data suggest that based on some discrepancies in awareness, knowledge, and compliance, a number of misunderstandings and contradictions persisted among the teens and parents regarding the vaccine messages.

#### *Teens’ Meaning-Making*

Teens make meaning of communication about cervical cancer, HPV, and the vaccine more so through the sociopolitical, technological, and media factors in their lives than they do through the personal, familial, and educational aspects of their lives. Additionally, teens make meaning of the vaccine media simultaneously and across multiple spheres in their lives, for the vaccine was not only a health intervention – it was also a marker by which many of the teens understood their identities within the social and

cultural spheres of their lives. For example, conversations about the vaccine often evolved into conversations about the morals of sex, by which the conversations then progressed into gossiping about pregnant teens at school. Furthermore, teens' myriad perceptions of the media about the vaccine served as a microcosm for understanding difference among their peer networks. The ways that girls make meaning of different identities through the vaccine media emerged as *teens' observations of difference*, particularly among identities of race, socioeconomic status, and age; *teens' talk about difference*, in which teens spoke of offending others, disclaiming racism, and joking; *teens' perceptions about other' beliefs*, particularly that others are uninformed and others do not care about their health and school; and *parenthood status as differentiating factor*.

In general, teens did not seek health information from the media or interpersonal sources. However, through their entertainment and social networking functions of media, teens' awareness about some teen health topics were raised, such as around eating disorders, body image, healthy eating, and sex. In the process of actively using entertainment and social networking media, teens *reaffirmed their self-images* as being different from the norm, powerful, and successful. Teen girls also actively analyzed and critiqued the media forum, and in turn, teens garnered rules they believed governed the functioning of their bodies. These rules emerged as the health topics teen girls should be concerned about, social rules about how to act and what not to talk about with peers and boys, and the morals around sex. Finally, based on how they perceive the media influences them or by how they feel they are represented in media, girls felt a number of emotions, including guilt, neglect, normalcy, difference, and thoughtfulness.

*Parents' Meaning Making*

Different from the teens, the parents made meaning of the vaccine communication largely through their personal, familial, and educational factors. For example, one primary difference is that parents' made meaning of the campaign largely through their *philosophies on parenting* and their *knowledge of their daughters' choices* around risk behaviors. Parents' educational factors differed from teens' wherein that teens made meaning largely through school experiences, and parents made meaning largely through *comparisons to their pasts*, either with *their own related health experiences* or through a sense of nostalgia that when they were younger, concerns about HPV and cervical cancer were not issues that concerned them or that they were even aware of. Additionally, parents' sociopolitical factors for meaning making consisted of their *observations of the teen population, morality, medical, and the parent network*, whereas teens' sociopolitical factors largely emerged from their friends as well as how they make meaning of difference among their peers.

#### *Teens and Parents Make Meaning Together*

Parents and teens together gave meaning to the vaccine campaign through their interactions about health as well as their interactions about the vaccine. Their health interactions were meaningful because of the *contexts for which health discussions* occurred; because some parents and teens had *open discussions about sexual health*; because of the *types of topics discussed as well as taboo topics avoided*; and because of some *parents' hesitance to reveal their personal lives/pasts* to their daughters. When teens and parents talked about the vaccine, the common patterns of these interactions included a *daughter questioning the parent* for vaccine information; daughters' *trust* that the parent made the right decision about vaccination; the *parent teaching the daughter*; in

some cases, *teens' lack of participation in decision-making*; and in other cases, *mutual decision-making* about the vaccine between both parent and teen. Parents and teens also made similar recommendations for improving the message credibility with girls, targeting and representing both girls and parents better, and improving recognition of the topic on a systematic level.

### Theoretical Interpretation

#### *Situational Theory of Publics*

The situational theory of publics' variables of problem recognition, level of involvement, and constraint recognition provided the building blocks for how I asked about, examined, and understood teen girls' and parents' relationship with the campaign messages. Communicators can apply the variables to the levels publics display in order to determine what type of public a group represents in terms of its communication behavior around a topic (J. E. Grunig, 2006). The theory was originally proposed to help communicators determine the most strategic publics with whom to form relationships. The theory was to help communicators answer questions about a public, such as, "With which publics is it possible to communicate and how can one communicate most effectively with each kind of public?" and "What communication effects are possible with each kind of public?" (J. E. Grunig, 2006, p. 8). In this study, these questions can be applied to the participants' reactions and responses, although the findings do not fit neatly into the organization of the situational theory because of the diversity in the data. Thus, although the purpose of this study was not to evaluate the types of publics teen girls and parents comprise around vaccine communication, the data suggest noteworthy elaborations of important communication behavior factors – problem recognition,

involvement, and constraint recognition – which indicate why and how teen girls and parents communicate. Below, I discuss how the findings confirm previous situational theory studies that investigated race and ethnicity, class, gender, health topics, age, and cervical cancer. The findings also provided support for a theory of women's health communication.

*Race and ethnicity in the situational theory.* This study's findings helped confirm previous studies' suggestions that race and ethnicity play a significant part in the situational theory's predictive ability of publics' behaviors around relevant health issues. For example, this study supports Sha's (2006) argument that the referent criterion should be reintegrated into the situational theory of publics' group of independent variables, for her data verified that "if a person identifies with a given culture, he or she may behave according to that culture's rules regardless of the situation at hand" (p. 60). The data also suggest an intersection between race and class in how the teen girls received and perceived communication about the vaccine.

*Class complicates the situational theory.* Class was a complicated factor to detect in this study because I did not ask participants to fill out pre-discussion information sheets to indicate their income and education levels. Instead, I use the identity of class as a place to discuss constraints that participants perceived in obtaining the vaccine. The finding that several of the participants from Millswood and a few of the other participants said that cost would be an issue for them in obtaining the vaccine does support Aldoor's argument that campaign designers improperly tout diversity and cultural competency within their campaign messages and tactics.

Class also seemed to be a factor in Merck's decision of which girls to target. For example, the girls from Millswood are sexually active, and thus, they are assumed to be at higher risk for contracting HPV (note: these girls can still receive the vaccine and have it be effective; it just may not be as effective as if it were given to them prior to sex onset) than are some of the other girls I interviewed who are not sexually active. The non-sexually active girls – who tended to be White and from middle class backgrounds – were the targets of the campaign, the ones who received endorsements from doctors, the ones who had parents with money or insurance, and the ones that largely received the vaccine. On the other hand, the teen mothers – who were all either Latina or Black and who tended to derive from lower-income backgrounds – had not been given any endorsement from a trusted or familiar third-party like a doctor, did not feel they were targeted by the campaign messages, may or may not have had parents that could have given them access to the vaccine, and none of whom had received the vaccine. However, since the girls from Millswood were the ones who may need the vaccine more immediately than some of the other girls since they were already sexually active, and for some of them, protecting themselves from their boyfriends giving them sexually transmitted infections was a primary health concern for them, perhaps these girls should have been the primary targets of the campaign.

Monetary or insurance access was the primary barrier between the participants from Millswood and Merck having an organization-public relationship, and Merck's for-profit mission took precedence over the pro-public health purpose it claims it works to achieve. By not deploying a boundary spanner for these particular girls and teens/parents from low-income backgrounds, Merck thus is positioning its vaccine as a *luxury item*, as

a material product that only those with access can obtain, and as a product that commodifies girls' health as incomplete without the vaccine. The public relations role, in this case, divides teen girls and parents of teen girls along an axis of access, and further relegates girls already experiencing intersecting oppressions to a health of limited protection.

Furthermore, the ability to pay for the vaccine is a cultural factor that fits into the situational theory of publics' constraint recognition easily because inability to pay/lack of insurance or access to the vaccine is a type of barrier to seeking the vaccine. However, if class and ability to pay are part of a public's culture in that they provide a lens through which members of that public view media about concerning topics to them, then class and ability to pay are factors assigned to a level of involvement. This is such because as is evidenced by the teens at Millswood, many did not even know about the existence of the vaccine, as did some of the girls who had received the vaccine based on doctors' recommendations or because they had seen the commercial many times prior to the interview. Furthermore, the girls from Millswood questioned if they would be able to access the vaccine. Thus, these data suggest that class – as another component of culture – precedes the situations within which teen girl and parent publics would seek information about the vaccine. These data again complicate the distinct variables of the situational theory and affirm the need to consider class and ability to pay as factors *prior* to the development of an organization-public relationship.

Finally, to reassert Aldoory's (2001) suggestion, the data suggest that campaigns targeting girls should consider girls from different courses of life (e.g., not living with or being supported by parents anymore, having been emancipated because of childbearing,

etc.) rather than the traditional, middle-class perspective. These data also suggest an intricate relationship between class and race that has been barely researched in the past in public relations studies and which seems to provide a confounding web of oppression that communicators would be remiss to attempt to fit into traditional models of communication variables that are based on White, middle-class standards and ideals.

*Gender in the situational theory.* This study is important because it contributes to the small number of public relations studies that have focused primarily on women publics about women's topics (Aldoory, 2001; Slater et al., 1992; Vardeman, 2006; Vardeman & Aldoory, 2007). As women have been considered important publics not only for their "buying power" and their family caretaking roles, they are also largely the health decision-makers of families. For example, when I asked the parents if they talked with their partners about the decision to get the vaccine, all of them said they were the ones that make decisions and search for information about health for the family (and the ones that were single parents were all mothers). Furthermore, women are important publics because they are also the primary family teachers about health. By and large, when teens were asked who they talk to about health or who they would seek out if they had cervical cancer vaccine questions, they said their mothers. None said their fathers, and only a few said they would talk to their friends or go on the Internet and not go to their mothers.

Vardeman and Aldoory (2007; 2008) have focused two studies primarily on the role of mothers in caregiving situations when a disaster or contamination event threatens the health of their children. Findings from the current study confirm findings from the previous studies in that participants made meaning of news around threatening events

through misunderstanding, confusion, a negotiated lens of their perceived personal risk, and the situation of the risk in their everyday lived experiences. In the current study, teens and parents alike exhibited a number of misunderstandings of the cervical cancer/HPV health threat, so much so that teens' personal risk for HPV and cervical cancer were at times miscalculated or underestimated. As everyday lived experiences provided a basis through which teens and parents make meaning about cervical cancer communication, it was also important to understand the larger socio-ecological systems that influenced them to make a vaccination decision, such as educational, sociopolitical, economic, and technological/mediated systems.

The current study's findings also confirm another important piece from Vardeman and Aldoory's 2007 and 2008 studies about how the caregiving role of women takes precedence when conflicting media messages are sent about a health threat. Vardeman and Aldoory (2008) found that when participants were faced with contradictory messages about an involving health topic, their role as protectors took priority over their own personal health concerns. Similarly, the current study found that when faced with conflicts between the constraints they felt toward vaccinating and the benefits they perceived their daughters would receive from the vaccine, those that felt the most conflict decided against the health innovation. As in Julia's case, once she learned about the potential side effects and complications of the vaccine, she could not be convinced that her daughter's well-being was worth the risk of taking the chance on the vaccine.

