ABSTRACT

Title of Dissertation: THE PSYCHOLOGICAL FOUNDATIONS OF HOMEGROWN RADICALIZATION: AN IMMIGRANT ACCULTURATION PERSPECTIVE

Sarah Louise Lyons, Doctor of Philosophy, 2015

Dissertation directed by: Dr. Michele Gelfand
Department of Psychology

In the post-9/11 era, an increasing number of extremist threats are homegrown. Radical organizations such as the Islamic State are actively targeting Muslim immigrants and nationals of Western countries as recruits. Yet, little research has addressed the factors that drive immigrants to aggress against their country of settlement. We integrate the terrorism and immigrant acculturation literatures to suggest that cultural identification processes play a key role in the radicalization of Muslim immigrant and minority populations. Specifically, we propose that "marginalized" immigrants who do not identify with either their heritage culture or the culture of the larger society (Berry, 1970, 1997) have experienced significance loss (Kruglanski, Chen, Dechesne, Fishman, & Orehek, 2009) and are at the greatest risk for radicalization due to threats to significance. Moreover, we argue that this can be exacerbated by exclusion from others in the larger society. In Study 1, we show in a sample of 198 Muslims in the United States that

marginalized individuals experience significance loss, which is exacerbated by exclusion from the larger society, and in turn increases support for radical groups, ideologies and behavior. In Study 2, we find partial replication of this model outside the American context in a sample of 204 Muslims in Germany. In Study 3, we move to the lab and demonstrate in a sample of 145 first- and second-generation immigrants in the United States that marginalization, and to some extent exclusion, are risk factors for significance loss outside of the Muslim population, and that significance loss contributes to support for radicalism. Implications for psychological science and social policy are discussed.

THE PSYCHOLOGICAL FOUNDATIONS OF HOMEGROWN RADICALIZATION: AN IMMIGRANT ACCULTURATION PERSPECTIVE

by

Sarah Louise Lyons

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctorate of Philosophy
2015

Advisory Committee:
Professor Michele Gelfand, Chair
Professor Paul Hanges
Professor Arie Kruglanski
Professor Gary LaFree
Professor Edward Lemay

Acknowledgements

First and foremost, I would like to thank my adviser, Michele Gelfand, for her immeasurable support and guidance throughout not only this project but also my entire graduate student career. I recognize how lucky I am to have had a mentor who invested so much of herself in her students' development. Her passion for cultural psychology research was contagious, and helped stimulate my own sense of academic curiosity.

I also want to acknowledge my committee members Paul Hanges, Gary LaFree, Edward Lemay, and particularly Arie Kruglanski for their instrumental support in developing this research. In addition, the contributions of Hedieh Mirahmadi and Mehreen Farooq at WORDE and Marieke van Egmond at Jacobs University, Bremen were invaluable in completing this project.

Next, I am thankful for the support of the SDOS community, which ranged from statistical consultation to therapeutic counsel. I especially want to thank Elizabeth Salmon, who has been there since the beginning of this journey when we were both learning the ropes as undergraduate research assistants at the University of Virginia.

And this all certainly would not have been possible without the dedication of the research assistants working with me at the University of Maryland. Special thanks to Kristin Corcoran, Melissa Lee, Sheena Patel, Shuping Yang, Sophie Brasseux, Tony Yoon, Patrick Maloney, Will Talbot, and Ogue Addeh. I am so grateful for their commitment and am privileged to have been witness to their growth as students.

Above all, I am indebted to my family, friends and loved ones for their support over the past years. My heartfelt appreciation goes to Anna Miller, a random roommate turned best friend, my rock throughout graduate school. I am thankful for serendipitously

finding my husband Milan Padilla along the way, who, through always inspiring me to maintain a positive outlook and strive to be my best self, undoubtedly affected my work for the better. And the most profound gratitude goes to my parents, Ann and Scott Lyons, who instilled in me early on a love for learning and exploration.

Finally, this research would not have been possible without the generosity of several funding organizations:

This material is based upon work supported by the National Science Foundation Graduate Research Fellowship under Grant No. 2011097279.

The final year of dissertation writing was supported by a Dissertation Completion Fellowship from the American Association for University Women.

This research was supported by the Science and Technology Directorate of the U.S. Department of Homeland Security through the Center for the Study of Terrorism and Behavior (CSTAB – Center Lead) Grant made to the START Consortium (Grant # 2012-ST-61-CS0001). The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security, or START.

This research was supported by the U.S. Army Research Office under Grant W911NF-08-1-0144.

This research was also funded by an Anneliese Maier Research Award from the Humboldt Foundation to Dr. Michele Gelfand.

TABLE OF CONTENTS

List of Tables

List of Figures

Chapter 1: Introduction and Overview

On April 15, 2013, an annual celebration of Boston spirit and patriotism turned tragic when two explosions at the finish line of the Boston Marathon killed three people and injured more than 260 others. The suspects, brothers Tamerlan and Dzhokhar Tsarnaev, were young ethnic Chechen men who had resided in the United States for at least 10 years. It did not take long for the Internet media to explode with anecdotes about the brothers in the days following the event. Tamerlan did not seem to acclimate well to American culture. One classmate said Tamerlan claimed to have never had an American friend, that he didn't understand Americans (Shane, 2013). Tamerlan's one true passion was for boxing. However, although he was a talented boxer and won the title of Golden Gloves heavyweight champion of New England, he was forced to give up his dream when he was barred from participating in national championship because he was not a United States citizen (Sontag, Herszehorn, & Kovaleski, 2013). Tamerlan was not completely accepted by the Muslim community either. He was admonished by members of his Cambridge mosque for disrupting a sermon to share his non-mainstream views (Kaleem, 2013). His younger brother Dzhokhar did not appear to have experienced as much frustration in the United States, but had recently displayed an interested in learning more about his Chechen roots. Their family had never stayed in one place, having moved from the Russian territory of Kalmykia to Kyrgyzstan to Chechnya before seeking asylum in the United States.

In 2010, Faisal Shahzad attempted to detonate a car bomb in Times Square. Shahzad was born in Pakistan in 1979 and moved to the United States in 1998, becoming a naturalized citizen in 2007. He studied computer science at an American university and

lived in a house in the Connecticut suburbs of New York. After a financial crisis involving the loss of his house in 2008, he began to become more involved in Islam and politics. He once wrote Muslim friends asking for advice on how to cope with the maltreatment of Muslims in a peaceful way, knowing that violence toward innocents was forbidden by Islam. He asked, "Can you tell me a way to save the oppressed? And a way to fight back when rockets are fired at us and Muslim blood flows? ... Everyone knows how the Muslim country bows down to pressure from west. Everyone knows the kind of humiliation we are faced with around the globe" (Elliott, 2010). Ultimately, Shahzad visited Pakistan in 2009 to train with the Pakistani Taliban before his failed attack in 2010 (Kleinmann, 2012).

In 2003, eleven Northern Virginia men were charged with conspiracy to train for and participate in violent jihad overseas. The team included four American-born converts to Islam, two of whom had served in the Marines and two in the Army, a South Korean convert with a degree from Virginia Tech in engineering, a Pakistani-American kitchen designer, a Yemeni son of a diplomat, and a computational biology PhD student at George Mason University. The men gravitated toward each other at a Salafi mosque in Falls Church, Virginia, and later withdrew from the mosque community to further their radicalization in private meetings. The men trained at firing ranges and practiced at paintball war games at facilities in Virginia (Silber & Bhatt, 2007).

What the aforementioned examples have in common is that all of the offenders were either born or spent substantial time in the United States. Faisal Shahzad was a naturalized citizen. The Tsarnaev brothers had lived in the United States for ten years. The Virginia Paintball group consisted of American-born men. Although earlier terrorist

threats were largely considered to come from abroad, more and more threats in the post-9/11 era originate from within country borders. As recently as January of 2015, two French citizens attacked the headquarters of the satire publication Charlie Hebdo in Paris, killing twelve people.

As the Islamist extremist movement has increased its presence on the Internet, they have launched a call for "Jihad in your own countries" (Rosenbach & Stark, 2011). This phenomenon of individuals plotting and committing extremist violence in their own countries is known as homegrown terrorism. The Congressional Research Service defines homegrown terrorism as "terrorist activity or plots perpetuated within the United States or abroad by American citizens, permanent legal residents, or visitors radicalized largely within the United States" (Bjelopera & Randol, 2010). This definition of homegrown terrorism can include perpetrators with or without recent immigrant backgrounds, and can describe variants of terrorism ranging from radical Islamism to domestic right-wing terrorism. For the purpose of this research, however, we are primarily interested in the version of homegrown terrorism wherein the perpetrators are Muslim immigrants (Studies 1 and 2) and immigrants from a variety of immigrant backgrounds (Study 3), and the targets of terrorist activity are nationals of the country within which the perpetrators live. More specifically, we focus on the antecedents of radicalism in the immigrant population rather than homegrown terrorist activity itself, as elucidating the factors that make individuals more or less vulnerable to radicalization is integral to the success of counterterrorism efforts.

Homegrown plots have been on the rise since the September 11th attacks, and have dramatically skyrocketed in the past few years. Between September 11th and May

2009, American authorities made 22 arrests for jihadist-inspired terrorist plots by American citizens or permanent residents of the United States; between May 2009 and November 2010 alone, that number was 21 (Bjelopera & Randol, 2010). Perhaps the most serious homegrown threat at present is the Islamic State. This movement has experienced great success in recruiting foreign fighters online. As many as three thousand individuals from Western countries have gone to Iraq or Syria to fight with the Islamic State, and there is the concern that they will come back radicalized and prepared to carry out attacks on their own soil (Barrett, 2014; U.S. House of Representatives, Committee on Homeland Security, 2014; Benach & Riechmann, 2014). The Islamic State is technologically savvy, making themselves accessible worldwide through outlets such as Facebook, Twitter, and Instagram (McCoy, 2014; Barrett, 2014). A teenager interested in joining the movement can consult an online Frequently Asked Questions page to find out whether it would be better to have his braces removed before or after flying to Syria (Parasczcuk, 2014). Social media has also enabled the Islamic State to carefully balance the projection of its extreme message with personally relatable content that appeals to the "average" Western person, such as posting a picture of a militant holding a cat one day and a photo of a brutal slaughter the next (McCoy, 2014).

The Islamic State is just one example of the way radical organizations have restructured and changed their recruitment tactics in the post-9/11 era. As it becomes harder for organizations such as al Qaeda to infiltrate foreign countries under the watch of homeland security, jihad has become "leaderless" (Sageman, 2011) and al Qaeda has built a grassroots network of would-be terrorists. Anyone with a computer and an Internet connection can access al Qaeda's catalogue of propaganda and recruitment materials.

Although recruits may be inspired and motivated by al Qaeda, they need not ever make a trip abroad to participate in a training camp or personally meet with al Qaeda officials (Hoffman, 2006). Instead, they can participate in "virtual training camps" (Crone & Harrow, 2011) and still receive support from high-ranking al Qaeda spokespeople. The homegrown movement not only provides the resources to act as a lone wolf, but also fosters a sense of organization and purpose (Kohlmann, 2008). It allows individuals to benefit from the support and guidance of a community without ever having to leave home (Post, McGinnis & Moody, 2014). Radical organizations purposefully use English to attract second and third generation Muslims abroad who speak no other languages.

Although scholars have long been studying the factors that give rise to extremist groups abroad, the motivations of homegrown terrorists are less clear. In many cases these are immigrants who have moved to a new country to start a life there, or second-generation citizens who have grown up in that society. Why would anyone want to aggress against their own country? What about their acculturation experience has driven them to radicalization? Surprisingly little is known about the psychological mechanisms that give way to such behavior, but it is important to gain a better understanding of the factors that put immigrant and minority populations at risk of becoming radicalized. This will be some of the first work to explicitly invoke immigrant identity processes[1] in the study of the antecedents of radicalization.

