ABSTRACT

Title of thesis: THE CONTRIBUTIONS OF DEMOGRAPHIC BACKGROUND AND SERVICE-LEARNING EXPERIENCES TO UNDERGRADUATES' PERCEPTIONS OF APPRECIATION OF DIVERSITY

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This study investigated how race, gender, academic class standing, service involvement prior to college, and type of service-learning program may relate to students' perception of the contribution of service-learning on appreciation of diversity. The data were collected from 290 students at the University of Maryland, College Park in spring 2004, from a locally-created instrument.

The findings revealed that there were significant differences in the reported contribution of service-learning to diversity appreciation between women and men and between freshmen and seniors, although there was no difference between races. Stepwise multiple regression indicated that aspects of class standing, type of service-learning program, race, and gender significantly predicted and contributed to the variance (8%) in students' reported contribution of service-learning to diversity appreciation. Further

research should be conducted to better understand the role of race in this outcome as well as how practitioners can structure the service experience to enhance this outcome.

THE CONTRIBUTIONS OF DEMOGRAPHIC BACKGROUND AND SERVICE-
LEARNING EXPERIENCES TO UNDERGRADUATES' PERCEPTIONS OF
APPRECIATION OF DIVERSITY

by

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CHAPTER 1

INTRODUCTION

There is currently a national dialogue within higher education around community

service and service-learning (Astin, Sax, & Avalos, 1999; Eyler & Giles, 1999; Jacoby,

1996; Jones & Abes, 2004). This dialogue is consistent with the interest that college

students seem to be demonstrating in service. Both undergraduate students during the

1990s and contemporary undergraduate students display high levels of volunteerism

within their local communities (Levine & Cureton, 1998; Sax, 2003). Approximately

83% of 2002 freshmen reported participating in volunteer work the year before entering

college, which is a record high, despite the fact that only 29% of students had attended a

high school that had a graduation requirement of service (Sax).

Participants in both community service and service-learning work to meet a

community need. However, service-learning experiences are intentionally designed to

reach predetermined learning outcomes, unlike community service (Eyler & Gyles, 1999;

Jacoby, 1996; O'Grady, 2000; Weigert, 1998). Service-learning may be integrated to an

academic curriculum, although it may be a co-curricular experience and entirely separate

from an academic course (Delve, Mintz, & Stewart, 1990; Jacoby; Scheurermann, 1996).

The term service, however, can be considered to encompass both community service and

service-learning.

Often, service experiences are set in communities that are unfamiliar to college

students (Eyler & Giles, 1999; Jones & Abes, 2004; Jones & Hill, 2001). More

privileged individuals, largely White, middle class college students, tend to perform their

service in communities of low socio-economic status and populated predominately by

People of Color (Green, 2001; O'Grady, 2000; Raskoff & Sundeen, 2001). As such, service-learning has been considered a pedagogy by scholars to teach students about diversity and social issues (Eyler & Giles; Green; Jones & Hill; Levine & Cureton, 1998; O'Grady). However, due to the structural inequality in service-learning settings between students and those they are working with in a community, there exists a danger in reinforcing stereotypes and replicating oppressive structures (Green; Jones, 2002; Jones & Hill; Raskoff & Sundeen). Appreciation of diversity as a concept, both within and outside of a service-learning context, is necessary as to not reinforce stereotypes and increase the likelihood of building authentic relationships across difference (Jones & Hill). Thus, it seems that service-learning has the potential to be related to diversity appreciation.

Service-learning is becoming increasingly recognized for its potential to enrich student learning and development (Astin & Sax, 1998; Eyler & Giles, 1999; Jacoby, 1996; Raskoff & Sundeen, 2001). Although cognitive outcomes, such as appreciation of diversity, are central to the mission of higher education, it is unclear exactly how service-learning affects these outcomes (Steinke & Buresh, 2002). As not much is understood currently about the complex processes of students' development of appreciation of diversity within a service-learning context, some scholars call for more research in this area (Jones & Hill, 2001; Steinke & Buresh). There is even a greater lack of understanding of how Students of Color come to benefit from experiences with diversity, difference, and service, as much of the research on service-learning has focused on White students (Jones & Hill, 2001, 2003; Raskoff & Sundeen; Youniss & Yates, 1997). Thus, this study aims to examine appreciation of diversity within a service-learning context as

well as how appreciation of diversity through service-learning varies for students depending on their (a) pre-service-learning characteristics, (b) social identities, and, (c) the type of their service-learning experiences. However, first a closer examination of service-learning is necessary.

<div align="center">General Theoretical Background</div>

<div align="center">*Service-Learning*</div>

Service: Morton's Model

Morton (1995) asserted the need to examine the nature of service and the implications of various types of service. He proposed a framework for understanding service experiences consisting of three types of service: charity, project management, and social change. He viewed charity as hierarchical in that service is provided to others without their input, consultation, or involvement in the process. Project management is typified by an emphasis on addressing a particular problem and by a more privileged partner contributing resources and services to a community. Although a partnership is established, paternalism continues to exist within project management. Social change, viewed as more transformative, involves building equal partnerships and addressing the root causes of social problems. Originally, Morton had suggested that these three paradigms of service were on a continuum, with charity at the end with the least focus on relationships and root causes of social issues. At the other end of the continuum was social change, and project management was in the middle. Morton believed that the continuum was generally developmental, and that students often began their service experience in charity, then progressed to project management, and then to being activists and working for social change. However, Morton later declared that these three

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paradigms could all be powerful and significant. He posited that each of the three paradigms potentially could be enacted with depth, if students addressed root causes of social problems and if students invested in relationships in their service work. Morton's two versions of his model aid in the understanding of the different types of service. The crux of Morton's model is that service experiences should be intentional and meaningful.

Service-Learning

Service-learning is defined differently by scholars (Eyler & Giles, 1999). However, service-learning generally includes the core concepts of an emphasis on learning, reciprocity, and intentional and thoughtful service, which is carried out to meet a community need (Eyler & Gyles; Jacoby, 1996; O'Grady, 2000; Weigert, 1998). The community is an equal partner with those conducting the service; community voice is fundamental and should be represented throughout the process (Eyler & Giles; Jacoby; Mintz & Hesser, 1996; Rhoads, 1997). According to some definitions, service-learning is explicitly linked to academic coursework with predetermined learning outcomes, is the basis of academic assignments, and is evaluated (Jacoby; Weigert). However, other scholars purport that service-learning can be a rich and intentional co-curricular experience, apart from the classroom (Delve, Mintz, & Stewart, 1990; Scheurermann, 1996). Service-learning is also seen as benefiting institutions of higher education by assisting them in their mission of providing service, to both the communities in which they reside and ultimately, to society (Astin & Sax, 1998; Weigert).

Since service-learning is constructed as a reciprocal process, through service involvement students are not merely helping the community, but they also learn, grow, and benefit from their service work and their partnership with the community. Some

scholars argue that students should have the expectation that their own lives will be enhanced as they go into their service work, aside from solely feeling personal satisfaction (Jacoby, 1996). It is generally accepted that service involvement is a powerful pedagogy for enhancing student development and learning; service involvement may engender outcomes for students in a variety of areas, including personal and social development, academic and cognitive gains, diversity, and civic engagement (Astin & Sax, 1998; Eyler & Giles, 1999; Jacoby; Raskoff & Sundeen, 2001). For instance, Astin and his colleagues found that participation in service and service-learning positively influences undergraduate students' feeling of empowerment, socially responsible behaviors, commitment to serving their communities, and an interest in multiculturalism, in both the short and long-term (Astin & Sax; Astin, Sax, & Avalos, 1999).

It is clear that service-learning experiences, in order to increase the likelihood that students will develop personally along cognitive, psychosocial, and social identity dimensions as well as demonstrate the outcomes of civic engagement, appreciation of diversity, academic enhancements, and life skills, need to be thoughtfully and carefully planned. In order to reach those outcomes, service-learning participants engage in reflection, discussion, and other structured activities. In particular, the area of diversity requires a developmental approach so that these service-learning opportunities will be more likely to enrich students' understanding (Levine & Cureton, 1998; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Eyler and Giles (1999) stressed that students should be engaged in conversations and reflection around diversity and difference before their service experiences. Students should also be well trained and oriented to the community, service agency, and issue that they will be dealing with before any service is carried out

(Mintz & Hesser, 1996). McEwen (1996) urged that practitioners first identify student learning and development outcomes and then intentionally design the service-learning experience to foster these outcomes. In terms of academic service-learning, Téllez (2000) emphasized the importance of selecting methods of reflection and instruction within the classroom to contribute to students' academic learning. These intentional activities and evaluated assignments must also be well thought out.

Community service versus service-learning. Service-learning is distinct from community service in that it not only meets a community need, but it also is explicitly connected to learning outcomes and is intentional about making meaning of service experiences (Eyler & Gyles, 1999; Jacoby, 1996; O'Grady, 2000; Weigert, 1998). There is also evidence that service-learning provides enriched learning over community service (Jones & Hill, 2003; Raskoff & Sundeen, 2001). Additionally, there is some evidence that students are more satisfied with service-learning than community service (Raskoff & Sundeen). Furthermore, academic service-learning seems to enhance students' learning in comparison to traditional academic courses (Eyler & Giles; Steinke & Buresh, 2002).

Who engages in service-learning? There is some evidence that certain students are more likely to be involved in service-learning. Some research contends that one characteristic of undergraduate students who participate in service is that they were involved in service during high school (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Berger & Milem, 2002; Jones & Hill, 2003, Marks & Jones, 2004; Vogelgesang & Astin, 2000). According to Fitch's (1991) research, women are more involved in service than men, which he attributed to the traditional stereotype that women are more caring than men. Generally, other scholars corroborate that there seems to be an over-representation

of women involved in service (Astin & Sax; Levine & Cureton, 1998; Marks & Jones, 2004; Winniford, Carpenter, & Grider, 1995). O'Grady (2000) asserted that most students who engage in service are White and from middle class backgrounds, but speculated that this may be because Students of Color do not always identify their community work as service. Furthermore, students that work are less likely to be involved in service than students that do not work (Fitch). According to the National Center for Education Statistics, as a group, Students of Color work an average of more hours per week than White students (*Percentage distribution of undergraduates, by their work status while enrolled and among those who worked, the average and median hours worked per week: 1999-2000*, 2003). Nevertheless, the numerical difference is slight and whether the number is greater or less than that of White students depends on the particular racial group of Color. According to Astin and Sax's national and longitudinal data, additional characteristics that predispose students to service involvement are possessing leadership skills, having tutored during high school, being involved in their faith, maintaining close relationships with teachers, and employing community activism. Moreover, the more students viewed their attendance in college as a means to earning more money, the less likely they were to volunteer during college (Astin & Sax).

Now that there is a basic understanding of service-learning, this chapter will briefly examine diversity within higher education.

<center>*Diversity within Higher Education*</center>

Bowen and Bok (1998) attested that there is tremendous value in racial diversity in higher education. Bowen and Bok as well as Chang (2000) claimed that this diversity has effects beyond higher education and improving race relations. These men are not

alone in their sentiments. Milem (2003) contended that there are four areas on which

diversity has a positive impact: individual students, institutions of higher education, the

economy and the private sector, and the greater society. Bowen and Bok's research also

corroborated how racial diversity has resulted in benefits for these areas.

In *Regents of the University of California v. Bakke* (1978), Justice Powell

suggested that the government had a vested interest in creating more racially diverse

institutions through race-conscious procedures, particularly because society was

becoming increasingly diverse and it was imperative for students to learn to negotiate

their lives effectively in such a society (Schmidt & Selingo, 2002). This notion, that

higher education should develop in students the ability to work and lead in a multicultural

society, continues to be salient. Many scholars and activists purport that racial diversity

in institutions of higher education engenders educational benefits for students (Bowen &

Bok, 1998; Gurin, 1999; Milem, 2003). An increasing body of research explores the

various outcomes of structurally diverse educational settings for students, including an

enhanced understanding of and commitment to diversity issues. However, as the second

chapter will explore, most of this literature is framed as White students learning from

racially diverse others (Gurin, Nagda, & Lopez, 2004; Whitt et al., 2001).

Service-Learning and Diversity

Similar to the literature on the learning outcomes of diversity in higher education,

much of service-learning literature has been constructed from the perspective of majority

students. As previously discussed, most students who engage in service tend to be

privileged in terms of race and socio-economic class (O'Grady, 2000; Marks & Jones,

2004). These students generally do not identify with the communities that they are

serving. As such, various scholars purport that service-learning can be a method for students to learn about diverse others and examine issues of difference (Eyler & Giles, 1999; Green, 2001; Jones & Hill, 2001; Levine & Cureton, 1998; O'Grady). Moreover, Eyler and Giles contended that the first step in students' personal and interpersonal development through service-learning is learning about diversity, such as appreciation of diversity and reduction in stereotype use. Some scholars also suggest that social justice is an integral component of service-learning (Broido, 2000; Green; Jones & Hill; O'Grady). There are several practical frameworks for considering how particular experiences may strengthen learning about and appreciating diverse others.

Gordon Allport's (1954) intergroup contact hypothesis provides a framework for considering the intersections between service-learning involvement and diversity. This theory purports that prejudice can be reduced if different social or identity groups are brought together under certain circumstances. Jones (2002) also suggested that these constructs may interact negatively, that for some students, stereotypes are reinforced through service-learning. Several studies have also explored diversity outcomes in service involvement, including ones conducted by Eyler and Giles (1999) and Jones and Hill (2001, 2003). Additionally, some scholars have suggested that variables that may be out of students' control, such as some service-learning variables and social identities, may impact how students respond to diversity education and service-learning (Astin, 1993; Daloz, Keen, Keen, & Parks, 1996; Eyler & Giles, 1994, 1999; Graham, 1998; Gurin, 1999; Gurin, Nagda, & Lopez, 2004; Green, 2001; Jones & Hill, 2001, 2003; Levine & Cureton, 1998; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996;

Raskoff & Sundeen, 2001; Springer, Palmer, Terenzini, Pascarella, & Nora, 1996; Whitt et al., 2001). This literature will all be reviewed in the second chapter.

Problem Statement

Although there is research on appreciation of diversity, particularly set within the context of structurally diverse higher education environments, and research on service-learning, there is limited research on the connections between the two (Jones & Hill, 2001). As this paper has discussed, the current literature does purport that service-learning enhances students' diversity outcomes. Nevertheless, most of the research on the outcomes of diversity and service-learning focuses on White students; the limited studies that go beyond the White paradigm are generally problematic as well, as they either examine Students of Color as if they are a monolithic group, or solely examine Black students out of racial minority groups (Green, 2001; Jones & Hill; Gurin, Nagda, & Lopez, 2004; Raskoff & Sundeen, 2001; Whitt et al., 2001). There are suggestions that social identities, such as race, gender, socio-economic class, and age, may influence how students learn and develop from service-learning and structural diversity, but there has not yet been a strong focus on these influences. However, most of the literature on the differential impact of service-learning and diversity has focused on race. Furthermore, Eyler and Giles (1999) contended that the quality of service-learning needs to be a greater focus, as it impacts students' learning outcomes.

Research Questions

Thus, the purpose of this study is to examine the relationship between service-learning and undergraduate students' appreciation of diversity at a large, public, research institution of higher education in the Mid-Atlantic region, the University of Maryland,

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College Park (UMCP). This study seeks to determine whether or not students' perceived appreciation of diversity as a result of service-learning significantly differ by various demographic and service variables. In particular, there are two primary research questions: (a) does students' perceived appreciation of diversity as a result of service-learning experiences significantly differ by racial background, gender, and academic class standing?, and (b) do racial background, gender, academic class standing, service participation prior to college, and type of service-learning program significantly predict and contribute to the variance explained of appreciation of diversity as a result of service-learning experiences?

Definition of Key Terms

Service-learning, for the purpose of this study, is defined as both occurring within and outside of the strict academic curriculum. The fundamental criteria for service experiences to be considered service-learning are that the service is intentionally designed to: meet community needs, as determined with participation from the community; achieve learning outcomes through additionally structured activities such as training, orientations, and reflection; and, establish a reciprocal and equal partnership with the community.

Diversity within service-learning involvement, according to O'Grady (2000), can be defined as both possessing an appreciation for a multitude of perspectives as well as an increased understanding of the complexities around social issues, including systems of power and oppression.

The construct of the *contribution of service-learning to appreciation of diversity* is defined by the UMCP's Office of Community Service Learning's (OCSL) survey. It is

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important to note that within the context of the OCSL survey, this construct is designed to measure the extent to which students felt that service-learning had contributed to the following seven items, taken verbatim from the surveys: interacting with students of a race or ethnicity different than your own; interacting with students of different religious or political backgrounds; understanding of people from races/ethnicities different than your own; understanding how your race(s) shape your identity; understanding diverse cultural, political and intellectual views; willingness to seek out new experiences; and, awareness that systems can disadvantage groups of people. The more general term of *appreciation of diversity* henceforth will be utilized in the context of these seven aforementioned dimensions, although it is based primarily around interacting and understanding yourself and others along multiple dimensions as well as possessing an openness to various viewpoints and experiences. Nonetheless, for the purposes of the literature review, related constructs will be utilized, as defined by those particular scholars. An example is Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) and Whitt, Edison, Pascarella, Terenzini, and Nora's (2001) notion of openness to diversity and challenge. How this research study's conception of appreciation of diversity relates to other scholars' concepts will be contrasted in Chapter 3.

     Racial background is also defined by the OCSL surveys. The response choices for racial groups are as follows: African/African American, Asian/Asian American, Caucasian/White, Latino/a, Native American, Bi/Multi-racial, Other. The term *Students of Color* refers to those students who self-identify as African/African American, Asian/Asian American, Latino/a, Native American, Bi/Multi-racial, and Other. The term *White* will be used for students that identify as Caucasian/White on the OCSL surveys.

The term *gender*, as opposed to sex, will be used to discuss women and men, as most of the research studies that will be examined in the subsequent chapter use the term gender.

Professional Significance of the Problem

A study on the intersection of diversity and service-learning, with particular analyses by various demographic groups and service-learning experience variables, is professionally significant for a number of reasons. Each of the following reasons behind the relevance of this study will be discussed below: the importance of the broad topic of diversity; the need for higher education to teach students to learn to live in a multicultural society as part of its mission; service as a relevant topic to both students and higher education; the need for greater understanding of the outcomes of service-learning as a trend; the need for service-learning to be further examined as a tool to promote students' understanding of diversity; and, the lack of practical understanding in how social identities in particular are related to service and diversity outcomes.

In particular, it is recognized that race continues to be a challenging issue in higher education as well as in the United States. Race continues to shape many aspects of one's quality of life, including one's educational and occupational opportunities, where one lives, and the quality of public secondary education that is available (Chang, Witt, Jones, & Hakuta, 2003; Tatum, 1999). Research suggests that racial inequalities and discrimination still exist in many communities across the country, including college campuses (Bonilla-Silva & Forman, 2000; Chang, 2000). Diversity is a compelling topic within higher education, as it is controversial and heated, both for students as well as administrators (Jones & Hill, 2001; Levine & Cureton, 1998; Whitt et al., 2001).

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Therefore, many scholars declare that society has an interest in ensuring that students are able to interact productively across racial difference, and that this should be part of the educational mission of institutions of higher education (Chang, 2000; Eyler & Giles, 1999; Gurin, 1999; Jones & Hill, 2001; Milem, 2003; Whitt et al., 2001). Moreover, some scholars profess that institutions of higher education have an obligation to produce citizens for a pluralistic and democratic society (Gurin; Jones & Hill; Whitt et al.). Institutions themselves, varying from Georgetown University, Florida Atlantic University, the University of Michigan, and the University of Puget Sound, as evidenced by their mission statements, also identify multicultural and global citizenship as an educational objective and outcome (*Meeting the NCA criterion…,* 2000; *Mission statement,* 2000; *Mission statement,* n. d.; *Mission statement and education goals,* n.d.; *University mission statement,* n.d.). Similarly, some institutions highlight the importance of diversity more broadly. For instance, the University of Maryland, College Park also purports to be committed to diversity (*University of Maryland mission statement*, 2000). Its mission statement declares that one of the university's greatest attributes is the diversity of its students, faculty, and staff and that it is committed to recruiting and retaining diverse members of its community. Moreover, the University of Maryland aims to celebrate diversity through all of its programming. The mission to educate students about diversity may be viewed as even more urgent currently, as this ability for students to navigate, work, learn, lead, and live in a heterogeneous society becomes more pressing with the increasing racial diversity of the United States population (Raskoff & Sundeen, 2001; Réndon & Hope, 1996). Furthermore, because of the demographic increases in Persons of Color, it is dangerous for institutions of higher education to ignore racial

tensions and dynamics (Chang; Garcia, 1997). Not only are the demographics of the country changing, which makes multicultural competencies, including knowledge of others and skills with working with others, increasingly important, but consequently, this change is also reflected in the composition of the students enrolled in higher education (Whitt et al.). Thus, diversity seems to be a pertinent topic in higher education.

Service-learning is also a pertinent topic for higher education, demonstrated by the high frequency in which current students are participating in service (Levine & Cureton, 1998; Sax, 2003). Furthermore, not only is service-learning beneficial to the local community and society, but it also aids institutions of higher education in meeting their mission of helping to prepare citizens that will help to serve the greater society to which they belong (Astin, 1999; Astin, Sax, & Avalos, 1999; Berger & Milem, 2002; Daloz et al., 1996; Weigert, 1998). Community-university partnerships, in which universities are purposefully attempting to become engaged citizens in the communities in which they reside, is one way in which intentional service-learning may manifest. Such partnerships are also being increasingly emphasized (Jones & Abes, 2003; Jones and Hill, 2001). For example, the University of Maryland, College Park identifies engaging in collaborative partnerships with communities outside of the university as one of its desired institutional objectives and outcomes (*University of Maryland mission statement*, 2000). Therefore, as service seems to be an agenda of both institutions of higher education and students, it is an important issue for higher education and this needs to be further examined.

Service-learning is increasingly utilized as a pedagogical method in higher education to enrich students' learning, particularly in a way that relates learning to a

practical context, outside of the classroom. Because service has become a trend in higher education, it seems vital to examine the learning outcomes for students engaged in service activities (Eyler & Giles, 1999; Jacoby, 1996; Steinke & Buresh, 2002). Some research has investigated the personal benefits that students reap from service involvement. For instance, this pedagogy, Eyler and Giles contested, helps students to: appreciate diversity, become better citizens, increase self-knowledge, determine career goals, develop leadership skills, work with others, grow spiritually, feel more connected with the community and faculty, learn more, and think critically about problem analysis.