*Situational theory for health topics.* Among the handful of studies that have used a health topic to explore the usefulness of the situational theory of publics, the current study confirmed some previous findings. First, in their study of how publics process

information about bioterrorism in the news to determine linkages between amount and type of media coverage and the STP variables, Aldoory and Van Dyke (2006) indicated that publics need social connections when learning about a potential health threat, and that publics largely seek information through their personal networks to determine their personal risk. In the current study, personal networks are vital to how teens and parents make meaning of the vaccine media. In particular, parents use their parent networks as ways to alleviate their concern and fear of uncertainty around whether their daughters are sexually active (or practicing safe sex) or conducting other risk behaviors like drinking alcohol, driving while intoxicated, or trying drugs. Also, the current study confirmed Muturi's (2005) results that participants perceived a lack of communication between sex partners, which was a significant trend across many participants. This finding was echoed in this study – not so much between sex partners – but among the hesitance parents felt to discuss certain sexual health experiences from their pasts with their daughters as well as teens' perceptions that it is not socially appropriate to talk with peers, boys, and in some cases, their parents, about sex-related topics.

Furthermore, Muturi argued that the STP provides useful organization to the data collection process about health topics because of its inevitable discovery of the range of perceptions, attitudes, feelings, and behaviors a single group can have about a similarly-involving health risk. In this sense, the situational theory is useful as *one way* to gather a breadth of information about publics' perceptions of a health threat. However, as suggested by the data regarding race, class, gender, age, and parenthood status, the situational theory falls short of considering the depth of important cultural factors that may overwhelm situational factors. Thus, the situational theory should not be used as the

sole tool by which communicators gather and interpret information about how publics communicate about important health topics.

*Further support for theory for women's health communication.* Aldoory's (2001) study of making health messages meaningful to women has largely served as a guide to my research agenda for the past several years. As such, the current study's findings build off of her findings in terms of the ways women situate their perceptions of media around health topics in their everyday lives, women's negotiations of their self-avowed identities to make health innovations work for them, and in general, building upon the gamut of mediated and interpersonal sources of information women use to find health information as well as the decision-making processes women use to weigh the costs and benefits of adopting campaigns' suggested behaviors.

More importantly, however, this project further contributes to Aldoory's (2001) proposal for a developing theory for women's health communication by extending our understanding of (a) *teens as unique publics*, (b) *the blurred lines of teens' lives*, and (c) *the groupings of women's decision-making*. First, not only should public relations practitioners recognize the increasing importance of women as unique publics, but for health practitioners, teens and young adults are significantly becoming an important public to speak with as well, for health interventions are increasingly shifting from treating conditions to preventing conditions, and teens are the publics to whom these messages are increasingly being sent.

Second, teen girls represent a significantly complicated group with which to communicate, for the lines that separate the many factors influencing their health are increasingly blurred, such as the lines between education and media (e.g., watching

*Gossip Girl* and learning about bulimia, using Facebook or MySpace to aid in homework completion) and social and political (e.g., having thoughts about “different” girls but “hating racism,” learning that the pharmaceutical companies’ intentions are not solely for teens’ health), to name a few.

Third, rarely do health interventions exist within a vacuum for a single person. In other words, health decision-making and campaigns suggesting health innovations typically require the observation, approval, and decision-making by more than just the single individual who will benefit from the health innovation. Instead, health interventions typically span multiple publics, as does the cervical cancer vaccine intervention, for although girls receive the vaccine and avoid getting cervical cancer, parents restrict or allow the daughter access (through money, insurance, permission) to the vaccine. Thus, in order to promote adoption of the vaccine, pharmaceutical and government communicators, for example, must convince parents as well as indirectly establish buy-in from teens of the long-term benefits of the vaccine (if they do, in fact, exist). As the variable outcomes of the campaign demonstrate (via the multitude of perceptions of, feelings around, and decisions to vaccinate), women typically make meaning not in silos but rather in interpersonal groupings: perhaps in some instances, decisions are made in pairs, and in others, they are made across larger groups.

*Exploring the limitations of the situational theory.* The current study was an extension of my previous study employing the situational theory to meaning making of cervical cancer communication (Vardeman, 2006). This former study explored meaning making only of cervical cancer, since the vaccine had not yet emerged, and those participants exhibited a dearth of awareness and knowledge about cervical cancer and

HPV, an indirect involvement with conducting routine Pap smears and other protective actions against cervical cancer, and overall low constraints. Meaning making factors that emerged among those participants were grouping of women's issues, loss, and control, which were all themes found among the participants in this current study. However, based on the new data, reconceptualizations of the situational theory's independent variables emerge as *problem recognition and the lack of knowledge, indirect involvement, and crowded constraint recognition*.

First, the previous cervical cancer situational theory study and the current study provide evidence that the *problem recognition* variable should be refitted to include the necessary element of *knowledge*. In the current study, teens had low awareness of HPV, cervical cancer, and the connection between the two prior to the onset of the Gardasil campaign. Once the campaign emerged, girls knew the terms HPV and cervical cancer better, but they still asked a significant number of questions in order to clarify their understanding (e.g., "how do you get it?" "how do you know you have it?"). Parents had a higher awareness of cervical cancer but less specific knowledge about the connections of cervical cancer to HPV. Furthermore, although both groups said their awareness levels had heightened after the campaign, they still exhibited signs that they did not have a complete working knowledge of the pathology of cervical cancer and HPV, and in some cases, the knowledge they demonstrated was inaccurate. For example, several teens and parents presented the *monogamy fallacy* when they spoke of their belief that once a woman is in a monogamous relationship, her risk for threats like HPV and cervical cancer are eliminated. Some of these girls, in fact, felt that they were not at risk for cervical cancer because they planned to wait until marriage to have sex, and they planned

to be monogamous in their marriages. Also, some parents perceived the vaccine as a *license/false sense of security*, for they feared that by giving their daughters the vaccine, they may be indirectly suggesting to their daughters that it's acceptable to have sex now, to have unprotected sex, and to not conduct routine Pap tests. Such misunderstandings as the *monogamy fallacy* and the threat of a *license/false sense of security* present significant challenges to the problem recognition variable of the situational theory. Without a comprehensive, working knowledge of a health threat, girls and woman cannot fully protect themselves against an infection or disease. This finding confirms previous situational theory research in which women were interviewed about cervical cancer and the data suggested that the extent of women's knowledge is related to the extent to which they perceive a health threat as a problem (Vardeman, 2006).

Second, the level of involvement variable continues to display problems in predicting communication behavior when a public perceives itself to be *indirectly involved* with a health topic. Some teens did not feel connected to communication about cervical cancer, HPV, or the vaccine because they perceived the commercial was not targeting teens or teens like them. For instance, several girls felt the commercial was meant for girls who were already sexually active or who already had cervical cancer or HPV. Furthermore, some of these girls felt they were not at risk for cervical cancer either because they had already been vaccinated, they perceived they were healthy, or they were not sexually active. Thus, although the girls were at the recommended age for vaccination, and if they had not already become sexually active, they were at the sexual activity stage most conducive for the vaccine to be effective, many did not perceive that they were involved. Other teens who were sexually active also did not perceive

themselves to be involved or threatened by cervical cancer because either they were in monogamous relationships or they did not see the threat as something someone their age needed to be concerned about. However, since several of the teens had already received the shot, and they said they were not sexually active, they did not feel connected to the topic.

Parents, however, demonstrated high level of involvement. Since some of them were not positive that their daughter was sexually active or they thought that she may be in the near future, they felt significant uncertainty and fear about what may happen once she becomes sexually active. Furthermore, several parents connected with cervical cancer more deeply than the teens did because they had memories of family histories of cancer-related deaths or experiences. Parents' own personal experiences with STIs or cancer also motivated them to actively search for information about the vaccine either through mediated or interpersonal sources.

Third, the data indicate that although significant constraints were perceived by most of the participants, their decisions were not made without cost. This section will highlight how some participants felt decision-making anxiety about the vaccine and some perceived simultaneous constraints-motivations. This, I propose, demonstrates that the situational theory's constraint recognition is simplistically constructed, for it does not currently consider the ways in which perceived constraints can be crowded by near-debilitating emotions as well as conflicting signs of involvement and motivation. Thus, I suggest that for women's health issues, an assumption of *crowded constraint recognition* should be adopted by communicators.

Constraint recognition divided the teens according to the barriers they perceived in communicating or acting around the vaccine. On one hand, the majority of the teens interviewed did not express having any constraints about seeking information or obtaining the vaccine. The primary constraints for them were that many of them hate getting shots and that in some cases, they may not want to ask their parents about sex-related information. However, many of these girls had already been vaccinated, and they felt that as long as they stay abstinent, avoiding cervical cancer was realistic and easy. On the other hand, girls from Millswood perceived significant barriers in the cost of the vaccine and whether their insurance would cover the cost. As many of these girls wanted the vaccine but were concerned about the cost, they perceived that it may be difficult to not only avoid getting cervical cancer but also to talk to other girls and their boyfriends about topics like STIs, wearing a condom, and getting tested for STIs.

Some parents, alternatively, saw significant constraints toward communicating about the vaccine. Their constraints focused around their perceptions that either they should not have vaccinated their child because of the risks of the vaccine, or that the risks and benefits of the vaccine are not known and have not been tested long enough for them to feel sure that they should take the chance and vaccinate their daughters. However, since many of the parents had already vaccinated their daughters, they emerged as active communicators about the vaccine, particularly since several said they had conducted their own research on the topic, they had talked with their friends, family members, and colleagues about the vaccine, and some said they planned on talking to others they knew about getting the vaccine.

The findings suggest that parents and teens make complex decisions for their health since both groups perceived what to them were significant constraints in communicating or acting around the vaccine. These decisions are complex because with simultaneous constraints and motivating factors – and with what some consider being a significant health status at stake – parents seemed to enter into their decisions with caution in some cases, and in other cases, significant anxiety. Decision-making anxiety and simultaneous constraints-motivations are characteristics of women’s decision-making that is important for communicators to know when determining messages and tactics targeting women, parents, and teens.

*Age confirmed as differentiator in the situational theory.* As in previous studies examining health and information-seeking behavior, age emerged in the current project as a significant differentiating factor between whether participants felt involved and to what extent they felt pressured to make a decision about the vaccine. For example, some parents said that when they were first addressed about the vaccine (through the media, coworkers), they felt pressured to get the vaccine immediately because of the perceived urgency of protecting their daughters against cervical cancer. Later, when they watched the new set of commercials in the Gardasil campaign, they felt the girls portrayed were older than their daughters, and they wondered “why did we rush?” Several parents said that they would have liked to have waited until their daughters were older – in some cases, so that the daughters could make the decisions themselves – because the issue at hand is an adult-related issue because it involves sex, and in some cases, parents were not comfortable broaching that subject with their daughters. Thus, in some cases, age was a constraining factor. In other cases, age was an involvement factor because some girls did

not see themselves as connected to cervical cancer because they perceived themselves to be too young to be confronted with cancer. Thus, age served as both a constraining and de-motivating factor, and thus, reaffirms that the situational theory cannot accurately predict teen girls' and parents' communication behaviors about health topics, particularly one that spans multiple, disparate age groups.

### *Cultural Studies*

*Circuit of culture.* The circuit of culture (du Gay et al., 1997) provides a practical framework within which to understand the *consumption* moment of cultural meaning making of vaccine media by teen girls and parents. By examining the process of articulation to find linkages, cultural studies highlight moments that are “not necessary, determined, or absolute and essential for all time; rather [they are] conditions of existence or emergence [that] need to be located in the contingencies of circumstance” (du Gay et al., 1997, p. 3). Linkages found among teen girls and parents include such moments when their multiple cultures vary, overlap, change, and remain concurrently distinct and simultaneous from and with each other, like when teens and parents make meaning together about the vaccine as well as separately. This is also noticed when participants make meaning of the vaccine media by articulating gender as both ever-present and restricting to their relationship to such opportunities as the vaccine.