We propose a new theory to identify the risk factors that make immigrants susceptible to recruitment by extremist organizations. Immigrants are subject to a host of acculturation challenges, including negotiating multiple cultural identities and facing

[1] Although these processes also apply to American-born minorities (i.e., second- and third-generation), we will address our population of interest as "immigrants" for the sake of brevity.

discrimination from the host society. What about radical groups resonates with individuals who have had these experiences? We begin with a discussion of existing frameworks that describe terrorist motivations, specifically those pertinent to homegrown terrorism, identifying specific psychological processes that might be invoked by identity management challenges and exclusion experiences. Specifically, we will discuss the threat of "significance loss" that affects so many immigrants (Kruglanski et al., 2009). We will then go on to review what is known about patterns of acculturation and outcomes associated with different levels of identification with immigrants' host and origin cultures. We will argue that failing to identify with either the heritage or host cultures puts individuals introduces a threat to personal significance that could thrust them toward fulfilling needs for self-worth by identifying with and working on behalf of an radical organization. We then ask which factors might exacerbate this effect. Because exclusion by the host culture is such a common threat to immigrants' well-being, we will delve into the psychological and behavioral consequences of exclusion from the social psychology literature and propose that exclusion from the host society exacerbates the vulnerability of immigrants who lack belongingness with any culture. We will introduce three studies to test our theory.

Chapter 2: What Motivates a Terrorist?

Psychologists, sociologists, criminologists and political scientists have failed to identify a typical "profile" of a terrorist based on individual characteristics. Radicalized individuals are no different than most other people in terms of psychopathological diagnoses or personality attributes (Atran, 2003; Horgan, 2003). Surprisingly, many terrorists come from middle-class, moderately religious families, are highly educated and speak several Western languages (Sageman, 2004). Rather, the motivation of an individual to become radicalized and commit acts of violence appears to arise from a constellation of macro and micro level factors, and the transition from adopting radical beliefs to engaging in violence does not follow a predictable trajectory (McCauley & Moskalenko, 2008; Taylor & Horgan, 2006).

However, less work has explored what motivates a *homegrown* terrorist, which is the purpose of this research. Homegrown terrorists are unique in that they are usually immigrants or minorities who are radicalized in the same country that they perceive as the enemy. In what follows, we will review four prominent models of radicalization that apply to homegrown terrorism: Moghaddam's "Staircase to Terrorism," the New York Police Department's four stages of radicalization, Sageman's four-prong approach, and Kruglanski's quest for significance. Many researchers have theorized about pathways to radicalization (e.g., Atran, 2003; Borum, 2003; McCauley & Moskalenko, 2008), but we focus on these four models due to their emphasis on threats that are particularly relevant to the experience of immigrants, including identity processes and perceived exclusion by mainstream society.

Moghaddam's Staircase to Terrorism

Moghaddam's "Staircase to Terrorism" metaphor describes the six levels through which individuals become radicalized and move toward legitimizing violent extremism (Moghaddam, 2005). The ground floor contains subjective perceptions of *deprivation*. A person may feel that his group, such as ethnic or religious minority group, has received disproportionately unfair treatment in society. Such perceptions of deprivation may threaten the stability of one's personal or collective identity. On the first floor, individuals consider their opportunities to address their grievances, and whether this can be done in a way that offers procedural justice through use of the democratic process (Tyler & Huo, 2002) and if they have the social mobility to engage in action. For instance, disenfranchised persons could participate in a peaceful protest or engage in community or political dialogue. This was Faisal Shahzad's original attempt as communicated in his letter toward Muslim friends. If the individual cannot find a way to address their grievances in a constructive fashion, which was the case for Shahzad, he may move to the second floor, displacement of aggression. Here, the discontent is channeled toward a target. For instance, the United States government might be blamed for the maltreatment of Muslim Americans.

Those who move on from identifying the target to considering courses of action to displace aggression move to the third floor, moral engagement. At this point, individuals become engaged with like-minded others who are able to share each other's grievances and thus fulfill a need for affiliation (Moghaddam, 2005). Through the establishment of a group identity, they highlight the us-them demarcation to legitimize violent action

through disengaging with the real world and morally engaging with the ideology of terrorist organizations.

From here, recruits can be drawn onto the fourth floor and formally join a terrorist organization, which offers both an avenue for addressing grievances and a place of belonging for disaffected individuals (Moghaddam, 2005). Once on the fourth floor, the us-them categorization between those inside and outside the terrorist organization is solidified as the recruit is socialized into the traditions, goals and methods of the group. At this point, the recruit is fully indoctrinated and cannot escape the hold of the organization. On the fifth and sixth floors, recruits are taught to obey and conform, and sidestep inhibitory mechanisms to engage in violent jihad. Although this model was originally designed with non-Western radicals in mind, several of these stages are applicable to homegrown recruits. Muslim Americans who have experienced discrimination in the post-9/11 era may have come to identify the United States government as responsible for disposing an ideology of intolerance, and find solace in meeting and identifying with others who have had the same experiences. Next, we look to a model that was specifically developed in the context of homegrown terrorism.

NYPD's Radicalization in the West Model

The New York Police Department's publication "Radicalization in the West" proposes a model based on case studies of known homegrown terrorists. The model highlights four stages of homegrown radicalization: pre-radicalization, self-identification, indoctrination, and jihadization (Silber & Bhatt, 2007). Throughout the process, individuals may be subject to influence by radical others at *incubators*, or nodes where like-minded people congregate. A major incubator is the Internet, with thousands of

extremist websites and chat rooms. In the pre-radicalization stage, environmental and personal characteristics affect an individual's risk of being radicalized. Environmental factors that play a role in the pre-radicalization stage include socialization with others of the same culture and religion, particularly if these communities tend to be isolated from the majority culture. Muslim males between the ages of 15 and 35 appear to be particularly vulnerable to the influence of extremism, as many of these individuals are at a time in their lives where they are looking to identify who they are and find the "meaning of life" (Silber & Bhatt, 2007). According to the analysis of case studies of Western-based terror plots, most of these men do not have a previous criminal history and are not especially religious at the start of their radicalization.

During the second stage, self-identification, individuals are catalyzed by some crisis that presents a threat for establishing an identity. The crisis could be economic in nature, such as losing a house in the case of Faisal Shahzad; social, including real or perceived discrimination or alienation, such as Tamerlan Tsarnaev's exclusion from boxing; political, such as international conflicts between Muslims and non-Muslims; or personal, such as a death in the family (Silber & Bhatt, 2007). One could imagine that any of these events might exacerbate the existing struggle of an immigrant to find their own identity in between two cultures, which could be considered a crisis in and of itself. These kinds of crises can propel individuals to seek answers through religious texts, social networks, or the Internet. During this search, it is likely that the individual will be exposed to a radical interpretation of Islam, and may become alienated from his former life and begin to affiliate more with like-minded others. In the third stage, indoctrination, the individual accepts a religious-political worldview that condones violence against any

un-Islamic target. During the final stage, jihadization, the individual mobilizes toward accepting jihad as a personal obligation and begins to engage in operational planning (Silber & Bhatt, 2007). At this point, the individual may work independently or become accepted to a group that works collectively. The NYPD model highlights identification and belongingness needs that are crucial for immigrants trying to establish themselves in a new society, or second- or third-generation Muslim minorities trying to find their place between two cultures. It also demonstrates the powerful effect of a critical life crisis that can catalyze an individual toward self-destructive coping strategies.

Sageman's Four-Prong Model

As compared to the previous models that describe sequential stages of radicalization, Sageman's model conceptualizes radicalization as emerging from the interplay of four factors: a sense of moral outrage, a specific worldview, resonance with personal experiences, and mobilization through networks (Sageman, 2008). *Moral outrage* is the result of an event interpreted as a moral violation. For instance, Zachary Chesser of Fairfax County, Virginia lodged death threats at the creators of "South Park" after the series depicted the Prophet Muhammad wearing an animal costume, which was interpreted as a moral offense (Kleinmann, 2012). The specific worldview provides the context for interpreting moral violations, such as that they are part of a unified Western strategy to wage war against Islam (Sageman, 2008). *Resonance with personal experiences* refers to moral violations with which one can personally identify, such as perceived discrimination or exclusion on account of being Muslim. Finally, *mobilization through networks* involves allying with like-minded people who can empathize with and confirm their interpretation of events (King & Taylor, 2011; Sageman, 2008).

Mobilization can occur on the Internet, where the Islamic social movement provides an outlet for Muslim Americans to find acceptance and validation.

Kruglanski's Significance Quest Theory

The aforementioned models all highlight personal or group grievances that precipitate the radicalization process. The ground floor of Moghaddam's staircase contains subjective perceptions of deprivation; the self-identification stage of the NYPD model can be characterized by an identity-related crisis such as discrimination; Sageman's moral outrage factor may be linked to unfair treatment of Muslims. Such grievances have been discussed by Kruglanski and colleagues as sources of *significance loss* (Kruglanski et al., 2009). Individuals strive to find meaning in their lives in a universe where one's human presence is finite. This is called a *quest for significance*. The quest for significance can sideline other competing goals for self-preservation, justifying risky means for achieving significance gain (Kruglanski et al., 2013). For example, committing to jihad and potentially sacrificing one's life for a higher cause offers status, honor and respect as a martyr (Crenshaw, 2007), thereby gaining personal significance.

In addition to earning status and recognition, fulfilling a role in an extremist organization can also restore a *loss* of significance. Loss in significance can be attributed to individual and social causes, including personal trauma (e.g., Faisal Shahzad's loss of his house), humiliation, and perceived maltreatment by society (Kruglanski et al., 2009). If an individual feels he has been treated unjustly as compared to others in society because of his ethnicity or religion, the humiliation of being treated with disrespect might engender a sense of inferiority, and consequently lead to significance loss. For example, Muslims in Diasporas who feel alienated by the local society might experience

significance loss, and then engage in a quest for emotional and social support (Kruglanski et al., 2009; Sageman, 2004) in order to establish a sense of purpose. Preliminary work has found support for this quest. Analysis of Pew Global Attitude Surveys revealed that perceived discrimination was associated with justification for suicide bombings amongst American and European Muslims (Victoroff, Adelman, & Matthews, 2012).

Additionally, some empirical evidence for the significance quest has revealed that individuals who experience a loss in significance engage in a "collectivistic shift," wherein a person becomes especially aware of one's group norms and starts to abide by them (Kruglanski, Gelfand, & Gunaratna, 2012). This is hypothesized to be the case because belonging to and acting on behalf of a collective for a common cause should reestablish one's own significance. In two experimental studies, individuals who were given failure as opposed to success feedback endorsed interdependence more and independence less, and preferred to work in a group instead of alone. In an online study of twelve Arab countries along with Pakistan and Indonesia, low success in life was related to stronger identification with collectives such as one's nation or religion (Kruglanski, Gelfand, & Gunaratna, 2012). Although the relationship between significance loss and collectivistic shift has yet to be explored in an immigrant sample, significance loss is a crucial threat for immigrants who are making new lives for themselves and negotiating cultural identities, and those who lack a collective to identify with might seek out a new group to gain significance.

Summary

All four models have highlighted the important role of identity processes in pathways to homegrown radicalization. For instance, the third floor of Moghaddam's

staircase involves forging a group identity with individuals who share the same grievances, and the NYPD model includes an identity threat stage that results in a search for affiliation with like-minded others. Individuals who are searching for their identity and place in the world are particularly susceptible to groups that offer a sense of certainty, purpose and commitment (Schwartz, Dunkel, & Waterman, 2009). Joining a highly entitative group with a clear ideology has been shown to reduce uncertainty. (Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007). Identity searching is a critical issue for Muslim immigrants and minorities residing in the United States, who are caught between cultures and may lack a sense of clear belongingness (Stroink, 2007). These individuals in particular may be compelled to regain significance to confirm their sense of self-worth by joining a supportive group that promises revenge against a society that has not been accepting of them. This could ultimately lead to moral disengagement and acceptance of radical strategies to counter maltreatment from the host society perceived as relative deprivation.