An expanding body of literature indicates that students learn from diversity and that interacting with diverse others in regards to socio-economic class, race, and ethnicity is linked with students' appreciation of diversity (Hurtado, Milem, Clayton-Pederson, & Allen, 1998; Jones & Hill, 2001). Thus, it may be extrapolated that in order for higher education to produce students that are able to be citizens and members of diverse communities, developing appreciation of diversity in students is important. Various scholars advocate that intentional courses and programs, such as service-learning, encourage contact and dialogue across difference for enhanced learning and understanding about diversity (Green, 2001; Jones & Hill). As there is currently an emphasis on diversity and multiculturalism in higher education as well as service-learning, it is beneficial to examine the potentially powerful connections between the two in order to enrich learning and development of students (Jones & Hill).

Lastly, there is the practical situation of the deficiency in the understanding of the relationship of various social identities, such as race, gender, and age, to appreciation of diversity outcomes (Green, 2001; Jones & Hill, 2001, 2003; Raskoff & Sundeen, 2001;

Youniss & Yates, 1997). Similarly, as previously discussed, little is known about how Students of Color experience service and racial diversity (Green; Jones & Hill; Gurin, Nagda, & Lopez, 2004; Raskoff & Sundeen; Whitt et al., 2001).

<center>Anticipations about Usefulness of Results</center>

This study may add to the support for service-learning as an intentional experience to promote student learning and development around diversity outcomes. For faculty and staff that are planning service-learning, whether or not it is directly part of an academic curriculum, who want to enhance students' appreciation of diversity and understanding of social justice issues, it is important to better understand how the service experience is related to appreciation of diversity (Green, 2001; Jones & Hill, 2001). This research study aims to help elucidate what contributes to diversity outcomes in service-learning involvement, examining both demographic characteristics that students bring to their service experiences as well as characteristics of service-learning that have the potential to be controlled and manipulated through legislation such as prior collegiate service involvement. Further, findings from this study have the potential to elucidate relationships between social identity groups and diversity outcomes within the context of service, which perhaps can inform practitioners in better understanding some of the complex ways that service may differentially affect students. Moreover, this study might also be able to help inform the ways in which practitioners and instructors of service-learning courses structure the service experience itself in order to enrich student learning (Whitt et al., 2001).

Overview of Methodology

This study was conducted at the University of Maryland, College Park (UMCP), a large, public, research institution of higher education. It employed a self-report survey that is administered by the Office of Community Service-Learning (OCSL) to students engaged in a semester-long service-learning experience, either curricular or co-curricular.

Summary of Introduction

This chapter has provided an introductory basis for this study and has discussed the related practical and professional implications. The following chapter will present the current literature on service-learning and diversity, as well as present the limitations of the current literature.

CHAPTER 2

LITERATURE REVIEW

This chapter will embark on a closer examination of the evidence and theories

around learning from diverse others. This chapter will first explore literature in regards to

diversity outcomes from interacting with diverse peers within higher education and then

with diversity outcomes from interacting with diverse others in service-learning contexts.

More specifically, it will review the literature that relates to: contact with diverse others;

educational benefits of racially diverse higher education environments; outcomes of

service-learning; the intersections of service-learning and diversity outcomes; and how

social identities and service variables potentially relate to diversity appreciation within a

service context.

Contact with Diverse Others: Intergroup Contact Hypothesis

As the United States is becoming increasingly diverse (Raskoff & Sundeen, 2001;

Réndon & Hope, 1996), contact between different groups of individuals, also known as

intergroup contact, becomes more prevalent, and cross-cultural competency may become

more of a necessity (Chang, 2000; Eyler & Giles; Gurin; Jones & Hill, 2001; Milem,

2003; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Although the numbers of

racial minorities continues to increase, this does not necessarily mean that interactions

between various social identity groups will increase. Despite increased diversity,

individuals continue to grow up in racially and culturally homogenous areas (Eyler &

Giles, 1999; Levine & Cureton, 1998). Thus, particularly given the United States'

continued legacy of racial prejudice and discrimination, it becomes progressively more

urgent for all individuals to be fully integrated and included as equal participatory

citizens in society. One way to facilitate these first steps may be to reduce racial and cultural prejudice on an individual level. As college can be the first time that students are in close proximity to those different from themselves, many see higher education as an opportunity to promote and provide cross-cultural interactions, in an effort to equip students with cross-cultural skills and to reduce biases and stereotypes (Chang, 2000; Eyler & Giles, 1999; Gurin, 1999; Jones & Hill, 2001; Milem, 2003; Whitt et al., 2001). Allport's (1954) intergroup contact hypothesis is a useful framework to consider how biases may be reduced, and how students learn from diverse others in the context of structural diversity in higher education as well as in the service setting.

Allport's Intergroup Contact Hypothesis

In the aftermath of World War II, Allport (1954) believed that one way to reduce prejudice was to promote intergroup contact. He specified fundamental conditions of contact, under which individuals would be most likely to experience positive group relationships and thus reduce prejudice; they include: equal group statuses within the situation, common goals, intergroup cooperation instead of competition, intimate contact versus casual contact, and the support of authorities, law, or custom. Allport's intergroup contact hypothesis will be employed as a model for considering the connections between service-learning and diversity.

The contact hypothesis has been extensively investigated in a variety of settings, such as residencies, the military, and schools and camps, and has been generally supported (Amir, 1976; Pettigrew, 1998; Robinson & Preston; 1976; Sherif, Harvey, White, Hood, & Sherif, 1988). Continuing in Allport's legacy, much of the research has examined interracial or interethnic contact.

However, one non-racial example that demonstrates the power of in- and out-groups is the Robbers Cave field experiment (Sherif et al., 1988). In their study, 24 boys from similar Protestant and lower-middle class backgrounds were brought to a campground. All boys were permitted to interact in the beginning, but were subsequently divided into two groups to sever the budding friendships. Stereotypes and prejudices were created by instigating competition between the boys. The researchers then attempted to reduce these prejudices with interventions. They found that bringing the two groups together without conflict was not enough; they needed to stage situations where both groups were mutually dependent so that they had to cooperate to reach common goals.

One criticism of the Robbers Cave study (Sherif et al., 1988) was articulated by Pettigrew (1998), who asserted that in this short-term experiment with short-term contact, prejudice reduction was minimally effective; more substantial time is required for this to occur. Although long-term contact would be more beneficial, contact is not enough to create change in group perceptions. The nature and quality of these interactions is also important. Amir (1976) declared that intimate contact is needed with members of the outgroup in order to optimize the likelihood of reducing prejudice. An additional limitation of the Robbers Cave study is that the animosity between the two groups of boys did not arise from the cycle of socialization that occurs in society, but rather was artificially produced.

Suggested Revision to the Contact Hypothesis

Similar to the notion of intimacy, Pettigrew (1998) suggested an addition to the intergroup contact hypothesis. He contended that the contact between groups must have

the potential to foster the development of authentic cross-group friendships. Jackman

and Crane (1986) also supported the notion that interactions need to have the capacity for

individuals to build personal relationships.

Application of Contact Hypothesis to Service-Learning

Service-learning theorists have often cited intergroup contact theory, by

identifying direct contact with a different other as the primary means through which

students learn about difference and diversity (Erikson & O'Connor, 2000; Jones & Hill,

2001). For instance, if a practitioner wants to use service-learning as a pedagogical

method to reduce prejudice and the service-learning experience is not carefully

structured, then negative, unintended consequences may result, such as reinforcing

stereotypes (Erikson & O'Connor; Jones, 2002). This is especially the case when student

volunteers are outsiders to the community in which they are working. There are a variety

of things that service-learning practitioners should do in the design of the service

experience to minimize this possibility. Erikson and O'Connor cited Allport's (1954)

contact theory in their suggestions of such a design. Applying Allport's model to

service-learning, possible recommendations include the following: students and those in

the community should be working towards the same goals; students and community

members should have equal power; contact with those in the community should be

structured in such a way as to contradict traditional stereotypes; and relationships

between the groups should be long-term (Erikson & O'Connor). Additionally, support

from the institution for service-learning has been suggested to influence students' service

involvement (Jones & Hill, 2003).   These suggestions reflect Allport's circumstances of

optimal intergroup contact: common goals, equal statuses, cooperation, intimate contact,

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and support of authorities. Additionally, service-learning practitioners need to provide structured, reflective opportunities and assignments for students that are connected to coursework or other intellectual objectives, in order to facilitate meaning-making of working in the community through the contact theory lens (Eyler & Giles, 1999). This adheres to the standard model of service-learning experiences as previously discussed.

Reciprocity and Equal Power

The notions of reciprocity and the importance of relationships are emphasized in the service-learning pedagogy (Eyler & Giles, 1999; Jacoby, 1996; Mintz & Hesser, 1996; Rhoads, 1997). According to this philosophy, communities are perceived through a lens of assets, instead of deficits; communities are equal partners and have as much expertise and contributions to offer as student service-learners. Eyler and Giles also found that the more students felt that the community's needs were integrated in their service experience, the more likely students were to show increased tolerance over their semester service-learning involvement. Within the context of service-learning and multiculturalism, Jones and Hill (2003) stated that reciprocity requires establishing appreciation of diversity and mutual understanding. Therefore, it appears that the notion of equal power suggested by Allport (1954) may be related to diversity outcomes. However, there are obstacles and challenges in translating some of the concepts from the intergroup contact hypothesis into practice as a designer of service-learning experiences.

Equal group statuses. One problematic feature of application of this model to the service-learning paradigm is the idea of equal status. Service-learning educators, according to scholars such as Eyler and Giles (1999) and Mintz and Hesser (1996), should be careful to ensure that all parties are equal. However, Raskoff and Sundeen

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(2001) suggested that the reality is that those that serve are generally seen as experts; this power differential within service is difficult to combat. Because social hierarchies and power structures can be replicated in service situations, practitioners must take extra care that students explicitly discuss and explore issues of oppression, power, and privilege, particularly for White students (Green, 2001; Raskoff & Sundeen). Otherwise, there is a danger that students' stereotypes of marginalized groups may be reinforced.

Reciprocity. Moving beyond the specific service site, often reciprocity does not exist at the university and community level. Universities need to examine their roles in the communities and how equal these parties are (Jones & Hill, 2001). Without equal statuses between the larger university and community, Jones and Hill warned that service-learning will perpetuate systems of oppression, which would not fulfill the tenets of intergroup contact theory.

Contact Hypothesis in One Study: Understanding Diversity through Service-Learning

Jones and Hill's (2001) qualitative study of students involved in service-learning appears to be congruent with intergroup contact theory. The study examined the origins of students' diversity appreciation. In this study, various parallels are evident: students worked with those different from themselves in the community service setting as partners with common goals, the experience was institutionally-sanctioned, and participants were able to build relationships over time. Under these conditions, the researchers found that students also reported reduced prejudice. Therefore, it seems that within a service context, satisfying conditions of Allport's (1954) intergroup contact hypothesis is related to reduced prejudice.

Application of Contact Hypothesis to Diversity in Higher Education

One important caveat in examining the contact hypothesis within the realm of higher education is that most of the research on the influences of diversity on student learning and outcomes focuses specifically on peer interactions that occur on college campuses, and not other types of interactions, such as in off-campus service-learning contexts. However, there are some ways in which tenets of the contact hypothesis are well-suited to understanding how students are affected by interactions with diverse peers. For example, replicating ideals of intergroup contact theory, Pascarella et al. (1996) and Whitt et al. (2001) investigated a national sample of college students' openness to diversity. They found that students who built friendships with diverse others or engaged in conversations expressing multiple viewpoints, were more likely to be more open towards others that were different from themselves, along a variety of dimensions, as well as be more accepting of multiple viewpoints. These researchers also found that the institutional environment towards racial nondiscrimination was predictive of students' openness to diversity. Therefore, it seems some of Allport's (1954) crucial components of the intergroup contact hypothesis, contact with diverse others and stance of the institution towards issues of diversity, may be related to students' openness to diversity.

Hurtado, Milem, Clayton-Pederson, and Allen's (1998) findings are consistent with research findings from Jones and Hill (2001) and Pascarella et al. (1996) and Whitt et al. (2001): increased contact with peers different from oneself appears to lead to appreciation of diversity. Hurtado et al. (1998) contested that interracial contact can positively influence students' perceptions of racially different peers. Furthermore, they believed that interracial contact between peers promotes educational benefits. This

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chapter will now focus on general learning outcomes, specifically diversity outcomes, of racially diverse higher education environments.

Learning from Contact with Diverse Others: Diversity Outcomes

Diversity Outcomes: Learning about and Openness to Diversity

There is an increasing body of evidence that associates racially diverse college environments with enhanced student learning about diversity. According to Gurin (1999), structural diversity influences racial and cultural engagement as well as compatibility of differences. She contested, drawing from three studies, that students who experienced greater ethnic and racial diversity within and outside of the classroom setting, including informal interactions with peers, were more likely to be engaged with individuals of different races and cultures, reveal higher measures of citizenship engagement, and believe that group differences were compatible with the interests of the broader community. Gurin utilized national data, which examined students after four years of college and five years after completing college, as well as data from the University of Michigan. Her research supports that students in more racially diverse environments are more open to diversity and differences.

Additionally, research has found relationships between diversity outcomes and diversity-related activities, such as service-learning activities. For instance, students in the four-year Michigan Student Study felt that diversity initiatives aided them in their cultural understanding (Matlock, Gurin, & Wade-Golden, 2002). These initiatives included participating in an inter-group dialogue program and in multicultural events. Although Matlock et al.'s results should be interpreted with caution, as they sampled one institution, their results are reminiscent of Astin's (1993) findings that students'

commitment to racial understanding is related to taking ethnic studies classes, having friends from diverse racial and ethnic groups, and engaging in multicultural workshops. Whitt et al. (2001) also found that students who attend diversity-related activities, such as racial and cultural workshops, or who engage in conversations with diverse others, are more likely to be open to diversity. Other research indicates that students who attend racially diverse institutions demonstrate a greater commitment to racial understanding (Chang, 2000).

Pascarella et al. (1996) and Whitt et al.'s (2001) set of studies are particularly useful for examining diversity beyond race and ethnicity. These researchers employed the National Study of Student Learning, the Collegiate Assessment of Academic Proficiency, and the College Student Experiences Questionnaire in order to examine factors that influence students' openness to diversity and challenge, which was defined as openness to a variety of types of diversity and challenges to students' personal beliefs, ideas, and assumptions. Further, this construct was pilot tested, which gives one more confidence in its validity and reliability. Their institutional sample was comprised of 18 different colleges and universities located in 15 states, representing institutional diversity in regards to type, size, location, student residence, admissions selectivity, and ethnic makeup of the student body. The researchers collected data from 2,416 first year college students in the fall of 1992 and in the spring of 1993 (Pascarella et al.). Additionally, they examined the same students in their second and third years of college, in the spring of 1994 and the spring of 1995, respectively (Whitt et al.). The longitudinal design of this overarching study adds to the confidence that one may have about the causal relationships they found. An additional methodological strength of this study concerns

the fact that the researchers statistically adjusted for potential sample bias with an algorithm in regards to gender, race and ethnicity, and institution for the follow-up data collections. They also controlled for the following variables: precollege characteristics, including race, gender, and precollege openness to diversity and challenge; aspects of the institutional environment; academic experiences; and, nonacademic and social experiences. Their findings become even more convincing because they controlled for students' precollege attitudes. Moreover, this set of studies enhances one's understanding of diversity broadly defined, beyond race, and includes viewpoints, ideas, age, religion, and so forth. A limitation of these studies is that students were placed in the following racial categories: White, Black, Hispanic, and Other; they did not include Asian Americans, let alone other categories, such as Native American or Biracial and Multiracial, as their own categories. In their coding, the researchers combined Students of Color in one category and White students in another, which potentially masks differences between different racial groups.

There were some consistent findings from all three years of this set of studies (Pascarella et al., 1996; Whitt et al., 2001). For instance, the strongest predictor of openness to diversity and challenge at the end of each year was precollege openness to diversity and challenge. As the researchers controlled for precollege openness to diversity, this implies that students' openness can grow from their environment and experiences while at college. Independent of other influences, women in comparison to men and older students in comparison to younger students demonstrated statistically significant higher levels of openness to diversity and challenge. One environmental variable, perceived institutional racial nondiscrimination, had a significant effect on

openness to diversity and challenge. Across all years, the more likely students were to: possess acquaintances and friendships with others that were different from themselves in such dimensions as ideas, race, ethnicity, age, and religion; engage in conversations reflecting multiple viewpoints that challenged their beliefs and ideas, not limited to conversations around personal, racial, and cultural differences; and participate in a cultural or racial workshop, the more likely they were to demonstrate higher scores of openness to diversity and challenge. None of the variables were found to have isolated effects on students' openness to diversity in only the second or third years of college.

Despite the consistency in which some variables were significantly associated with students' openness to diversity and challenge, there were some variables that were found to be significantly associated with this construct solely in one or two years (Pascarella et al., 1996; Whitt et al., 2001). For instance, at the end of students' first and second years, independent of other influences, Students of Color in comparison to White students scored statistically significantly higher on the openness to diversity and challenge variable, but this was not the case for students at the end of their third year. Another difference found in the third year sample was that total credit hours completed had a positive influence on students' openness to diversity and challenge, although this relationship was not significant in the other two years.

Some of Pascarella et al. (1996) and Whitt et al.'s (2001) findings are consistent with other research and theoretical foundations. For instance, other scholars have found that friendships and contact with racially diverse peers are important to diversity outcomes (Astin, 1993; Gurin, 1999). Furthermore, the relationship between the institutions' embodiment of a nondiscriminatory racial environment and students'

openness to diversity and challenge appears to parallel Allport's (1954) intergroup contact hypothesis's principle that support from an authority is vital in reducing prejudice. The fact that perceptions of the institutional environment, particularly around commitment to diversity, are important for students' attitudes, views, and behaviors about diversity is also supported by other scholars (Astin; Hurtado et al., 1998).

Long-Term Consequences: Diversity Outcomes

Research also substantiates that diversity outcomes of structural diversity in higher education environments have an effect on students after they graduate. Milem (2003) suggested that undergraduate students who are exposed to diversity are more likely to seek out diversity later in life. Similarly, Gurin's (1999) national and longitudinal data indicated that students with the most diversity experiences as undergraduates had the most cross-racial interactions five years after college. Gurin purported that interactions with diverse others during college had an impressive impact on the extent to which graduates lived racially and ethnically integrated lives. Furthermore, these students were also the ones who were most likely to demonstrate civic engagement years after graduation. Thus, the educational benefits of racial diversity seem even more impressive because they persist.

Outcome Differences between Students of Color and White Students

Although the research supporting the educational benefits of contact with diverse peers seems compelling, Pascarella, Palmer, Moye, and Pierson (2001) articulated a criticism of this research. They indicated that findings support the importance of a racially diverse campus for White students in particular. It is significant that some findings of developmental, social, and cognitive benefits are not as impressive for

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Students of Color as they are for White students (Antonio, et al., 2004; Gurin, 1999; Gurin, Nagda, & Lopez, 2004; Villalpando, as cited in Chang & Astin, 1997).

Gurin's (1999) research on the learning outcomes of students who interact with diverse others is an example of differential outcomes. In her study, White students with the most experience with racial diversity demonstrated the greatest cognitive growth in terms of active thinking, intellectual self-confidence, and motivation to achieve academically. Further, they possessed the highest post-graduate degree aspirations and showed the largest gains in placing values on their cognitive skills. However, diversity experiences did not have any significant effects for African American students upon graduation. Undergraduate diversity experiences had a positive influence on White students' racial and cultural engagement and citizenship engagement long-term. Similarly, interacting with Students of Color during and after college had a positive impact on White men's sense of social responsibility and participation in service (Villalpando, as cited in Chang & Astin, 1997). In Gurin, Nagda, and Lopez's (2004) study, White students who experienced racial diversity within the collegiate setting had enhanced civic participation and democratic sentiments; however, findings were not as strong for Students of Color. Some researchers point to the evidence that many Students of Color experience negative racial campus climates at predominately White institutions and face pressures and challenges that White students do not, thereby offering a possible reason for the differential effects cited here (Chang, 2002; Hurtado et al., 1998; Sireci, Zanetti, & Berger, 2003).

Moving Beyond Numbers: Intentional Learning Environments

Although it may seem that having a critical mass of Students of Color is sufficient to promote learning and development along diversity appreciation dimensions, this is not necessarily the case. One complication is that students tend to surround themselves with others like them (Eyler & Giles, 1999; Levine & Cureton, 1998). Thus, many scholars have alleged that there is not only a need for structural diversity, but institutions of higher education must intentionally create learning environments and facilitate meaningful interactions (Chang, 2002; Gurin, Dey, Hurtado & Gurin 2002; Hurtado et al., 1998; Tatum, Calhoun, Brown, & Ayvazian, 2000). In order to optimize learning and development for all students, institutions of higher education should not only work to diversify the racial composition of the student body, but they should employ a comprehensive series of initiatives intentionally aimed to address racial diversity on campus in a way to influence students' lives and peer relationships (Chang, 2000). Similarly, Gurin (1999) stressed that, in addition to structural diversity, there should be diversity in the classroom and informal cross-racial interactions. Examples of classroom diversity include racially diverse faculty as well as expanding the curriculum to include ethnic and racial studies or implementing a diversity or multicultural course requirement (Chang; 2000; Gurin). Clearly, informal interactions are powerful; Astin (1993) highlighted the strong impact of peers on student development. If institutions want to improve racial climates on their campuses, they will need to make campus-wide commitments and transformations to this end (Chang, 2000, 2002). Furthermore, with the increasing demographics of Persons of Color within the United States, research

suggests that ignoring the racial dynamics of a campus intensifies tension and conflict, instead of reducing it (Chang, 2000; Eyler & Giles).

Limitations of Learning Outcomes from Diversity

From the reviewed literature, it is clear that students learn from racial diversity in a variety of ways. In particular, students seem to demonstrate diversity outcomes including increased commitment to racial understanding, appreciation of diversity and difference, and openness to diversity. Nevertheless, it is important to acknowledge that students' attitudes about diversity and race are affected by many variables (Whitt et al., 2001).