Furthermore, *consumption* is a process by which meanings emerge through the active and passive use of the cultural artifact (i.e., the vaccine media) (Acosta-Alzuru, 2003; du Gay et al., 1997; Mia et al., 2002; Vardeman, 2006). This framework helped illuminate how girls and parents actively and passively use health media to work within their relationships as well as to justify their health decisions. For example, some girls

directly talked about their relationships with their partners and the difficulties they found in communicating about STI- and sex-related topics, and other girls indirectly employed the vaccine media to talk about and justify their important meanings placed on such symbols like their purity rings. Directly, some parents felt the commercial spoke to them because it portrayed moments of daughters and mothers hanging out and talking, which some felt was an unwavering reflection of their relationships. Indirectly, some parents used the vaccine opportunity to work through difficulties in their relationships with their children (e.g., fighting with daughters, uncertainty about how to confront daughter about sexual activity or initiate sex talk).

*Cultural studies of women.* Previous cultural studies (e.g., Acosta-Alzuru, 2003; Aldoory, 2001; Bobo, 1995; Duncan & Robinson, 2004; Grodin, 1991; Letherby, 2002; Martin, 2001; Press & Cole, 1999; Radway, 1984) about women's consumption of media proved useful for understanding how to conduct this study with teens and parents.

Themes from previous research that the current study's data confirmed include how girls are set apart from boys in media concerning teen girls; that teen girls may use such media as well as their critiques of such media as what Radway (1984) called their "declaration of independence" (p. 213); and that teen girls and parents worked through ambiguities they saw between the vaccine media and other cultural systems influencing their decision making (i.e., pharmaceutical company's intentions, political mandates, etc.), as Acosta-Alzuru (2003) found in her investigation of Venezuelans' meaning making of feminism in a local soap opera. Furthermore, these findings support previous understandings of culture that multiple identities such as social class, race, and ethnicity interact to create negotiated meanings for participants that are strong enough to erect divisions among teen

girls that pit them against each other about a health topic that is of seemingly equal importance to all of them (as found in Duncan and Robinson, 2004, and Press and Cole, 1999). Finally, the current study confirmed findings that despite the problematic spheres of influence upon teen girls and parents, they persist in pursuing meanings that empower them to make the best decisions they can for their health (as found in Bobo, 1995; Duncan and Robinson, 2004).

My study contributes to this body of literature that examines women's meaning making about involving topics in a number of ways. First, the media text used in the current study contributes new understandings of media, for it is the first study to examine a particular health campaign and the advertising media within it. As public information campaigns are increasingly becoming a vehicle through which to establish relationships and communicate with consumers about potential behavior or attitude changes, campaigns may emerge as important collections of intellectual property both in consumers' minds as well as in discourse among policy makers. Furthermore, considering the financial capital bolstering public information campaigns, these messaging tactics may prove to be powerful influences upon teen girls' and parents' decision-making processes, particularly when the campaign is emphasizing the adoption of an innovation or practice in the name of preventative care and improved health.

Next, the current study adds power to the usefulness of cultural studies based on two methodological aspects: (a) dyads of parents and daughters are an innovative sampling technique, and although parents and daughters were not routinely interviewed together, their data about one another and combined in data analysis provide valuable insight into the negotiated meanings parents (mostly mothers) and daughters make about

increasingly relevant and oftentimes divisive topics such as sexual health; and (b) teen girls have not been readily observed and understood using the cultural studies approach, and as a group that sits on the boundary between childhood and young adulthood, these moments of meaning making are important to capture to understand their distinct characteristics from mature womanhood.

To the latter point, the characteristic of cultures that the findings in this study exemplify most pointedly is the possibility that cultural studies investigate the *never-ending tension social groups experience in self-identification in relation to external – and possible contradictory – forces* (Nelson, Treichler, & Grossberg, 1992). To this point, teens expressed countless tensions, contradictions, conflicts, and discords within themselves and among their peer groups in their efforts to define themselves. For example, teens hold mission statements of sorts for themselves around such values like being informed, caring for friends, (tattle)telling to an adult only when a friend's health is at stake, and behaving within a "good-bad" framework. However, these values are on a daily basis contested and tested by forces that when combined, significantly challenge teen girls' abilities to claim their self-identity and behave according to their value systems. Difference among the girls at school everyday creates tension, for girls see others acting, talking, or appearing in ways they either do not understand or are not comfortable around; the media guarantee to girls that they will see images and representations of their bodies and their behaviors that dictate how they should look, what health topics they should be concerned about, and how they should achieve the standards set *for* them rather than by them; and even families maintain friction for teens, for as families provide a significant amount of love, guidance, and access to teen girls, some

teens do not feel their parents are comfortable sources of health and social information for them, some teens are fearful of not obtaining their parent's approval, some teens struggle to differentiate themselves from their families, and some teens face their health and their futures knowing there lie in their genetics and family histories health threats that some perceive as unpreventable. Atop other systems of pressure such as school, athletics, social activities, and romantic relationships, teens experience daily tension and contradiction in affirming their identities.

Furthermore, teens' lives exhibit significant blurring of lines between school and health (e.g., using social networking sites for homework), across family and health (e.g., pursuing a healthy life under the mandate of family genetics), amid media and self (e.g., relearning what is important for health through the media and replacing previous health notions created within the self), and through self and social (e.g., affirming self values and working through difference in the social sphere), to name a few. Thus, this investigation into how teens make meaning of the vaccine media produces data that do not simply correspond to the Research Questions outlined before I went into the field. For example, do data about how teens know themselves based on the difference they experience at school qualify as the sociopolitical factors that contribute to how they understand health media (i.e., RQ1d), or do the data instead fit better in how identity factors interact to create meaning differently among teens about the vaccine campaign (i.e., RQ7)? When the data suggested that girls garner much of their understanding of what is healthful for them from the entertainment media they use, do these answer the question of what technological and media factors contribute to girls' meaning making of the campaign (i.e., RQ1e), or do the data more express how girls' bodies are medicalized

and assigned particular governing rules by particular media and other social systems (i.e., RQ8b, RQ1d)? The point here is that teen girls are an exemplary age and gender group by which to conduct a cultural study and examine *consumption* amid the *circuit of culture* because their lives are messy by way of multiple overpowering social systems clashing upon them simultaneously, and this messiness is a major journey of cultural studies to uncover the dominant readings of health and the subverted readings of health, and how subverted readings are given agency by teens, even if in small, inchoate ways.

*Cultural studies of health and women.* Cultural studies examining women's meaning making of health topics are a less populated area of study. However, the few studies that contributed to my understand of conducting cultural studies among women about health topics – namely Aldoory (2001) and Martin (2001) – bestowed invaluable insight into understanding how women make decisions about health in ways that are exclusive to women and that are important for communicators, policy makers, community leaders, and organizations to know. Aldoory's and Martin's studies also guided me in developing my questions and understandings of how *consumption* will be both disparate and contiguous to the *representation* and *production* of media and political texts. My study reverberated a number of Aldoory's and Martin's findings, particularly among the findings of discrepancies between the known self that women experience and the often dissimilar representations of their bodies suggested to them by news sources (Aldoory, 2001) and medical texts (Martin, 2001). The current study also suggests that medicalization of the teen female body is evident based on, for example, entertainment media constituting eating disorders and food-guilt to teen girls as well as in girls' perceptions that the vaccine media endorses abstinence in order to maintain their active,

healthy, good lifestyle. Furthermore, the findings from this project largely confirm the negotiations of the everyday lived experiences that Aldoory and Martin elaborated on as well as the politics of health as different for girls and boys and problematic for girls as they believe they carry the burden for health decisions such as STI-prevention and safe sex.

The current project also extends the extant understandings of women's health experiences based on cultural meaning making by way of teen girls' *active health decision making, their everyday acts of gathering and giving information, and their developing sense of body*. First, although girls largely reported that they did not seek information about health from mediated or interpersonal sources, they do *actively make health decisions* based on the health information they receive indirectly. For example, they seek entertainment media like *Seventeen* and *People* magazines as well as television shows like *Gossip Girl* and *Grey's Anatomy*, and in the processes of their acquiring information about entertainment, they also garner information about celebrity social and health topics (e.g., Nicole Ritchie appearing underweight) as well as narratives in which loved characters encounter health issues (e.g., a character on *Gossip Girl* having an eating disorder). Based on these portrayals, girls make decisions about the foods they eat, the ways and amounts they exercise, the decisions they make around sex, the extent to which they participate in partying, and the relationships they pursue with people like and unlike them. The decisions they make are then incorporated into values frameworks, which in turn may influence their emotions. For instance, girls talked many times about food-guilt they have when they eat fast food or do not exercise because they perceive they will not look like the portrayals of girls and women in their shows/magazines. Similarly, a politics

of abstinence pervades teen girls' everyday lives and by which they experience emotions of defense, rejection, and outsider status with other girls.

Another theme that contributes to cultural studies' understanding of teen girls' meaning making of health communication is the *everyday acts of gathering and giving information about health*. First, although girls spoke of the (perceived) pointless lessons in their health classes, the perceived lack of care teachers have for students, and the lack of sex education in school, girls reported nuggets of health information they learned from memorable, interesting health interventions and experiments (e.g., using an egg to practice parenthood; watching the spread of HIV by passing dye injected water between students' cups). These activities were all engrained in the concept of experiential learning and seemed to be effective in helping students pay attention and remember health lessons, a point which girls said is different from the norm of not paying attention in the classroom because classes and teachers are "boring" or "don't care" about them. In the same vein of receiving knowledge, this age group seemed to value the idea of knowing about their bodies, their situations, their relationships, and their decisions. Several girls talked about the importance of "being informed" and looking deeper into issues to fully understand what they are getting into before making decisions. Evidence of this desire to know and need to see both sides of a story emerged in multiple discussions about the *Truth* anti-tobacco campaign. Girls valued this campaign because it "showed [them] another perspective" to not smoking, and they felt the ads "showed [them] rather than just telling [them]." Knowledge also emerged among this group in the act of telling – or giving – information. On one hand, girls said they would talk to their friend if they felt she was not acting healthfully (e.g., by gaining weight, by having sex). On the other

hand, girls also talked about telling an adult if a friend was not acting healthfully, despite the taboos girls experienced in the act of telling.

Finally, teen girls made meaning of the vaccine campaign through their *developing sense of body*. In the interviews, most of the teens were familiar with most of the key terms around the vaccine media, such as HPV, cervical cancer, Pap smear, STD, and cervix. However, girls asked countless questions about the natures of, relationships of, and processes around these terms. For instance, in a handful of interviews, I had to clarify for the girls where the cervix is located in our bodies, the function of the cervix, and why/how the cervix is involved with HPV and cervical cancer. As confirmation of previous studies' findings that girls take information given to them and apply it to their bodies and health as they are told to do, girls often connected cervical cancer primarily with their gender and subsumed a wealth of meanings of cervical cancer and the vaccine to the heuristic of their gender (e.g., "[when I hear the words cervical cancer], I think of girls"). Furthermore, several girls seemed squeamish when they heard about or discussed their anatomies and the decisions and processes they will undergo to maintain their health (e.g., Erica's disbelief with her mother that Julia occasionally "take[s] a look down there" to make sure everything is healthy). These few examples represent a larger trend that at the ages of 13-18 years, girls are still establishing their understandings of and even their feelings about the intersections of their health, their gender, and their perceptions of their health's place in the larger sociopolitical contexts of their everyday lives.