The aforementioned perspectives have been extremely influential in theorizing on homegrown radicalization; however, little empirical work has been conducted (Borum, 2011). Moreover, despite the clear relevance of identity issues among immigrant populations, homegrown terrorism research has not looked to the extensive literature on immigrant acculturation, with few exceptions (e.g., Simon & Grabow, 2010; Simon, Reichert, & Grabow, 2013; Simon & Ruhs, 2008). This is the gap that we intend to fill with the present research. In what follows, we will review the acculturation literature and argue that identity issues among immigrants threaten one's significance and are a precipitating force toward radicalization.

Chapter 3: Acculturation Processes

According to the United States Census Bureau's 2010 American Community Survey, about 40 million immigrants reside in the United States, amounting to thirteen percent of the total US population (Passel & Cohn, 2012). More than half of this figure is accounted for by Latin American immigrants. Of the remaining amount, about ten million come from South and East Asia, nearly six million from Europe and Canada, and almost three million come from the Middle East and Africa. As the immigrant community grows, the American cultural landscape is changing too. The United States used to be described as a "melting pot" society, wherein any immigrant could come to the country and become an American by assimilating to the majority culture. Nowadays, as different ethnic communities have made their home in the United States, the existence of a single majority culture is less defined. Rather, the very notion of American culture is constantly being shaped by the contributions of immigrants from around the world.

Yet, as the expectations for immigrants' integration into American society are always shifting, newcomers and second- and third-generation cohorts alike struggle to find belongingness in their host society as well as maintain their culture of origin. This process is known as *acculturation*, which has been widely defined as "those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups… under this definition acculturation is to be distinguished from... assimilation, which is at times a phase of acculturation" (Redfield, Linton, & Herskovits, 1936). As noted, acculturation processes apply to first-generation immigrants as well as second- and third-generations. However, due to the emphasis of the acculturation

literature on first-generation immigrants, we will focus on the experiences of this group in our review.

Many factors influence immigrants' adjustment to society and level of *acculturative stress*, which is the psychological impact of adaptation to a new culture (Berry, 2006a). One factor is the reason for immigration. Some immigrants come to a new country voluntarily, to seek economic betterment and opportunity. Sojourners and expatriates live in the host society for only a limited period of time, for travel or work purposes. Yet others are refugees or asylum seekers, escaping from dangerous conditions in their country of origin and driven by "push" factors to reach the host country. Adjustment is related to age of immigration, in that it is easier to adapt at a younger age, although adolescents may struggle with identity issues (Berry, 1997). Cultural distance between the culture of origin and culture of settlement also plays a role; for cultures different across dimensions such as values, norms and religious beliefs, adjustment is more challenging. There are gender differences in adjustment patterns; females have a more difficult time than males due to different definitions of gender roles across cultural contexts. Education affects the process as well; individuals who are higher educated have more job mobility and possess higher status, and also may be equipped with better tools to handle acculturative stress (Berry, 1997, 2006c). Finally, individual characteristics such as locus of control, need for cognitive closure, anxiety, extraversion and self-esteem act as protective or risk factors against acculturative stress (Kosic, 2006; Kosic, Kruglanski, Pierro, & Mannetti, 2004). It is important to note that despite challenges inherent in the acculturation process, many immigrants are actually better off than their native-born peers with respect to outcomes such as health, education and criminal

behavior, a phenomenon known as the immigrant paradox (Nguyen, 2006). We will now discuss some of the factors that lend themselves to positive versus negative adjustment outcomes.

Individual modes of acculturation have been described in terms of an *acculturation orientation* framework (Berry, 1970, 1997; Sam & Berry, 2010). Individuals display preferences for 1) how much they wish to maintain ties with their culture of origin, and 2) the extent to which they want to have contact with people outside their cultural group and participate in mainstream society. Preferences for these two dimensions are reflected in attitudes and behavior across a number of domains related to acculturation adjustment, such as culture, customs, language, values, neighborhood community, marriage, and employment (Bourhis & Barrette, 2006; Berry, 2006b). Those who primarily participate in the larger host society and forgo contact with their culture of origin community are said to endorse the *assimilation* orientation. These individuals predominantly identify with being a national of the country of settlement and may have abandoned their family's cultural traditions or only speak the language of the host society. Those who maintain more contact contact with their culture of origin community and decline to participate in mainstream society are said to endorse the *separation* orientation. These individuals may be reluctant to adopt new customs or traditions and prefer not to socialize with people who do not belong to their own cultural group.

However, attachments to the host and origin cultures are not mutually exclusive options. Individuals who seek to participate in the larger society while maintaining cultural values, norms and customs from their culture of origin are said to endorse the *integration* orientation. These individuals are able to experience belongingness in the

mainstream community while not sacrificing their heritage culture. Yet, there are some individuals who have trouble or are not interested in maintaining their culture of origin or forming relationships with others outside the cultural community. These people are said to endorse the *marginalization* orientation (Berry, 1970, 1997, 2006a; Sam & Berry, 2010). They lack a sense of belongingness to either culture and do not feel as if they fit in. The term "marginalization" is somewhat of a misnomer; it implies that immigrants have been rejected from both their heritage and host cultures (Bourhis & Dayan, 2004; Bourhis, Moïse, Perreault, & Senécal, 1997). Although this could certainly be the case some of the time, there are likely many pathways to marginalization. Some immigrants simply might not seek out or value contact with members of each community, or do not feel knowledgeable enough do so due to lack of consistent participation or exposure with either culture (e.g., Dzhokhar Tsarnaev's newfound interest in his cultural background after his family had been uprooted several times). For the purpose of the present research, we do not make any assumptions as to what causes marginalized immigrants to experience low identification with their host and heritage cultures. Instead, we are interested in their reported identification with each culture. Please see Figure 1 below for a graphical depiction of Berry's acculturation orientations.

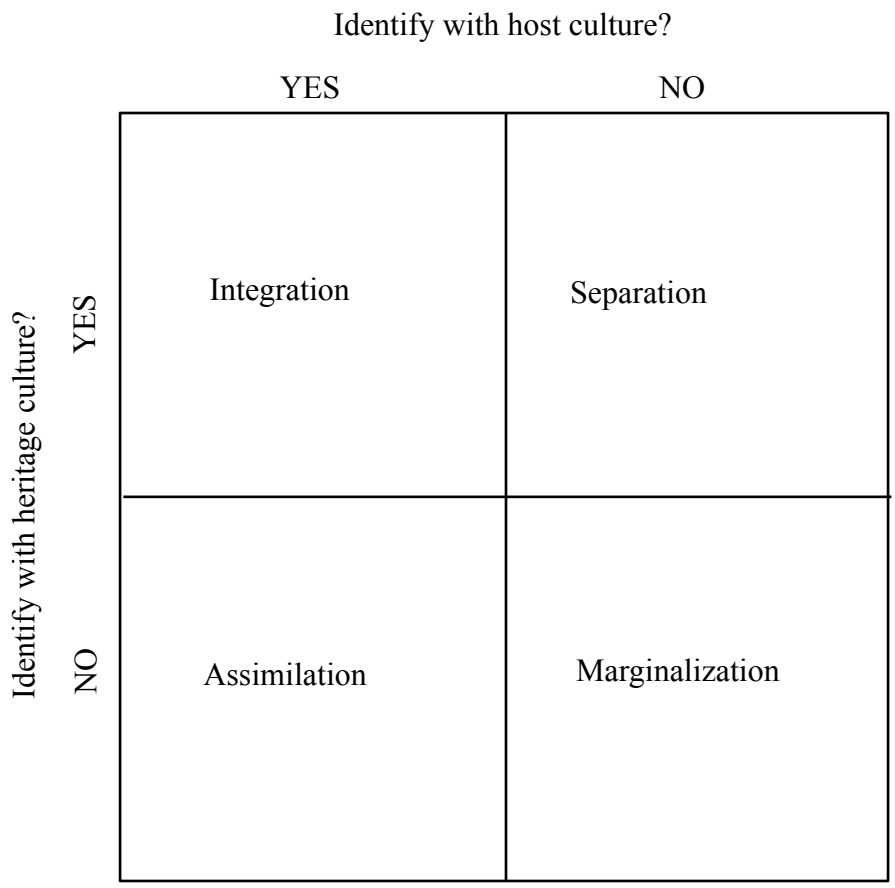

Figure 1. Berry's Acculturation Model

Decades of research have investigated outcomes of these orientations. Across various studies of immigrants, integration is typically found to be the most preferred of the acculturation orientations, and marginalization the least preferred (Bourhis et al., 1997). These orientations are associated with a number of psychological, health and life outcomes. The outcomes of acculturation orientations are often discussed in terms of *psychological* (i.e., well-being, mental health) and *sociocultural* (i.e., social competence) adaptation (Berry, Phinney, Sam, & Vedder, 2006; Ward & Kennedy, 1994). We will review some of these findings in what follows.

Across the board, integration has repeatedly been associated with psychological well-being and is negatively related to acculturative stress (Berry & Sam, 1997), and

predicts positive long-term health outcomes (Berry, 2006a; Schmitz, 1992). A meta-analysis of 325 acculturation studies revealed that integration is associated with better mental health than the other orientations (Yoon et al., 2013). In comparison, marginalization is linked with a number of negative outcomes. Marginalization has been related to alienation, psychosomatic stress and deviance, including delinquency, substance and familial abuse (Berry, 1997). In a study of the relationship between acculturation orientations and Big Five personality characteristics, marginalization was associated with high unsociability, neuroticism, anxiety, and closed-mindedness (Schmitz, 1994). The marginalized are also susceptible to the experience of anomie, which refers to a sense of instability or uncertainty that comes from a lack of purpose (Durkheim, 1951). Thus, along with the challenges of lacking identification with either culture and experiencing greater acculturative stress (Sang & Ward, 2006), the anomie and uncertainty of belongingness is likely to adversely affect self-esteem and other social and psychological processes (Berry, 1970; Bourhis et al., 1997). Marginalized Dutch immigrants in the United States, Canada and Australia reported lower satisfaction with life than immigrants engaging in other acculturation orientations (van Oudenhoven, 2006), a relationship that has been found in other samples as well (Berry & Sam, 1997; Neto, 1994).

The assimilation and separation orientations are more or less beneficial depending on the context. The separation and assimilation orientations fulfill certain belongingness needs that can help attenuate the effects of acculturative stress; having a sense of community and a social support system in place prepares individuals to contend with personal hardships (Cohen & Wills, 1985). However, each of the orientations comes with

drawbacks as a consequence of alienation from either the host or heritage culture. Assimilation into the mainstream culture distances the immigrant from their heritage culture, and can lead to ethnic- and self-hatred (Nguyen, 2006). Assimilation has been associated with disorders such as depression, substance abuse and anorexia, delinquency and family conflict (Chun & Akutsu, 2003; Szapocznik, Kurtines, & Fernandez, 1980). However, separation has also been associated with depression, obsessive-compulsive disorder and withdrawal (Torres-Matrullo, 1976), general dissatisfaction in life (e.g., boredom, sadness), as well as negative life events like divorce and hospitalizations (Salgado de Snyder, 1987). The separation orientation keeps immigrants from feeling comfortable and competent in their new environment, and can lead to loneliness and isolation (Nguyen, 2006).

Given that many homegrown radicals tend to be young adults (Silber & Bhatt, 2007), of special interest is the effect of acculturation orientations on immigrant young people. Much of the literature on acculturation orientation outcomes has focused on youth samples. In a study of adolescents in four countries, students with integrated identities demonstrated greater psychological adjustment at school, especially in terms of mastery and self-esteem (Phinney, Horenczyk, Liebkind, & Vedder, 2001). A study of immigrant youth in thirteen societies garnered additional support for the finding that the integration style yields positive adjustment outcomes; integration was associated with greater psychological and sociological adaptation, which included school adaptation and behavior issues (Berry et al., 2006). In a study of Chinese adolescents in New Zealand, post-hoc comparison tests revealed that the integration orientation was related to higher self esteem as compared to separation or marginalization (Eyou, Adair, & Dixon, 2000).