Furthermore, most of the reviewed research has constructed diversity predominately as racial diversity, although some researchers have defined diversity more broadly to encompass other social identities (Pascarella et al., 1996; Whitt et al., 2001) or the ability to accommodate different perspectives or minority opinions (Antonio et al., 2004; Pascarella et al.; Whitt et al.). A limitation of the current literature is that much of it focuses on racial diversity and neglects other aspects of diversity.

Moreover, there is a lack of knowledge of the impact of diversity on Students of Color at predominately White institutions, as the majority of the research focuses on White students' learning (Antonio et al., 2004; Gurin, 1999; Gurin, Nagda, & Lopez, 2004; Pascarella, Palmer, Moye, & Pierson, 2001; Pascarella et al., 1996; Whitt et al., 2001). Gurin, Nagda, and Lopez urge researchers to examine the outcomes of being in a racially diverse environment on Students of Color specifically. When Students of Color are examined, it is rare that outcomes for different racial groups are examined beyond the Black-White paradigm.

Service-Learning

Service-Learning as Learning from Diverse Others

Whitt et al. (2001) asserted that although there is research on how the college environment generally influences students' attitudes about diversity, there is little literature and research on which college experiences specifically influence how students value and experience diversity. As scholars have appealed for intentional learning experiences for students to learn from diversity, one intentional learning context for difference and diversity is service-learning. Scholars herald service-learning, when carried out properly, as a method for achieving diversity outcomes (Eyler & Giles, 1999; Green, 2001; Jones & Hill, 2001; Levine & Cureton, 1998; O'Grady, 2000).

Both educational benefits of diversity and service-learning have been constructed from a perspective of learning from "the other." As seen from the review of some of the research on diversity outcomes, the crux of the research asserts that racially diverse institutions are viewed as providing an enriched learning environment for majority, White students and that these students become more open to diversity through contact with those different from themselves (Chang, 2000; Milem, 2003; Whitt et al., 2001). Similarly, service-learning has been viewed as enhancing learning for White, middle class students, as they generally interact with People of Color and people of lower socio-economic classes in their service sites (Green, 2001; Jones & Hill, 2001). Jones and Hill described the process of learning as through contact with those different from the student. In fact, Eyler and Giles' (1999) research indicates that the more students worked with those different from themselves in a service-learning environment, the more likely they were to report appreciation of other cultures. Furthermore, one scholar suggests that

White students also learn from their service-learning peers who are of different racial backgrounds (Green).

Although there may be similarities between how students learn from diversity within the higher education setting and the service setting, it is essential to note that the previously reviewed literature on the influences of structural diversity in higher education is distinct from the realm of service in two ways. First, within the service context, students may interact with their peers, but they also interact with individuals on site that are not their peers and are not of their same status; indeed interactions with those on the service site may be more prevalent due to the focus of and basic structure of service-learning experiences. This is why equal statuses which Allport (1954) emphasizes as one of the tenets of the contact theory, although professed by service-learning scholars as necessary to achieve (Eyler & Giles, 1999; Mintz & Hesser, 1996), may be a challenge. Second, the previously reviewed literature on the educational benefits of interacting with diverse others has been framed within and has been conducted in a higher education environment, while service-learning occurs off-campus. The two aforementioned distinctions may differentially influence diversity appreciation. As it currently stands, since there is not much research on diversity outcomes as related to contact with diverse others within the service-learning literature, the literature from higher education is useful in examining this phenomenon. Nevertheless, there are shortcomings in this prior research in specifically investigating diversity outcomes as a result of service-learning experiences.

As much of the literature on service-learning focuses on how students' perceptions of "the other" are altered, this renders the experience of student service-

learning participants who belong to communities that typically receive service, such as

Students of Color or students from lower social class backgrounds, invisible (Green,

2001; Jones & Hill, 2001). Therefore, there is a deficiency in the knowledge around how

Students of Color and students of lower socio-economic classes make meaning of and

learn from their service experiences. There may be different cultural understandings of

service (Green; Raskoff & Sundeen, 2001). For instance, there is some evidence that

Students of Color may not view their service involvement as service (O'Grady, 2000).

Similarly, Green posed the question of whether or not service-learning is a "White"

concept? Green asserted that service-learning at predominately White institutions in

particular needs to be further examined. Furthermore, although there is some evidence

that women, those from middle class backgrounds, and White students are more likely to

participate in and perhaps identify with the term service-learning and therefore, research

samples reflect this population, the result of this is that we do not understand the

experiences of other types of students. It may be argued that not having more

representative samples is not a limitation of the research but rather, of a limitation of

service-learning itself and how it is construed and perceived, but the consequent lack of

knowledge of how men, students from lower socio-economic class backgrounds, and

Students of Color make meaning from service-learning is problematic and limiting.

 Although service-learning has been purported to be one of these experiences that

enhances how participants understand and value diversity, there is still a need for greater

research to better understand these processes (Jones & Hill, 2001). This chapter will now

discuss the research on the variety of developmental outcomes of service, including

personal and social development, cognitive growth, diversity outcomes, and civic

engagement (Astin & Sax, 1998; Eyler & Giles, 1999; Jacoby, 1996; Raskoff & Sundeen, 2001).

<div align="center">*Service Outcomes*</div>

Undergraduate Years: Astin and Sax

In their national study, Astin and Sax (1998) decreed that even after they controlled for students' precollege characteristics, including their propensity to participate in service, they found that service participation substantially enhanced students' academic and life skill development and their sense of social responsibility. Astin and Sax utilized national data from 3,450 freshmen entering 42 institutions of higher education between 1990 and 1994; they subsequently sent a follow up survey to these students during the 1994-1995 academic year. The researchers utilized 35 outcomes for the three areas of development, and remarkably, all outcomes were favorably influenced by participation in service. Moreover, generally, the greater extent that students were performing service work, the greater the positive effect. The three areas of development that were examined include: civic engagement and diversity, academics, and life skills. A methodological asset of Astin and Sax's study is that they controlled for individual student characteristics at the time of entry to college. The longitudinal nature of the study and controlling for precollege characteristics and experiences both address one of the main criticisms of service-learning and its research, the selection effect: that the students that are involved in service-learning are predisposed to be open-minded and are more oriented toward social consciousness around diversity than the students who are not involved in service. Additionally, they examined a control group comprised of students who did not participate in service at the same institutions;

over 1,140 students of their sample were not engaged in service work. Limitations of the sample include that it consisted of approximately 2,290 women and the publication did not delineate the sample in regards to other types of compositions, such as race.

Of the 12 civic engagement outcomes, one of the largest differential changes between service and non-service participants was in the desire to promote racial understanding (Astin & Sax, 1998). Service participants were significantly more likely to want to personally work towards racial understanding than students who were not engaged in service. In Astin and Sax's findings, undergraduate students performing service showed greater positive change than non-participants in their knowledge of and acceptance of different cultures and races, capacity to be critical thinkers, comprehension of national social problems, and ability to resolve conflict and work cooperatively with others. The findings of this study suggest that service participation enhances knowledge of individuals from different races and cultures. Moreover, their findings also indicated that, as a result of their service participation, students felt that they could change society, and were more committed to helping others and serving their communities. Other research seems to substantiate the relationship between diversity and service or social responsibility (Gurin, 1999; Gurin, Nagda, & Lopez, 2004; Villalpando, as cited in Chang & Astin, 1997). It seems evident that students' civic responsibility and diversity outcomes, measured along a variety of dimensions, are enhanced through service work.

Long-Term Effects

Astin, Sax, and Avalos (1999) conducted a study in which they examined former college students for a greater amount of time than Astin and Sax's (1998) study. These researchers followed the freshmen who entered college in the fall of 1985 and

participated in the Cooperative Institutional Research Program survey. In addition to collecting data at the initial point of college entry, Astin, Sax, and Avalos also collected data on these students four and nine years later, in 1989 and 1994-1995, respectively. The final sample of students that responded to all three data collection points was 12,376, representing 209 institutions. The national and longitudinal nature of this study are notable. The findings of their study are compelling; not only are student volunteers affected at the end of their collegiate career, but they still demonstrate signs of being affected even nine years later. Students that were volunteers during college were more likely to feel empowered, go to graduate school, donate money to their alma mater, earn advanced degrees, socialize with individuals of different ethnic and racial groups than themselves, and engage in service after college. These effects seen nine years after college are similar to some of the civic engagement, diversity, academic, and life skills outcomes previously discussed and measured on a more short-term basis. Thus, undergraduate service participation seems to have a substantial and meaningful impact on individuals.

Another study that examined the enduring influences of a service-learning course is Jones and Abes's (2004) constructivist study. They analyzed interviews with eight students two to four years after the completion of their service-learning course. They found that participants in the follow up study demonstrated complex thinking about their own identity, changes in future commitments, and openness to new experiences and ideas. Although this study utilized a small sample of students from one course at one institution, it further informs one's understanding of the more lasting impacts of service-learning.

Intersection of Service-Learning and Diversity Outcomes

Although research substantiates that there is a relationship between service experiences and diversity outcomes, much is not yet understood in terms of how exactly service-learning contributes to understanding diversity (Jones & Hill, 2001). The little that is known has been generated by examining predominately White students, leaving a gap in the understanding of how service-learning contributes to diversity outcomes for Students of Color. Nevertheless, some scholars theorize about how this process may occur for White students. For instance, Green (2001) suggested that service-learning may serve as a catalyst for White students to advance through their own racial identity development, so that they are more likely to accept their White privilege and understand how their race impacts their personal identity. Eyler and Giles (1999) argued that the service-learning experience allows students to learn about and work with diverse others, sometimes for the first time, which furthers tolerance and appreciation of diversity and reduces stereotyping.

Diversity Outcomes in Service-Learning

Eyler and Giles (1999) conducted a national study at 20 colleges and universities of over 1,500 students in the spring of 1995. A methodological strength of their sample is that they included institutions of higher education that represented a variety of academic service-learning experiences and institutional types and geographic locations. Further, their study included both students involved in various types of service-learning, approximately 1,100 of them, and students not involved in service. The inclusion of a control group in this study allows for greater control of extraneous factors and greater confidence in that service-learning involvement had an impact on the outcomes. Eyler

and Giles also surveyed these students before and after a semester of service, including students' self-assessment of their tolerance. Although this measure is self-reported, and is therefore limiting in some ways, the inclusion of such a baseline provides a more comprehensive picture of how students' tolerance may be influenced by service participation. Collecting data from the same students in two points of time adds to the confidence in speculating a relationship between service participation and tolerance level. The research design controlled for factors such as family income, age, gender, race, and other community service during college. Moreover, the researchers also interviewed 67 students from seven institutions in order to generate qualitative data. However, as typical of most of the service-learning research, women were over-represented in their sample, comprising 68% of the total sample. The sample consisted of 17% Students of Color, but a more specific racial breakdown is unknown, reflecting the tendency of service-learning literature to treat Students of Color as a monolithic group which renders racial differences invisible. A limitation of this study was that it was framed as working with diverse others and it did not examine what the service-learning experience was like for members of marginalized communities that are often expected to contribute to the diversity and students' learning. Moreover, Eyler and Giles deliberately sampled students that were involved with extensive service-learning experiences, most serving every week for the majority of the semester, coupled with structured reflection.

Eyler and Giles (1999) found that service-learning had a positive impact on students' tolerance levels, in comparing those who participated in service-learning to those that did not. They found that tolerance for difference increased for service-learners, and they performed analyses to assess if gender, race, family income, and age

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differentially impacted tolerance of diversity, which will be discussed later in this chapter. The researchers also found that working with diverse others, in terms of race, religion, gender, and socioeconomic class, was a predictor that students would indicate that they: learned to think differently about social issues; were more committed to social justice; lessened use of stereotypes; demonstrated greater cultural appreciation; and, were more open to new ideas. From this study, Eyler and Giles purported that the core of reducing stereotypes and increasing appreciation of different cultures is creating positive interactions and relationships through working for a common goal, which adheres to Allport's (1954) intergroup contact hypothesis. They emphasized that the informal nature of service can allow for parties to be more open in hearing others' perspectives and viewpoints. Through these relationships, the researchers argued, students began to see the similarities between themselves and diverse others.

National and quantitative data are useful in understanding how service-learning can function as a means for students to better understand diversity and difference. However, qualitative research may also be beneficial in gaining a more complex understanding of how students come to understand diversity and potentially how service-learning may further students' perceptions of diversity (Whitt et al., 2001).

Jones and Hill (2003) studied students who were involved in community service in high school and investigated their understanding of the role of service in their own lives while they were in college. In this qualitative study, they found that being involved with reflective and thoughtful service experiences helped students to better grasp the larger social context, such as inequities and social issues. Further, they emphasized that for service to be meaningful for students, it must be personally relevant. Jones and Hill

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also professed that service involvement affords students the ability to reflect on their personal identities.

In another qualitative study, Jones and Hill (2001) explored the ways in which students began to view and make meaning of diversity through service-learning. The researchers investigated six undergraduate students in a service-learning course that provided service to two different sites. However, there are several problematic aspects of their sample. For instance, they only studied a small group of students at one institution. Moreover, there was one African American woman, and the five other students were one White man and four White women. Although the researchers contended that this sample, mostly White women, was representative of their service-learning course, as one of the few studies that explicitly examines the how service-learning influences students' appreciation of diversity, it further replicates the gap in understanding this process for Students of Color. The Students of Color in this sample also adhere to what is generally found in service-learning literature: a Black-White racial paradigm. In terms of their research design, they interviewed students over a self-identified short period.

According to Jones and Hill's (2001) analysis, the principal facilitator of learning about diversity and related social issues was building personal relationships from those that were being served in the community. This notion is corroborated by others (Eyler & Giles, 1999; Jones & Hill, 2003; Rhoads, 1998). Moreover, in a follow up study (Jones & Abes, 2004), participants in this service-learning course demonstrated an openness to new ideas and experiences two to four years after the course. Jones and Hill (2001) reiterated that the students learned from those that were different from themselves, individuals that they probably would not have had contact with if it were not for their

intentional service experience. Jones and Hill (2001) posited that through ongoing

interactions, students were able to come to better understand and appreciate other

viewpoints and experiences dissimilar to their own. Students were also challenged to

reexamine their stereotypes, and appeared to demonstrate a reduction in stereotypic use

as they worked towards a common goal with community members at the service site.

The suggestion that service-learning involvement decreases negative stereotyping

substantiates Eyler and Giles's findings. However, Jones and Hill (2001) asserted that if

there is not reciprocity and relationships are not built within the service site, it will be

difficult for students to gain appreciation of diversity outcomes.

Nevertheless, even if service-learning experiences are intentionally planned with

the desired outcome of enhancing appreciation of diversity, some students will not

demonstrate growth in this area (Jones, 2002). Despite quality service-learning

experiences, not all students will come to understand and appreciate differences, although

it is unclear what may be some of the reasons for this. In fact, some students may even

regress in that some students' stereotypes may be reinforced through their service-

learning involvement (Jones & Hill, 2001). The term "underside" of service-learning,

coined by Jones (2002), refers to the notion that service-learning may not be

transformative for all students as proponents are apt to profess and students' stereotypes

may in fact be reinforced. One potential explanation that Eyler and Giles (1999) inferred

is that students respond differently to service-learning depending on their cognitive

development, such that students at more complex levels of cognitive development may be

more likely to demonstrate enhanced diversity outcomes. Similarly, there are some

suggestions in the available research that other student differences would impact how

students respond and learn from service-learning, such as social identities (Green, 2001; Jones & Hill, 2001, 2003; Raskoff & Sundeen, 2001; Youniss & Yates, 1997).

Connections between Social Identity and Diversity and Service-Learning Outcomes

As service-learning has generally been considered a mechanism for majority students to understand difference, it is feasible that outcomes, particularly around diversity and social justice, may vary for students depending on their social identities (Green, 2001; Jones & Hill, 2003). Exploring students' own social identities in their service-learning involvement is important, as there is some evidence that intersections of students' identity dimensions may influence their construction of service experiences (Jones & Hill; Raskoff & Sundeen, 2001). One must be mindful, however, that social identities are complex. Students have multiple identities that intersect; they do not experience their identities in isolation (Jones & McEwen, 2000; Raskoff & Sundeen; Reynolds & Pope, 2001). Further, many developmental processes are occurring concurrently and intersect. Thus, it may be misleading to speak of how race, gender, and age, separately, influence how students make meaning and learn from their service-learning involvement, as if they exist singularly.

As diversity outcomes outside of the service-learning context are demonstrated differentially depending on the various social identities of a particular student, this may also be the case for diversity outcomes within the service-learning context. The cautions mentioned before in connecting findings from these two bodies of research to each other apply here as well; service-learning is distinct because of its unique interactions off-campus between students and those that may have higher statuses, as may be the case for a site supervisor, or lower statuses, as may be the case for recipients of service. Although

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there are few studies that specifically examine the relationship between social identities

of service-learners and how they experience service-learning (Jones & Hill, 2003;

Raskoff & Sundeen, 2001; Youniss & Yates, 1997), there are some findings that aid in

the understanding of these complex relationships between identity and service-learning.

For instance, some research suggests that students who experience marginality are able to

connect more personally to their service experience (Daloz, Keen, Keen, & Parks, 1996;

Jones & Hill, 2003). Similar to the limited research on how Students of Color experience

diverse institutional environments, currently there is a lack of knowledge of how Students

of Color learn from service-learning (Jones & Hill, 2001; Raskoff & Sundeen).

Therefore, a closer examination of how race, gender, and age may affect diversity

appreciation and service is essential.

Race

One constraint in reviewing the research which explores how students of different

racial and ethnic backgrounds construct service-learning or diversity is that most existing

studies group Students of Color together, or solely examine African American or Black

students. However, the research reviewed seems to indicate that Students of Color

experience racial diversity differently than White students. Several studies have found

that White students enjoy greater educational outcomes from contact with diverse peers

than Students of Color (Gurin, 1999; Gurin, Nagda, & Lopez, 2004; Villalpando, as cited

in Chang & Astin, 1997). This difference in experience depending on racial background

is also reflected in appreciation of diversity and service-learning.

Diversity Appreciation

Pascarella et al. (1996) and Whitt et al. (2001), who examined openness to diversity and challenge in the same group of students at four points of time throughout their first three years at college, found some evidence that Students of Color have statistically higher levels of openness to diversity than White students, independent of other variables, during their first and second years. However, in this study it is unclear why race did not seem to be a factor for students in their third year. Although Whitt et al.'s finding was only for students in their first and second years of the study, the researchers also found that influences on openness to diversity and challenge differed in magnitude by race in the third year. Thus, conditional effects for race were found for students in their third year even though race was not found to have a significant effect on students' openness to diversity. This may suggest that although Students of Color may demonstrate greater openness to diversity than White students, the experiences that tend to influence openness to diversity and challenge may impact Students of Color differently than Whites.

Nevertheless, Whitt et al. (2001) admitted their surprise that this difference did not persist to the end of the third year, in particular given past research on the differences between how Students of Color and White students view diversity, such as seen in Astin's (1993) work. Astin found that Students of Color are more likely to be committed to racial understanding than White students. It seems then, that race is an important factor in understanding how students come to view diversity of opinion and racial understanding.

Service-Learning

Generally, there is limited research exploring how students' racial and ethnic identities help to shape their service experience and their perceptions within that experience (Jones & Hill, 2003; Raskoff & Sundeen, 2001; Youniss & Yates, 1997). One study that explicitly contributes to knowledge of the relationships between service participants' ethnicity and their experiences with service examines Los Angeles public and private high school students. In this study, Raskoff and Sundeen utilized both quantitative and qualitative analyses of 285 students from 27 high schools over four years. Although this study investigated community service programs, including but not limited to service-learning, and studied high school students, but not college students, it is still applicable for this literature review. It is one of a few studies that examines how race shapes racial minority students' experiences in service, thus, making this research relevant. These researchers also examined dimensions of the service involvement as well as the high school, and controlled for all variables in their quantitative analyses, which adds confidence to the significant differences they found. An additional strength of this study is the racial diversity of its sample, which included self-identified African American, Asian American, Latino, Other, and White students. These researchers hypothesized that race would differentially influence students' perceptions of their service involvement. Although there are more similarities than differences between racial groups, their findings do indicate statistically significant differences between groups. For example, Asian Americans were significantly more likely to state that they learned more about themselves and less about helping others when compared to other racial groups. Latinos, in comparison to other racial groups, were more likely to expect

to volunteer in the future. In respect to Asian American, Latino, and White students, African American students were more likely to fear rejection in their service involvement. White students were less likely to feel that they learned about themselves compared to Students of Color. The reasons behind these racial differences are unclear, although the authors tentatively speculated their hypotheses. Thus, it seems that race has a differential impact on how students experience service.

In a qualitative study, Green (2001) explicitly investigated racial perceptions within a service-learning context in relation to the racial identities of her students. She examined 14 students who participated in a service-learning course which involved weekly tutoring in a predominately African American middle school. The class consisted of 10 White women, one Filipino man, and three African American women. A limitation of her study for understanding this particular study's research questions is that the sample was dominated by White women. This study is also limited in that it only examined a small number of students at one institution in one service-learning course. Green suggested from her study that social identities affect the ways in which students experience and make meaning of their service-learning involvement. For instance, she contended that discussing power and privilege particularly around race may be more difficult for White students and that Students of Color bring different lived experiences, and therefore strengths, to their service work in comparison to White students, who generally had never before had an experience in which they identified with being a minority. Green posited, from the themes that were associated with individuals belonging to particular racial groups, that Students of Color are generally more able to understand power imbalances in a service context because of their status as racial

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minorities. Further, she professed that Students of Color are more likely to identify with those receiving service, primarily because of race and socio-economic class issues.

In another qualitative study, Jones and Hill (2003) corroborated Green's (2001) assertion that service-learning may impact Students of Color in a different way than White students. They maintain that how students understand and engage in service-learning is influenced by their social identities and that these processes may be different depending on students' race, social class, and gender.

There is limited research that indicates that race influences students' perceptions of service. Although there is some evidence that service-learning experiences are different for Students of Color versus White students, it is unclear how Students of Color make meaning of their service experiences and how they learn about diversity in this context. However, one study that explicitly investigated the relationship between race and tolerance of diversity within a service context seems to contradict some of the other findings about service and diversity appreciation. Eyler and Giles (1999) examined racial minority status and whether or not this influenced students' level of tolerance in service-learning; they found that it did not to a statistically significant degree. Although it is sometimes suggested in this review of the literature that Students of Color may have a different experience in service-learning and demonstrate different diversity outcomes, there is currently not a sufficient amount of literature upon which to assert this claim.