### *Feminist Media*

*Medicalization of women's bodies.* Medicalization literature largely informed my understanding of how to conceptualize girls' meaning making of health because it

refocuses the symbols, languages, definitions, norms, and relationships that girls give to vaccine communication back to power differentials, and in particular, the power that is held by medical/health interests over teen girls and their parents. The overall governing rules found in this study were *health topics teens should be concerned about*, *social rules*, and *the moral divide of sex*. Specifically, these findings contribute to the medicalization concepts of the *body as a site of struggle*, as girls' main health concern was weight and many of their disappointments of how their bodies look, among other body struggles girls expressed. Also, the argument of medicalization's proposition that the *medical encounter is an interaction of power* was evidenced in almost every participants' experience that their doctor was the person to recommend the vaccine and persuade them that it is a "win-win" health innovation, as was the proposition that *medicine is a controlling interest behind the discourse, politics, economics, and biosociality of human culture*, as displayed in Merck's powerful relationships with doctors and politicians, so much that they convinced several governors to propose legislation to mandate the vaccine for all 11- to 12- year old girls attending public school. *Risk politics* were also demonstrated by those at risk versus those not at risk being intricately linked to the "good-bad" frameworks girls valued as well as those not at risk being the ones with access to the vaccine. Finally, *professionalization* was evident in the findings, as portrayals in the vaccine media and news media highlight the innovation of the first vaccine to prevent a type of cancer, as was *moralization*, in which several of the girls' value-laden frameworks – such as the morals of sex and the politics of abstinence – were reinforced by vaccine and news media (Foucault, 1977, 1978; Lupton, 2003; Clarke et al., 2003; Kline, 2003; Rose, 2001).

Furthermore, although the gender of woman is not the sole depository for medicalization effects, gender for women is unique and significantly complicated when biomedical culture possesses power upon almost every sphere of teen girls' lives. Scholars like Donna Haraway (1997) and Emily Martin (2001) propose that the female body is a site upon which authoritative powers manipulate and mold girls' behaviors according to commercial interests' needs. Haraway calls the bodies which are maneuvered in such ways *cyborgs*, and Martin likened the female body to the *other*, broken version of the male body. Both conceptualizations of the female body refer to biomedical culture's insistence that the body is out of order, needs repair, and the health innovation it has produced (a feat, as it is marketed, of technology and biology) is the sole way to remedy the broken body. In the current study, girls voiced this metaphor in their perceptions of the ad. For example, Abella said that she could stay the way she wanted – which was active, healthy – if she received the vaccine: “[The girls in the ad] were all active and healthy seeming, so because of that, I felt that if I got the vaccine, I would be able to stay that way.”

Additionally, this study revealed the gender depreciations of medicalization based on inequities girls perceived from the ad and its targeting the health innovation solely to girls. As mentioned before, several girls asked why boys were not getting the vaccine if it helped with HPV – which they understood boys could get and pass on to girls – and one group of girls talked about their realities of dealing with their male partners, that the guys do not care right now about STIs because “they think they can't get it right now,” and they wondered why – if guys are the ones to pass the STI or disease on to girls – do they not have to be vaccinated? By not addressing these points, Merck perpetuates an assumed

responsibility that girls must protect themselves as if they are the participants in the relationship who are automatically acting out of responsible behavior. This one-sided responsibility also begs the question: why was it tested and made accessible and marketed to girls first, and then boys, when boys are (typically) the ones that are infecting girls with HPV? Women/girls contract STIs at a higher incidence than do men/boys, but did Merck not think about the boys' role in the deployment of the health innovation? Future studies should examine the *production* of the campaign to investigate the research used to inform the campaign and to understand the reasons why girls were targeted instead of boys.

*Women's reception of media body images.* In the results chapter, I reported that the data suggest that girls feel *guilty, neglected, normalcy, difference, and thoughtfulness* about the ways their bodies are imagined in mediated and interpersonal contexts around the topic of the cervical cancer vaccine. These feelings expressed by girls confirm some of the previous studies' findings that women perceive media body images among involving health stories with confusion, anxiety, alarm, distrust of science and medicine, questioning of historic binaries, and decontextualized as merely body parts rather than as a person living among social, economic, cultural, and relational spheres (Bordo, 1993; Covello & Peters, 2002; Roswell et al., 2000). Scholars of such studies also endorsed the use of qualitative methods to elicit emic experiences of women reading medicalized meanings among various mediated texts, which was a purpose the current study pursued.

Other ways that teen girls and parents of teen girls make meaning of media body images and which contribute to the extent body of literature include (but are not limited to) *bullying from a distance*, which I observed when girls' conversations turned from

cervical cancer prevention to making fun of and talking badly about “bad: other girls at school (e.g., “you can tell when they have a bad weave”, “is her hair just like plastered on?”); *fear of others’ experiences*, such as among the parenthood divide that girls suggested regulated their behaviors as well as their social relationships; and *powerful and empowered*, as some girls said they felt about the commercial, based on their perceptions that the images reflected their active, healthy, successful lives that they can maintain by getting vaccinated.

### *Communication Campaigns*

Conceptualizing, refining, and critical literature around communication campaigns and cultural competency contributed to the development of this study and provided important frameworks through which to understand the dynamics of the Gardasil campaign, what types of appeals consumers perceived it employed, and what problems exist in the development and deployment of campaign messages that may or may not hinder its effectiveness with teen girls and their parents. Parts of this section are written from an organizational outcome standpoint (i.e., did the organization meet its campaign goals), and other parts are written as critical to the organizational outcome standpoint (i.e., how did teens and parents critique the campaign as well as how I interpret these findings to add critical value to how campaigns are conducted).

*Cultural competency.* As stated in the literature review, cultural competency and cultural sensitivity are terms used and goals established within campaigns through which campaign designers work to talk to groups “in their languages” and “on their levels” (Dutta, 2007; Ford & Yep, 2003). Working toward cultural competency is necessary in large-scale, nationwide campaigns such as the Merck-Gardasil campaign because the

producers of the campaign are not natives of the consumer groups of the campaigns (i.e., producers are not teen girls, they may not come from the same racioethnic backgrounds as some of the teens, they may not have the same values and practices of teen girls, etc.). Thus, in order to “get down to their level,” campaign designers theoretically conduct formative research and conduct message testing with members of consumer groups to ensure that the messages contain representations, language use, social norms, and cultural symbols, among others, that resonate with teens enough that teens pay attention and are motivated to seek the vaccine.

The current study’s data suggest that the Gardasil ad did contain certain cultural symbols and values that many of the teen girls interviewed felt were important to them, such as images of girls playing sports and being active, girls appearing happy and healthy, and girls making responsible decisions and being informed about their health. Furthermore, some girls and parents interviewed said they liked the commercial, and several sang the jingle during the interview (which indicated to me that Merck made a memorable brand). However, it seemed the interviews were saturated with suggestions for improving the commercial because teen girls and parents alike felt varying degrees of discrepancies between the representations of themselves in the commercial and the ways they would like information about such a topic sent to them. For example, many of the girls indicated that there were several omissions of information about the vaccine, and many girls said that they were confused by some of the information delivered (e.g., Mia watched the commercial then said she was confused by the supposed benefits of the vaccine: “So, what I don’t understand is, if it doesn’t treat it and it doesn’t prevent it, then why get it?). More specifically, certain images and activities portrayed in the ad – like a

girl knitting a sweater bearing the slogan, “one less,” and girls doing double-dutch jump-roping – were laughed at by several girls in the interviews (e.g., Serena said, “I don’t really think that anyone would really go and make one of those sweaters that says ‘one less.’ I know I wouldn’t.”). These findings again beg the question, to what extent did Merck conduct formative research and message testing of the campaign messages? If they did conduct the research, why do the data suggest significant dissent and issues with the ad?

*Knowledge production within communication campaigns.* Rakow’s (1989) and Salmon’s (1990) illuminations of the contradictions of knowledge production of communication campaigns supported the use of the *circuit of culture* as a means to understand gaps between messages produced and sent by an organization and the messages received and interpreted by campaign consumers. Specifically, these works opened up possibilities that teen girls’ and parents’ perceptions did not have to match with the messages sent in the Gardasil ad and in other media, and that differing perceptions of the campaign were not the fault of individuals (as Lupton, 1994, pointed out is often assumed by campaign designers) but more the result of two disparate cultures communicating about a health threat is perceived in extremely dissimilar ways.

Specifically, knowledge is differentially produced in reference to the campaign in myriad ways: (a) Merck campaign designers encode meanings of cervical cancer, HPV, the vaccine, teen life, teen motivations, relationships teens have with their parents and peers, and teen needs for information into the Gardasil media; (b) teens make meaning about the vaccine and the campaign with knowledge they produce from the cultural systems in their lives, which predominantly depend on the medicalization of teens’

bodies and sociopolitical systems they co-create with their friends and about their peers; (c) teens and parents know the communication about the vaccine via their everyday lived experiences together, parent-daughter talk, and the family histories and genetics; and (d) the news and entertainment media produce knowledge about teen bodies and such sexual health related topics like HPV according to current political actions, economic conditions, influences from pharmaceutical companies, and perceptions of what consumers want to read/watch in their channels. Knowledge is typically produced based on the relationships the designer has, which inevitably contain power differentials, typically between the campaign producer and the campaign consumers.

The clashes in knowledges produced around this health topic and its campaign result in teens being hindered to inform themselves and protect themselves in ways they initiate rather than being led to understand their bodies, their sexual health, and their health decision-making according to knowledges produced by parties with very different intentions than their own. Furthermore, these works encouraged a “new communication model to recover public participation” (Rakow, 1989, p. 180) by highlighting the discrepancies in producers’ and consumers’ realities around cervical cancer, HPV, and the vaccine, which resonates with much of the findings in this study and the ways the findings can be applied to future, feminist- and culture-based communication relationships. Thus, in order to initiate publics-led campaigns in which publics establish campaign goals, messages, tactics, and relationships for themselves, public relations practitioners must first learn how knowledge is created differently and negotiated between the producers of campaign messages (typically organizational campaign designers) and the consumers of campaign messages.

### *Theories of Body Knowledge Production*

Research within the sociological tradition of knowledge production was used to inform this study by providing background about how knowledge is differentially produced at the site of the human body (Foucault, 1987; Hess, 1997; Mamo & Fishman, 2001). Among this body of research, science is perceived as a culture that carries enormous power in prescribing to other bodies the meanings and uses of the human body. These studies typically employ ethnographic methods in order to investigate the power relations and complications that result when the body serves as a boundary object across science, medicine, culture, technology, and nature. Particularly important to situating the current study's findings were the concepts of *commodification* (Clarke et al., 2003; Novas, 2003) and *marketing race* (Mamo & Fishman, 2001; Shim, 2005).

The data in this study reveal commodification in reference to the problematizing of the healthy, active, female teen body that the campaign produces as reality. In other words, the campaign sells the possibility that without the vaccine, girls will most likely contract HPV, it will most likely turn into cervical cancer, and girls will most likely discontinue living the carefree life they once enjoyed. Furthermore, part of the commodification process involves the blurring of lines between commerce and health education, for the Gardasil ad sells the chance for girls to learn more about HPV/cervical cancer and arm themselves against imminent future disease; however, the commercial interests of the pharmaceutical company complicates the relationship that teen girls and their parents can have with the vaccine, which was a point a few girls and more parents realized during their interviews (e.g., Mia's initial reaction to the ad was, "I don't think it's really telling you anything. It's trying to sell you on a product").