The finding that integration leads to higher self-esteem than marginalization has been replicated among youth immigrants in Montreal and Paris (Berry & Sabatier, 2010).

In addition to school adaptation, the effects of acculturation orientations have also been found in the work domain. In a work setting, compatibility with the host culture is especially important because most jobs require some interaction with host country nationals. Among Chinese professionals in Australia, assimilation was associated with the greatest job satisfaction (Lu, Samaratunge, & Härtel, 2012). New Zealand government employees on international assignments who had integrated identities experienced less psychological distress, while assimilated workers experienced better sociocultural adjustment. These findings were replicated in a study of international aid workers in Nepal; integrated workers showed fewer signs of depression, and assimilated workers experienced fewer social difficulties (Ward & Rana-Deuba, 1999). Much like other domains of adjustment, the marginalization orientation yields negative outcomes in the workplace. For ethnic minority workers in government jobs in the Netherlands, most of whom were Moroccan immigrants, marginalization orientation predicted lower job satisfaction, lower organizational commitment, lower self-efficacy, and greater cynicism toward their work (Peeters & Oerlemans, 2009). Acculturation preferences may even influence hiring decisions. Norwegian managers saw applications that were manipulated to portray integrated, assimilated and separated acculturation orientations (marginalization was not included). As compared to assimilated or integrated applicants, Norwegian managers saw separated Turkish job applicants as "less hirable" due to low perceived Person-Organization fit, despite that they were rated high on Person-Job fit (Horverak, Bye, Sandal, & Pallesen, 2013). Although marginalized was not included as a

condition, one might surmise that their Person-Job fit would also be perceived as low due to their low host culture orientation.

In general, integration is related to the best outcomes for adjustment, marginalization is the worst, and the separation and assimilation orientations fall in between. However, it is implied that an acculturation orientation (commonly referred to as a "strategy" in the literature) is a matter of *choice*; the individual prefers to associate with one culture or another. In fact, immigrants' choice of acculturation orientation is constrained by the options for socialization in their environment. Attitudes of the host society and resources provided by the culture of origin influence an individual's acculturation process (Ahmed, Kia-Keating, & Tsai, 2011; Berry, 1997). We will now address the contextual factors that lead immigrants to adopt these different acculturation orientations.

The individual's acculturation orientation in some part depends on the climate of the host society. For a person to endorse the separation orientation there must be a community of other individuals from the host culture; for a person to endorse the assimilation orientation, there must be an expectation that assimilation is an option (i.e. the host society must demonstrate willingness to incorporate immigrants as members of their society). Broad factors such as national policies and institutional ideologies to some extent constrain the acculturation choice of immigrants (Berry, 2003, 2006b). Societies that are receptive to multiculturalism encourage integration orientations; societies that subscribe to the "melting pot" metaphor of immigration are likely to produce assimilation orientations; societies where minority groups are segregated from the rest of society will result in individuals adopting the separation orientation; finally, societies that are not

welcoming to immigrants (i.e., have no immigrant communities) and have excluded them from participating in society will force individuals into the marginalization orientation. As an example, one study found that Turkish youth in Norway were more marginalized than Turkish youth in Sweden. Norway's Turkish community is smaller and less established than Sweden's, and Norway's policy toward immigration encourages immigrants to give up their cultural identity, whereas Sweden's does not (Westin, 2006).

Being that many urban centers in the United States are multicultural, most immigrants have opportunities for contact with others from their culture of origin as well as people outside their cultural group. However, despite that the United States is a nation of immigrants and is by definition a multicultural society, the country has not historically engendered the same welcoming spirit for all cultural groups (Montreuil & Bourhis, 2001). Italian and Irish settlers were once held with low regard (Glazer & Moynihan, 1963), and although they have since been better integrated into society, more recent migrants from Muslim countries in the post-9/11 era have been met with discrimination from the host society (Amer & Hovey, 2007). Current dialogues about immigration reform reinforce the message that not all immigrants are welcome in American society, and the host country narrative bears a major impact on the adaptation experiences of immigrants (Berry, 2003, 2006b; Berry & Sabatier, 2010). In a study of youth acculturation in thirteen Western societies, perceived discrimination was negatively related to psychological and sociocultural adaptation (Berry et al., 2006).

The impact of societal constraints on acculturation processes has begun to be illuminated in recent work on the acculturation experiences of Muslim immigrants in non-Muslim countries. Anti-Islamic sentiment following the September 11th attacks has

introduced new acculturation challenges for Muslims, relating to cultural adjustment as well as mental and physical distress (Tummala-Narra & Claudius, 2013). In a study of Arab immigrants in the United States, the relationship between acculturation orientation and health outcomes to some extent depended on whether participants were Christian or Muslim (Amer & Hovey, 2007). Integration-marginalization was measured on one continuum, and separation-assimilation was measured on another. All immigrants who were less integrated and more marginalized experienced greater family dysfunction, and marginalized orientation was additionally associated with depression in Christians. Although more than 50% of both Christians and Muslims preferred adopting an integration orientation, Christians reported actually experiencing greater integration and assimilation into American society than did Muslims. The difficulty of Muslim immigrants as compared to Christians could be accounted for by greater cultural distance (Berry, 2006a). People who maintained their Arab family and religious values and engaged in Arab cultural practices but were disengaged from mainstream society suffered from greater acculturation stress, such as discrimination and alienation from society. In a worst case scenario, the association between maintaining cultural practices and being subject to acculturative stress could encourage some Muslim immigrants to give up their culture altogether. Another study of Arab Americans similarly found a relationship between sociocultural adversities and psychological distress, but additionally found a negative relationship between stress and cultural resources provided by the origin community (Ahmed et al., 2011). Thus, connections to the culture of origin appear to be especially important in finding a healthy way to cope with discrimination from the host society.

Despite the known acculturation challenges for Muslims and the rising threat of homegrown radicalization, little work has examined the relationship between Muslim immigrant acculturation experiences and support for extremism or attraction to extremist organizations. Some research has found support for the *benefits* of integrated identities in the context of extremism; Turks and Russians living in Germany who held dual (i.e., integrated) identities were more likely to participate in political action in a peaceful, normative manner, and holding a dual identity was unrelated to the acceptance of political violence (Simon & Grabow, 2010; Simon & Ruhs, 2008). However, a recent study by the same research group revealed that Turks and Russians living in Germany who held dual identities demonstrated greater sympathy for radical action when they felt their German identities were in conflict with their heritage identities (Simon et al., 2013). Dual identity was measured with items such as "Sometimes I feel more like a German and sometimes more like a Turk/Russian— it depends on the situation." Identity conflict was measured with one item, "I have the feeling that I would have to give up my Turkish/Russian identity if I wanted to become German." This research addressed the consequences of maintaining integrated identities when under pressure to assimilate. The study did not speak to the implications of not identifying with either Turkish/Russian or German cultures; there was no measure of marginalization per se. This is the quadrant of immigrants for whom we suspect are at an even greater risk for being radicalized.

In our review of the acculturation literature we have demonstrated that the immigrant acculturation orientation framework applies widely to many domains of life adjustment. One clear take-home point is that whereas integration is consistently linked to positive life outcomes, marginalized immigrants are at the greatest risk for

experiencing poor psychological well-being and sociocultural adaptation. However, this literature has not yet been applied to the study of terrorism, and in particular, to developing a better understanding of the psychological foundations of homegrown radicalization. This is the purpose of the current research, and in the following chapter we will draw from the terrorism and acculturation literatures to introduce our theory that marginalization processes can relate to risk for radicalization through mediating psychological processes.

Chapter 4: Introduction to Theory and Hypotheses

Research has yet to explore the threat of radicalization for marginalized immigrants, a population known to be vulnerable to negative psychological and sociocultural outcomes from the acculturation literature (Berry, 1997). We offer a novel approach to the study of homegrown radicalization by focusing on the identity processes of immigrants. We integrate the terrorism and acculturation literatures to address the question of whether and how acculturation processes can increase attraction to and support for extremist groups and causes. As discussed in the review of the acculturation literature, immigrants who endorse the marginalization orientation lack a sense of clear ingroup self-categorization or belongingness; in other words, they are in a state of identity uncertainty because they do not identify with either the host or the heritage culture. They suffer from low self-esteem and anomie (Berry, 1997), indicators of significance loss. Holding a marginalized identity can be seen as a source of significance loss, based on one's subjective assessment that he does not belong to either his heritage or host cultures. Individuals without a sense of belongingness in either culture may be looking for opportunities to find a place where they fit in society and thereby gain significance (Kruglanski et al., 2009). Theories of radicalization support the notion that would-be terrorists are looking to identify with like-minded others who share their grievances (Moghaddam, 2005; Silber & Bhatt, 2007), and we suggest that marginalized immigrants are particularly in need of identifying such a support network.

In what follows, we will propose that immigrant marginalization can relate to radicalization processes through significance loss. Our theory is that marginalized immigrants experience threats to their sense of self-worth due to their inability to build

and maintain connections to either their heritage or their host cultures, group memberships that are important in providing individuals with a sense of belongingness, meaning and purpose. In turn, feelings of significance loss will increase the attractiveness of radical groups and causes, as they provide a means for restoring self-worth. We will also address factors that can exacerbate feelings of significance loss among marginalized immigrants. We will highlight exclusion from others in the host society as a particularly relevant risk factor for marginalized immigrants, as hostile reminders that one is not wanted in a society can provide an additional "shock" to existing threats to significance. Please see Figure 2 below for a graphical depiction of our immigrant marginalization theory of radicalization.

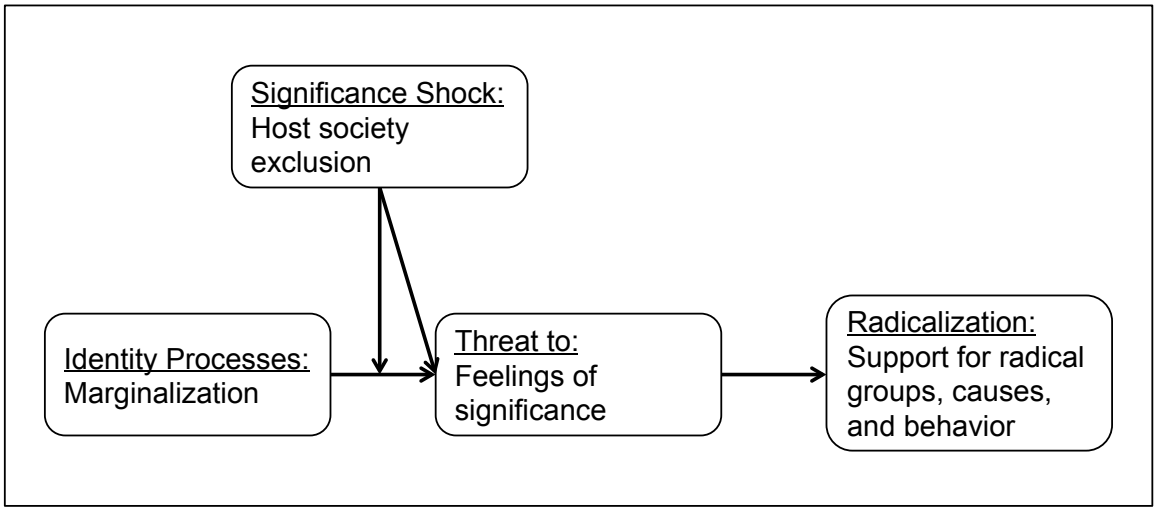

Figure 2. Immigrant marginalization theory of radicalization.