Gender

Diversity Appreciation

There is also some research regarding the extent to which gender may influence appreciation of diversity. The current research indicates that women are more likely to

be open to diversity than men (Astin, 1993; Levine & Cureton, 1998; Pascarella et al., 1996; Springer, Palmer, Terenzini, Pascarella, & Nora, 1996; Whitt et al., 2001). For instance, in the multiple year study conducted by Whitt et al. and Pascarella et al., female students in contrast to male students were statistically significantly more open to diversity and challenge, across all three years. Gender, therefore, seems to play a significant role in students' diversity outcomes. However, this one study is not sufficient on its own to say that gender would be a better predictor of appreciation of diversity through service-learning over race, which was only found to have an effect for the students in their first and second years of college. Additionally, the researchers found conditional effects of gender in students' second and third years, while race was only suggested to have a different net effect on openness to diversity and challenge in the second year.

Astin (1993)'s research also supports this gender difference in diversity outcomes. He found that women are significantly more likely than men to demonstrate an increase in cultural awareness as well as become more politically liberal. Similarly, other research indicates that women have significantly more positive views of diversity on campus and are more supportive of civil rights (Levine & Cureton, 1998; Springer et al., 1996). Therefore, these studies imply that women and men view diversity differently and potentially engage in environments that tend to influence openness to diversity. Nevertheless, the reasons for these differences in how men and women view diversity issues are not clear. Less is known about how gender relates to service-learning outcomes.

Service-Learning

It is well accepted that women are generally more involved in service than men (Astin & Sax, 1998; Fitch, 1991; Levine & Cureton, 1998; Marks & Jones, 2004; Winniford, Carpenter, & Grider, 1995). Jones and Hill (2003) contended that gender is a factor in how students experience, perceive, and learn from service-learning. However, the influence of service participants' gender as it relates to their service experience has not been the subject of much research (Jones & Hill; Youniss & Yates, 1997). Eyler and Giles's (1999) national study is an exception. They found that women were significantly more likely than men to score higher on the impact of service-learning on tolerance for diversity, when all other variables were controlled for.

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Age and Academic Class Standing

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Diversity Appreciation

Currently, there is little research on the effect of age as it relates to how students develop in college (Whitt et al., 2001). Further, there is even less knowledge of how age may influence diversity outcomes. However, as research on college students predominately focuses on traditionally-aged students (Graham, 1998), for much of the current research, age and academic class standing are related. Thus, an examination of academic class standing may be a useful substitute for age. Nonetheless, it is important to note that academic class standing and age are not necessarily synonymous.

Astin's (1993) national study of college impact, which examined traditionally-aged, full-time students, found that students reported greater tolerance of diversity when they were seniors as opposed to freshmen. Thus, it may be that students are more likely to demonstrate appreciation of diversity outcomes at senior status versus when they were

at freshman status. However, this also brings to light that maturation or the collective experiences of students could potentially be factors in measuring diversity outcomes. Consistent with Astin's findings is Pascarella et al. (1996) and Whitt et al.'s (2001) previously discussed longitudinal and national study. Pascarella et al. and Whitt et al. found, controlling for other factors, that older students were statistically significantly more open to diversity and challenge when compared to younger students, across the four data collection points during the first three years of college. It appears then that some of the research on traditionally-aged college students has focused on students' academic class.

Although age might be related to current college credits earned for most traditionally-aged college students, this is not always the case. The picture seems a little more complex. For instance, in Pascarella et al. (1996) and Whitt et al.'s (2001) set of studies, at the end of students' first and second years, total college credit hours earned did not have a significant effect on openness to diversity and challenge. Nevertheless, total college credits did have an impact for students in their third year (Whitt et al.). It may be that maturation becomes salient during the third year of college, but it is unclear why this was the case.

In regards to examining non-traditionally-aged students, one national study substantiates the notion that age is related to increased openness to diversity. Comparing traditionally-aged students with students aged 27 years or older, Graham (1998) found that older students were more open to new ideas than other students. This may imply that students are more open to diverse perspectives as they mature and age. However, this also may indicate that maturation could potentially impact research findings of diversity

outcomes. Nevertheless, in studying both non-traditionally-aged and traditionally-aged

students, it appears that age and academic class standing are related to how open students

are to new ideas and diversity.

Service-Learning

Age does not seem to have been a focus in how college students experience and

learn from their service experiences. However, Eyler and Giles (1999) did measure

students' ages in their national study. They found that age was not significantly related to

students' tolerance level after a semester of service-learning. Moreover, age was

generally found not to be a significant predictor of most of their service-learning

outcomes. Therefore, how age relates to appreciation of diversity in a service-learning

context is somewhat unclear.

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Socio-Economic Class

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Diversity Appreciation and Service-Learning

For the most part, there is a lack of exploration concerning how socio-economic

class identities of students affect their service-learning involvement (Jones & Hill, 2003;

Raskoff & Sundeen, 2001; Youniss & Yates, 1997). However, some scholars attest that

students must take into account their own class background when interacting with those

of generally lower socio-economic classes in their service-learning involvement (Green,

2001; Jones & Hill). As with other personal identities, socio-economic class background

may shape students' lenses and perceptions of the world and their service-learning

experiences. Raskoff and Sundeen's study of high school service students in Los

Angeles indicated that lower socio-economic status students were more likely to say that

they learned about work skills through their service experience, controlling for other

variables, including type of service. Eyler and Giles (1999) found in their study that students of lower family incomes were statistically significantly more likely than higher family incomes to be tolerant of difference after one semester of service-learning participation. Thus, how socio-economic class background potentially affects students' abilities to engage with diversity and difference in service settings is largely unknown; however, there is limited evidence that students of lower family incomes may be more tolerant of diversity in service settings.

Connections between Service Variables and Diversity and Service-Learning Outcomes

Service Involvement Prior to College

Diversity Appreciation and Service-Learning

A service variable that has been shown to be associated with service experiences during college is service involvement prior to college (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Berger & Milem, 2002; Jones & Hill, 2003; Marks & Jones, 2004; Vogelgesang & Astin, 2000). As this chapter has discussed, precollege openness to diversity has been shown to be strongly related to openness to diversity during college (Whitt et al., 2001) and an outcome of service-learning is a variety of diversity-related outcomes (Eyler & Giles, 1999; Green, 2001; Jones & Hill, 2001; Levine & Cureton, 1998; O'Grady, 2000). Both precollege service and precollege openness to diversity seem to be important to their respective outcomes, collegiate service and collegiate openness to diversity, and service-learning seems to be related to appreciation of diversity. Thus, a tentative hypothesis, which does not have any substantial support for it as of yet, is that service involvement prior to college may be related to the contribution of service-learning to appreciation of diversity.

Amount of Service

In addition to social identities, the characteristics of service-learning experiences which contribute to its quality can enhance what students glean from their service experience (Eyler & Giles, 1999; Jones & Hill, 2003). One such characteristic is the length of time of the service-learning experience. In their national study, Astin and Sax (1998) found that there was a positive relationship between the more students performed service work and their learning and development outcomes; the amount of time performing service, measured in number of months, had significant effects on 34 of their 35 outcome measures. Similarly, Astin, Sax, and Avalos (1999) found that high levels of involvement in service, as measured by the number of hours students spent in service per week in their last year of college, positively influenced various student outcomes measured four and 10 years after college.

Diversity Appreciation

Scholars have suggested that appreciation of diversity needs to be developed over a period of time (Daloz et al., 1996; Green, 2001; Jones & Hill, 2001; Whitt et al., 2001). Whitt et al. suggested that over time, individuals are able to increase and extend interactions and time spent with diverse peers, which may lead to greater openness to diversity and challenge. Increased time with individuals different from oneself, they alleged, can provide greater opportunities for educationally potent experiences with difference. Similarly, Daloz et al. conducted a study of 100 individuals, not college students, that were committed to creating change in their communities and asserted that time is needed for significant dialogue across difference, which allows one to learn to

work with diverse others, understand diverse others, and potentially become committed to working for the common good.

Service-Learning

Green (2001) theorized that time within the service setting is needed for students, particularly White students, to come to a deeper understanding of diversity. Jones and Hill (2001) substantiated the idea that a requisite of enhanced service outcomes is time. These researchers particularly emphasized the need for students to strengthen relationships with community members and reflect upon their relationships and service in a sustained way, as these are fundamental aspects of students' deepening their understanding and appreciation of diversity. In fact, they argued that long-term commitments by students will produce continued student learning of diversity and social issues. Therefore, it seems that the more time students spend in intentional service experiences, possibly the greater likelihood that they are able to understand complex issues such as diversity, justice, and social issues. However, diversity appreciation development is a complicated process and it is not well understood (Raskoff & Sundeen, 2001; Jones & Hill). Thus, evidence of the importance of time as related to diversity outcomes within a service context has been limited. Moreover, evidence may also be contradictory.

For instance, one study has found that in service experiences of a short duration and without much structured opportunities to reflect, students still were likely to report that their stereotypes were challenged (Giles & Eyler, 1994). It seems that the evidence of the relationship between time length of service and diversity outcomes is mixed.

However, it is possible that the reduction of stereotypes and appreciation of diversity are qualitatively different constructs.

Summary of the Literature Review

This review of the literature on diversity education and service-learning highlights the limited research on how the two may powerfully intersect for enhanced development and learning in students (Jones & Hill, 2001). Therefore, a broader question that arises is: what characteristics significantly predict appreciation of diversity as a result of service-learning? The research is limited and the strengths of such factors on service-learning and diversity are not well-understood. Based on prior research, however, it seems that demographic variables, such as race, age, and gender, may have relationships with students' appreciation of diversity as a result of service-learning. It appears that these conditions, in addition to service variables such as service involvement prior to college and time spent in the service-learning experience, might be significant predictors of appreciation of diversity through service-learning as well. How do various social identities and service-learning variables contribute to students' gaining appreciation of diversity outcomes as a result of their service-learning involvement? How do these variables vary in their predictive strengths? This research study attempts to answer these questions. The research methodology chosen for this study will be described in detail in the next chapter.

CHAPTER 3

METHODOLOGY

This chapter will review the methods by which this study was executed, including

the hypotheses that were tested, the institutional context where the research was

collected, the research design, sampling techniques, instrumentation, data collection, and

data analysis.

Research Questions and Hypotheses

This study investigated the relationship between service-learning experiences and

appreciation of diversity outcomes for undergraduates at a large public research

institution, the University of Maryland, College Park (UMCP). More specifically, the

study sought to answer: (a) does appreciation of diversity as a result of service-learning

experience differ significantly by racial background, gender, and academic class

standing?, and (b) do racial background, gender, academic class standing, involvement in

service prior to college, and type of service-learning program significantly predict and

contribute to the variance explained for appreciation of diversity as a result of service-

learning experience?

Based on the empirical and theoretical literature cited in the previous chapter, a

number of alternative hypotheses were tested. Broadly, these alternative hypotheses can

be grouped in two ways. First, it was predicted that students of different social identities

would significantly differ in their perceived appreciation of diversity outcomes as a result

of their service-learning experience. Second, it was hypothesized that the same set of

social identity variables with the addition of service-learning experience variables would

be significant predictors and would contribute to the variance explained of appreciation

of diversity outcomes as a result of students' participation in service-learning. In order to examine these questions, the UMCP's Office of Community Service-Learning's (OCSL) *Curricular Service-Learning Survey (CSLC)* and *America Reads*America Counts Service-Learning Survey (ARACSLS)* were analyzed. These two OCSL surveys are distributed at the end of each semester to students who are involved with service-learning opportunities through academic courses and through a federal work-study program, the America Reads*America Counts (ARAC) program, respectively. The OCSL surveys are established surveys that generate responses from Students of Color and White students who are involved in service-learning. Furthermore, the surveys include seven questions that aim to measure the contribution of service-learning to appreciation of diversity. The eight individual, alternative hypotheses which were tested are detailed below.

In relation to the first research question:

Hypothesis 1: There will be a difference in students' reported appreciation of diversity as a result of their service-learning experience based on their race.

Hypothesis 2: There will be a difference in students' reported appreciation of diversity as a result of their service-learning experience based on their gender.

Hypothesis 3: There will be a difference in students' reported appreciation of diversity as a result of their service-learning experience based on their academic class standing.

In relation to the second research question:

Hypothesis 4: Race will be a significant predictor and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience.

Hypothesis 5: Gender will be a significant predictor and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience.

Hypothesis 6: Academic class standing will be a significant predictor and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience.

Hypothesis 7: Service involvement prior to college will be a significant predictor and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience.

Hypothesis 8: Type of service-learning experience will be a significant predictor and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience.

Institutional Context for the Study: University of Maryland, College Park

The data statistically analyzed were collected at the University of Maryland, College Park (UMCP), a predominately White, public, research institution in the Mid-Atlantic region. UMCP is a large institution, with an enrollment of over 25,000 undergraduate students in the fall of 2003 (*Who's on campus now?: General demographics*, 2004). According to the UMCP's Office of Institutional Research and Planning, in the fall of 2003, the general profile of the undergraduate body in terms of its gender breakdown was roughly evenly split between women and men. Moreover, approximately 59.1% of the student body self-identified as White, 13.8% self-identified as Asian, 12.3% as Black or African American, 5.5% as Hispanic, 2.4% as Foreign, .3% as Native American, and 6.7% as Unknown. The academic undergraduate class

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composition was as follows: freshmen comprised 21.7% of the student body, sophomores comprised 24.2%, juniors comprised 25%, and seniors comprised the largest percentage, 25.5%. Lastly, a little more than 75% of students were from the state of Maryland, which requires 75 hours of documented community service or service-learning for graduation (*ECS StateNotes secondary education: High school graduation requirements,* 1998; *Programs: Requirements,* n.d.). Socio-economic class background information and age are not currently readily available from the Office of Institutional Research and Planning.

UMCP is well-suited for this research study for a variety of reasons. As the only state that currently mandates a service graduation requirement for all public high school students (*ECS StateNotes secondary education: High school graduation requirements,* 1998; *Programs: Requirements,* n.d.), and since prior service is one of the characteristics that appears to be a factor in influencing college service participation (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Berger & Milem, 2002; Jones & Hill, 2003; Marks & Jones, 2004; Vogelgesang & Astin, 2000), investigating an institution in the state of Maryland is appropriate. Moreover, UMCP is an institution that has significant racial and ethnic diversity, as evidenced by the previously cited demographic statistics, and has asserted its institutional commitment to diversity (*University of Maryland mission statement*, 2000).

<div align="center">The Office of Community Service-Learning</div>

The UMCP's Office of Community Service-Learning (OCSL) was established in 1993. Its mission statement purports that it promotes quality curricular and co-curricular service-learning as an essential part of the academic mission and strives to further the university as a partner within the greater community in which it resides (*Community*

Service-Learning mission statement, 2002). Thus, it works with the following groups: faculty and staff in order to integrate service-learning into curricula and living-learning programs; students to increase and enhance opportunities for one-time and on-going community service and service-learning; and community partners to connect them with students and faculty. Furthermore, the mission states that the specific student learning and development outcomes that the office works toward are: leadership development, increased social responsibility, and an appreciation of diversity (*Community Service-Learning mission statement*). The office also disseminates an assessment survey at the end of every semester to three groups of students engaged in service-learning at UMCP: those enrolled in service-learning courses, those involved in student groups that perform service, and students in America Reads*America Counts (ARAC), a federal work-study tutor and mentor program. The OCSL surveys aim to gauge students' perceptions of their service-learning involvement for the particular semester.

America Reads*America Counts Program

America Reads*America Counts (ARAC), a national program, was established at the UMCP in 1997. ARAC is a partnership between the UMCP and the public school system of the county in which the university resides, Prince George's County Public Schools (PGCPS), that allows college students who receive federal work-study to engage in service-learning opportunities to meet a local community need (*Program information,* n.d.). This program is part of the OCSL, but it functions fairly independently as an entity. Students who participate in this program are involved in service-learning, although they receive pay for their efforts. Although it may seem that service-learning should not involve extrinsic rewards, academic service-learners receive course credit for

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their work.   Further, as these students receive federal work-study assistance, this might likely indicate that they are from lower socio-economic class backgrounds. However, this information cannot be verified and it also should be noted that additional factors determine financial need. ARAC works with a total of 13 local elementary schools to provide high quality mentoring and tutoring to elementary students. All of the schools have high poverty levels and low reading scores (*Program information)*. The mentees that participate in ARAC tend to be predominately Students of Color, some speak languages other than English, and some are part of immigrant families.

ARAC works with approximately 100 UMCP students each semester. The majority of UMCP ARAC students are mentors while a smaller number simultaneously function as mentors and team leaders. All mentors work to enhance their effectiveness by establishing relationships with mentees as well as by utilizing a structured curriculum to tutor reading or math. America Reads mentors, the vast majority of ARAC students, use a technique called reading recovery, while America Counts mentors use a curriculum developed by PGCPS personnel and the mathematics faculty at the UMCP's College of Education. All mentors commit to one semester and work with the same, specially-identified three to four elementary school students over the course of the semester. The mentors travel to the school two to three times a week, each time working with all their mentees, and tutor at least six hours a week. Nevertheless, most mentors tutor eight to 10 hours a week. Mentors have a site supervisor at the school, who is a member of PGCPS personnel. Team leaders, approximately one student at each school, serve as the primary contact for mentors as well as supervise and evaluate the mentors. They are responsible for accomplishing administrative duties, assisting school personnel, and acting as the

liaison between the school, the mentors, and the ARAC staff. Team leaders also are mentors at the same time. Some of the mentors return for another semester. Each mentor undergoes 12 hours of training from PGCPS staff before they begin tutoring. Once at their school placement, students attend a school orientation and, each month during the semester, students attend a two and a half hour training and development session. This is the primary opportunity for structured reflection and learning for the students. At the end of the semester, students participate in "Closing Activities," which includes completing a survey assessing learning outcomes of their service-learning experience, the *ARACSLS*.

Research Design

This research design is non-experimental; more specifically, it is ex post facto. This study used already existing data from the service-learning surveys collected by the Office of Community Service-Learning at the University of Maryland, College Park. The OCSL service-learning survey is locally-developed, and its purpose was to examine UMCP students, in three service-learning program types and along particular learning outcomes as a result of service-learning, including diversity appreciation. This study's original strategy was to examine two previous data collection periods, each at the end of its respective semester: fall 2003 and spring 2004. Thus, the data are secondary, as they were previously collected and are a borrowed source for this study. It was intended to utilize two semesters in order to increase the likelihood of obtaining large enough numbers of different racial groups to perform statistical analyses. This way, groups beyond Black and White students can be analyzed, and Students of Color do not have to be grouped together, as is so often the case. However, an Analysis of Variance (ANOVA) was performed to ascertain whether or not there was a significant difference

between the fall 2003 and spring 2004 samples in regards to the contribution of service-learning to appreciation of diversity scale. This ANOVA revealed that the samples from the fall 2003 and spring 2004 were significantly different from each other, preventing the aggregation of the two datasets into one, $F(1, 238)=34.402, p < .0001$. Thus, in order to still test the hypotheses and due to several addition reasons, it was determined that the sample would be spring 2004 curricular and America Reads*America Counts students. One reason for this decision was that there were more respondents in the 2004 data set compared to the 2003 data set (i.e., 218 and 290, respectively). Furthermore, the spring 2004 data are more recent than that of fall 2003, and lastly, one researcher, Wilmarth (2004), examined fall 2003 data from the Office of Community Service-Learning and the current researcher did not want to be duplicative.

Between group comparisons of service-learning participants' perceived appreciation of diversity as a result of service-learning participation were made based on their race, gender, and academic class standing. These three factors along with level of participation in service previous to the UMCP and type of service-learning performed during the semester (i.e., curricular service-learning or ARAC) were tested for their ability to predict the contribution of service-learning to diversity appreciation outcomes.

Sample Selection

The whole population of students at UMCP engaged in service-learning experiences cannot be identified, as neither the Office of Community Service-Learning nor any other university entity is a gatekeeper to service, meaning that individuals can and do engage in service-learning experiences without the university's knowledge. Nevertheless, the sample population consists of students involved in curricular and

federal work-study service-learning. It is important to recognize that students engaged in curricular service-learning at UMCP are not all known. Thus, one must use caution in attempting to generalize the results of this study to all students at UMCP who participate in curricular service-learning.

Eyler and Giles (1999) professed that the quality of the service experience has a positive impact on diversity outcomes. Therefore, it seems that knowing the quality of service involvement is important when examining the level of appreciation of diversity gained from the service experience. For this reason, the focus of this study was on academic service-learning and America Reads*America Counts; thus, these two groups made up the study's sample. Including both groups also examines a greater breadth of service-learning experiences than one alone. Surveys from general co-curricular service-learning students were not utilized; justification for this decision will be provided below.

Curricular Service-Learning

Curricular or academic service-learning experiences at UMCP vary more so than the structured America Reads*America Counts program. For instance, in service-learning courses, some students participate in their service on their own, while others serve as a class. Additionally, the locations of service sites vary, including Prince George's County, Montgomery County, Washington, DC, and the Baltimore, Maryland area. Furthermore, the types of service locations vary, depending on the academic field of study and the students' interests. Most curricular service-learning students, based on previous surveys, complete less than 25 total service hours for the entire semester. These factors are in contrast to ARAC students, who as previously discussed, complete roughly eight to 10 hours a week of service. However, this diversity of service-learning

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experiences allows for greater variation than solely examining the ARAC students who follow a structured model in their service-learning. Further, although students who participate in curricular service-learning at the UMCP engage in a variety of service experiences, their service work is intentionally connected to their academic course content to enhance the learning outcomes of the course. The instructors of such courses prepare students before they serve and provide structured reflection techniques for students. Moreover, as previously seen, service-learning classes are the focus of many of the studies of service-learning outcomes. Therefore, in keeping with this trend, employing academic service-learning students for this study is appropriate.