Finally, the concept of *marketing race* emerged as a complex dynamic of the Gardasil ads because researchers have argued that pharmaceutical companies are increasingly injecting ads with a diversity of races (Mamo & Fishman, 2001; Shim, 2005). The data<sup>8</sup> from the current study suggest that the marketing of race to teen girls and their parents resulted to some extent in stereotyping, profiling, other-ascribing instead of self-avowal, and systematic marginalization, as proposed by Whitehead (1929). Specifically, although many participants perceived that mostly White girls were portrayed in the ad, a stereotyping that girls from other races were promiscuous and the girls that the ad should be sent to persisted. Among those that perceived there to be a diversity of girls in the ad, some felt they were being profiled and that the drug was being marketed and targeted to minority girls as a means to test the drug on minority rather than White girls.

### *Cervical Cancer*

The current study contributes to the body of literature of cervical cancer interventions in three primary ways: regarding samples, regarding methods, and regarding knowledge about cervical cancer prevention barriers. First, all of the extant studies about cervical cancer (besides Vardeman, 2006) sample exclusively women of color, women from low-income backgrounds, and women ages 40 and older, whereas the current study interviewed the two new samples of teen girls and parents of teen girls to

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<sup>8</sup> One of the ads Gardasil released had multiple girls from different races in it, and another ad Merck aired had few diverse faces and mostly White faces. The ad shown in the majority of the interviews was the ad being currently aired, which was the majority-White ad, which was available on the [www.Gardasil.com](http://www.Gardasil.com). However, in some cases, participants ended up seeing the earlier, more diverse ad because it was available on YouTube.com, and based on the Internet connection at the participants' homes, we went with the ad that uploaded faster. Furthermore, a couple of the interviews were conducted in a workplace in which YouTube was blocked by the organization's technology services; thus, I could only show the Gardasil.com ad, and at that time, Merck had replaced the majority-White ad with an ad portraying older, college-aged looking girls.

discover their awareness, perceptions of, and feelings around cervical cancer, HPV, and the vaccine. Thus, the findings in this study contribute to an entirely new and different age group, which may prove helpful in future campaigns and health care and public health strategies move toward preventative rather than palliative care. Second, the vast majority of the evaluations of interventions and other studies conducted to learn about women's practices around cervical cancer have employed quantitative methods, whereas this study utilized qualitative interview and focus group methods to explore new themes and meaning making concepts among participants. Thus, these data will guide future studies – particularly those looking to generalize findings to a larger population – in new concepts to investigate. Third, age and intimate knowledge of cervical cancer continue to be complicated barriers in cervical cancer communication, for teen girls largely felt they were not old enough to worry about cervical cancer, although a vaccine at an early age provides the best protection. Without the intimate, comprehensive knowledge of how cervical cancer works, women cannot fully protect themselves. These barriers should continue to be examined by researchers, and educators and communicators should acknowledge that the pathology and epidemiology of cervical cancer and HPV are complicated and take time to understand.

## Conclusion

### *Limitations*

While this research contributed to several areas of theory, it is not without its limitations. In particular, due to time and resource limitations, the parents I interviewed were all White except for one Black mother. In a future study, I would like to interview more parents of color to understand how the parental themes persist or contrast among

them compared to the predominantly White themes. I would also like to interview more fathers to find out the extent to which they participated in vaccine decision-making as well as how they perceive issues around these health topics. This would be particularly interesting given that many of the girls talked about discrepancies they felt in responsibility to be vaccinated and their perceptions that boys did not need to be vaccinated. Furthermore, not having more parents from seemingly low socioeconomic backgrounds limited the ability of this study to truly understand factors and barriers to vaccine decision-making across a range of families.

There were also some interesting limitations in data collection. First, although many of the girls proactively offered their sexual activity status to me, some did not. Furthermore, I cannot be certain that all girls were truthful about their sexual activity status. Thus, this disclaimer should be considered in reading my findings, for their persistence with which some themes emerged depended on girls' reporting of their sexual activity status (although I never requested or hinted at wanting to know this information). However, it is interesting to consider the idea that some girls may have misreported based on their desire to appear socially acceptable, moral, or responsible. Furthermore, this possibility that some of the girls misreported their status is not a new finding in social scientific research, for researchers have long known that participants may provide socially acceptable answers rather than true answers, particularly around sensitive or controversial topics.

Another data collection quandary was my realization throughout the study that some parents helped their daughters "cram" for the interview. For example, in one focus group of girls, one participant said that her mom told her and her friend information about

cervical cancer as she drove them to the interview. In another instance, a mother said that she had talked to her daughter about cervical cancer prior to the daughter's interview because she did not want the daughter to be "blind-sided" during the interview. At first, I considered that this "need to cram" was a contamination of the evidence. I wondered if parents do this because the daughter questions why she is going to do this interview, what is it for, what is HPV, etc. I also wondered if possibly parents do it because they are perhaps embarrassed that their kids may not know facts about the disease. Then I reconsidered that this act is perhaps some parents taking the opportunity of the interview to talk to their daughters about a potentially sensitive health issue that they may not otherwise have the chance to discuss with them (e.g., when Rachel and Molly talked about the ease of the daughter asking about sex or when the school needs a sex education release signed by the parent, that that gives parents a catalyst to initiate the awkward discussion). In terms of the validity of the parents doing "cram sessions" with their daughters before the interview, it is something that I had little control over since I was not communicating with most of the parents but rather through this one parent. Also, would I have any ethical ground to stand on to say that parents should refrain from talking about this with their daughters for the sake of getting their real-time, honest reactions and knowledge of the topic? And when I consider the feminist empowerment piece, the point is to give girls information through the *process* of the study, and perhaps parents sharing information with their daughters prior to the interview (for whatever function or motivation) is simply part of that empowerment-through-information process.

*Future Research*

*Public relations and health communication.* In order to truly enable a feminist, culture-centered critique of segmenting publics and public relations, future research can investigate the extent to which practitioners are interested in these findings and efforts toward more mutual communication relationships with their publics. A project such as this should also investigate factors motivating practitioners to develop better dialogues among their publics as well as barriers practitioners perceive in doing so. *Understanding the perspectives of producers* is vital to bringing these culture-centered communication efforts to reality by bridging the gaps that exist between practitioners and publics.

Another way to uncover useful strategies and tactics in productive communication relationships is to conduct a *case study* of a grassroots, community-based organization in which publics are co-constructing the campaign from its onset. Building public relations' collection of stories and strategies and sharing these stories in pedagogy may increase the chances that more organizations will adopt a feminist, culture-centered approach to situated publics in their strategic management processes. Furthermore, knowledge production studies should be conducted to uncover how certain taken-for-granted ideas, objects, and relationships emerged into importance, and how they were given credence by some authoritative bodies over others. Furthermore, these studies are important when information is kept concealed (intentionally or unintentionally) and that information may hold insight into the nature of a promoted health innovation. For example, many of the participants perceived that HPV was a "new" virus, and when they asked me about it, I did not have an answer. I did some superficial searching to find the origins of HPV, but could find none. Mapping what and when knowledges about such a potentially influential health threat emerged is important to knowing the epidemiology and pathology of a virus.

These knowledge productions maps certainly are important for publics in assessing their risks to such threats, and producers and public health communicators should know these histories in order to understand which groups are most relevant in forming communication relationships.

Finally, researchers should each work to conduct *action research* (Mies, 1983; Novek, 1996) in their projects, for the goals of action research are the methods by which public relations research can actually impact organizations. By using our tools (e.g., media relations, writing) to bring our research out of academia and into public discourse, we in turn put social pressure on organizations to act as a community citizen. In this study, I conducted action research in two ways. I am currently composing a response letter to a *New York Times* journalist (Elisabeth Rosenthal) about her cervical cancer vaccine article, “Researchers question wide use of HPV vaccines” (August 21, 2008) to give her information about studies such as mine and encourage her to next cover the consumer perspective of the issue. My hope is that by responding to articles/segments such as these, the important feminist, cultural perspective will be brought to the forefront, and parents and teens will be able to connect better to an issue they typically see discussed among authoritative voices (e.g., government entities, pharmaceutical companies, doctors). Furthermore, public relations researchers should use their tools to apply for relevant grants to improve communication to publics about important health topics. In this case, I applied for an Avon Hello Tomorrow grant in which I committed to developing and providing holistic, comprehensive, two-sided information about the vaccine to girls that want more information about the vaccine (serving as boundary-spanner) as well as information about how girls can receive the vaccine through vaccine

programs to which they may be eligible for. If they are not eligible, they can apply for monies this grant will provide through the Agency for Pregnant Women<sup>9</sup>.

*Cultural studies.* Cultural studies can be useful in contributing understandings of how policies impact groups of people. In this study, I learned that teen girls experience an inchoate health literacy, particularly in feeling comfortable talking about their sexual health, in feeling disconnected in knowing their bodies intimately, and in understanding the physiologies of their bodies. In efforts to not automatically place a blanket blame on the educational system, I suggest that future research conduct cultural studies like that of Emily Martin's (2001) investigation of the medical culture to determine what are the lessons, messages, and understandings of sex and the female body being taught in the educational system. For example, a textual analysis of biology texts, sex education materials from high schools, and district-level curriculum requirements about sex education would indicate the ways in which cultural meanings like moralism, innovation, and difference interact with biological meanings to promote particular understandings of sex, health, and how to communicate about them among teen girls.

Furthermore, to better understand the progression of girls' understandings of their bodies, interviewing older teen girls, young women, and parents of 'tweens may provide a more cogent knowledge of not only how decision-makers about such controversial and

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<sup>9</sup> As part of my goal to turn this project into action research in efforts to "giv[e] back" to the communities where we work in a "commitment to application" (Fine et al., 2003, p. 124), I recently applied for a \$5,000 grant from Avon's Hello Tomorrow Fund. This fund gives a different applicant \$5,000 each week because the applicant is working to promote health among women. In my application, I outlined a plan for using the funds to create low-cost materials to distribute to girls – such as those at Millswood – as well as use the remaining monies to create a fund to house at the Agency for Pregnant Women. This fund would be available for girls seeking financial counseling and help for the vaccine. Instead of automatically giving the money to the girls for the vaccine, administrators of the fund would first work with the teen to determine if she is eligible to receive the fund through any of the other vaccine programs first. If she is not, she will receive the money to obtain the vaccine. Logistics for researching the different vaccine programs, developing the low-cost informational materials about how to get the vaccine, and administering the monies will be developed if I receive the grant from Avon.

complicated topics as vaccines make decisions, but it may also help health educators map children's and women's understandings of their bodies over time. Such topics that would add to the body of women's health cultural studies include when and how young women knew to go get their first Pap smear; what was discussed and explained in the Pap smear; what are salient memories of health and sex education classes; and what was it like the first time a young woman searched for a method of contraception, among others.