The Impact of Marginalization on Significance Loss

The psychological mediators that explain the relationship between risk factors and radicalization have thus far received little empirical attention, and explaining mediating processes is an aim of the current research. The benefit of looking at significance loss as a mediating process is that the quest for significance broadly encompasses a number of

psychological motivations, including needs for belongingness, esteem, achievement, meaning, competence, and control (Deci & Ryan, 2000; Fiske, 2010; Frankl, 2000; Higgins, 2012; Maslow, 1943; White, 1959; in Kruglanski et al., 2014; Leary & Baumeister, 1995). We suggest that several of these underlying motivations are particularly relevant to marginalized immigrants who struggle to make sense of their cultural identity.

For example, belongingness is known to serve the function of providing individuals with a positive self-concept (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Leary & Baumeister, 1995). Of all immigrants, the marginalized are at the greatest risk of experiencing unfulfilled needs for belongingness. Optimal distinctiveness theory highlights two needs that are in tension for individuals: the need to belong, and the need to be distinguished from others (Brewer, 1991). Immigrants in the marginalized quadrant are over-satisfied in the need for differentiation, while their belongingness needs are not met. In this sense, assimilated and separated immigrants are in a better position than the marginalized; despite being estranged from one culture or another, the assimilated and separated are still able to achieve belongingness in either their host or heritage communities. Research has revealed that individuals for whom belongingness is threatened are more likely to conform to a unanimous inaccurate judgment (Williams, Cheung, & Choi, 2000) and more likely to succumb to the persuasion of others (Carter-Sowell, Chen, & Williams, 2008). This raises the question of whether marginalized immigrants who lack any group membership might be more susceptible to fulfilling requests by malevolent groups (e.g., radical organizations) in order to gain social approval and belongingness. Working for a collectivistic cause can

lead to empowerment that subdues anxiety about one's failures and death, making individuals more willing to engage in self-sacrifice for an important cause (Kruglanski et al., 2014; Orehek et al., 2011).

Relatedly, another important process that may be invoked in significance loss among marginalized immigrants is the search for meaning. Evolutionary explanations maintain that one's meaning in life is derived from social belongingness; because humans rely on their group members for survival rather than on the natural environment alone, failing to secure group membership can actually threaten one's existence (Stillman & Baumeister, 2009). Empirical work has supported this link between social belongingness and meaning in life; in one study, participants who experienced chronic loneliness saw life as meaningless and absurd (Stillman et al., 2009). Because of the chronic loneliness marginalized immigrants likely suffer from due to their low attachment with either their host or heritage cultures, these individuals may subjectively perceive their life as having less meaning. Subjective perceptions of life's meaning are related to other psychological outcomes; people who perceive *greater* meaning in life experience less depression, greater satisfaction in life, optimism, and higher self-esteem (Steger, Frazier, Oishi, & Kaler, 2006). We know from the acculturation literature that marginalized immigrants are at greater risk of depression and low self-esteem (Berry, 1997). If marginalized immigrants are deprived of a sense of meaning in life, they may seek to regain it as part of a significance quest (Kruglanski et al., 2009). The pursuit for meaning in life is thought to be driven by four needs: a sense of purpose, feelings of efficacy, the belief that one's actions have value, and a positive sense of self-worth (Baumeister, 1991; Stillman & Baumeister, 2009).

As per our review of the acculturation literature, we have reason to expect that marginalized immigrants are at risk for experiencing significance loss, as the marginalized lack a sense of cultural belongingness and are known to suffer from negative psychological outcomes (Berry & Sam, 1997; Neto, 1994; Schmitz, 1994; van Oudenhoven, 2006;). We aim to illuminate in the present research how marginalization can influence radicalization processes through feelings of significance loss.

The experience of significance loss does not necessitate or guarantee enrollment in a radical organization. Yet, practicing jihad on behalf of a radical group might be perceived as offering a means to restore deprived psychological needs for meaning or belongingness. Members are given the autonomy to orchestrate attacks for a higher purpose, and are praised for their work. We expect that individuals who have experienced significance loss may be thrust toward radical groups and causes, to the extent that they are seen as effective sources for gaining significance. Accordingly, we predict that marginalization will induce feelings of significance loss, which in turn will increase support for radical groups, causes and behavior. Significance loss unites a number of psychological processes that are at play under conditions of threat to self-worth, and we will capture the diverse components of significance loss in a scale that we will address in the methods section.

Hypothesis 1a: Marginalization will be related to greater feelings of significance loss amongst immigrants (Studies 1, 2 & 3).

Hypothesis 1b: Feelings of significance loss will predict greater support for radical groups, causes, and behavior (Studies 1, 2 & 3).

As noted, of particular interest for this research program is the marginalized quadrant, who do not identify with either the host or the heritage cultures. We believe them to be at the greatest risk of radicalization due to threats to significance. Yet, it is worth speculating on potential outcomes for other acculturation orientations. Although we do not make specific predictions with respect to each other acculturation orientation, we do expect integration to act as a protective factor against significance loss. This would be consistent with the literature on the benefits of integration, and additionally, integration can be seen as the flip side of marginalization; the more an individual identifies with both cultures, the less marginalized they are. Likewise, the less an individual identifies with both cultures, the more marginalized they are.

However, the acculturation literature has found evidence for risk factors among separated and assimilated immigrants as well, as they each have one positive cultural orientation and one negative cultural orientation. We will explore these other identity conditions in our analyses. We do not expect them to be at as great of a risk as the marginalized who have two negative cultural orientations, because the assimilated and separated each have a social buffer in their belongingness to the host or heritage community, respectively. Yet, they may still be more susceptible to radicalization than integrated immigrants. Both separated and assimilated immigrants have been found to suffer from loneliness (Chun & Akutsu, 2003; Nguyen, 2006) due to their alienation from one culture or the other. Their needs for personal significance may not be as fulfilled as the integrated. Certain extenuating conditions may exacerbate the threat to these needs, which we will discuss next.

Moderating Factors

One of the goals of this research is to identify the conditions under which the vulnerabilities of immigrants are exacerbated. Unfortunately, on top of negotiating their own cultural identities, immigrants are at times confronted with maltreatment by members of their host society, as discussed in the review of acculturation processes (Ahmed et al., 2011; Amer & Hovey, 2007). Discrimination against Muslim immigrants and minorities has increased in the post-9/11 era as many Muslims are subject to name-calling, racial profiling, and even community policing (Sirin & Fine, 2007). Despite occasional episodes of discrimination from the host culture, many Muslim immigrants report that they are successfully able to integrate into society (Sirin & Gupta, 2012). Therefore, discrimination clearly does not turn all immigrants into aggressive radicals. However, some immigrants may be more affected by negative treatment from the host society than others. Although immigrants who endorse the other acculturation orientations are not immune to discrimination, marginalized immigrants are the least equipped to handle these experiences due to a lack of community connectedness. Separated immigrants can find support in their cultural communities, and assimilated and integrated immigrants still have other positive associations with the host culture. Marginalized immigrants, however, may be particularly jarred by hostile reminders that they do not fit into the society within which they live.

The terrorism literature highlights the role of acute, significance loss-inducing events in radicalization processes (King & Taylor, 2011; Kruglanski et al., 2009; Moghaddam, 2005; Sageman, 2004; Silber & Bhatt, 2007). Threats to significance, as discussed earlier, can be induced by individual as well as social factors. For example, acts

of social disrespect by others or conflict with an out-group can induce a sense of powerlessness and humiliation that provokes a desire to reestablish significance through revenge (Kruglanski et al., 2014). We argue that the relationship between marginalized identities and radicalization might be amplified by a "shock" to significance, which in the case of immigrants means a severe instance of maltreatment by the host community. This trigger could lead marginalized immigrants to find other like-minded individuals who share the sense of being wronged, as discussed in the radicalization literature.

Host culture maltreatment can be explicit in the case of name-calling, but it often times exists under the subtle guise of exclusion, such as in the case of Tamerlan Tsarnaev's thwarted participation in an American boxing tournament. Exclusion is a process that has received thorough attention in the social psychology literature and has been linked to threatened psychological needs and aggression (Williams, 2007). Given the known consequences for exclusion, we think that this is a process worthy of more thorough investigation in the context of homegrown radicalization. We next discuss empirical research on the relationship between exclusion, psychological processes invoked in significance loss and aggressive responses, as well as the relevance for theories of radicalization.

Exclusion as a Cause of Significance Loss

Researchers have found robust universal support for negative reactions to exclusion; the experience of being excluded does not appear to be better or worse in different cultures (Williams, 2007). The effects of exclusion have been replicated using a wide variety of experimental paradigms, such as being left out in "Cyberball," a computerized ball-tossing game (Williams et al., 2000), being told that you will spend

your life alone (Twenge, Baumeister, Tice, & Stucke, 2001), and being informed that none of the other participants want to work with you (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997). Surprisingly, individuals are even upset even when they're excluded from groups they do not wish to belong to, such as the KKK (Gonsalkorale & Williams, 2007). Exclusion has repeatedly been shown to threaten fundamental needs including belongingness, self-esteem, control, and the perception of a meaningful existence, as well as increase sadness and anger (Williams, 2007; Williams et al., 2000).

In many cases, exclusion is likely to produce aggressive responses. In one set of studies, participants who felt rejected demonstrated a hostile cognition bias; they were more likely to interpret future ambiguous stimuli as aggressive (DeWall, Twenge, Gitter, & Baumeister, 2009). After participants were told that they would likely live their life alone, they made more hostile attributions toward the author of an ambiguous essay. This hostile cognition bias in turn was associated with aggression toward a range of others, including people who had excluded them but also individuals unrelated to the original act of exclusion. This hostile cognition bias is thought to have developed because normative social behavior was met with rejection instead of approval, and thus did not promote future social behavior. People who repeatedly experience exclusion may display a greater propensity for interpreting others' actions as hostile.

One recent study examined the aggressive responses of excluded Moroccan, Turkish and Dutch students in the Netherlands (Schaafsma & Williams, 2012). The Netherlands has a large Moroccan and Turkish population, and these Muslim immigrant communities have faced difficulty integrating into the larger society, in part due to negative attitudes held by the Dutch majority. Some participants in the study were

Christian, and others were Muslim. Students were either excluded by their ethnic ingroup or outgroup in a Cyberball game. Participants who were excluded by their ethnic outgroup displayed more aggression toward the excluder than participants who were excluded by their ethnic ingroup; however, participants who were excluded by their ethnic ingroup demonstrated greater support for fundamentalist religious beliefs. This finding was attributed to the activation of different threats as a function of the social identity of the excluders. Exclusion by the outgroup constitutes a categorization threat, where an us-them distinction is made clear to the victim. In this case, aggression is a salient response option. Exclusion by the ingroup, however, constitutes an acceptance threat; individuals who are rejected from a group to which they should belong are faced with uncertainty and may seek to restore certainty by seeking ties with clear and distinctive groups, such as religious fundamentalists (Hogg et al., 2007; Schaafsma & Williams, 2012). Given that ingroup exclusion led to the endorsement of religious fundamentalism and outgroup exclusion led to aggression, one might consider whether marginalized immigrants who already experience threats to significance would be especially prone to host country-directed aggression in the face of host culture exclusion.

Summary. In sum, the previously discussed work highlights the very real threat of exclusion for personal significance. These processes have in turn been associated with aggressive behavior geared toward restoring these needs. We suggest that immigrants who are already experiencing significance loss may be drawn toward extreme groups to increase self-clarity, and severe experiences of exclusion from the mainstream culture might exacerbate significance loss. We already know that excluded individuals may be more willing to aggress against outsiders when seeking acceptance (Carter-Sowell et al.,

2008; DeWall et al., 2009; Schaafsma & Williams, 2012). Thus, a state of internal significance loss (identity marginalization) coupled with an instance of significance shock (host culture maltreatment via exclusion) could prove to be a lethal combination.