Federal Work-Study Service-Learning: America Reads*America Counts

As discussed, America Reads*America Counts students participate in a structured service-learning experience, which includes training, consistently working with the same mentees, and on-going reflection. One can have more confidence that these students participate in a similar service-learning experience, which appears to provide a quality experience, as a group than the curricular service-learning students. As ARAC students participate in service multiple times a week, which probably allows for developing more personal relationships, and at a site that is generally unfamiliar to them, one can examine this level of engagement in service-learning in comparison to other students. Service-learning in the form of weekly tutoring is also seen in the service-learning literature (Green, 2001) and ARAC's design echoes Jones and Hill's (2001) notion that personal relationships are necessary to build empathy, which then can lead to greater cross-cultural understanding. Furthermore, previous research on the outcomes of service-learning has focused primarily on White students. The little research that has focused on Students of

Color has focused on African American students or as a collective group of Students of Color. As such, ARAC students are appropriate for inclusion in this study for examining Students of Color, as there is a higher number proportionally of Students of Color in ARAC than in the overall UMCP student body.

Co-curricular Service-Learning

On the other hand, however, students who participate in co-curricular service-learning experiences do not necessarily have an authority who has been properly trained in service-learning and can ensure that intentional preparation, training, reflection, and learning are occurring, unlike America Reads*America Counts and curricular service-learning, although some do. However, there may be more uncertainty about the quality of service-learning involvement for students involved in co-curricular service-learning as a whole as well as more threats to internal validity. The co-curricular service group also consists of a wide variety of service experiences, from student groups whose missions focus on service, groups such as honor societies that may perform service without service being a main function of their groups, and Greek organizations that may engage in philanthropy events once a semester. One cannot guarantee the intentionality that should be part of service-learning experiences or even a focus on service for co-curricular service-learners as a group. Although the academic service-learning participants may also engage in a wide variety of service-learning experiences, these students share the commonality of their service being intentionally connected with their academic coursework. America Reads*America Counts students are participating in a similarly structured program. As such, one tentatively might have more confidence in supporting significant relationships if they are found with ARAC students and curricular students

versus co-curricular students. Due to this wide variance in the co-curricular group, these students were not included as part of this research study.

Sampling Procedure and Strategy

Only two of the three groups were investigated in this study: academic (i.e., curricular service-learning) and federal work-study service-learning (i.e., ARAC). The two particular surveys that were used for this study are the *Curricular Service-Learning Survey (CSLC)* and *America Reads*America Counts Service-Learning Survey (ARACSLS)*, respectively. The surveys, distributed by the Office of Community Service-Learning at the University of Maryland, College Park, targeted students who are engaged in curricular and ARAC service-learning. This study employed non-probability sampling for the curricular service-learning students and probability sampling for the ARAC students. This study entailed external assistance in locating the participants. Participants were selected purposefully, because of their involvement in service-learning. The survey was administered to a variety of service-learning classes and all of the student mentors in the federal work-study program. Students were not randomly assigned to groups; rather their group membership depends on their type of service-learning involvement based on the two aforementioned categories.

The *CSLC* was distributed to instructors of service-learning classes that the OCSL staff members were aware of and maintained relationships with; the staff is not aware of all classes with a service-learning component. Therefore, the sampling strategy is one of convenience since students that were included were those that were readily accessible to the OCSL staff. In effect, for a small office, it is easier to conduct this semesterly study in this manner because it is less time consuming and it also lends itself to a higher

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response rate. In fact, the OCSL purported a 85% response rate to the surveys in fall 1999 to spring 2002. Additionally, the OCSL staff members employed a snowball sampling technique in order to identify other instructors of courses with service-learning components that they were previously not aware of. Unlike curricular service-learners at UMCP, the OCSL has access to all student mentors in the federal work-study program, the America Reads*America Counts program. Thus, ARAC students within this study's targeted timeframe (i.e., fall 2003 and spring 2004) function as a cluster. The *ARACSLS* was disseminated to the ARAC Coordinator, who subsequently disseminates the surveys to all of the ARAC students.

Although there are a variety of limitations in utilizing this research design, there are some strengths in this choice, most of which center around practicality. Compared to other designs, it is less expensive, is not susceptible to attrition, and limits the time involved to collect data. Using this survey also means that the infrastructure has been built by the OCSL.

<center>*Sample*</center>

After deleting duplicate respondents and other problematic files, the sample of spring 2004 data from the *CSLC* and *ARACSLS* included 290 usable surveys. The OCSL distributed a total of 470 surveys to 19 service-learning courses in the spring semester of 2004. The curricular service-learning sample consists of a total of 268 participants, representing a total of 11 service-learning courses and an overall response rate of approximately 57%. More specifically, each of the 11 courses contributed the following number of returned surveys to the 268 total and consequently represent the following respective response rates: 24 surveys from Introduction to American Studies (71%

response rate); 20 surveys from American Studies: Popular Culture, Youth, and Literacy (80%); 56 surveys from Civicus and Service-Learning (89%); 30 surveys from Team Maryland: Serve, Learn, and Lead (100%); 9 surveys from College Park Scholars Service-Learning: International Studies (100%); 7 surveys from College Park Scholars Service-Learning: American Cultures (100%); 12 surveys from Education in Contemporary American Society (92%); 15 surveys from Community Service and Leadership (94%); 21 surveys from Controlling Stress and Tension (53%); 53 surveys from Adult Health and Development Program (71%); and, 21 surveys from Pre-Medical and Allied Health Colloquium II (88%).

The sample also includes 22 America Reads*America Counts (ARAC) participants. Of a total of 56 ARAC surveys that were collected in spring 2004, 34 participants indicated they had been in ARAC for more than one semester, and thus were deleted from the data file to reduce the threat to internal validity. Therefore, the majority of the sample utilized for this study, 92.4%, was comprised of curricular service-learning students, and the total sample was 290 participants.

In regards to demographic information of the sample, women students represented 63.1% of the sample while men represented 36.9% of the sample. Additionally, the racial breakdown was as follows: 13.8% African/African American, 15.2% Asian/Asian American, 54.5% Caucasian/White, 6.6% Latino/a, 0% Native American, 4.5% Bi/Multi-racial, and 5.5% Other. The largest portion of the sample in terms of academic class background was comprised of sophomores (30%). The rest of the academic class distribution was as follows: freshmen comprised 21.7% of the sample, while juniors comprised 24.1%, and seniors, 18.6%.

The obtained sample was tested for response bias, in comparison to the UMCP undergraduate student body, by employing the chi-square statistic for each of three demographic dimensions. The results of the comparison are reported in Chapter 4.

Instruments and Measures

Rationale for Using Instruments

The *Curricular Service-Learning Survey* and the *America Reads*America Counts Service-Learning Survey* were chosen for this study because they are appropriate means to examine the research questions. One example is that their respondents include a racially diverse group of students. The surveys also purport to measure appreciation of diversity as a result of involvement in service-learning and collect information about respondents including their service experience and demographic characteristics. Additionally, the infrastructure has been created by the OCSL, which results in higher response rates and connections with programs and classes that are engaged in service-learning.

Survey Creation

Original OCSL Service-Learning Survey

The Office of Community Service-Learning initially began to collect information about students' attitudes towards curricular service-learning in the fall semester of 1999. The OCSL continued to use this survey each subsequent semester until the spring semester of 2002. This original OCSL survey that was utilized beginning in the fall 1999 was created by adapting a survey from the Center of Academic Excellence at Portland State University. It was not created upon a theoretical basis. During this time period,

there was only one version of the survey, which was distributed to students involved in academic service-learning.

Revised OCSL Service-Learning Surveys

During the summer of 2002, the OCSL modified its survey to measure learning outcomes as opposed to solely attitudinal information. The OCSL staff members decided to use the Social Change Model of Leadership Development as the survey's theoretical basis (Higher Education Research Institute, 1996). The Social Change Model of Leadership Development purports that leadership is collaborative and that social change involves three levels: the individual, groups, and the community or society. Moreover, the developers of the surveys focused on three particular outcome areas related to service-learning which corresponded to the individual level of the Social Change Model, namely collaborative leadership, civic engagement, and appreciation of diversity. The derivations of the questions for each of these three questions will be delineated below.

Questions for the collaborative leadership item-set were taken or slightly modified from the National Survey for Student Engagement (NSSE) and the Socially Responsible Leadership Scale (SRLS), while questions for the civic engagement item-set were taken or slightly modified from the Center for Information and Research on Civic Learning and Engagement (CIRCLE). The questions for the contribution of service-learning to appreciation of diversity item-set were created locally by several OCSL staff members as well as were adapted from the NSSE.

In addition to the change in content of the original survey, the OCSL also created three versions of the survey. Each version was essentially identical in that they all measured the same three outcome areas; however, each version had specific questions

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intended to gather information about the particular type of service-learning. In the spring

semester of 2003, the OCSL piloted three new surveys, each tailored to one of three types

of service-learning involvement at UMCP: academic courses, student organizations, and

ARAC. Two of these new versions of the OCSL service-learning surveys, the *CSLS* and

the *ARACSLS,* were employed for this research study.

Pilot Test and Subsequent Revisions

The OCSL ran a pilot test with approximately 300 students, in order to establish

validity and reliability for the survey instruments and to, informally, obtain feedback

from participants and those administering the survey. Student participants seemed to

think that the surveys were clear and of an appropriate length. One alteration that was

made from this pilot test was that a question was added to ascertain the amount of service

that students performed during the course of the semester. As the OCSL had originally

intended for the surveys to be used for internal use, staff members did not initially seek

Institutional Review Board (IRB) approval. However, they did request IRB approval for

the three service-learning surveys for the fall semester of 2003. One suggestion from the

IRB included that the instructions for the survey administrators be more explicit. These

two aforementioned revisions were made for the fall 2003 and subsequent data

collections.

<div align="center">*Overview of Instrument*</div>

The *CSLS* and the *ARACSLS* are self-report instruments using Likert-type scaling.

The surveys contain common statements around students' service-learning experience,

although they also contain statements specific to each type of service-learning. Both

surveys are comprised of four main sections. They begin with a section that examines

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students' experiences in either their service-learning course or ARAC, respectively. Then, the following section includes statements about their prior and future commitments to service as well as the utilization of the OCSL. The third section of the surveys attempts to measure appreciation of diversity, leadership, and civic engagement, respectively, as a result of service-learning participation. The last section of the surveys includes demographic questions and questions specific to the type of service-learning experience. The focus for this study was on prior service participation from the second section, the contribution of service-learning to appreciation of diversity outcomes, and demographic and service-learning experience variables from the last sections of the surveys.

As much more is known about the service experience of the America Reads*America Counts students, instructors of the service-learning courses were asked to fill out a questionnaire about their course and submit this information along with the returned surveys (Appendix A). Some of this information is beneficial to know, although it may not be utilized in a significant way. For instance, one of these questions requests the number of service-learning hours required by the particular course.

Validity

Face validity for the OCSL survey was established before it was pilot tested in the spring semester of 2003. The OCSL staff members closely examined the survey to ensure that the instrument seemed to investigate the three constructs of appreciation of diversity, civic engagement, and collaborative leadership. The staff members were knowledgeable in these areas and agreed that the instrument appeared to measure these three constructs.

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Further, a staff member in the OCSL confirmed the validity of the survey

instrument from the spring 2003 and fall 2003 semesters' data collections. She

established construct validity of the contribution of service-learning to appreciation of

diversity, one of the item-sets, through conducting a common factor analysis, principal

components analysis (PCA) (Thompson & Daniel, 1996). This is an example of utilizing

the internal structure of the survey to examine validity (McMillan & Schumacher, 2001).

Interacting with different races, one factor, accounted for 65.462% of the variance among

the inter-correlations of the seven total variables. The correlations between the seven

items ranged from .442, for the interaction between *interacting with different religions or

politics* and *awareness that systems can disadvantage*, to .799, for the interaction

between *interacting with different races* and *understanding how race shapes identity*.

Five of the seven variables, *interacting with different races, interacting with different

religions or politics, understanding different races, understanding how race shapes

identity*, and *understanding diverse views*, achieved factor loadings ranging from .823 to

.893 (Table 3.1). *Willingness to seek new experiences* had a factor loading of .721 while

awareness that systems can disadvantage had a factor loading of .679.

<center>*Reliability*</center>

The reliability of the contribution of service-learning to appreciation of diversity

item-set, comprised of the seven aforementioned items, was demonstrated through a test

of internal consistency with the spring 2003 and fall 2003 surveys. The Cronbach alpha

had a value of .911. According to McMillan and Schumacher (2001), this test of

reliability is well-suited for surveys. Furthermore, these authors contend that this alpha

score would represent little error and a high degree of reliability. The reliability of this

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Table 3.1

Construct Validity of Contribution of Service-Learning to Appreciation of Diversity through Principal Components Analysis (N=626)

Survey Item from Contribution of Service-Learning to Appreciation of Diversity Construct	Factor Loading
Interacting with students of a race or ethnicity different than your own	.852
Interacting with students of different religious or political backgrounds	.839
Understanding of people from races/ethnicities different than your own	.893
Understanding how your race(s) shape your identity	.823
Understanding diverse cultural, political and intellectual views	.835
Willingness to seek out new experiences	.721
Awareness that systems can disadvantage groups of people	.679
Cronbach alpha for Contribution of Service-Learning to Appreciation of Diversity scale: .911	

Note: This analysis was conducted by a staff member in the Office of Community Service-Learning (OCSL) from the data collected in spring 2003 and fall 2003 from the OCSL Service-Learning Survey.

item-set was similar for the spring 2004 data set; the obtained Cronbach alpha score for this study's particular sample was .908, which implies high internal consistency and reliability.

Description of Measures

Curricular and America Reads*America Counts Service-Learning Surveys

The *CSLS* and the *ARACSLS* that were disseminated in the fall 2003 and spring 2004 are provided (Appendices B and C, respectively). The following measures, which encompass the information from the surveys that were analyzed, were asked identically on both the *CSLS* and the *ARACSLS*: service involvement prior to college, contribution of service-learning to appreciation of diversity, and demographic information. They are discussed below.

Service involvement prior to college. After the first section investigating students' current experiences with service-learning, the subsequent section is mostly comprised of questions about prior service and future commitments to service. Students respond to the prompt "Please indicate your level of agreement with each statement about your participation in service" for each statement in the second section. The five-point Likert scale responses include: *Strongly Disagree*, *Disagree*, *Neutral*, *Agree*, and *Strongly Agree*. The one statement that was used for this study is "Before I came to UM, I participated in community service activities." This was the measure of students' involvement in service prior to college.

Contribution of service-learning to appreciation of diversity. The beginning of the third section of the surveys asks "To what extent has your community service experience contributed to your:" The first seven items listed after this prompt investigate

the construct of appreciation of diversity as a result of service-learning involvement. They are listed below.

1. interacting with students of a race or ethnicity different than your own
2. interacting with students of different religious or political backgrounds
3. understanding of people from races/ethnicities different than your own
4. understanding how your race(s) shape your identity
5. understanding diverse cultural, political and intellectual views
6. willingness to seek out new experiences
7. awareness that systems can disadvantage groups of people

Students may choose one of four Likert scale responses: *Very Little*, *Some*, *Quite a Bit*, or *Very Much*. The collective score from this item-set, derived from the factor analysis and Cronbach alpha reliability tests discussed previously, comprised the appreciation of diversity as a result of service-learning experiences scale. The aforementioned seven responses from this item-set were summed in order to create the contribution of service-learning to appreciation of diversity composite measure.

It is important to note that this measure of appreciation of diversity differs from the previously reviewed literature. Most of the studies that were reviewed focus on race, while OCSL's definition of appreciation of diversity as a result of service-learning is more broadly defined. However, some studies did examine particular components of OCSL's appreciation of diversity construct, including: interacting with students of different races than oneself (i.e., Astin, 1993; Eyler & Giles, 1999; Gurin, 1999; Pascarella et al., 1996; Whitt et al., 2001), interacting with students of different religious or political backgrounds than oneself (i.e., Eyler & Giles; Pascarella et al.; Whitt et al.), understanding people of different racial backgrounds than oneself (i.e., Astin; Eyler & Giles; Jones & Hill, 2001; Matlock, Gurin, & Wade-Golden, 2002), understanding how race shapes one's identity (i.e., Green, 2001; Gurin, Dey, Hurtado, & Gurin, 2002; Jones

& Hill, 2003), understanding diverse viewpoints (i.e., Antonio et al., 2004; Pascarella et al.; Whitt et al.), and openness to new experiences and ideas (i.e., Graham, 1998; Jones & Abes, 2004; Jones & Hill; Pascarella et al.; Whitt et al). None explicitly included an acknowledgment that systems can disadvantage groups of people as part of their appreciation of diversity measure. As the measures of appreciation of diversity vary, one must be careful in drawing direct connections between these studies.

Another limitation of the appreciation of diversity construct is the wording of its prompt, which asks students to indicate the influence of service on their appreciation of diversity. Thus, the construct of appreciation of diversity is not measured on its own, but rather how it has been positively influenced by service. Not only does this wording imply a relationship between the two, but it does not permit for appreciation of diversity to decrease from the service experience. Due to this bias and limitation in students' responses, one, therefore, should be additionally cautious in interpreting the results of the study.

Demographic variables. Additionally, three questions from the final section of the survey, which includes demographic questions, were utilized for this study. They were: race, gender, and number of college credits earned. The questions and their respective response choices, in the order that they appear in the survey, are listed below. These questions were the measures for racial background, gender, and academic class standing.

What is your racial background (check all that apply)?
☐ African/African American
☐ Asian/Asian American
☐ Caucasian/White
☐ Latino/a
☐ Native American

☐ Bi/Multi-racial
☐ Other

What is your gender?
☐ Male
☐ Female
☐ Transgender

How many college credits have you earned?
☐ 1-29 (freshman)
☐ 30-59 (sophomore)
☐ 60-89 (junior)
☐ 90-120 (senior)
☐ more than 120

Although the surveys do inquire about students' ages, this study utilized academic

class standing, which was listed along with the total number of college credits that

students' earned. As discussed in the literature review, research on traditionally-aged

college students tend to focus on their academic class standing or number of completed

college credits. Another reason that this study examined students' college credits and

class standing instead of their age is that the Office of Institutional Research and Planning

does not publicize undergraduate demographic profiles by age.

Type of Service-Learning Program and Amount of Time in Service

Although the previous chapter reviewed literature that explored the relationships

between the amount of service completed and diversity appreciation and service-learning

outcomes, there is not a standardized way in which the *CSLS* and the *ARACSLS* asked the

question of how much time students spent engaged in service-learning over the course of

the semester. Thus, the information regarding the number of completed hours of service

for the service-learning course was not collected. Nevertheless, as previously discussed,

the amount of completed service-learning hours and the frequency of service-learning

over the course of the semester distinguish students enrolled in academic service-learning

classes and students who are ARAC mentors. Therefore, the variable of the type of service-learning program, either curricular service-learning or ARAC, was utilized. This measure was obtained from the type of survey completed (i.e., the *CSLS* or the *ARACSLS)*.

Data Collection Procedures

Data were collected from students at the end of the spring 2004 academic semester. Each semester the data collection procedures were analogous. The process of administering the *Curricular Service-Learning Survey (CSLC)* began prior to the end of the semester. Several weeks before the last day of classes, the Office of Community Service-Learning staff members contacted the instructors of courses that contained a component of service-learning that they were aware of, across various academic disciplines, and explained the purpose of the *CSLC*. Instructors were also asked if they were aware of other service-learning courses in the respective semester. If an instructor was named that the OCSL staff members were not previously aware of, they contacted that instructor and explained the *CSLC*. This snowball sampling technique was repeated until the OCSL staff members had exhausted the lists of previously unknown service-learning instructors. Instructors that agreed to participate in the study first read a short protocol description. Then, they distributed the *CSLC* survey to their students on the last day of class, along with a consent form which was attached to the front of the survey (Appendix D). The consent forms and instruments were collected separately, a measure intended to enhance participant anonymity. The time length for students to complete the surveys was generally about 10 to 15 minutes. Additionally, curricular service-learning instructors completed a consent form and a short questionnaire about the structure of the

service-learning component and related requirements for their respective course

(Appendix A). Instructors then submitted all completed surveys, consent forms, and the

instructor questionnaire to the OCSL.

As ARAC is organizationally part of the OCSL, much more is known about the

service-learning experience for ARAC students than curricular service-learners.

Therefore, there was no questionnaire for the ARAC Coordinator. Before the last week

of classes, the OCSL provided *America Reads*America Counts Service-Learning*

Surveys (*ARACSLS)* for all of the ARAC mentors along with a short protocol to the

ARAC Coordinator. After the last day of class, the America Reads*America Counts staff

members conducted "Closing Activities" for ARAC mentors on a designated day.

During business hours on this day, students visited the ARAC office and completed

ARAC paperwork for the end of semester, including the *ARACSLS*, if they consented to

participate. When students returned their surveys and consent forms, they were

separated. The ARAC staff members then ensured that the OCSL received all completed

surveys and consent forms.

Data Analysis Plan

Data Preparation

The OCSL maintains all collected data, dating as early as fall 1999, in one data

set. Thus, the first task was to delete the data sets prior to the spring of 2004, as they

were not pertinent to this study. Further, the entire data set for spring 2004 initially

included curricular, co-curricular, and federal work-study service-learning students.

Thus, the students who responded to the co-curricular service-learning survey were

eliminated; 339 total respondents remained in the sample at this point. Then, all of the

ARAC students that indicated that they have been involved in the program for more than one semester were removed from the data file; these students numbered 34. From here, the data were reviewed for outliers in the data set as well as for missing data. These mistakes were deleted from the data file. The resulting sample was comprised of 290 students.