*Implications on Theory*

*Public relations: Toward a feminist, situated, culture-centered approach to campaign production.* The public relations body of literature addressing the situational theory of publics was useful in informing the data collection and analysis of this study. However, based on the array of cultural factors through which participants make meaning which lie outside of the purview of these variables and public relations concepts, traditional public relations theories such as the situational theory of publics do not accurately reflect and predict how teen girls and parents will act toward HPV/cervical cancer vaccine communication. Instead, *a communication model that places culture at the center of campaign origination, development, deployment, and community involvement should replace traditional models that merely measure knowledge, attitudes, and behaviors as decontextualized from culture.* Thus, attempting to fit the findings of this study into a static framework like the situational theory proved difficult and problematic because of the need for public relations campaign work to evolve to work within, for, and toward a less neat, less predictable, less uniform generation of publics.

In efforts to define publics' situation in more descriptive ways that are more true to the complexities, conflicts, and difference they experience, I also propose that we fuse

the meaning of situated knowledge and positionality from feminist literature with alternative approaches to communication relationships. Feminist and sociological scholars like Donna Haraway (1997), Sandra Harding (1997), and Patricia Hill Collins (2000) discuss standpoint theories in which based on a person's identity, a person can experience reality and relationships from a *particular, situated* position, and their identities understood by them and identities prescribed to them by others may not be congruent. These incongruent realities of self, in turn, create the multiple standpoints that exist within different cultures and across a society. I suggest, again, that when we refer to the situation of publics, *situation refers to the negotiated identity of the group rather than the superficial, physical, environmental, or temporal factors that may influence decision-making around an involving topic*. These factors do not dissipate from how practitioners understand publics' perceptions and decisions around a topic; rather, these factors are merely superficial factors, whereas the cultural meanings and situational identities are considered first and foremost when campaigns are imagined, built, and implemented.

These implications also address ethical obligations assumed by the practitioner. Thus, I also advise that through this study, we *revisit feminist approaches in efforts to reinvigorate public relations research and building communication relationships*. This means that first, the public relations practitioner understands that her role in public health is unique from other public relations' roles in other industries. Specifically, health practitioners have a special, situated standpoint of their own: they work for their stakeholders, as any for-profit organization employee does, and they work for their publics, as ethical codes of the public relations practice suggests. However, as Seib and Fitzpatrick (1996) propose, an additional obligation public relations practitioners have is

to society, and in the case of the health practitioner, the obligation is to work toward public health goals. In the case of Gardasil, campaign designers thus have the added obligation to make the option available to all teen girls and parents of teen girls by (a) making the information available to them, and (b) helping them learn the extent to which they are eligible for free or discounted vaccine programs such as CDC's Vaccines for Children Programs, Medicaid, and Merck's Vaccine Patient Assistance program.

Nascent to a situated approach, I proposed that practitioners assume a cultural-centric approach to situated publics in order to relearn how to give the reigns of campaign development completely over to publics. More importantly, my purpose here is to encourage a *feminist, culture-centered approach to campaign design*, through which campaign designers work to reduce power differentials in communication relationships by pursuing cultural meanings, languages, and norms more ethnographically and bringing cultural members into initial decision-making rather than glossing over culture as a factor to be checked off in the to-do list of the campaign. More importantly, health practitioners should instigate and develop campaigns from the onset with publics who experience the issue from the standpoint of oppression. Practitioners would work within a framework of emancipatory research, which is part of the philosophy behind feminist epistemology that research must be conducted to raise consciousness about the oppression of women and therefore alleviate the oppressions and pressures that impact women's livelihood, status, and opportunities for autonomy (Acker et al., 1983). Thus, the health practitioner would be promoting emancipatory communication such that not only does she start the campaign from the public's perspective with the public (Dozier & Lauzen, 2000), but she

also starts the campaign with those in greatest need as a way for them to communicate about and out of the health threat.

*Cultural studies: Difference literacy.* The current study supplies the body of cultural studies with some important ways teen girls make meaning of their relationships that can aid future cultural studies investigators and communicators working with teens in their development of meaningful messages and campaigns. For example, the relationships girls have with one another are vastly influential to how they view health topics such as the vaccine. To this point, the relationships highlighted by the study are not necessarily friendships, but in many ways, the relationships represent that linkages girls experience through difference, and the articulations they make about their own identities through comparisons they construct with girls exhibiting different identities and lifestyles (e.g., the “*good-bad*” *framework*, girls putting “on a show” in front of other girls to act “like you don’t care” about sexual health topics). To these points, teen girls teach cultural studies theorists, communicators, and educators a lesson that difference is a process to understand and a language around which we all must learn to be literate. Just as with reading literacy, health literacy, and media literacy, teen girls show us that *difference literacy* is an important goal to work toward in negotiating our identities with the decisions we make around health. Teen girls exhibit inchoate difference literacy compared to that of race, gender, and identity politics scholars and community leaders; however, their demonstrations of cautiousness with discussing race, their vehement disclaiming of racism, their recognition in some ways that “personalities,” money/access, and lifestyle matter more in interpreting cervical cancer and the vaccine rather than racial or ethnic difference, and their elucidation of their linking race to promiscuity and race to

the devaluing of health and school (i.e., that some girls “don’t care” about school and their health), all represent teen girls’ active work to make meaning of how they are individual as well as the same as girls they perceive as different from them.

Unfortunately, it seems that the “good-bad” framework persists alongside an “us-them” structure which indicates active *othering*, despite the girls’ consistent qualifications that, “I’m not racist” or “not to be racist, but...” because ultimately, they do have racist thoughts based on feelings of difference from other girls, and they do judge based on skin color. Furthermore, it seems that they do have ideas about how the commercial could be created, based on their opinions of how girls from different racial groups act, and in their minds, these are constructive ways to develop and distribute meaningful health messages. This dialogue indicates that cultural studies should continue to chip away at the underlying meanings of these “good-bad,” “us-them” frameworks as well as to reaffirm that comparing oneself to people perceived as different is simply a natural way to understand the role, the groupings, and the norms to which a person subscribes.

*Health communication: Budding health literacy.* The current study also provides health communication campaigns research and in particular, scholars studying cultural competency and health literacy, insight into why knowing the levels of health literacy among a public is vital to achieving cultural competency within messages. A major theme among the teen girls’ experience with seeking information about a cervical cancer vaccine is what constitutes a *budding health literacy*. Characteristics that comprise teen girls’ inchoate health literacy are:

1. *Their inability to express their feelings about health*, because often when I asked how they feel about an experience, either they would provide a thought or opinion or they would stammer and provide platitudes like, “I don’t know,” or “whatever”;
2. *Uncertainty about the definition of health*, for when I asked what they thought about when I said the word, health, they either provided one word answers, said they do not know, or in subsequent discussions, they revealed that topics like eating disorders, sex, and relationships are not part of their purview of health (e.g., in response to Chelsea saying she saw a bulimic character on *Gossip Girl*, Sadie said, “But how is that, like, a health issue?”);
3. *The placeholder of “the doctor,”* for many girls said that when they think of health, they think of the doctor; when I probed them about their health experiences, their feelings about topics they have seen in the media, and about what they have learned about health from various contexts, girls revealed much more; furthermore, they also talked about their visits to the doctor for physicals and their doctor’s recommendations for the vaccine; thus, it seems the doctor a significant amount of intellectual property in health meaning making for teens;
4. *Misunderstanding actresses’ status in the commercial*, for several girls indicated they think the girls in the commercial actually have cervical cancer/HPV, are sexually active, or have received the vaccine;
5. *Awkwardness of talking about sexual health or reproductive biology*, because in some cases, girls did not want to say words like, “sex,” “vagina,” and

“abstinence,” either because they were embarrassed to say it in front of one another, in front of me, or within hearing distance of a parent who was at home during the interview, or they are not used to saying these words;

6. *Disproportionate reactions to news media that echoes in their everyday lives*, as several girls talked about health topics they had seen in the media that also seem to penetrate their schools or social activities (e.g., some girls reported that students at their school caught mrsa/staph, and in reaction, the girls started obsessively cleaning their gym mats and washing their hands constantly); and
7. *Lack of systematic understanding*, as several girls do not understand the relationships that exist among pharmaceutical companies, government regulatory agencies like the FDA and the CDC, state policy-making bodies, doctors, and the media (e.g., in one interview, Louise explained the relationships and multiple interests and processes across such parties to her daughter, Alana, because she was asking questions about the vaccine as if the pharmaceutical company operated to release the vaccine to consumers in a vacuum).

*Health communication: Feminist, multicultural critique.* The current study expands upon previous critiques of campaigns (Dutta, 2007; Guttman, 2003; Lupton 1994; 2003) by proposing a feminist, multicultural critique of health communication. Such a critique is necessary to question the ethics of campaign goals, particularly when an organization’s consumer public consists of disparate groups of people. First, campaign designers should *consider the ethics of health promotion of luxury items among low*

*income women* (as I propose that the cervical cancer vaccine is a luxury item). This proposal is gendered on purpose because as this and previous studies have shown, women tend to be the caregivers, caretakers, and sole decision-makers about health among families. In the current case, questions abound about Merck's consideration for girls like the teens from Millswood: to what extent are they the target of the campaign? To what extent does Merck outreach to doctors in low-income areas? The problem emerges when girls learn about the vaccine, they believe it to be a good idea to protect themselves, then they learn they may not be able to afford or access the vaccine. Furthermore, to what extent is Merck promoting its discount vaccine program among low income teen girls and parents? The purpose of these questions is to encourage practitioners to thoroughly interrogate – with the advisement of members of the consumer publics – their marketing strategy and to not abandon certain groups because of their potential inability to pay.

Second, campaign designers should *rethink the practice of repackaging a group's meaning making in more eloquent form*. The current process by which actual messages are developed is a form of condescending regurgitation in that the campaign producer performs the difficult task of accessing someone else's perceptions, drawing up an image and words around that perception, then giving it back to them to persuade them to do something, and getting their feedback about the message. In this turnaround process, producers extract realities for a person, superficial-ize them by decorating them and making them seem “better packaged” and “more refined,” then giving it back to them in ways that we think will persuade them to use their realities as vehicles to behave in some way that may not be natural or desirable to them. The campaign producer risks accusations by consumer groups of colonialism and “talking down to them.” Maybe

herein lies a contradiction of persuasion: that human nature yearns for connection, but in trying to have others “see it the way we do,” we ultimately risk alienation and division among people rather than solidarity and cooperation. As one step toward reducing the power differentials of this process, designers can consider what Wallack et al. (1993) have termed *media advocacy* in which organizations assist individuals and groups in providing resources and strategic advice so that consumer groups can create the media themselves and work with media personnel to develop news stories or other campaign tactics around a topic important to them and in the ways they believe represent them best.

#### *Implications on Methodology*

As this study explored the typically neglected group of teen girls in the context of a public relations campaign, the findings imply extensions of feminist methodology in the contexts of health communication and media studies, which build upon Fine et al. (2003) in their collection of feminist considerations in the field. This study contributes to the bodies of literature about feminist methods and the feminist standpoint epistemology through (a) *negotiations and questions about my role*, (b) *interviewing vulnerable participants about sensitive topics*, and (c) *bargaining between essentialism and division of participants*.