Importantly, with these predictions we maintain that marginalization and exclusion are two discrete contributors to significance loss (and will show in the method section that they factor separately). Although exclusion could certainly increase risk for marginalization, there are many pathways to marginalization beyond exclusion. Likewise, plenty of people experience exclusion without becoming marginalized. What we predict is that both marginalization and exclusion will lead to feelings of significance loss, and further, that exclusion experiences will *amplify* the existing relationship between identity marginalization and significance loss.

Hypothesis 2a: Perceived (Studies 1 & 2) or real (Study 3) exclusion by the host society will increase feelings of significance loss.

Hypothesis 2b: Perceived (Studies 1 & 2) or real (Study 3) exclusion by the host society will exacerbate the relationship between marginalization and feelings of significance loss.

Finally, we expect that all of these factors together will explain how marginalization indirectly influences support for radicalism via mediating and moderating processes.

Hypothesis 2c: Marginalization will indirectly predict support for radicalism as mediated by feelings of significance loss and amplified by exclusion.

Overview of Studies

We conducted field and experimental studies to explore the relationship between immigrant acculturation processes, exclusion experiences and support for radicalism. We tested the theory in the United States and abroad, in Muslim and also non-Muslim immigrant samples. We examined several indicators of support for extremism, including attraction to radical groups, support for radical ideologies, and willingness to engage in radical behavior.

In Study 1, we administered online surveys to first- and second-generation Muslims in the United States, measuring identity processes, perceived exclusion, and support for extremist groups and causes. We also explored the process theorized to mediate the relationship between these variables: significance loss. In Study 2, we administered the same survey in Germany to demonstrate that our theory applies beyond the American context. The survey design was partially informed by pilot interviews with first- and second-generation Muslims in each country. In Study 3, we tested the robustness of the theory in a sample of non-Muslim college students with diverse immigrant heritage backgrounds. Additionally, to better draw a causal relationship between host culture exclusion and radicalization, Study 3 measured identity processes and manipulated exclusion by the majority group in a controlled laboratory setting. In this study we also sought to explore factors that could mitigate the relationship between identity processes, exclusion and support for radicalization. Because homegrown terrorism is a phenomenon that has affected not only first-generation immigrants but also second-generation citizens (Silber & Bhatt, 2007), and acculturation is a process that

affects non-immigrant minorities (Nguyen, 2006), we included multiple generations of immigrants in each of our studies.

Although our key interest for this research is in immigrants who are marginalized, we test our hypotheses including the other acculturation orientations as controls. We report throughout any findings involving the role of separation, assimilation, and integration orientations.

Chapter 5: Immigrant Marginalization in the United States (Study 1)

Participants, Design and Procedure

In Study 1, we utilized a field sample to investigate the relationship between acculturation processes, perceived exclusion and support for radicalism via feelings of significance loss. We administered surveys to 260 first- and second-generation immigrants in the United States. We developed a contract with the World Organization for Resource Development and Education (WORDE) to assist with collecting survey responses in the United States. WORDE is a nonprofit organization with access to Muslim immigrant communities throughout the country. We focused our recruitment efforts on young adults under the age of 35, according to demographic trends associated with radicalization (Silber & Bhatt, 2007). We primarily recruited participants of Pakistani origin because there are known to be widespread Pakistani communities in different regions of the United States.

WORDE helped identify participants and administer surveys throughout the United States. Surveys were administered on a computer using an online survey platform. The survey took between 30-40 minutes for most participants, and a $25 Amazon.com gift card was provided as compensation.

Participant characteristics. Our final sample included 198 participants, as 62 survey responses had to be excluded[2] (78 Male, 107 Female; mean age = 27.42). Of these

[2] Participants who indicated that they did not come from an immigrant heritage background (e.g., Muslim converts) were not included in the final analyses. We also excluded participants whose responses indicated that they were not devoting their full attention to the survey or who were trying to take the survey multiple times to receive extra compensation. In order to detect inattention to the survey, we included five attention check questions throughout the survey (e.g., "Please select '3' if you are paying attention.") Participants who failed more than one attention check question were excluded. We also looked for unusual patterns in the responses, such as large sections of incomplete data or abnormally short submission times. There were some participants who appeared to be taking the survey from outside of the United States, raising suspicion that these respondents did not actually live in the country. These responses were also excluded.

participants, 92 indicated that they were first-generation immigrants, and 107 were second-generation Americans who had been born in the United States. Controlling for generational status and gender did not influence the results. The participants came from a total of 27 states, with the majority coming from Maryland (N = 60), Virginia (N = 35), California (N = 30), New York (N = 11), or Washington D.C. (N = 10). The participants represented more than 20 different heritage country backgrounds, with slightly more than half reporting Pakistan as their heritage country (N = 108). The sample was highly educated, with more than 75% possessing a college or other advanced degree. The sample came from a higher than average social class, with more than 75% reporting that they belonged to the upper-middle class or higher.

Pilot Interviews

Prior to the dissemination of large-scale surveys, we conducted qualitative interviews with 20 first- and second-generation Muslims in the United States. Participants varied on the same demographic characteristics that we intended to include in our survey sample. The aim of these interviews was to gain a more thorough understanding of immigrants' experiences living in the host culture with respect to cultural identification, exclusion, and attitudes toward the host culture, and to ensure that our survey materials were fully representative of immigrants' experiences across cultural and social backgrounds. These questions were developed in collaboration with WORDE. The interviews were transcribed and analyses of these responses informed final decisions regarding choice of materials to be included in the surveys.

We learned that the Muslim identity was a significant part of the heritage culture identity for most interview respondents, which influenced the development of our

marginalization measure. We found that it was difficult for many individuals to speak directly and honestly about radicalism in the Muslim community, specifically with respect to their own attitudes, so this influenced the choices we made in developing and selecting indicators to measure support for radicalism.

We also came across themes that were unrelated to the present hypotheses but were important for WORDE's understanding of the issues the Muslim American community faces, so we addressed some of these issues in greater depth in the survey for WORDE's benefit. For example, some interviewees discussed the pressure to prove to both of their cultural communities that they were a "real" Muslim or a "real" American. Some also mentioned the hypocritical nature of Americans' self-proclaimed positive attitudes toward diversity and multiculturalism. A full discussion of the interview themes is beyond the scope of the current research but will be subject to more thorough analysis in the future. Please see Appendix A for all of the questions contained in the interview protocol.

Stimuli

Participants were asked questions about their acculturation orientations, experiences of exclusion by mainstream society in the United States, perception of personal significance, and attitudes toward extremism. A number of other measures pertaining to experiences in the host country were also included at WORDE's request but are not part of the present analyses. These measures addressed online media consumption behavior, satisfaction with community mosques, and open-ended accounts of personal discrimination experiences.

Marginalization. We included two items from the Immigrant Acculturation Scale (Bourhis & Barrette, 2006), specifically with respect to two dimensions of acculturation: customs and values. For example, the item pertaining to values was "I do not wish to maintain my heritage culture values or adopt American values as I feel uncomfortable with both types of values."

We supplemented these items with an additional two items that assessed the extent to which participants felt that they did not belong to any culture. One of these items was framed with respect to Muslim culture rather than the culture of the heritage country, given that our interviews suggested that Muslims in the United States also focus on their Muslim identity. These items were "There are times when I feel like I don't belong to any culture" and "Sometimes I don't feel part of American culture or part of Muslim culture." All items were measured on a six-point scale (1 = Strongly Disagree, 6 = Strongly Agree; $\alpha = .68$)[3].

Other acculturation orientations. In order to isolate the unique role of marginalization, we took a conservative approach and included control measures for endorsement of other acculturation orientations including separation ($\alpha = .78$), assimilation ($\alpha = .78$), and integration ($\alpha = .78$). These six items (two for each of the three acculturation orientations) also came from the Immigrant Acculturation Scale and were measured on a six-point scale (1 = Strongly Disagree, 6 = Strongly Agree) for both the domains of customs and values (Bourhis & Barrette, 2006). Sample items include "I wish

[3] Participants also completed a nine-item measure of ingroup identification (Hogg & Hains, 1996; Hogg, Hains, & Mason, 1998; Hogg et al., 2007), both with respect to their heritage identity and their host culture identity. We intended to use the product term of these two dimensions as another measure of marginalization, but the means on both scales were so high that it would have been difficult to make meaningful distinctions between the different cultural orientations. Therefore, we decided to utilize the approach of including specific items for each acculturation orientation in our analyses.

to maintain my heritage culture values and also adopt key features of American values" (integration, values), "I wish to maintain my heritage culture customs rather than adopt American customs" (assimilation, customs), and "I wish to give up my heritage culture values for the sake of adopting American values" (separation, values). Please see Appendix B for all acculturation orientation measures.

Exclusion. Participants completed the nine-item Inclusionary Status Scale (Spivey, 1990; Rubin, Watt & Ramelli, 2012) pertaining to experiences of exclusion by non-Muslim Americans. Sample items include "I sometimes feel that other non-Muslim Americans avoid interacting with me" and "I often feel like an outsider in non-Muslim American social gatherings." These items were measured on a six-point scale (1 = Strongly Disagree, 6 = Strongly Agree; $\alpha = .86$). Please see Appendix C for all of the items in the scale.

Significance loss. We adapted the 24-item Need Threat Scale (Williams, 2009) with subscales for belongingness, certainty, control, and self-esteem, as these are all needs thought to be captured in the quest for significance. We removed one item from the control subscale and added four of our own items pertaining to humiliation, shame, hopelessness and anger, given that they directly reflect significance loss. Participants were asked to indicate on a five-point scale how often they felt different states and emotions. In order to explore the structure of the scale, we conducted Principal Axis Factoring (PAF) analyses on the 27-items with direct oblimin rotation. PAF is a technique that allows shared variance among items, and direct oblimin rotation is used when factors may be related. This was an appropriate technique for our scale, as the

subscales could theoretically be correlated. Our Kaiser's criterion was set for Eigen-values over one.

We found that a single factor explained 47.8% of the variance in responses, with the second and third factors explaining an additional 7.9% and 4.3%, respectively. We interpreted the first eight-item factor as representing significance loss. These items were: "I feel ashamed," "I feel humiliated," "I feel rejected," "I feel meaningless," "I feel hopeless," "I feel like an outsider," "I feel nonexistent," and "I feel disconnected from other people" ($\alpha = .90$). Two additional items were removed from the factor because of loadings less than .40 ("I feel angry" and "I feel invisible")[4].

In order to demonstrate divergent validity of this scale, we conducted additional exploratory factor analyses that indicated significance loss factored separately from our measures of exclusion or marginalization. This was to be expected, as our marginalization and exclusion measures pertained to specific social identities and social experiences, respectively, whereas our significance loss items reflected how these and other experiences become internalized psychologically and interpreted as threats to self-worth. Please see Appendix E for the complete set of items and their respective factor loadings.

Support for radicalism. We included several indicators of support for radical groups, causes and action. These measures included readiness to sacrifice oneself for a cause, support for an extreme interpretation of Islam, and support for a hypothetical radical group.

[4] There was a second factor that represented 11 positively valenced items. Top-loading items included "I feel like others interact with me," "I feel like others like me," and "My self-esteem is high" ($\alpha = .90$). A final third factor included six items, most of which came from the uncertainty subscale. Top-loading items included "I feel confused," "I feel uncertain," and "I feel unsure of myself or my future" ($\alpha = .90$). See Appendix D for the complete set of items and their respective loadings.

Readiness to self-sacrifice. Participants completed items from the Self-Sacrifice Scale (e.g., "Under the right circumstances, I would sacrifice my life for an important cause"; Bélanger, Caouette, Sharvit, & Dugas, 2014). This scale has been used in the context of terrorism research and has undergone extensive psychometric work to establish its unidimensionality, internal consistency, temporal stability, and predictive validity. It has been distinguished from measures of depression and suicidal ideation, confirming the idea that readiness to die for a cause is not related to the presence of some psychopathology. Because of survey length concerns, we only included the five top-loading items. The items were measured on a seven-point scale (1 = Not Agree at All, 7 = Very Strongly Agree; $\alpha = .95$). Please see Appendix F for the full measure.