After the aforementioned data were eliminated from the data file, some preliminary analyses and computations were conducted. The next step was to combine the responses of the seven appreciation of diversity as a result of service-learning questions in order to create one composite scale to represent an overall contribution of service-learning to appreciation of diversity scale. Then, the internal consistency of the contribution of service-learning to appreciation of diversity scale was tested by obtaining a Cronbach alpha score. The results of the Cronbach alpha test are provided in Chapter 4. Finally, some preparations were made to the independent variables for this study. A description of the variables utilized in this study is provided in Table 3.2. For example, racial background, gender, academic class standing, and type of service-learning variables had already been converted to dichotomous or "dummy" variables in the OCSL dataset. In other words, instead of one variable representing racial background, separate dichotomous variables for each racial background were created, such as: African/African American (0=no, 1=yes); Asian/Asian American (0=no, 1=yes), and so forth. This classification of the independent variables made them suitable for the analyses of Hypotheses 4, 5, 6, and 8. In regards to Hypothesis 7, the prior service involvement variable was coded via a Likert scale, and thus did not need to be made into dummy variables. For these analyses, a referent category was removed for each of two sets of

Table 3.2

Description of Variables Utilized in the Study

Variable	Coding	Used with Hypothesis Number
Race	1=African/African American 2=Asian/Asian American 3=Caucasian/White 4=Latino/a 5=Native American 6=Bi/Multi-racial 7= Other	1
Gender	1=Male 2=Female	2, 5
Academic Class Standing	1=Freshman (1-29 credits) 2=Sophomore (30-59 credits) 3=Junior (60-89 credits) 4=Senior (90-120 credits) 5=More than 120 credits	3
Race	African/African American (0=no, 1=yes) Asian/Asian American (0=no, 1=yes) Caucasian/White (0=no, 1=yes) Latino/a (0=no, 1=yes) Native American (0=no, 1=yes) Bi/Multi-racial (0=no, 1=yes) Other (0=no, 1=yes)	4
Academic Class Standing	Freshman (0=no, 1=yes) Sophomore (0=no, 1=yes) Junior (0=no, 1=yes) Senior (0=no, 1=yes) More than 120 credits (0=no, 1=yes)	6
Service Involvement Prior to College	1=Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree	7
Type of Service-Learning Experience	1=Curricular service-learning 2=ARAC	8

dummy variables. These were, because of a fewer number of respondents in comparison to other categories in each individual variable, Native American, and over 120 credits, respectively. No students self-identified as transgender, so the gender variable was recoded into two options as opposed to three. A similar procedure was performed with type of service-learning program since no co-curricular service-learning students remained in the sample.

These same independent variables, were, however, recoded in order to conduct the analyses associated with Hypotheses 1, 2, and 3. Thus, racial background, gender, and academic class standing were recoded back into nominal categories (i.e., racial background: 1=African/African American, 2=Asian/Asian American, 3=Caucasian/White, 4=Latino/a, 5=Native American, 6=Bi/Multi-racial, and 7=Other).

Statistical Procedures and Analyses

Descriptive Statistics

Descriptive analyses included frequencies and percentages of participants' racial backgrounds, genders, academic class standing, level of involvement in service prior to college (i.e., Strongly Disagree, Disagree, Neutral, Agree, or Strongly Agree to the statement "Before I came to UM, I participated in community service activities"), and type of service-learning program (i.e., curricular or ARAC). The mean scores and standard deviations of prior service involvement were also computed.

Chi-square Statistic

As previously discussed, descriptive statistics of the obtained sample were compared to the overall UMCP student body; chi-square statistics were performed to test for response biases along the dimensions of race, gender, and academic class standing.

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Analysis of Variance (ANOVA)

Hypotheses 1, 2, and 3 (i.e., there will be a significant difference in students' reported appreciation of diversity as a result of their service-learning experience based on their race, gender, and academic class standing, respectively), were analyzed with one-way Analysis of Variance (ANOVA). First, the mean scores and standard deviations of the contribution of service-learning to appreciation of diversity for each respective subgroups of racial background, gender, and academic class standing were calculated. Then, the F-statistic of the ANOVA was examined to determine if there were differences among the means of the independent variables of racial background, gender, and academic class standing (Lomax, 2001). This procedure allows for greater accuracy than conducting separate t-tests, which would increase the likelihood of committing a Type I error (Lomax; McMillian & Schumacher, 2001). As these variables are categorical in nature, or can be appropriately converted, and the dependent variable, appreciation of diversity as a result of service-learning, is continuous, this statistic was appropriate. The original course of action, if there were significant differences found between any groups of students, was to perform a Tukey's HSD, a conservative post hoc test that is still powerful enough to detect differences, in order to determine where the significant differences were (Lomax; McMillian & Schumacher).

Multiple Regression Analysis

A multiple regression analysis using stepwise entry was performed to test Hypotheses 4, 5, 6, 7, and 8 (i.e., race, gender, academic class standing, service involvement prior to college, and type of service-learning experience, respectively, will be significant predictors and contribute to the variance explained of students' reported

appreciation of diversity as a result of their service learning experience). Because there is

not much empirical or theoretical evidence of what the predictors are of appreciation of

diversity in a service-learning context, or which are the best predictors, it seemed more

appropriate to perform a stepwise multiple regression, as this study is more exploratory,

over a hierarchical multiple regression, which would be appropriate if there was more

research to justify the ordering of independent variables into the multiple regression

equation.

A potential complication is that there may be high multicollinearity between the

independent variables. Therefore, before executing a multiple regression analysis, a test

of mulitcollinearity was performed. An intercorrelation matrix of the five independent

variables was produced to investigate the extent to which they correlated with one

another. If there was high multicollinearity, indicating that two variables were too highly

correlated, one variable was to be removed from the regression equation.

Summary of Methodology

This chapter has presented the methods employed in this quantitative study of

appreciation of diversity through service-learning involvement. The next chapter will

describe the results acquired from these methods.

CHAPTER 4

RESULTS

The purpose of this study was to investigate the relationships between undergraduate students' participation in service-learning and their consequent reported appreciation of diversity as a result of this participation. More specifically, the study examined how this relationship may have varied based on race, gender, and academic class standing (i.e., Hypotheses 1 through 3) as well as if these demographic variables with the addition of service variables significantly predicted and contributed to the variance explained of the contribution of service-learning to appreciation of diversity (i.e., Hypotheses 4 through 8). This chapter will reveal the results of the statistical analyses utilized to test eight alternative hypotheses.

Preliminary Analyses

Contribution of Service-Learning to Appreciation of Diversity

The Cronbach alpha for the contribution of service-learning to appreciation of diversity scale, comprised of seven survey items, from the spring 2004 sample was .908, suggesting high internal consistency (Table 4.1). Further, the mean of the contribution of service-learning to appreciation of diversity scale was 19.83 ($SD = 5.76$) for the 290 participants. This signifies that most students scored above the middle value for the possible range of scores, which was 17.5 for a range of seven to 28, although there is quite a range given the standard deviation. Furthermore, for a mean of 19.83, students would tend to respond, on average, almost but not quite "Quite a Bit", which was a score of 3, for the seven survey items that inquired the extent to which service-learning contributed to them.

Descriptive Statistics

Women students represented 63.1% of the sample as 183 participants, while men students represented 36.9% of the sample as 107 participants (Table 4.2). No students self-identified as transgender. The sample included 40 African/African American students (13.8%), 44 Asian/Asian American students (15.2%), 158 Caucasian/White students (54.5%), 19 Latino/a students (6.6%), 0 Native American students (0%), 13 Bi/Multi-racial students (4.5%), and 16 Other students (5.5%). In regards to academic class standing, the distribution was as follows: 63 freshmen (21.7%), 87 sophomores (30.0%), 70 juniors (24.1%), 54 seniors (18.6%), and 13 students had more than 120 credits (4.5%). Three students chose not to disclose their academic class standing. Moreover, the sample was majority curricular service-learning students: 268 students (92.4%) participated in curricular service-learning while 22 students (7.6%) participated in America Reads*America Counts.

To the prompt "Before I came to UM, I participated in community service activities," students responded in the following ways: 13 students *Strongly Disagree* (4.5%), 16 students *Disagree* (5.5%), 13 students *Neutral* (4.5%), 115 students *Agree* (39.7%), and 132 *Strongly Agree* (45.5%). One student did not respond to this question. The mean score for this measurement of prior service involvement is 4.17 and the standard deviation is 1.05.

Chi-Square Statistics

Chi-square statistics were conducted to test if there were significant differences along relevant demographic dimensions between the obtained sample and the University of Maryland, College Park student body as given by the Office of Institutional Research

Table 4.1

Mean and Standard Deviation for Contribution of Service-Learning to Appreciation of Diversity (N=290)

	M	*SD*
Contribution of Service-Learning to Appreciation of Diversity	19.83	5.76
Cronbach alpha: .908		

To what extent has your community service experience contributed to your:

Interacting with students of a race or ethnicity different than your own

Interacting with students of different religious or political backgrounds

Understanding of people from races/ethnicities different than your own

Understanding how your race(s) shape your identity

Understanding diverse cultural, political and intellectual views

Willingness to seek out new experiences

Awareness that systems can disadvantage groups of people

Note: Possible range of scores for contribution of service-learning to appreciation of diversity scale was 7.00 to 28.00. Students responded to each of the seven survey items on a Likert scale: *Very Little = 1, Some = 2, Quite a Bit = 3,* or *Very Much = 4.*

Table 4.2

Obtained Sample and University of Maryland, College Park (UMCP) Demographics

	Obtained Sample		UMCP	
	N	%	N	%
Gender:				
Female	183	63.1%	12,512	49.2%
Male	107	36.9%	12,934	50.8%
Transgender	0	0%	--	--
$\chi^2 =22.407$, *df* = 1, *p*=.000				
Race:				
African/African American	40	13.8%	3,131	12.3%
Asian/Asian American	44	15.2%	3,502	13.8%
Caucasian/White	158	54.5%	15,026	59.1%
Latino/a	19	6.6%	1,400	5.5%
Native American	0	0%	74	.3%
Bi/Multi-racial	13	4.5%	--	--
Foreign	--	--	619	2.4%
Other	16	5.5%	1,694	6.7%
$\chi^2 =9.135$, *df* = 5, *p*=.104				
Academic class standing:				
Freshman	63	21.7%	5,522	21.7%
Sophomore	87	30.0%	6,147	24.2%
Junior	70	24.1%	6,361	25.0%
Senior	54	18.6%	6,478	25.5%
More than 120 credits	13	4.5%	--	--
Post-baccalaureate	--	--	287	1.5%
Special undergraduate	--	--	311	1.6%
Applied agriculture	--	--	67	.3%
$\chi^2 =9.88$, *df* = 4, *p*=.042				

Note: The dashes signify that the data were not available. The obtained sample's (Spring 2004) *N* is 290; three participants did not indicate their academic class standing and thus are not represented in the table. UMCP data was adapted from data from the Office of Institutional Research and Planning for fall 2003 (*Who's on campus now?: General demographics*, 2004). Retrieved November 13, 2004, from http://www.oirp.umd.edu/WOCN/general.cfm

for fall 2003, as these figures are only made public once an academic year (*Who's on campus now?: General demographics*, 2004). Please see Table 4.2 for a comparison. There were significant differences for gender (χ^2 =22.407, *df* = 1, *p*= .000) and academic class standing (χ^2 = 9.88, *df* = 4, *p*=.042). This sample has statistically more women than men in comparison to the University of Maryland population. The sample also seems to over-represent sophomores and under-represent seniors. However, racial background was not significantly different between the observed and expected observations (χ^2 = 9.135, *df* = 5, *p*=.104).

<div align="center">Testing of Hypotheses</div>

<div align="center">*Hypothesis One: Difference in Race*</div>

The first alternative hypothesis stated that there would be a difference in students' reported appreciation of diversity as a result of service-learning based on their race, which included African/African American, Asian/Asian American, Caucasian/White, Latino/a, Bi/Multi-racial, and Other. As there were no self-identified Native American students in this sample, this group was not included in the analysis. Students who identified as Bi/Multi-racial and Other were also not included due to the small number of respondents (i.e., 13 and 16, respectively). There was no significant difference in the contribution of service-learning to appreciation of diversity based on race according to the one-way Analyses of Variance, *F*(3,257) =1.491, *p*=.271. Please see Table 4.3 for a summary of results. Thus, the alternative hypothesis is rejected.

<div align="center">*Hypothesis Two: Difference in Gender*</div>

According to the second alternative hypothesis, based on gender, there would be a significant difference in students' appreciation of diversity as a result of service-learning.

Table 4.3

ANOVA Results: Contribution of Service-Learning to Appreciation of Diversity by Race (N=261)

Race	*n*	*M*	*SD*	*F(df)*	*p*
African/African American	40	19.25	5.56	1.491 (3, 257)	.217
Asian/Asian American	44	21.52	6.30		
Caucasian/White	158	19.65	5.42		
Latino/a	19	20.16	6.43		

Note: Possible range of scores for contribution of service-learning to appreciation of diversity scale was 7.00 to 28.00.

Only female and male students were included in this analysis because no students self-identified as transgender. Women students (*M*=20.42*, SD*=5.36) were significantly more likely than men students (*M*=18.83*, SD*=6.28) to score higher on the contribution of service-learning to appreciation of diversity scale, $F(1,188) = 5.221$, *p*=.023. As there are only two groups, a post hoc test is not needed. Results are summarized in Table 4.4. The alternative hypothesis is not rejected.

Hypothesis Three: Difference in Academic Class Standing

The third alternative hypothesis predicted that there would be a difference in the contribution of service-learning to appreciation of diversity among academic class standing. Respondents who indicated that they had obtained more than 120 credits were not included in this analysis due to the small number (i.e., 13). This hypothesis is not rejected, as there was a significant difference in this score based on academic class, $F(3, 270) = 3.341$, *p*=.020. A Tukey's HSD post hoc test revealed that seniors (*M*=21.76*, SD*=5.94) were significantly more likely than freshmen (*M*=18.52*, SD*=5.56) to demonstrate higher scores on this scale (*p* =.012). Please refer to Table 4.5 for a summary of results.

Hypotheses Four Through Eight: Stepwise Multiple Regression

Hypotheses 4 through 8, respectively, are that race, gender, academic class standing, service involvement prior to college, and type of service-learning experience would be significant predictors and contribute to the variance explained of students' reported appreciation of diversity as a result of their service-learning experience. First, these five independent variables were recoded into a suitable format for performing a linear multiple regression. Therefore, the result was 13 variables (i.e., race into

Table 4.4

ANOVA Results: Contribution of Service-Learning to Appreciation of Diversity by Gender (N=290)

Gender	*n*	*M*	*SD*	*F(df)*	*p*
Female	183	20.42	5.36	5.221 (1, 288)	.023*
Male	107	18.83	6.28		

Note: Possible range of scores for contribution of service-learning to appreciation of diversity scale was 7.00 to 28.00.

* *p* < .05

Table 4.5

ANOVA Results: Contribution of Service-Learning to Appreciation of Diversity by Academic Class Standing (N=274)

Gender	*n*	*M*	*SD*	*F(df)*	*p*
Freshman (1-29 credits)	63	18.52[a]	5.56	3.341 (3, 270)	.020*
Sophomore (30-59 credits)	87	19.36	5.55		
Junior (60-89 credits)	70	19.73	5.83		
Senior (90-120 credits)	54	21.76[b]	5.94		

Note: Possible range of scores for contribution of service-learning to appreciation of diversity scale was 7.00 to 28.00. The means with the superscripts a and b significantly differ at the *p*=.012 level.

* *p* < .05

African/African American, Asian/Asian American, White, Latino, Bi/Multi-racial, Other;

gender remained the same; academic class standing into freshman, sophomore, junior,

and senior; service involvement prior to college remained the same; and, type of service-

learning program remained the same).   Then, a test of multicollinearity was conducted

with these 13 independent variables by ascertaining the correlations between these

variables. Please see Table 4.6 for an intercorrelation matrix. The correlations were not

high enough to suspect multicollinearity and thus all variables were entered into the

multiple regression equation.

Results from the stepwise multiple regression suggested that the overall model

was significant, F (4, 284) = 6.164, p=.0001, with the statistically significant independent

variables explaining 8% of the variance in students' reported appreciation of diversity as

a result of service-learning participation (Table 4.7). Senior status (p=.003) contributed

to the greatest amount of variance explained of the dependent variable, 2.6%.

Furthermore, type of service-learning program (p=.019), Asian/Asian American group

membership (p=.025), and gender (p=.033) also contributed to the variance and are

significant at a .05 level. Participation in ARAC, being Asian/Asian American, and

being a female were all positively associated with gains in appreciation of diversity as a

result of service-learning. Collectively, race (i.e., being Asian/Asian American), gender

(i.e., being female), academic class standing (i.e., being a senior), and type of service-

learning involvement (i.e., participation in ARAC) explain a significant amount of the

variance. Therefore, respectively, alternative Hypotheses 4, 5, 6, and 8 are not rejected.

However, service involvement prior to college does not seem to be significant predictor

or contribute to the variance explained of students' reported contribution of service-

Table 4.6

Correlation Matrix of Race, Gender, Class Standing, Service Involvement Prior to College, Type of Service-Learning, and Contribution of Service-Learning to Appreciation of Diversity

	African/African American (A)	Asian/Asian American (B)	Caucasian/White (C)	Latino/a (D)	Bi/Multi-racial (E)	Other (F)	Gender (G)	Freshman (H)	Sophomore (I)	Junior (J)	Senior (K)	More than 120 credits (L)	Service Involvement Prior to College (M)	Type of Service-Learning (N)
A	--	$-.17^b$	$-.44^b$	-.11	-.09	-.10	.06	-.02	-.04	.01	.07	-.04	-.01	.11
B		--	$-.46^b$	-.11	-.09	-.10	.03	-.04	-.07	.10	-.01	.05	.01	-.05
C			--	$-.30^b$	$-.24^b$	$-.26^b$	-.08	.10	.09	$-.15^b$	-.04	-.00	$.14^a$	-.05
D				--	-.06	-.06	-.03	-.00	-.05	.08	.02	-.06	-.02	.02
E					--	-.05	.03	-.07	.08	-.01	-.02	.03	-.00	-.06
F						--	.06	-.05	-.03	.08	.00	.02	$-.28^b$	.10
G							--	-.10	.03	$.13^a$	-.00	-.01	$.13^a$	$.14^a$
H								--	$-.35^b$	$-.30^b$	$-.25^b$	-.11	$.20^b$	-.03
I									--	$-.40^b$	$-.31^b$	$-.14^a$	.08	-.05
J										--	$-.27^b$	$-.12^a$	-.06	.05
K											--	-.10	$-.19^b$	-.00
L												--	-.10	.00
M													--	-.07
N														--

Note: Superscript a indicates that *p* < .05 while superscript b indicates that *p* < .01

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Table 4.7

Summary of Regression Equation for Contribution of Service-Learning to Appreciation of Diversity (N= 289)

Independent Variable	R	R^2	R^2 Change	ß	p	$F(df)$
						6.164** (4, 284)
Senior	.160	.026	.026	.171**	.003	
Type of Service-Learning	.218	.047	.021	.136*	.019	
Asian/Asian American	.255	.065	.018	.129*	.025	
Gender	.283	.080	.015	124*	.033	

* $p < .05$
** $p < .01$

Note: Type of Service-Learning was coded as 1=Curricular, 2=America Reads*America Counts. Asian/Asian American was coded as 0=no, 1=yes. Lastly, gender was coded as 1=male, 2=female.

learning to appreciation of diversity and consequently, alternative Hypothesis 7 is
rejected.

Summary of Results

This chapter has served to report the statistical analyses utilized to test this
research study's eight alternative hypotheses and their consequent results. Alternative
Hypothesis 1, that there would be a difference in students' perceived appreciation of
diversity as a result of service-learning based on race, was rejected because no significant
differences were found. However, Hypotheses 2 and 3, that there would be a difference
in students' reported contribution of service-learning to diversity appreciation based on
gender and academic class standing, respectively, were not rejected. Women students
had significantly higher scores on this scale than men students, as did senior
students when compared to freshmen students. Alternative Hypotheses 4, 5, 6, and 8
were not rejected, as being a senior, type of service-learning program, Asian/Asian
American, and gender, respectively, explain a significant amount of the variance of the
contribution of service-learning to appreciation of diversity. The combination of senior
status, type of service-learning program, membership to the racial group of Asian/Asian
American, and gender provided a relatively small but significant explanation of the
variance: 8%. These aforementioned variables were also found to be significant
predictors of the contribution of service-learning to appreciation of diversity. More
specifically, those that were seniors, were participants in ARAC, were Asian/Asian
American, and were female were more likely than their respective counterparts to
demonstrate higher appreciation of diversity as a result of service-learning scores.
However, service involvement prior to college was not a significant predictor nor did it

contribute to the variance explained of diversity appreciation as a result of service-learning involvement and, therefore alternative Hypothesis 7 was rejected.

Discussion of these results, their consequent professional and practical implications, and shortcomings of this research study will be presented in Chapter 5. Lastly, suggestions for future research will also be discussed.

CHAPTER 5

DISCUSSION

The focus of this study was to examine the relationship between service-learning experiences and appreciation of diversity for undergraduate students as well as to examine these experiences for racially diverse students. The main research questions were as follows: (a) does the contribution of service-learning on appreciation of diversity differ significantly by demographic variables including race, gender, and academic class standing?, and (b) do demographic and service variables, including race, gender, academic class standing, involvement in service prior to college, and type of service-learning program, significantly predict and contribute to the variance explained for the contribution of service-learning on appreciation of diversity? In order to investigate these questions, this research study examined 290 students that were engaged in either curricular or co-curricular service-learning at the University of Maryland, College Park during spring 2004 and responded to the Office of Community Service-Learning's *Curricular Service-Learning Survey (CSLC)* or *America Reads*America Counts Service-Learning Survey (ARACSLS)*, respectively.

Summary of Findings

This study found that there was no significant difference in the contribution of service-learning on appreciation of diversity based on race. However, there were significant differences based on gender and academic class standing: women were more likely than men to have higher reported appreciation of diversity as a result of service-learning, as were seniors in comparison to freshmen. Moreover, this study found that being a senior undergraduate student, type of service-learning program, being

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Asian/Asian American, and gender were significant predictors and contributed to the variance explained of students' reported appreciation of diversity as a result of service-learning. Nevertheless, service involvement prior to college was not a significant predictor and did not contribute to the variance explained.

Discussion of Results

Race

That there was no significant difference in the contribution of service-learning to appreciation of diversity between racial backgrounds surprised the researcher. There is research that supports that various racial groups may experience and understand racial diversity differently: Pascarella et al. (1996) and Whitt et al.'s (2001) studies of openness to diversity and challenge found that this measure was significantly higher for Students of Color in comparison to White students during students' first and second years of college. However, it is important to note that the concept of openness to diversity depending on racial group backgrounds is distinct from the contribution of service-learning on appreciation of diversity. It could be that students' appreciation of diversity, if measured on its own, would be statistically significant between racial backgrounds, but the contribution of service-learning on diversity outcomes does not significantly vary.