*Negotiations and questions about my role.* The feminist standpoint epistemology assumes that the researcher and participants have a relationship within the context of the interview and that by acknowledging this relationship, a deeper objectivity can be achieved (Harding, 1990). Although this piece is fundamental to the feminist epistemology, the roles I worked through in this study were my careful roles as an *educator* and my difficult tensions with being a *peacemaker*. First, in nearly every

interview, girls and parents alike asked numerous questions (girls more so than parents) about cervical cancer, HPV, and the vaccine as well as related topics like Pap smears, reproductive biologies, and sex. At first, I was apprehensive about educating participants about the facts around these issues, for I worried I may contaminate the research process. However, with guidance and reassurance from my advisor, she helped me see that in doing feminist research, the purpose is to help participants empower themselves and grow in ways that lead to autonomous, free lives. In this case, knowledge about how cervical cancer-related topics work together is one way to help girls empower themselves, particularly for this topic, as I have argued earlier that the biological dynamics of cervical cancer are complicated and complex to understand.

I was also confronted several times in interviews with the realities of racism, othering, and bullying from a distance. Several groups of teen girls often talked about their negative feelings toward pregnant girls at school, and they often associated parenthood status with girls from non-White races. They also made derogatory comments about girls they thought were “gross” because they were what the participants perceived as promiscuous. I was extremely uncomfortable during these conversations: should I try and change their opinions about difference and race and show them a more compassionate perspective? I constantly questioned whether I should try and make peace among these girls with those they bully by intervening and asking them if they are perhaps generalizing or stereotyping girls, and whether they had thought about what conditions led girls their age to be pregnant or to feel they need to have sex with multiple partners at their age. I found myself frozen at times, and in some moments, I did nothing. I listened to them, did not laugh at their jokes, and either refocused the discussion back to

cervical cancer or the commercial, or simply asked about their feelings about the differences they perceived (e.g., “How do you feel that there are pregnant girls at your school?”). Fine et al. (2003) said to continue to work-the-hyphen of the Self-Other framework in efforts to tease out the commonalities and the divides, and I hope as I grow as a researcher, I will learn better ways to maintain rapport with participants but also help them see new perspectives on difference within their everyday realities of difference and conflict.

*Interviewing vulnerable participants about sensitive topics.* Although the worst-case scenarios I prepared for in interviewing minors about sex-related topics did not occur (e.g., asking for sex-related advice, panicking about sex topics, revealing risky behaviors), several less “hot” (Fine et al., 2003, p. 118) methodological quandaries emerged from which feminist researchers can learn. First, the presence of parents – either in the same interview, in the same house, or as part of my study but in another interview completely – complicated the contexts of interviewing teens. For example, the presence of parents either in the interviews or within earshot of the interview became an extremely tense dilemma for me. In my solicitation and arrangement of the interviews, I stated that I wanted to interview parents and teens separately; however, in the actual interviews, I was reluctant to ask parents to leave the room, for they had invited me into their homes, taken time to talk with me, and permitted me to talk with their daughter about sensitive subjects. Furthermore, I did not want to wreck the rapport I worked to build with that family. I reconciled these dilemmas and conducted the interviews either with parents and daughters in the same interview or with parents nearby for the purpose of observing teens’ reactions and responses when the parent was nearby and not nearby as well as

learning from parent-daughter interactions as data (particularly for the Research Question addressing how parents and teen make meaning together about the campaign).

Second, interviewing teens then their parents was at times a challenging endeavor as well. My dedication to confidentiality slipped a few times when I revealed to parents – in the context of the discussion – that their daughters had told me they were abstinent. At the time, I did this because some parents expressed obvious concern and obvious previous struggle with this subject; in an attempt to reassure them, a few times I made comments like, “well, [your daughter] said she is nowhere near wanting to have sex right now.” My need to reassure and comfort participants is my limitation as a researcher, *and* I do question whether my need to reassure and actually doing so is not consonant with the commitments set forth in feminist standpoint epistemology? To what extent is it unethical to share a minor’s information with the parent when the researcher has information that may ease a participant’s mind – even momentarily – from some pain of uncertainty she may be experiencing? To what extent is one participant’s empowerment more “valid” than another’s? I predict if teens had revealed to me they were sexually active and talked to me about it, I would have been more guarded against sharing that with parents, because that revealing is the sort of information I was expecting I would have to keep confidential from the parents. I think I did not think about – ahead of time – that the “safe” information – or the information that parents would approve of anyway – is still just as important to keep protected by confidentiality. What if a parent stopped talking to their daughter about sex, based on my confirming with her – and thus, me being a 3rd party – that the daughter is not having sex? What if the parent mentioned to the daughter that I indicated she wasn’t having sex, and then the daughter loses trust in talking to

researchers, older adults, people who want to help, etc.? The consequences of revealing even “safe” information are significant and should not be dismissed or underestimated.

*Bargaining between essentialism and division of our participants.* Finally, as revealed by the data, teen talk consists largely of talking about other girls, peers, boys, and teachers. This study provided interesting data because I had the opportunity to visit with a classroom of pregnant teens/teen mothers; however, these were the same girls that some of my White, middle-class participants consistently *othered* and bullied from a distance. I consistently thought in my data analysis, how do I stay true to the data without essentializing all girls for their commonalities and diminishing important and powerful differences, or *other* any of the girls (either for their parenthood status or for their gossip/bullying behavior) and thereby perpetuating divisive dialogue among teens? My bias is to avoid essentializing and instead, commit *othering* the gossiping girls, particularly since they have access to the vaccine, and they felt uninvolved because they believe their abstinence protects them from risk, whereas many of the teen mothers felt the vaccine could help them but they did not have access to obtaining it. To negotiate these equally challenging tensions in feminist studies, I decided that revealing my position and my dilemma would help readers contextualize how I report and interpret the findings. Furthermore, an important lesson that this experience reminded me of is that despite a researcher’s bias toward particular participants, it is our responsibility to explore that bias, to question the racist/*othering*/mean comments in our writing and when possible, with our participants, to remember that we are all humans with fears and anxieties and problematic circumstances and influences that led us to believe as we to do

(and often influences out of our control), and to write about these tensions in order to continue the dialogue around managing these dilemmas.

### *Implications on Practice*

In my work in creating strategies for public health federal agencies and conducting communication research at Winter Research Inc., as well as a former public relations practitioner in the high-tech industry, I have worked with a number of theories, models, frameworks, flowcharts, logic models, and maps that are built to guide practitioners through the typical behaviors/cognitive processes of publics. Over time, I have come to believe that having a plan for the factors that go into attitude/behavior/awareness change and visually (and in some cases, statistically) demonstrating the relationships among those factors are useful. However, concurrently over the past five years, I have interviewed hundreds of women – and now 40 teens – and the most significant lesson from this experience has been that women’s meaning making around their health cannot be subjugated to squares and circles and connecting lines in a model, for every woman’s data serve at times as consistent with the masses and at other times serves as the outlier. Furthermore, based on the confines from previous medical trials, policy-making around health, and academic research projects dating back centuries, women’s bodies, health, and minds have been consistently constricted to fit within a mold prescribed by more powerful entities (e.g., medical culture, government policies, doctor’s diagnoses, etc.) (Martin, 2001). But, herein lies my constant struggle for the past five years: *how do I work toward empowering women with information and stay true to my feminist ideals that each women’s position is unique and exhibits an important, partial knowledge that has been formed based on intersecting subjugations of*

*power, and stay true to my roots as a communicator who understands the need for order, strategy, planning, and segmentation as well as the realities of working for organizations with budgets/the “bottom line,” and intersecting interests?*

As a feminist researcher and communicator, I say that in order to negotiate the tension of opposing interests, my offering to public relations practitioners and health communicators is to *continue with struggle, instigate honest dialogue, and return to humble curiosity*. As a way to compromise these tensions, I suggest that practitioners use reflective questions (similar to Fine et al., 2003; Lupton, 1994) to continue with struggle, instigate honest dialogue, and return to humble curiosity. Reflective questions should be working documents that grow and refine as practitioners on a project learn new perspectives and considerations for their relationships with their publics. The questions advise practitioners to take time to discuss the extent to which they have considered varying aspects about the role of the project, the ethics of the project, and the publics’ perspective in the project. One final note is the importance of incorporating the *and* in communication relationships, feminist research, and campaign development (rather than *either/or*; Walker, 1995), for communicators and researchers constantly recognize the need for and realities within which communication campaigns operate *and* suggest ways that campaigns can be implemented to be more true to, meaningful for, and initiated within publics. The key is to remember that multiple, fractured, conflicting realities exist, and that communication relationships can acknowledge these oppositions in order to work through tensions.

*Public relations practitioners.* Public relations practitioners can use the data from this study to understand a new and unique public – teen girls – when they are confronted

with decision-making about a topic that is involving to them but may present considerable constraints. Practitioners working to improve public health should employ a cultural studies approach, and in particular, examine the consumption of mediated meanings among the publics. As the teen girls in this study demonstrated, it is vital for any organizational communication campaign to grasp and address the contradictions, tensions, conflicts in affirming their identity, and blurred lines of a culture. Practitioners can also instigate honest dialogue to encourage a feminist, culture-centered approach to situated publics by considering the following reflective questions that cover the role and ethics of the project and the publics' perspectives in the project:

*Considerations: Role and ethics of the project.*

1. To what extent is the project produced for publics in relation to the interests of the organization? If the interests of the organization far surpass the interests of the public, what are potential effects? How will the organization deal with these effects?
2. Where does the power lie in the relationship between producer and consumer, and how are realities produced differently?
3. How will the project improve publics' lives? Public health? Relationships between the organization and other interests (e.g., government, community, economic, education, etc.)?
4. How much are communicators willing to equip publics with resources and skills to create and manage the campaign messages themselves, as in initiatives such as media advocacy (Wallack et al., 1993)?

5. To what extent is the purpose of the project to improve knowledge about an important topic among publics?
6. What products or ideas have been commodified in this project? What are publics' opinions about selling such products and ideas to them?
7. How has the project dealt with difference? To what extent has difference been used as a marketing tool? What are publics' opinions about the deployment of difference in the campaign?

*Considerations: Publics' perspectives in the project.*

8. To what extent have publics been part of the goal-setting and development of the project from the beginning? To what extent has their input been implemented? How has the organization dealt with negative feedback or tensions with the public(s)?
9. To what extent has the culture(s) within which publics exist been considered and formed relationships with for not just the goal of the project but as community partners? What are some ways that feminist, multicultural research can be conducted with and by publics?
10. Does each strategic public have boundary spanners that exist in the cultures as well as in the organization? How can any discrepancies be remedied?
11. To what extent are publics manufactured by the organization? To what extent are publics natural, based on the culture's norms, needs, and preferences?
12. How much have ideals like ethics of care and ethics of personal accountability and critical dialogue been initiated with publics (Collins, 2000)?

13. To what extent have such communication behavior factors like problem recognition, amount of knowledge, involvement, and constraint recognition been considered? To what extent have communicators considered that there may be additional factors as well as important outliers that do not fit into traditional, extant models?

*Health communicators.* Health communicators can also garner significant data from this study to build upon and incorporate into future campaigns. I offer to them reflective questions regarding the ethics of conducting communication campaigns in order to stay true to feminist, culture-centered approaches campaign development and deployment.

1. To what extent have communicators reflected upon their biases and forced themselves to be humbly curious about the publics' perspectives? Have feelings that publics are "stupid," and "don't know what's good for them" surfaced? If so, how have these been managed?
2. To what extent was research conducted with publics: were the methods and analysis brief, cursory formative tasks, or were ethnographic, long-term, participant observatory projects using multiple methods and multiple sources pursued?
3. How much do communicators feel they are performing colonizing projects among publics/cultures? Have publics/cultures been asked if they feel the project is important for their community? To what extent have cultures' feedbacks been incorporated into the campaign?