Extreme interpretation of Islam. We included ten items representing a radical interpretation of certain tenets of Islam, such as the meaning of Jihad (Kruglanski et al., 2015). Sample items include "Muslims in America should help their oppressed brothers and sisters in other parts of the world by particting in combative jihad" and "Combative jihad is the only way to conduct jihad." These items were measured on a six-point scale (1 = Strongly Disagree, 6 = Strongly Agree; $\alpha = .80$). Please see Appendix G for the full measure.

Hypothetical group vignette. Participants read a description of a group that resembled an extremist organization, modeled after extremist groups described in past research (Hogg, Meehan, & Farquharson, 2010). The group was called "Fundamental Muslim" and was said to consist of young Muslims in the United States. The group was described as highly cohesive, loyal and valuing group member contributions, and firmly committed to the goal of avenging American injustices toward Muslims at any cost. This

description was developed in conjunction with WORDE and was subject to piloting in advance.

After reading the description, participants responded to a) four items indicating how likely they would participate in a number of behaviors for an extreme group (e.g., "How likely would you be to participate in demonstrations, sit-ins, and blockades on behalf of the group?"; 1 = Very Unlikely, 7 = Very Likely), b) four items indicating how much they identified with and wished to know members of the group (e.g., "To what extent do you desire to get to know the group's members?"; 1 = Not at All, 7 = Very Much; Hogg et al., 2010), and c) four items indicating the extent to which they would show understanding for group members participating in a variety of radical behaviors (e.g., participating in a violent demonstration, blocking a road; 1 = Not at All, 7 = Very Much; Simon et al., 2013). Because of the expectation that many participants would not be willing to admit support for the group, we framed the items with respect to descriptive norms, or in other words, the extent to which they expected most members of their social circle would support the group. The final scale was a compilation of these twelve items measured on a seven-point scale ($\alpha = .94$). Please see Appendix H for the complete vignette and Appendix I for the corresponding measures.[5]

Results

Table 1 presents the scale means and standard deviations and Table 2 shows the correlations across study variables. As would be expected from a general sample, overall support for radicalism was quite low. To test our hypothesis that marginalization predicts

[5] We included several additional measures in the survey that will not be addressed here, such as cultural tightness-looseness (Gelfand et al., 2011) and perceived closed-mindedness of the host society, for exploratory comparative analyses between the American sample in Study 1 and the German sample in Study 2. These specific measures will be introduced in our discussion of Study 2.

support for radical groups and causes, mediated by significance loss and exacerbated by exclusion, we utilized a moderated mediation analysis approach. We also looked at the role of other variables such as generational status, sex, and age. None of these variables changed the relationship between our predictor and outcome variables, so they were not included in the subsequent analyses.

Moderated mediation. We conducted moderated mediation analyses following the procedure outlined by Hayes (2012). We entered marginalization as the independent variable, significance loss as the mediator, and exclusion as the moderator. Exclusion was only entered as a moderator on the path leading to significance loss. Integration, assimilation and separation scores were entered as covariates in both the paths leading to significance loss and the outcome variables. We ran this model three separate times for each of our three outcome variables. Marginalization and exclusion were mean-centered to reduce the threat of multicollinearity in the interaction term.

We ran the analyses with 5000 bootstrap samples to generate 95% confidence intervals for the conditional indirect effect, which was estimated at -1, 0, and +1 standard deviations from the mean of the moderator (exclusion). When the confidence intervals do not contain zero, the effect is considered significant. This is recommended over traditional significance testing, as significance tests do not respect the non-normality of the sampling distribution of the indirect effect (Hayes, 2012).

Willingness to self-sacrifice. Marginalization predicted greater significance loss (B = .24, SE = .04 p < .001), as did exclusion (B = .34, SE = .05, p < .001). This supported our hypotheses that both marginalization and exclusion would be related to greater feelings of significance loss. The interaction term for marginalization and

exclusion also predicted greater significance loss, such that the relationship between marginalization and significance loss was amplified by perceived exclusion (B = .15, SE = .05 p = .003). This supported our hypothesis that exclusion would exacerbate the relationship between marginalization and feelings of significance loss.

Significance loss in turn predicted readiness to self-sacrifice (B = .51, SE = .19, p = .008). This provided support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. There was no direct effect for marginalization, controlling for the other acculturation orientations (B = -.17, SE = .13, n.s.).

We then looked to see whether there was an indirect effect of marginalization on readiness to self-sacrifice through significance loss. The confidence intervals suggested that there was an indirect effect from marginalization to support for radical ideologies via significance loss when exclusion was high (i.e., one standard deviation above the mean; 95% CI [.0646, .3851]). Please refer to Figure 3 below for a graphical depiction of the interaction on significance loss, and Figure 4 for a depiction of the moderated mediation relationship, including unstandardized loadings with standard errors in parentheses. See Table 3 for the full set of results.

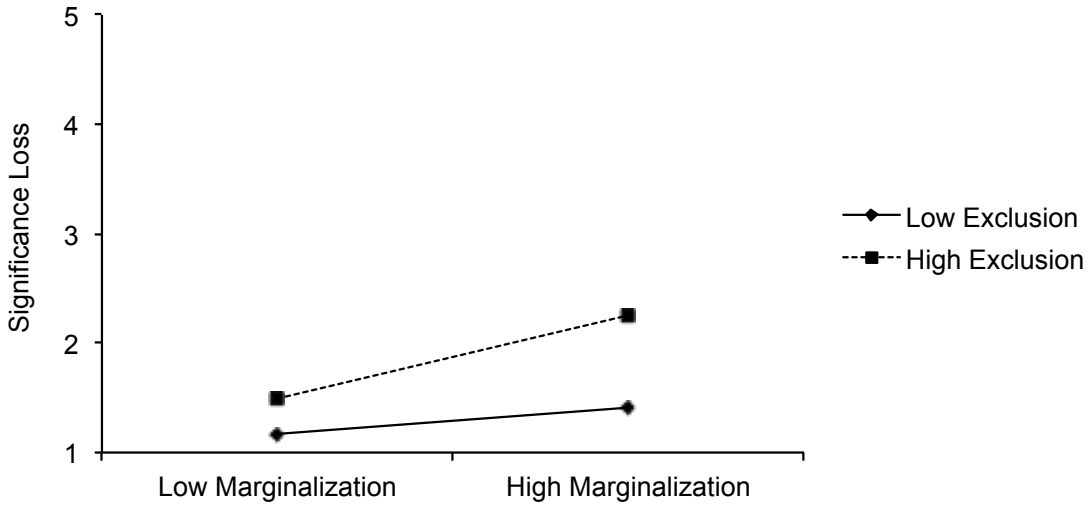

Figure 3. Interaction between marginalization and exclusion on significance loss in Study 3. Marginalization and exclusion are both depicted at +/- SD from the mean.

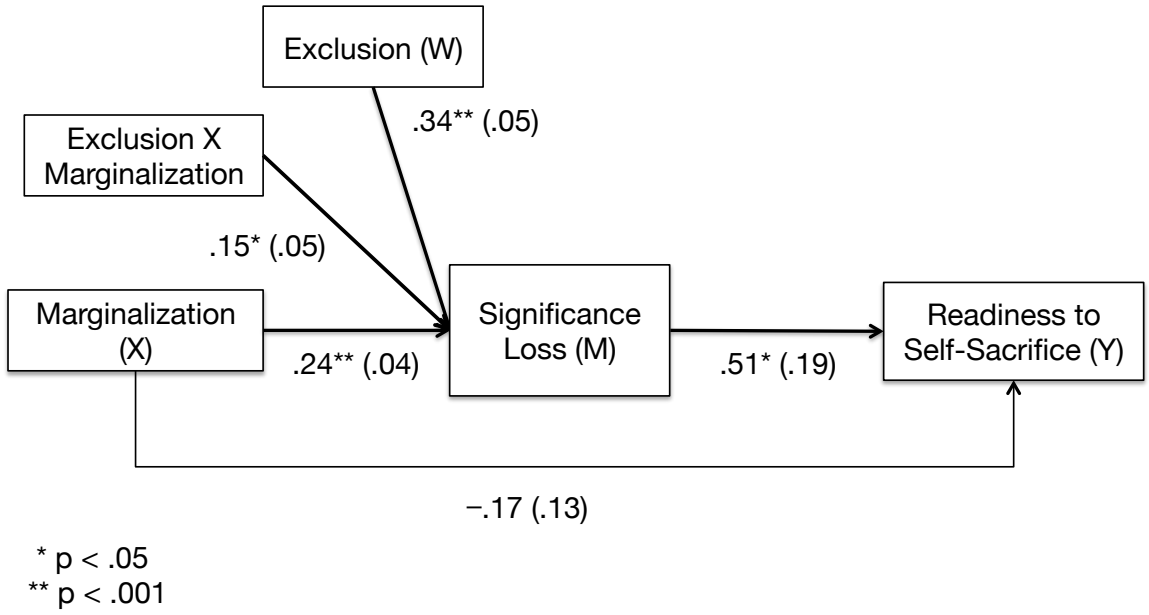

Figure 4. Moderated mediation path to readiness to self-sacrifice in Study 1.

Support for a radical interpretation of Islam. The path to significance loss was identical to that of the analyses for willingness to self-sacrifice, such that marginalization

and exclusion both predicted greater significance loss, as did the interaction term for marginalization and exclusion

Significance loss in turn predicted support for a radical interpretation of Islam (B = .17, SE = .07, p = .03). This provided support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. Controlling for the role of the other variables, there was a marginal direct negative effect from marginalization to support for radical ideologies (B = -.10, SE = .05, p = .06).

We then looked to see whether there was an indirect effect of marginalization on support for a radical interpretation of Islam through significance loss. The confidence intervals suggested that there was an indirect effect from marginalization to support for radical ideologies via significance loss when exclusion was high (95% CI [.0057, .1322]). Please refer to Figure 5 below for a depiction of the moderated mediation relationship, including unstandardized loadings with standard errors in parentheses. Table 4 presents the full set of results.

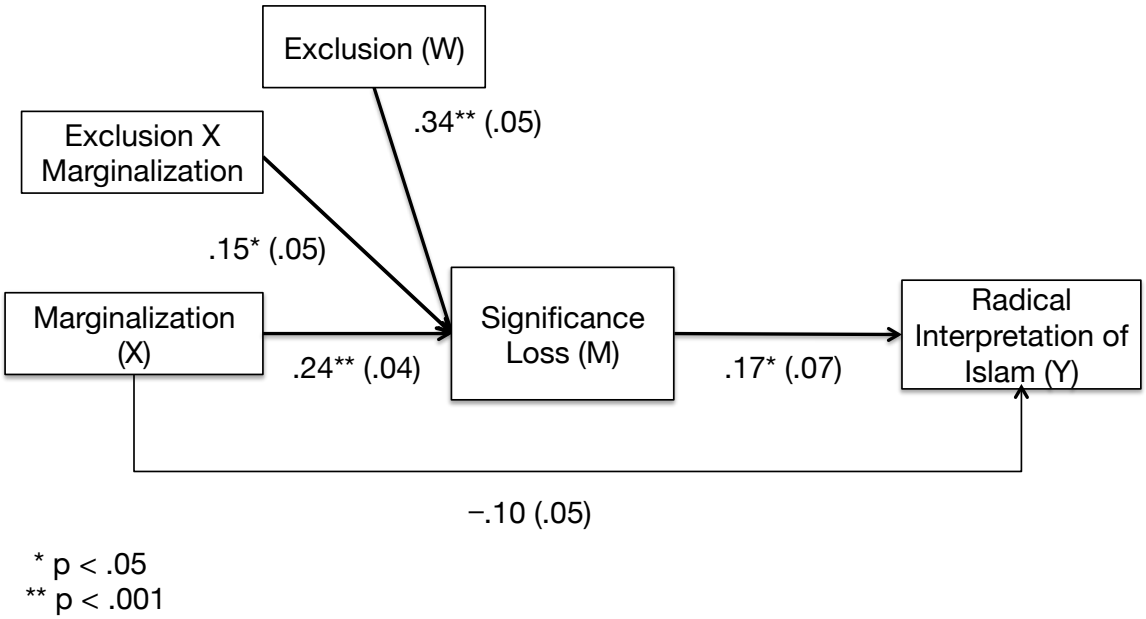

Figure 5. Moderated mediation path to support for a radical interpretation of Islam in Study 1.