Nonetheless, the research that examines a variety of racial groups' perceptions and experiences within the context of service is rather limited and mixed. Therefore, it is not clear exactly how the finding of no significant difference in the contribution of service-learning to appreciation of diversity among racial groups fits with the reviewed research. There is some research that supports that different racial groups may perceive and learn from their service experiences differently (Jones & Hill, 2003; Raskoff &

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Sundeen, 2001; Youniss & Yates, 1997). Raskoff and Sundeen found statistically

significant differences between racial groups: Asian Americans were less likely than

other groups to feel they learned about others and more likely to feel they learned about

themselves; Latinos were more likely to believe they would volunteer in the future;

African Americans were more likely to fear rejection from their community service

experience; and, White students were less likely to report that they learned about

themselves. The applicability of Raskoff and Sundeen's study can be disputed and may

partly explain why their findings might seem incompatible with this researcher's, in that

Raskoff and Sundeen investigated community service programs, the high school

environment, and the location of Los Angeles, California. However, again, there is an

absence of studies that examine a variety of racial groups' perceptions within the context

of service and thus this study is useful in this discussion. This researcher's finding could

also be an indication that race is not such an important factor in regards to appreciating

diversity through service-learning.

An additional piece of research that supports that racial groups do demonstrate

varying experiences within service-learning is Wilmarth's (2004) analyses of fall 2003

data from the Office of Community Service-Learning *Curricular Service-Learning

Survey*, with a sample of 180 students. Wilmarth found that Asian/Asian American

students scored significantly higher than White students on an awareness of structural

inequality scale, which only shares one construct in common with this research study's

appreciation of diversity as a result of service-learning scale: "awareness that systems can

disadvantage groups of people." As the scales are different, it is difficult to discern how

related these findings are, although the studies were conducted at the same institution, albeit using data collected during different years.

Nevertheless, there is also research that substantiates the notion that there are not significant differences between races in regards to perceiving and learning from service-learning. Raskoff and Sundeen's (2001) study of high school students engaged in community service and their perceptions of their participation found that there were more similarities between racial groups than differences. Similarly, Wilmarth (2004) found no significant differences in the appreciation of difference as a result of service-learning scale among African/African American, Asian/Asian American, and Caucasian/White racial groups. Wilmarth's appreciation of difference as a result of service-learning scale encompassed six of the seven constructs of this study's contribution of service-learning to appreciation of diversity scale, not including the construct of "awareness that systems can disadvantage groups of people," as well as six other constructs. It could be that the contribution of service-learning to appreciation of diversity does not seem to change on the part of the racial identity background of the participant. However, as the research is unclear in regards to how different racial groups understand their service experience, further research should be done.

Moreover, it could be the case that the lack of significant differences between racial backgrounds is due to the homogeneity of the students within this sample. It could be that students that tend to be engaged in service-learning in general are privileged and more alike than dissimilar, irregardless of racial backgrounds. Further research should examine this issue.

Gender

Although research around race is less consistent, some of this study's findings seem to support previous research in regards to gender and academic class standing. For instance, based on previous research it is not surprising that women are more likely than men to report a statistically significant difference in their appreciation of diversity as a result of service-learning. Research substantiates that female undergraduates are more likely than male undergraduates to be open to diversity (Astin, 1993; Levine & Cureton, 1998; Pascarella et al., 1996; Springer et al., 1996; Whitt et al., 2001). In general, women seem to report higher levels of openness to diversity than men.

This research study's finding seems to indicate that there is a relationship specifically between gender and the service-learning outcome of appreciation of diversity. Jones and Hill (2003) and Youniss and Yates (1997) purported that gender shapes how students learn from and experience service-learning, although there is not much research to substantiate their assertion, aside from Eyler and Giles (1999) who found that female undergraduates were statistically more likely than male undergraduates to demonstrate higher scores on the contribution of service-learning to tolerance for diversity in a national study on academic service-learning. Similarly, Wilmarth (2004) found that women were more likely than men to have higher appreciation of diversity as a result of service-learning and awareness of structural inequality scores. Although the diversity constructs between Eyler and Giles's study and this study as well as Wilmarth's study and this study, respectively, are slightly different, it nevertheless seems that gender has a differential impact on how service-learning participants perceive diversity. Exactly how service-learning affects men versus women is not exactly clear, although it seems

women are more likely to report learning about diversity within the context of service-learning than men.

Academic Class Standing

Similarly, this research study's finding that seniors are significantly more likely than freshmen to demonstrate higher scores in the contribution of service-learning to diversity appreciation supports existing research. Astin's (1993) national study of the influence of college found that traditionally-aged seniors self-reported higher levels of tolerance of diversity compared to when they were freshmen, which seems to indicate that when students are at a more advanced academic class standing, they are more likely to be open to diversity. Pascarella et al. (1996) and Whitt et al.'s (2001) longitudinal studies on traditionally-aged students and Graham's (1998) study on non-traditionally and traditionally-aged students also substantiated the notion that older students are statistically more likely than younger ones to be open to diversity and new ideas. The reasons behind these findings are unclear; they could be due to maturation, development, or the cumulative life experiences of students.

However, how this study's finding relates to the limited research on how age or academic class standing may influence diversity outcomes within the context of service-learning is unclear. Eyler and Giles's (1999) study found that age did not significantly influence students' level of tolerance within the service-learning context. The reason that Eyler and Giles findings seem to contrast that of this study may be qualitatively different samples: Eyler and Giles investigated only academic service-learning participants. Moreover, the definition of tolerance for diversity and appreciation of diversity are not the same. It is difficult to discern if service-learning is contributing to the diversity

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appreciation or if it is maturation since in both studies students are examined after one semester of service-learning involvement; the same students are not examined over a longer span of their development. Based on Eyler and Giles' suggestion, perhaps cognitive development, over academic class standing, is more closely linked to diversity outcomes and would be more appropriate to examine as it relates to diversity outcomes, including in a service-learning context. Based on previous research, it does seem that, in order to maximize the likelihood of achieving diversity outcomes, one must take a developmental approach (Levine & Cureton, 1998; Whitt et al., 2001).

Demographic and Service Variables: Explained Variance and Predictors

There has not been much research in terms of how various factors contribute to the variance explained of diversity appreciation as a result of service-learning or what are the best predictors of appreciation of diversity through service-learning; therefore, it is difficult to hypothesize how various factors may serve to explain the variance of and predict this construct. How these potential predictors relate to each other is not known. Nonetheless, based on the current research, the multiple regression model supports this research, but also is surprising in some ways.

This study found that academic class standing, type of service-learning program, being Asian/Asian American, and gender explained 8% of the variance of the contribution of service-learning to diversity appreciation. Although 8% is not a large amount, particularly collectively for these four factors, this model is significant. It may be that demographic variables are not all that important in regards to the contribution of service-learning to diversity appreciation. As senior status is the strongest predictor and accounts for 2.6% of the variance explained, it could be appreciation of diversity is

closely tied with development. What specific type of development is not exactly known.

It may also be that the aggregate of a senior's college experiences is more influential on

appreciation of diversity than characteristics such as demographic background and level

of participation in service prior to college. This idea was supported by Pascarella et al.

(1996) and Whitt et al. (2001), who asserted that, when controlling for other factors,

students experience gains in openness to diversity and challenge as a result of

experiences that they have in college. However, the strength of this variable in

comparison to the others is somewhat surprising given that Eyler and Giles's (1999) did

not find age to be a predictor for tolerance for diversity as a result of service-learning.

It is notable that the second best predictor is type of service-learning program; this

may imply that the service-learning variables themselves are as important as

demographic variables. Participation in ARAC over curricular service-learning was

significantly related to the contribution of service-learning on appreciation of diversity.

At this point, it is difficult to speculate what factors are important in distinguishing the

two types of service-learning involvement in this study, although one may speculate that

the additional time spent participating in service-learning may be a factor given that

ARAC students generally engage in a higher amount of hours in service over the course

of a semester in comparison to curricular service-learners (Astin & Sax, 1998; Astin, Sax,

& Avalos, 1999; Daloz et al., 1996; Green, 2001; Jones & Hill, 2001). This greater time

spent at the service site would provide greater opportunity to develop meaningful

personal relationships with others, which some scholars purport is essential to developing

appreciation of diversity within the service context (Eyler & Giles, 1999; Jones & Hill,

2001, 2003; Rhoads, 1998). This logic is also supported by Allport's (1954) contact

hypothesis. Another potential reason that ARAC students are more likely to have higher scores on the appreciation of diversity as result of service-learning scale may be because they, on average, might be from lower socio-economic status backgrounds in comparison to academic service-learning students (Green, 2001; Jones & Hill, 2003; Raskoff & Sundeen, 2001; Youniss & Yates, 1997). A third hypothesis that may explain this finding is that the ARAC program is part of the Office of Community Service-Learning and therefore, the program may have been intentionally designed to meet OCSL's learning outcomes for service-learning, including appreciation of diversity, more so than service-learning courses. Further studies are necessary in this area to better understand what factors in the type of service-learning program are most closely linked to diversity appreciation as a result of service-learning involvement.

The fact that being Asian/Asian American is the third best predictor of appreciation of diversity as a result of service-learning is somewhat of a surprise for two reasons. The first is that there was no significant difference in the contribution of service-learning to appreciation of diversity among racial backgrounds in the ANOVA, but being Asian/Asian American was a significant predictor in the stepwise regression analysis. This suggests either a Type I error in the stepwise regression or a Type II error in the ANOVA. Thus, it may be the case that being Asian/Asian American is not that significant of a predictor of appreciation of diversity as a result of service-learning because there were no significant differences in this scale among racial groups. To better ascertain whether or not being Asian/Asian American is a significant predictor of diversity appreciation within the context of service-learning, further analyses should be conducted.

The second reason that this finding in the multiple regression is surprising, although there is an absence of studying this racial group within the context of service-learning, is that trying to reconcile this finding with other applicable findings is difficult. Raskoff and Sundeen's (2001) finding that Asian Americans were significantly more likely than other racial groups to report they learned more about themselves and less about helping others is puzzling in conjunction with research that supports that service-learning facilitates tolerance and diversity appreciation through learning about and interacting with others. Eyler and Giles (1999) and Jones and Hill (2001) support this latter notion and similarly, other researchers have found a relationship between developing relationships with those different from oneself and being open to diversity outside of the service context (Pascarella et al., 1996; Whitt et al., 2001). However, Eyler and Giles's findings are based on predominately White students and analyzed Students of Color as a monolithic group while Jones and Hill's are based on five White students and one African American student; this might explain some of the discrepancy between these researchers' assertions and what this researcher found in this study. It could also be that Raskoff and Sundeen's findings do not hold when examining the college population engaged in service-learning since they are based within the high school community service context. Additionally relevant research is Wilmarth's (2004) study. She found that Asian/Asian American academic service-learning students during the fall of 2003 were significantly higher in their reported awareness of structural inequality than White students. Although this construct is not equal to the diversity appreciation as a result of service-learning scale, her finding is congruent with this study's finding that Asian/Asian

American group membership seems to influence learning about different aspects of diversity.

Despite the caveat that this finding may not be real and the limited research, there is one hypothesis that the author can speculate as to why Asian/Asian Americans may be more likely to show gains in appreciation of diversity as a result of service-learning in comparison to other racial groups. It may be that Asian American students sometimes internalize the model minority myth. They may be particularly likely to feel pressure to perform academically in comparison to other racial groups (Suzuki, 2002; Yee, 1992). Given that the surveys were distributed by instructors and the Coordinator of ARAC and in the context of the classroom and a federal work-study job, Asian/Asian American students might have felt the need to perform and demonstrate high gains in diversity appreciation as a result of service-learning. Therefore, it may not be a realistic portrayal of this scale, but may have been inflated due to the model minority myth. Nevertheless, this hypothesis to explain why Asian Americans may be particularly likely to show increased scores in appreciation of diversity as a result of service-learning is not supported by current research. Thus, the experience of Asian Americans within the context of the appreciation of diversity as a result of service-learning should be further examined.

Pascarella et al. (1996) and Whitt et al. (2001)'s research seemed to support that gender plays a significant role in students' openness to diversity and challenge. Within the context of service experiences, Jones and Hill (2003) have hypothesized that gender is a lens that shapes how students engage in service-learning and Eyler and Giles (1999) have found that women are more likely than men to score higher on tolerance for

diversity as a result of service-learning participation. Given this finding, it is not surprising that being a woman was associated with higher gains in the contribution of service-learning to appreciation of diversity. That gender is the fourth best predictor and contributes 1.5% of the variance may seem low; however, there is not much research to corroborate gender's relative importance in service-learning outcomes as compared to other influences. Although much attention is allocated to gender within the context of service-learning, this focus on gender could be a distortion of the reality of the contribution of gender to how students come to understand and make meaning of their service-learning experiences. If this distortion does exist, it could partly be a result of the disporportionally large number of women students who engage in service experiences in comparison to male students (Astin & Sax, 1998; Fitch, 1991; Levine & Cureton, 1998; Marks & Jones, 2004; Winniford, Carpenter, & Grider, 1995).

The fact that the level of service involvement prior to college was not found to be a significant predictor in this model or contribute to the variance explained of the contribution of appreciation of diversity could be partly explained by developmental processes. As Eyler and Giles (1999) suggested, cognitive development may be related to diversity outcomes as a result of service-learning. When college students were in high school they might not have been able to fully grasp this survey's construction of appreciation of diversity; concepts such as understanding how race shapes one's identity and understanding systems of oppression seem advanced. Developmentally, students may have to reach a certain level before service-learning can be transformative. Therefore, the level of their participation in service-learning may not be important when examining their development of diversity appreciation as a result of service-learning prior

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to when they are in college. Moreover, although there is research that contends that: (a) high school involvement in service is related to collegiate service (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Berger & Milem, 2002; Jones & Hill, 2003; Marks & Jones, 2004; Vogelgesang & Astin, 2000); (b) precollege openness to diversity is strongly associated with openness to diversity during college (Whitt et al., 2001); and, (c) service involvement facilitates diversity outcomes (Eyler & Giles; Green, 2001; Jones & Hill, 2001; Levine & Cureton, 1998; O'Grady, 2000), it is mostly speculation that there might be a relationship between service participation prior to college and collegiate appreciation of diversity as a result of service-learning. This finding could also be explained by the fact that high school students from the state of Maryland are required to complete 75 community service or service-learning hours before graduation. This requirement may have created a mentality that service is a chore and not a true enriching learning opportunity. However, further research needs to be conducted to further examine this issue.

<div align="center">Implications for Practice</div>

This study adds some understanding for how service-learning involvement may be related to appreciation of diversity. As one of the findings of this study is that the type of service-learning program matters, this may mean that the intentionality behind structuring a quality service-learning experience is vital in order to facilitate and maximize learning outcomes, such as diversity appreciation. Given that ARAC students scored significantly higher than curricular service-learners on appreciation of diversity as a result of service-learning, it may be that socio-economic class is an important factor to consider in understanding how students gain diversity outcomes in the service context if

one assumes that these students as an aggregate are from a lower socio-economic class background, or that requiring greater service-learning hours enhances the likelihood that students will learn about diversity on site. However, more time and attention should be spent investigating how to best structure the service-learning experience to reach diversity appreciation as a result of this experience before any conclusions can be drawn.

Moreover, it is also useful to better understand how demographic variables such as academic class standing, race, and gender may relate to the contribution of service-learning to diversity appreciation for practitioners. For instance, this could explain that students from lower academic class standings (e.g., first-year students) may not be able to grasp more complex issues of appreciation of diversity in a service-learning context. Knowing this, practitioners may want to focus especially on students from lower academic class statuses so that they do not cause harm to the community through participating in the "underside" of service-learning and reinforce stereotypes (Jones, 2002). Additional teaching, reflecting, and learning around these issues may help to alleviate this danger, but it may not if students must reach a particular developmental level first. However, the relationship between academic class standing and the contribution of service-learning to diversity appreciation is something that practitioners should be cognizant of as they interact and structure the service-learning experience. Furthermore, this could also mean that practitioners are increasingly mindful of how male students are engaging and learning from the community, as they may be less likely to learn about diversity through their service-learning experience than female students.

This study's findings also imply that perhaps race is not an important factor in the contribution of service-learning to appreciation of diversity given the lack of significant

differences on this scale among racial groups in the ANOVA. As senior status was the strongest predictor of the contribution of service-learning to diversity appreciation, this may suggest that the experiences that one has throughout college influence appreciation of diversity through service-learning more so than demographic variables or the extent to which one engaged in service in high school. It may be then that practitioners should focus more on intentionally structuring the service-learning experience as opposed to considering pre-service-learning characteristics such as race or prior service experience. However, as being Asian/Asian American was a significant predictor in the multiple regression analysis, this may suggest that this group of students is particularly likely to learn about diversity through service-learning and therefore, perhaps practitioners should attempt to involve more Asian/Asian American students in service-learning if diversity appreciation is an outcome they want to achieve with students. This finding may also provide practitioners with a better understanding of how to best support and challenge Asian/Asian American students who are engaged in service-learning. Moreover, the speculation that Asian/American group membership may be interacting with socio-economic class implies that practitioners should view students holistically when designing service-learning experiences and realize that identities and developmental processes intersect.

Lastly, as prior collegiate service participation was not a significant predictor in the multiple regression, this may indicate that high school students who are completing their service hours in the state of Maryland need greater structure to facilitate a meaningful learning experience, particularly in the case of diversity appreciation within the service context. Additionally, this finding may imply that practitioners should

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intentionally provide more resources, marketing, or efforts to recruiting students to participate in service-learning who may not have thought about this as an option, instead of continuing to work with students who are interested in getting involved in service-learning based on their prior experiences with service.

Limitations

There are several limitations of this study due to the research design. One major limitation is that all students who are engaged in curricular service-learning did not have an equal opportunity to participate in the study, as only students known to be involved in curricular service-learning had that opportunity. As the OCSL is not aware of all students that are engaged in curricular service-learning, undoubtedly, some students that are involved in curricular service-learning were not included in the study. Thus, it is unknown if the sample is representative of students who participate in curricular service-learning; the results of the survey cannot be generalized to all students engaged in curricular service-learning at the UMCP. This is also the case with the employment of the snowball sampling technique, even though its purpose is to seek out participants that the researchers might not be aware of.

An additional limitation is that the exact number of students who participate in multiple service-learning courses or both curricular and co-curricular service-learning and completed the survey more than once is unknown. Creators of the OCSL survey estimated that this number is very small and, to attempt to minimize the threat of treatment replication, the known duplicate *ARACSLS* respondents were eliminated from the data set. Furthermore, aggregating the ARAC and academic service-learning students may be erroneous in that these groups may be qualitatively different; ARAC students

seem to have more of a homogenous experience as opposed to students enrolled in service-learning courses.

Moreover, this research design did not allow for the examination of a comparison group of students who were not engaged in service-learning experiences. Therefore, it is difficult to state that appreciation of diversity outcomes are necessarily related to service-learning involvement, as there was no control group. Since there was a selection bias in those who participated in the survey, (i.e., it only included students that are involved in service-learning), this produces a selection threat to internal validity.

There are several omissions to the survey that are limitations. One example of this is the omission of a socio-economic class background measure. For example, the students involved in America Reads*America Counts all qualify for federal work-study, meaning that they demonstrate a need for federal financial aid. Although this does not necessarily dictate their socio-economic status, they may come from a lower class background than curricular service-learning students. This personal identity may be at work in terms of predisposing them to be open to diversity, perhaps even more so than racial background or gender (Green, 2001). Indeed, students of the same racial group do not belong to the same socio-economic class background and therefore may have different experiences within service-learning based on these identities. However, these relationships cannot be explored because students' social class backgrounds are unknown. Another limitation of the survey is that it is unknown what students' appreciation of diversity was previous to their service-learning experience (Whitt et al., 2001). If this measure was assessed beforehand, this would provide greater information on how diversity outcomes may be affected by service-learning involvement.

There are limitations of the instrument in terms of how it was constructed. For instance, the OCSL survey consists of self-reported measures. Thus, one must interpret the results with some hesitancy as such measurements may be a weak assessment of learning outcomes (Antonio et al., 2004; Eyler, 2000; Steinke & Buresh, 2002). In addition, as discussed in Chapter 3, the wording of the measurement of the appreciation of diversity item-set is another limitation of this survey, as well as the conceptual difference of the OCSL's appreciation of diversity scale from scales used in previous studies, which limits the extent to which one can assert conclusions by comparing the results of the various studies.

A difficulty with studying service-learning is the wide variety of service-learning experiences, which may or may not result from controllable factors, such as where the students served, the quality of the experience on-site, the academic discipline and content, or the predetermined learning outcomes. Thus it can be difficult to maintain a level of commonality of service experiences among students. This is more difficult with this study's examination of academic service-learning in comparison to co-curricular service-learning. To help minimize this problem, this study examined the type of service-learning experience as one of its independent variables.

It is also clear that appreciation of diversity is a complex concept and, furthermore, that its development takes longer than the period which most studies have to examine students and follow their development (Daloz et al., 1996; Green, 2001; Jones & Hill, 2001; Whitt et al., 2001). Thus, it seems that appreciation of diversity is difficult to capture and measure on a short basis of time, such as at the end of a semester of a service-learning experience as in this study. It is doubtful that this study allows for the

appropriate time length to adequately be able to study students' development of diversity appreciation. Thus, depiction of the contribution of service-learning on students' appreciation of diversity may be limited.

Although there are a number of limitations with this study, which result in caution in generalizing these findings, this does not negate the benefits of this study or the Office of Community Service-Learning's *Service-Learning Survey.* However, to address these limitations in the future, the researcher proposes content-based as well as methodological revisions to the *Service-Learning Survey.*

Suggestions for Office of Community Service-Learning Survey Instrument

Based on this research study, there are a variety of recommendations for the Office of Community Service-Learning's *Service-Learning Survey.* The first of these are additions or changes to the content of the survey. It is suggested that the *Service-Learning Survey* include a question of whether or not students have taken the survey previously. This way, researchers can reduce the treatment threat to internal validity by ascertaining which students are repeat takers of the survey. Additionally, the phrasing should be changed so that the *Service-Learning Survey* can measure collaborative leadership, civic engagement, and appreciation of diversity independently from how they were affected by the service-learning experience. Lastly, it would probably be beneficial to add a demographic question to assess students' socio-economic background, as this identity, in addition to the race, gender, and other identities that the survey currently investigates, is probably relevant for students and may relate to how they understand diversity within the context of service-learning. Although there has not been much research on how socio-economic class may influence students' service participation

outcomes (Jones & Hill, 2003; Raskoff & Sundeen, 2001; Youniss & Yates, 1997), Green (2001) contended that this identity might be more important in the development of students' openness to diversity than race or gender within the service context. Including a measure for socio-economic class background would allow for the examination of how this demographic characteristic may relate to learning outcomes in service-learning.