4. To what extent have factors like age, ability to pay, knowledge, and lifestyle been glossed over and the variations among each been subsumed together in the campaign for purposes of efficiency?
5. To what extent have efforts been made to not just access and communicate at the level of health literacy with a group, but also, to what extent does the campaign work to improve the health literacy of a group?

I also propose a guide of feminist ethical characteristics for health communicators to follow in conducting campaigns in hopes of reducing power differentials and promoting the incorporation of publics back into the planning and strategic process. The guidelines are *equality; autonomy and independence; sincerity, humility and honesty; comprehensibility; cultural sensitivity; co-creation; and reflexivity*. This guide of ethical characteristics assumes that communicators adhere to it willingly, voluntarily, sincerely, intelligently, and consciously for the purpose of honor for the practice, for the self, and for the health of society's members whose voices have been historically unheard.

## Appendix A: Solicitation script (via phone call, email, or in-person)

Hello. My name is Jennifer Vardeman. I am a graduate student in the Communication department at the University of Maryland. I am conducting interviews and focus groups with teen girls and women to discuss their perceptions about communication they may have seen about the cervical cancer vaccine. If you are interested in participating, the [interview will last approximately an hour/focus group will last approximately two hours], and all information you give me will be kept confidential.

One of the groups of people I am interviewing are teen girls between the ages of 14 and 17 years old. Teens are required to have a parent present for the interview, and the parent must sign a consent form, permitting me to interview their daughter.

*[If she expresses any concern over this, I can explain to her that they can even provide me with a pseudonym, if they are comfortable with that. I will explain my process of storing, destroying, and reporting data, if I feel she is pressured by the issues of confidentiality. If she is nervous about speaking in front of other girls/women in a focus group, I will let her know that she is not required to say anything she is not comfortable with in the group.]*

When we meet, I will provide you with a form stating the details of the report and whom you can contact with any questions, and I will also ask that you sign a form granting me permission to audiotape our interview.

Thank you very much for your consideration. After the [interview/focus group] is over, if you request to see the final report, I will be happy to provide you with a copy. In the meantime, please contact me if you have any questions.

Thank you.

\*NOTE: Email solicitation will contain the same information.

## Appendix B: Teen Interview/Focus Group Questions

Thank you for talking with me today.

I am doing a project to learn how girls like you think about a health topic called cervical cancer. You may have heard about this before, or you may not have. Either way is OK. There are no right or wrong answers today – only your opinions matter.

I will not ask you if you have cervical cancer or any subjects related to that – that is your choice to reveal that information to me. Please do not share with anyone outside our talk today what each other has said.

Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

1. I'd like to start by talking about school and some of your hobbies. Tell me about how school is going.
  - a. *Probe:* What grade are you in?
  - b. *Probe:* What's your favorite subject?
  - c. *Probe:* What kinds of things do you do after school and on the weekends?
  - d. *Probe:* When you are at school, when/where do you see your friends? What do you and your friends do together? What do you and your friends talk about?
  
2. Now I'd like to ask you about your family and home life. So, who do you live with?
  - a. *Probe:* (If mom, dad, grandparents, etc.) How do you get along with them?
  - b. *Probe:* What do you talk about with your mom/dad/guardian?
  - c. *Probe:* (If siblings) How old are they? What do you do with them on the weekends?
  - d. *Probe:* When you finish school each day, what do you do?
  - e. *Probe:* What is your favorite thing about going home each day?
  
3. I'd like to hear about the types of media you use.
  - a. *Probe:* Do you mostly watch TV or read magazines?
    - i. *Probe:* What channels/shows? What magazines?
  - b. *Probe:* Do you use the Internet? What are your favorite web sites?
  - c. *Probe:* What kinds of things do you read and do on the Internet?
  - d. *Probe:* How much time do you spend on the Internet?
  - e. *Probe:* How do you feel about the things you see about teen girls' health in the media?
  
4. Now let's talk about health. When I say the word health, what do you think about?

- a. *Probe:* Do you think health is important? Why?
  - b. *Probe:* What are some of the healthy things you do? Why?
  - c. *Probe:* Where do you learn about health?
    - i. *Probe:* What things in school have given you information about health?
  - d. *Probe:* What are the health topics you talk about with your friends?
    - i. *Probe:* Your bodies? The foods you eat? The physical activities you do? Sports you play or other hobbies? Your relationships with other people?
5. Tell me about a time when you had to ask someone else about something about your health. It can be anything that bothered you and you went to talk with someone or looked for information about, like a broken bone, cramps, a cold, nausea, or anything else.
- a. *Probe:* What was wrong?
  - b. *Probe:* Where did you go for information/how did you talk to?
  - c. *Probe:* What information did you find out? Did the information help you?
  - d. *Probe:* How did you feel talking to/searching for information?
6. When I say the words cervical cancer, what do you think about?
- a. *Probe:* What images are in your head?
  - b. *Probe:* What words come to mind?
  - c. *Probe:* What questions do you have about it?
  - d. *Probe:* Have you talked about cervical cancer with anyone? Who?
7. When I talk about a vaccine for cervical cancer, what do you think about?
- a. *Probe:* What images are in your head?
  - b. *Probe:* What words come to mind?
  - c. *Probe:* What questions do you have about it?
  - d. *Probe:* Have you talked about a cervical cancer vaccine with anyone? Who?
8. If you needed information about cervical cancer, where would you go? Who would you talk with?
- a. *Probe:* What shows/books/Internet sites do you use to learn about health?
  - b. *Probe:* Would you talk to your doctor or your school nurse about cervical cancer?
  - c. *Probe:* Would you talk with anyone else?
9. Have you ever seen or heard anything (on tv/in class/on the radio/on the Internet/in magazines) about a cervical cancer vaccine?
- a. *Probe:* How many times have you seen or heard things about a cervical cancer vaccine?
  - b. *Probe:* What did the commercials/people say/communicate to you?
  - c. *Probe:* Please describe the messages.
  - d. *Probe:* How did you feel after seeing these commercials/hearing from these people?

*Please look over/listen the materials from the Gardasil campaign.*

10. What do you think the commercial is telling you?
  - a. *Probe:* What do you think the commercial wants you to do now?
11. Do you think this commercial is important for you to know? If so, why?
12. How does this commercial make you feel?
  - a. *Probe:* How do you feel about the girls in the commercial?
  - b. *Probe:* How do you feel about the activities the girls are doing?
  - c. *Probe:* How do you feel about the way the health topic is being sent to you?
13. Do you feel like this commercial is talking to you personally? If so, why?
  - a. *Probe:* If they are not, whom do you believe the commercial is talking to?
14. Do you feel like you are doing what the commercial is asking you to do in order to avoid getting cervical cancer? If so/not, why?
  - a. *Probe:* How does that make you feel?
15. If you could change the commercial so that you like it more, what would you change?
16. What would your family think if you mentioned cervical cancer to them? What would your family think if you mentioned the cervical cancer vaccine to them?
  - a. *Probe:* For example, if you watched that commercial on t.v. with your family one night, what would your family members say after the commercial?
17. What would your friends think if you mentioned cervical cancer to them? What would your friends think if you mentioned the cervical cancer vaccine to them?
  - a. *Probe:* For example, if you watched that commercial on t.v. with your friends one night, what would your family members say after the commercial?
18. Is there anything about what you think about this commercial that you feel may be unique/special to teens like you who are also Black/Asian American/Latina/White? (*If confused, ask another way:* Do you think Black/Asian American/Latina/White teen girls like you see this commercial in the same way or in different ways than teen girls who are other races?)
  - a. *Probe:* Like what?
  - b. *Probe:* Why?
19. After seeing this commercial and reading this information, do you think it is important to do the things the commercial is suggesting you do? (*If confused by question, re-ask:* After seeing this commercial and reading this information, what can you do to stay healthy over the next couple of years?)
  - a. *Probe:* Why would those things keep you healthy?
  - b. *Probe:* How do you feel about doing those things?"

20. Do you think it would be hard or easy to avoid getting cervical cancer? If hard/easy, why?

a. *Probe*: How does that make you feel?

21. Is there anything else you would like me to know? Do you have any questions for me?

Thank you for your time and help.

### Appendix C: Parent Interview Questions

Thank you for your willingness to participate today.

We are talking today about what health and topics like cervical cancer and vaccinations mean to you. I will not ask you if you or your daughter have cervical cancer or any subjects related to that – that is your choice to reveal that information to me. Please do not discuss with anyone outside the group what other participants say in the group today, as we want to protect the privacy of each participant.

Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

Since I am learning about how parents and teen girls make decisions about the vaccine for cervical cancer, I will be asking some questions about how you make decisions or seek information about your teen daughter. If you have something you want to tell me about an experience regarding one of your other children (if you have other children), that is fine as well.

1. First I'd like to ask you about your family and home life. So, who do you live with?
  - a. *Probe:* (If multiple children) How old are they? What do you do with them on the evenings and weekends?
  - b. *Probe:* When your kids finish school each day, what do they do?
  - c. *Probe:* What do you talk about with daughter?
2. What does the word "health" mean to you personally? What does it mean to you as a parent?
  - a. *Probe:* What is one of your major health concerns today for your daughter?
  - b. *Probe:* What are some of the health topics you've talked about with your daughter?
3. What are some situations in which you have sought health advice from others about your daughter's health recently?
4. When I mention cervical cancer, what do you think about? When I mention a vaccine for cervical cancer, what do you think about?
5. Where would you turn for information about a vaccine for cervical cancer?
  - a. *Probe:* Which media do you use for information?
  - b. *Probe:* What resources do you have to discuss concerns like cervical cancer?
6. What would your family think if you mentioned cervical cancer to them?

- a. *Probe:* What would your family think if you mentioned the cervical cancer vaccine to them?
  - b. *Probe:* What do you think your daughter thinks about cervical cancer and the vaccine?
7. What do you think a vaccine for cervical cancer means to your friends who also have teen daughters?
8. To what extent have you seen or heard any messages regarding a vaccine for cervical cancer?
- a. *Probe:* How often do you see or hear messages about a cervical cancer vaccine?
  - b. *Probe:* What did they say/communicate to you?
  - c. *Probe:* Please describe the messages.
  - d. *Probe:* What do these messages address?

*Please look over the materials from the Gardasil campaign.*

9. How well do you feel like the messages in these materials address your needs for information about HPV, cervical cancer, and the vaccine?
10. How do these messages make you feel?
11. To what extent do you think these messages are targeted to you?
- a. *Probe:* If they are not, whom do you believe the messages target?
12. How well do you feel you comply with the messages sent to you regarding cervical cancer?
- a. *Probe:* How does your level of compliance make you feel?
13. How would you change the messages if you could make them “talk” to you better?
14. If you could change the way that teens receive information about cervical cancer, how would you change it?
15. Is there anything about what you think about this commercial that you feel may be unique/special to parents of teens like you who are also Black/Asian American/Latina/White? (*If confused, ask another way: Do you think Black/Asian American/Latina/White parents of teen girls like you see this commercial in the same way or in different ways than parents of teen girls who are other races?*)
- a. *Probe:* Like what?
  - b. *Probe:* Why?
16. To what extent do you feel capable of helping your daughter avoid cervical cancer, based on the information you have seen here about it?

17. What are reasons why you would not be able to help your daughter manage cervical cancer the way you would like to?
18. Is there anything I left out or did not ask about that you feel is important for me to know?

Thank you for your time and help.

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