There are also some recommendations in regards to the methodology of how the *Service-Learning Survey* is conducted each semester. One suggestion in terms of methodology is to include a sample of students that are currently not engaged in service-learning. The inclusion of such a control group would allow for: increased confidence in the influence of service participation on appreciation of diversity and other learning outcomes, and increased control over extraneous factors. An additional survey could easily be created that includes outcome measures of collaborative leadership, civic engagement, and appreciation of diversity, as well as demographic information. Another potential recommendation is that students are given the survey prior to engaging in service-learning, in the beginning of the semester, and then at the end of the semester.

Suggestions for Future Research

Although it seems as though various identity groups, such as academic class background and gender, report significant differences in the contribution of service-learning on appreciation of diversity, it is not clear why this may be. A next step, then, would potentially be to better understand the lived experience of these students engaged in service-learning. A qualitative or phenomenological study of students in regards to gender or academic class background may provide insight to how students are making meaning from their service-learning experience and how, for instance, women may come

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to view diversity through service-learning in comparison to men and why they seem to be more likely to show gains in this area. Similarly, further research should be conducted to examine academic class standing and what impact collegiate experiences may have that lends to seniors having greater scores in the contribution of service-learning to appreciation of diversity.

One potential direction for future research is to further the understanding of Students of Color's experience with service-learning and appreciation of diversity. Although this study found that there were no significant differences between racial backgrounds in regards to the contribution of service-learning on appreciation of diversity, in the ANOVA, it could be that students' experiences by race are nonetheless different, particularly given the social construction of race in the United States. Even if it were found that racial group membership did not seem to influence the experience of students in service-learning, this would be beneficial information to have, particularly since the research in this area conflicts. As it stands, it is difficult to ascertain how Students of Color learn from service-learning because most of the research has focused primarily on White students. Research could also investigate whether Students of Color that participate in service-learning are qualitatively different in some way to Students of Color that do not.

Furthermore, the experience of Asian Americans in particular in service-learning should be further researched. It is unclear if racial group membership to Asian/Asian American is significant given the conflicting findings of the ANOVA and the multiple regression. Moreover, in addition to trying to see if there exists a difference in the Asian/Asian American experience in service-learning quantitatively, if there are

differences in this experience, further research should be dedicated to why this difference might exist, whether it be the model minority myth or other factors.

Eyler and Giles (1999), whose national study is still one of the most comprehensive on service-learning outcomes, suggested that learning about diversity is the first stage in students' development through service-learning. Therefore, another potential research area is a qualitative or phenomenological study on how student participants in service-learning learn about diversity issues. This study, the relationship between service-learning and appreciation of diversity as a result of this experience, could be examined from a qualitative lens altogether. Although the relationship between service-learning and openness to diversity has been espoused (Eyler & Giles; Green, 2001; Jones & Hill, 2001; Levine & Cureton, 1998; O'Grady, 2000), there has not been much research that explicitly focuses on how this relationship develops and evolves (Jones & Hill, 2001). Some researchers, such as Eyler and Giles, have examined the quantitative relationship between service-learning and diversity outcomes while Jones and Hill (2003) have conducted one of the few qualitative studies of service-learning, which did not focus explicitly on diversity outcomes. The one exception to this is a study performed by Jones and Hill (2001), who sampled six students and found that building relationships with those in the community were the primary means through which students learned about diversity. Green (2001) suggested that service-learning may facilitate White students' progression through their racial identity development, although this has not been substantiated through research. Thus, further investigation of how service experiences contribute to diversity outcomes would be beneficial. The

relationship between appreciation of diversity as a result of service-learning and identity development is another area of suggested research.

Although an appreciation of diversity as a result of service-learning construct was investigated in this study, it is not clear what the necessary and sufficient conditions to be able to develop appreciation of diversity are. Thus, based on previous research, an additional area of research may be to investigate the potential relationship between appreciation of diversity and cognitive development. It may be that, particularly for majority-identified students, students need to be at a certain level of cognitive development before they can appropriately grasp diversity-related issues and dynamics, as Eyler and Giles (1999) speculated. This would then potentially provide a strategy as to avoid Jones's (2002) notion of the "underside" of service-learning in which students' stereotypes are reinforced.

Although this study examined social identities such as race, gender, and academic class standing as a proxy for age, another potential identity to examine may be socio-economic class in the future. Currently, how students' class shapes how they make meaning of their experiences in service-learning has been overlooked (Jones & Hill, 2003; Raskoff & Sundeen, 2001; Youniss & Yates, 1997). Although race is generally a salient identity for students engaged in service, Green (2001) has hypothesized that often social class is as well. It may be that students from different class backgrounds experience service-learning differently or learn from this experience differently. Exploration of this topic would be beneficial to increase scholars' and practitioners' understanding of how one's class identity shapes one's outcomes within service involvement. It would also be beneficial to examine the intersections of identities, such

as race and class, as students are complex and their identities interact in their service-learning work (McEwen, 1996).

Lastly, further research should be devoted to exploring what factors service-learning practitioners can control and manipulate to enhance appreciation of diversity outcomes for their students. This may be especially relevant as several scholars have purported that the quality of the service-learning experience itself influences the learning outcomes that students are able to achieve (Eyler & Giles, 1999; Jones & Hill, 2003). Although the multiple regression model was significant and predicted 8% of the variance, 92% is left unexplained. If it is the case that the service-learning experience itself contributes more greatly to the contribution of service-learning to appreciation of diversity than demographic background characteristics, an examination of service-learning variables would be beneficial. In exploring past literature, potential factors may include the quality of the academic service-learning experience, such as: opportunity for meaningful reflection (Eyler & Giles; Jones & Hill, 2001; Téllez, 2000); explicitly teaching about oppression before students engage in service (Eyler & Giles; Green, 2001; Raskoff & Sundeen, 2001); the academic discipline and content; and, the predetermined learning outcomes and class objectives. The level of quality of the service experience itself may also be contributing factors, such as: the type of service broadly, such as Morton's (1995) categories of charity, project management, and social change, or in regards to where specifically students served; time spent in the service site (Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Daloz et al., 1996; Green; Jones & Hill, 2001); level of a reciprocal partnership with the community (Eyler & Giles; Jones & Hill, 2003); opportunity to build authentic relationships with those in the community (Daloz et al.;

Eyler & Giles; Jones & Hill, 2001, 2003; Morton; Rhoads, 1998); and, degree to which the service is addressing root causes (Morton).

Summary of Discussion

The purpose of this study was to investigate how social identities (i.e., race, gender, and academic class standing) and service-learning variables (i.e., service involvement prior to college and type of service-learning program) relate to how undergraduate students report their appreciation of diversity as result of participation in service-learning. The sample of students included in this study were involved in various service-learning courses and a federal work-study program, America Reads*America Counts, during the spring semester of 2004. These data were collected by the University of Maryland, College Park's Office of Community Service-Learning. These findings suggest that gender and academic class standing may relate to how students perceive the contribution of service-learning to their diversity appreciation. It seems that understanding how race may be a factor is complex; there is no significant difference in this reporting across races, but membership in the Asian/Asian American racial group accounts for some of the variance explained of the contribution of service-learning to appreciation of diversity. This seems to suggest either a Type I or Type II error. Characteristics that enhance the quality of the service-learning experience in respect to diversity outcomes should be further explored, as type of service-learning program appears as a significant predictor and contributes to the variance explained of students' reported diversity appreciation as a result of their service-learning participation. The relationship of service-learning prior to college does not seem to be important to appreciation of diversity within the context of service-learning. It is important to

recognize that this research is exploratory in nature and additional research should be

conducted in order to substantiate these findings.

**Service-Learning Course Survey
Office of Community Service-Learning**

Thank you for participating in the University of Maryland's **Service-Learning Survey**. The survey is administered by the Office of Community Service-Learning in order to explore the impact service-learning has on students' learning and development. Since 1999, over 2000 completed surveys have been returned, representing an over 85% response rate.

Please take a moment to complete this sheet and return it with your students completed surveys to the address below. You are also invited to email Barbara Jacoby at bjacoby@umd.edu with questions or concerns. Your support in finding time to administer these surveys during these last busy weeks of the semester is very much appreciated. **Thank you** for your continued efforts in support of service-learning at Maryland.

Additional questions are on the back of this sheet $\Rightarrow$

Semester	**Fall 2003**
Instructor	
Course Code	
Course Title	
Number of Students Enrolled	
Was the service for your course required or optional?	
How many students completed the service-learning component?	
Did you set a minimum of hours to be completed by the students?	
If so, how many?	

**Please direct questions and return
completed surveys and this cover sheet to:**

Barbara Jacoby
Director, Office of Community Service-Learning
1120 Stamp Student Union
bjacoby@umd.edu • *301-314-2273*

Instructor Survey

Question	
How many hours of **service**, on average, did your students complete?	
Was the service experience one-time or ongoing?	
Did students provide service as individuals, in groups/teams, or together as a class?	
Did you offer students preparation for the service experience?	
Were the **service sites** selected by you (the faculty) or by the students?	
If selected by you, did you pre-screen the service sites?	
Was the service activity chosen based on/prompted by community need?	
If service was based on community need, how was need identified?	
In the class, did you explicitly make **connections** between course content and the service activities?	
Did you explicitly help students apply course concepts to the service setting?	
Did you require **critical reflection** on the service experience?	
If yes, how many hours were spent on critical reflection?	
Was the reflection one-time or ongoing?	
Was reflection in the form of a journal?	
A reflection paper?	
Other written assignments? Please describe.	
Was reflection oral?	
Did you use other reflection methods? Please describe.	
How often did you give students feedback on their service experience?	
How often did you give students feedback on their critical reflection?	
Did you **evaluate** the service sites after the service?	
Did students evaluate the service sites?	
Did site supervisors evaluate the students?	

Curricular Service-Learning Survey: 2003-2004

The University of Maryland would like to better understand the impact that service-learning has on students, particularly how this experience has influenced your perspective on learning, your view of service, and your perspective of working in a diverse community. For each question, check the box indicating your response.

Name of the service-learning course in which you are enrolled:	The course code and number (e.g., EDCP 317):
Name of agency with which you worked:	

1. Please indicate your level of agreement with each statement about your service-learning course.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would not have done community service work this semester if I had not done it through this course.	☐	☐	☐	☐	☐
The community service component of this course helped me to see how the subject matter I learned can be applied in the real world.	☐	☐	☐	☐	☐
The community work I did through this course helped me to better understand the course content (e.g., lectures and readings).	☐	☐	☐	☐	☐
The community work I did in this course helped me to develop my academic writing skills.	☐	☐	☐	☐	☐
The community work I did in this course helped me to develop my critical thinking skills.	☐	☐	☐	☐	☐
I feel I would have learned more from this course if more time was spent in the classroom instead of doing community work.	☐	☐	☐	☐	☐
The course instructor helped me make connections between the service activity and the course content.	☐	☐	☐	☐	☐
The course readings helped me make connections between the service activity and the course content.	☐	☐	☐	☐	☐
The agency supervisor helped me make connections between the service activity and the course content.	☐	☐	☐	☐	☐
The idea of combining service in the community with University coursework should be practiced in more classes at the University of Maryland.	☐	☐	☐	☐	☐
The community service component of this course helped me clarify my professional goals.	☐	☐	☐	☐	☐

2. Please indicate your level of agreement with each statement about your participation in service aside from this course and this semester.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before I came to UM, I participated in community service activities.	☐	☐	☐	☐	☐
I participated in community service at UM prior to this experience.	☐	☐	☐	☐	☐
Before I graduate from UM, I anticipate participating in community service activities again.	☐	☐	☐	☐	☐
After graduation from UM, I anticipate participating in community service activities.	☐	☐	☐	☐	☐

	Yes	No	
I have used the Office of Community Service-Learning website (www.csl.umd.edu).	☐	☐	
I have visited the on-campus Office of Community Service- Learning (1120 Stamp Student Union).	☐	☐	
My high school had a community service requirement for graduation.	☐	☐	*If yes, how many hours were required:*

(over)

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3. To what extent has your community service experience contributed to your:

	Very Little	Some	Quite A Bit	Very Much
interacting with students of a race or ethnicity different than your own	☐	☐	☐	☐
interacting with students of different religious or political backgrounds	☐	☐	☐	☐
understanding of people from races/ethnicities different than your own	☐	☐	☐	☐
understanding how your race(s) shape your identity	☐	☐	☐	☐
understanding diverse cultural, political and intellectual views	☐	☐	☐	☐
willingness to seek out new experiences	☐	☐	☐	☐
awareness that systems can disadvantage groups of people	☐	☐	☐	☐
knowing/articulating your priorities in life	☐	☐	☐	☐
acting in ways consistent with your values	☐	☐	☐	☐
committing to activities that are important to you	☐	☐	☐	☐
Ability to work well with others	☐	☐	☐	☐
ability to foster a shared vision when working with others	☐	☐	☐	☐
respecting opinions other than your own	☐	☐	☐	☐
comfort level with conflict	☐	☐	☐	☐
ability to work in changing environments	☐	☐	☐	☐
openness to new ideas	☐	☐	☐	☐
ability to learn from the community what its needs are	☐	☐	☐	☐
ability to examine social problems in order to address root causes as well as immediate needs	☐	☐	☐	☐
interest in addressing national or global social problems	☐	☐	☐	☐
commitment to lifelong involvement in the community to address social problems	☐	☐	☐	☐
belief that individuals or groups doing community service can solve social problems	☐	☐	☐	☐
belief that individuals or groups taking political action can solve social problems	☐	☐	☐	☐
belief that it is your responsibility as someone who lives in the community to be involved in solving the community's social problems	☐	☐	☐	☐

What is your racial background?
- ☐ African/African American
- ☐ Asian/Asian American
- ☐ Caucasian/White
- ☐ Latino/a
- ☐ Native American
- ☐ Bi/Multi-racial
- ☐ Other

What is your gender?
- ☐ Male
- ☐ Female
- ☐ Transgender

What is your age?
- ☐ 17 or less
- ☐ 18-19
- ☐ 20-21
- ☐ 22-23
- ☐ 24 or older

What is your place of residence this semester?
- ☐ Residence hall
- ☐ Commons/Courtyard
- ☐ Fraternity/sorority
- ☐ Your family's home
- ☐ Other off-campus housing

How many college credits have you earned?
- ☐ 1-29 (freshman)
- ☐ 30-59 (sophomore)
- ☐ 60-89 (junior)
- ☐ 90-120 (senior)
- ☐ more than 120

What is your current college(s)?
- ☐ AGNR
- ☐ ARCH
- ☐ ARHU
- ☐ BMGT
- ☐ BSOS
- ☐ CMPS
- ☐ EDUC
- ☐ ENGR
- ☐ HLHP
- ☐ JOUR
- ☐ LFSC
- ☐ L & S

How many hours/week do you work?
- ☐ None
- ☐ 1-10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ more than 40

Where did you do most of your service for this class?
- ☐ On Campus
- ☐ Prince George's County
- ☐ Montgomery County
- ☐ Washington, DC
- ☐ In or near Baltimore
- ☐ Other

Approximately how many hours of service have you completed this semester in this course?
- ☐ 1-25 hours
- ☐ 26-50 hours
- ☐ 51-75 hours
- ☐ 76-100 hours
- ☐ more than 100 hours

APPENDIX C

AR*AC Service-Learning Survey: 2003-2004

The University of Maryland would like to better understand the impact that service-learning has on students, particularly how this experience has influenced your perspective on learning, your view of service, and your perspective of working in a diverse community. For each question, check the box indicating your response.

1. Please indicate your level of agreement with each statement about your experience in America Reads* America Counts.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would not have done community service work this semester if I had not done it through a Federal Work-Study position.	☐	☐	☐	☐	☐
In choosing my future career, I would prefer positions that allow my work to benefit the community.	☐	☐	☐	☐	☐
This experience influenced my decision to explore education as a possible career major.	☐	☐	☐	☐	☐
This experience helped me clarify my professional goals.	☐	☐	☐	☐	☐
Please answer the following two questions if you are an EDUCATION MAJOR ONLY					
This experience confirmed my decision to major in education.	☐	☐	☐	☐	☐
This experience influenced my decision to change my major from education to another field.	☐	☐	☐	☐	☐

2. Please indicate your level of agreement with each statement about your participation in service.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before I came to UM, I participated in community service activities.	☐	☐	☐	☐	☐
I participated in community service at UM prior to this experience.	☐	☐	☐	☐	☐
Before I graduate from UM, I anticipate participating in community service activities again.	☐	☐	☐	☐	☐
After graduation from UM, I anticipate participating in community service activities.	☐	☐	☐	☐	☐

	Yes	No	
I have used the Office of Community Service-Learning website (www.csl.umd.edu).	☐	☐	
I have visited the on-campus Office of Community Service-Learning (1120 Stamp Student Union).	☐	☐	
My high school had a community service requirement for graduation.	☐	☐	*If yes, how many hours were required:*

3. To what extent has your community service experience contributed to your:

	Very Little	Some	Quite A Bit	Very Much
interacting with students of a race or ethnicity different than your own	☐	☐	☐	☐
interacting with students of different religious or political backgrounds	☐	☐	☐	☐
understanding of people from races/ethnicities different than your own	☐	☐	☐	☐
understanding how your race(s) shape your identity	☐	☐	☐	☐
understanding diverse cultural, political and intellectual views	☐	☐	☐	☐
willingness to seek out new experiences	☐	☐	☐	☐
awareness that systems can disadvantage groups of people	☐	☐	☐	☐
knowing/articulating your priorities in life	☐	☐	☐	☐
acting in ways consistent with your values	☐	☐	☐	☐
committing to activities that are important to you	☐	☐	☐	☐
ability to work well with others	☐	☐	☐	☐

(over)

	Very Little	Some	Quite A Bit	Very Much
ability to foster a shared vision when working with others	☐	☐	☐	☐
respecting opinions other than your own	☐	☐	☐	☐
comfort level with conflict	☐	☐	☐	☐
ability to work in changing environments	☐	☐	☐	☐
openness to new ideas	☐	☐	☐	☐
ability to learn from the community what its needs are	☐	☐	☐	☐
ability to examine social problems in order to address root causes as well as immediate needs	☐	☐	☐	☐
interest in addressing national or global social problems	☐	☐	☐	☐
commitment to lifelong involvement in the community to address social problems	☐	☐	☐	☐
belief that individuals or groups doing community service can solve social problems	☐	☐	☐	☐
belief that individuals or groups taking political action can solve social problems	☐	☐	☐	☐
belief that it is your responsibility as someone who lives in the community to be involved in solving the community's social problems	☐	☐	☐	☐

What is your racial background (check all that apply)?
- ☐ African/African American
- ☐ Asian/Asian American
- ☐ Caucasian/White
- ☐ Latino/a
- ☐ Native American
- ☐ Bi/Multi-racial
- ☐ Other

What is your gender?
- ☐ Male
- ☐ Female
- ☐ Transgender

What is your age?
- ☐ 17 or less
- ☐ 18-19
- ☐ 20-21
- ☐ 22-23
- ☐ 24 or older

How many college credits have you earned?
- ☐ 1-29 (freshman)
- ☐ 30-59 (sophomore)
- ☐ 60-89 (junior)
- ☐ 90-120 (senior)
- ☐ more than 120

What is your current college(s)?

- ☐ AGNR ☐ EDUC
- ☐ ARCH ☐ ENGR
- ☐ ARHU ☐ HLHP
- ☐ BMGT ☐ JOUR
- ☐ BSOS ☐ LFSC
- ☐ CMPS ☐ L & S

How many hours/week do you work for AR*AC?
- ☐ None
- ☐ 1-10
- ☐ 11-20
- ☐ 21-30
- ☐ 31-40
- ☐ more than 40

What is your place of residence this semester?
- ☐ Residence hall
- ☐ Commons/Courtyard
- ☐ Fraternity/sorority
- ☐ Your family's home
- ☐ Other off-campus housing

How many semesters have you participated in AR*AC?
- ☐ 1 semester
- ☐ 2 semesters
- ☐ 3 semesters
- ☐ 4 semesters
- ☐ 5 or more semesters

Service-Learning Survey Informed Consent Form

I state that **I am over 18 years of age** and wish to participate in a program of research being conducted by Dr. Barbara Jacoby and the staff of the Office of Community Service-Learning at the University of Maryland College Park.

The **purpose** of this research is to examine the relationship between student experiences, attitudes, and outcomes in relation to curricular, co-curricular, and Federal Work-Study funded service activities. Specifically, the Office of Community Service-Learning would like to learn more about students' development of civic engagement, collaborative leadership, and appreciation of diversity as a result of their experience in service-related activities.

The **procedure** of this *Service-Learning Survey* includes my completion of a survey (attached) which will take approximately ten minutes.

All information collected in this study is **confidential** to the extent permitted by law. I understand that the data I provide will be grouped with data others provide for reporting and presentation and that my name will not be used. Additionally, I understand that my responses will not be provided to my service-learning group leader, service-learning course instructor, or Federal Work-Study employer or supervisor. I understand that my responses will not affect my group standing, course grade or performance evaluation.

I do not foresee any **risks** associated with my participation in the *Service-Learning Survey*.

The *Service-Learning Survey* is not designed to **benefit** me directly, but to help the Office of Community Service-Learning and its investigators learn more about the student learning and development outcomes of service-learning. I am free to ask **questions** or **withdraw** from participation at any time and without penalty.

I understand that I may **contact**, Dr. Barbara Jacoby, Principal Investigator of the Service-Learning Survey with further questions. She can be reached at the Office of Community Service-Learning, 1120 Stamp Student Union, College Park, Maryland 20742; 301-314-7253; or, at bjacoby@umd.edu. If I have any questions about my rights as a research subject or wish to report a research related injury, I may also contact the Institutional Review Board Office at University of Maryland, College Park, Maryland 20742 or by email at irb@deans.umd.edu or telephone at 301-405-4212.

Name of Participant: _____

Signature of Participant: _____

Date: _____

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