Support for radical groups. Because the support for radical groups measure was inserted shortly after data collection was underway, 21 participants did not complete this measure and thus the analyses for the path to significance loss produced slightly different results than the analyses for the two previous variables. The pattern, however, was the same. Marginalization predicted greater significance loss (B = .26, SE = .05 p < .001), as did exclusion (B = .35, SE = .06, p < .001). This supported our hypotheses that both marginalization and exclusion would be related to greater feelings of significance loss. The interaction term for marginalization and exclusion also predicted greater significance loss (B = .15, SE = .05 p = .005). This supported our hypothesis that exclusion would exacerbate the relationship between marginalization and feelings of significance loss.

In turn, significance loss predicted attraction to the group (B = .43, SE = .12, p = .003). This provided support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. Controlling for the role of the other acculturation orientations, there was not a direct effect for marginalization (B = -.12, SE = .08, n.s.).

We then looked to see whether there was an indirect effect of marginalization on support for radical groups through significance loss. The confidence intervals suggested that there was an indirect effect from marginalization to attraction to the group via significance loss when exclusion was high (95% CI [.0682, .3235]). Please refer to Figure 6 below for a depiction of the moderated mediation relationship, including unstandardized loadings with standard errors in parentheses. Table 5 presents the full set of results.

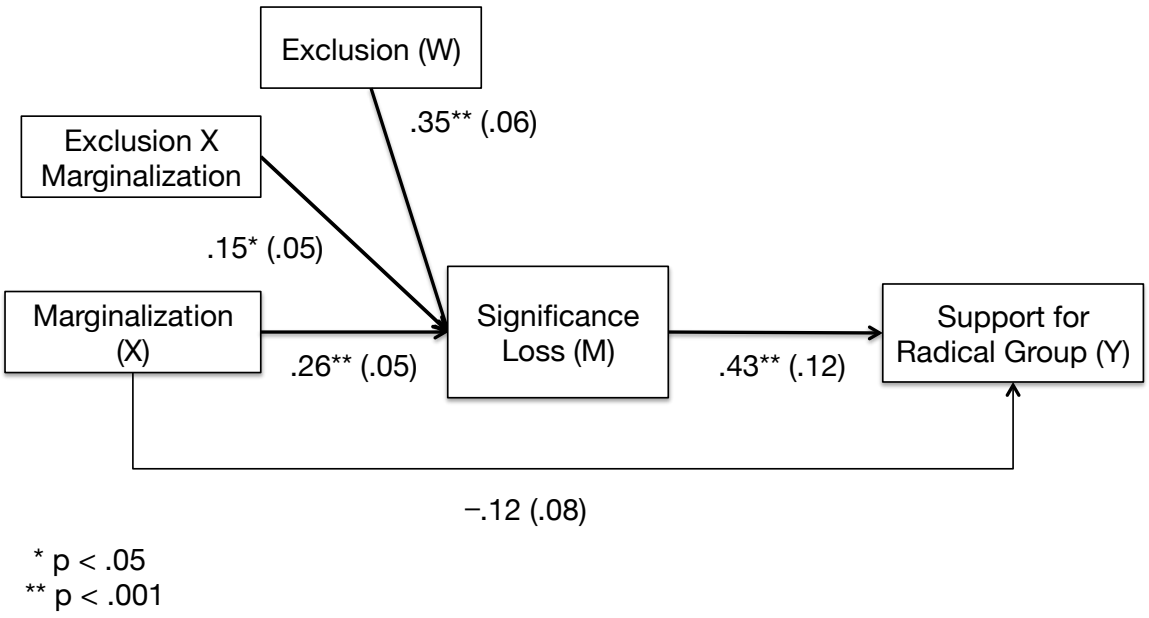

Figure 6. Moderated mediation path to support for the radical group in Study 1.

Other acculturation orientations. Although the focus for this research was the role of marginalization, we also report the patterns for the other acculturation orientations included as control variables. Table 3 shows that integration was a buffer against significance loss as well as readiness to self-sacrifice. The relationship between the other acculturation orientations and the dependent variables were less consistent. Separation was a buffer against readiness to self-sacrifice, but a risk factor for possessing a radical interpretation of Islam. Assimilation was unrelated to any of the variables of interest. Notably, marginalization was the only acculturation orientation that came up as a risk factor for significance loss.

We also looked into whether any of these other acculturation orientations would interact with exclusion to predict significance loss. Appendices J – R show that integration was the only acculturation strategy that interacted with exclusion, such that individuals experienced more significance loss when they felt more excluded and less integrated.

Study 1 Summary

As expected, we found that marginalization of Muslims in the United States predicted significance loss, and this was exacerbated by the perception of having been excluded by other non-Muslim Americans. In turn, significance loss predicted all three indicators of support for radicalism. All three sets of results provided support for our hypotheses. We also found an interaction between integration and exclusion on significance loss, such that participants who were less integrated experienced greater significance loss under conditions of exclusion. This finding is consistent with our predictions about marginalization, as less integration can be interpreted as more marginalization. Assimilation was unrelated to any of our variables of interest, and the role of separation was unclear as it was a risk factor for a radical interpretation of Islam, but a protective factor against readiness to self-sacrifice.

Although we found support for our predicted model in an American sample, it is important to know whether our theory can be applied to other cultural contexts. Thus, we sought to replicate the study in a sample of German Muslims in Study 2.

Chapter 6: Immigrant Marginalization in Germany (Study 2)

Homegrown terrorism is not a phenomenon unique to the United States. Some Muslim immigrants living in Western European countries have also become radicalized. Germany, which has a large Turkish population, is a country where many immigrants have had difficulty integrating into society (Phalet & Kosic, 2006; Kunst & Sam, 2013). We conducted the same interviews and surveys in Germany to determine whether the relationship between identity processes, exclusion and radicalization applies beyond the United States. To the extent that the theory can apply to other cultural contexts, it suggests that immigrant identity issues are a universal concern, not just relevant to the United States.

Participants, Design and Procedure

We administered surveys to 302 Muslims with immigrant backgrounds in Germany. Our collaborators at Jacobs University Bremen assisted in collecting survey responses in Germany. They contacted Muslim student associations at universities throughout the country, and also advertised in Muslim-German forums. Like in the United States, we attempted to maximize variability in ethnic background, gender, generational status and religiosity, and focused on young adults. We primarily recruited individuals of Turkish origin because they comprise the largest immigrant community in Germany.

As in the United States, surveys were administered using an online survey platform. The survey underwent a thorough translation and back-translation procedure to ensure that the German version of the survey was equivalent to the original English. Participants were informed of the purpose of the study, completed the survey, and then

received a full debriefing. Participants were compensated with an 8€ gift certificate sent through e-mail.

Participant characteristics. We used the same criteria as in Study 1 to exclude participants who failed to meet our eligibility criteria or demonstrated that they were not paying attention to the survey. Our final sample consisted of 204 participants (75 Male, 119 Female; mean age = 25.3). The sample included first (N = 77), second- (N = 107), and third-generation (N = 20) Muslim immigrants. Controlling for generational status and gender did not influence the results. Participants represented all states in Germany, with the largest number coming from Nordrhein-Westfalen (N = 46), Niedersachsen (N = 45), Bremen (N = 24), and Hessen (N = 20). Participants reported more than a dozen different heritage backgrounds, with approximately half coming from Turkey (N = 102). Perhaps in part owing to the younger average age and differences in the educational structure between Germany and the United States (i.e., Germans start university at an older age than Americans), a smaller proportion of the sample had a university degree (42%). More than 50% possessed an advanced high school degree that prepares students for university study. Slightly more than 60% of participants considered themselves as belonging to the upper-middle class or higher.

Pilot Interviews

As in the United States, we first conducted interviews with 10 Muslim first- and second-generation immigrants in Germany. These interview responses were translated into English and considered along with the American responses in the development of the survey materials so that we could make sure to address issues that were relevant to both Muslims in the United States as well as in Germany. The interview responses in Germany

touched upon many of the same issues as the American responses regarding identity management and attitudes toward radicalization. German Muslims additionally discussed some different discrimination issues than the American sample, such as discrimination in the workplace, pushback for wearing religious articles of clothing in public, and unfair depictions of Muslims in the mainstream media. Again, these responses will be subject to more thorough analysis in future research.

Stimuli

All measures from the American survey were translated and back-translated for inclusion in the German survey, and any translation discrepancies were discussed and resolved with the German collaborators. Some items needed to be modified slightly to appropriately fit the German context, as they had been initially designed with an American sample in mind.

Marginalization. We utilized the same four-item composite scale consisting of two of our own items and two items from the Immigrant Acculturation Scale (Bourhis & Barrette, 2006) to measure marginalization of immigrants in Germany ($\alpha = .64$).

Other acculturation orientations. In order to measure other acculturation strategies, we used the same items from the Immigrant Acculturation Scale (Bourhis & Barrette, 2006). These items were measured on a six-point scale for both the domains of customs and values pertaining to integration ($\alpha = .76$), separation ($\alpha = .83$), and assimilation ($\alpha = .78$).

Exclusion. Participants completed the same nine-item Inclusionary Status Scale (Spivey, 1990; Rubin, Watt & Ramelli, 2012) pertaining to experiences of exclusion by non-Muslim Germans ($\alpha = .86$).

Significance loss. We used the same eight items adapted from the Need Threat Scale (Williams, 2009) to measure significance loss among Muslims in Germany in order to be consistent with our measurement of the construct in the American sample ($\alpha = .88$).

Support for radicalism. We included the same indicators of support for radicalism as we had in the American sample.

Readiness to self-sacrifice. We administered the same five items from the Self-Sacrifice Scale, translated into German (Bélanger et al., 2014; $\alpha = .89$).

Extreme interpretation of Islam. We used the same ten items on a six-point scale representing a radical interpretation of certain tenets of Islam, translated into German ($\alpha = .81$).

Hypothetical group vignette. The hypothetical group vignette was translated and back-translated before being administered in the survey. Potential translation issues were taken into account when developing the English version of the description, so as to avoid problems with the German version. We used the same twelve-item scale to measure support for the group in terms of descriptive norms (Hogg, Meehan, & Farquharson, 2010; Simon et al., 2013; $\alpha = .95$).

Additional measures. We included additional measures in the survey for exploratory comparative analyses between the American and German samples.

Host country tightness-looseness. We included a measure of cultural tightness-looseness (Gelfand et al., 2011) for exploratory cross-national comparative analyses of the surveys. Tightness-looseness describes the extent to which a society maintains and enforces social norms (Gelfand, Nishii & Raver, 2006; Gelfand et al., 2011). Societies that are "tight" expect more conformity to normative behavior, and norm breakers are

subject to punishment. Societies that are "loose" do not have such strict expectations for behavioral conformity, and are more permissive toward norm-breaking. Tightness has been linked to higher rates of terrorism at the country level (Gelfand, LaFree, Fahey & Feinberg, 2013), and other data has indicated that Germany is moderately tight, whereas the United States is moderately loose (Gelfand et al., 2011). Accordingly, we included this measure to see if there were any differences in radicalization rates in the United States and Germany as a function of tightness-looseness.

The Tightness-Looseness Scale consisted of six items pertaining to the perceived tightness or looseness of the host society. Sample items include "There are many social norms that people are supposed to abide by in this country" and "In this country, if someone acts in an inappropriate way, others will strongly disapprove." Items were measured on a six-point scale (1 = Strongly Disagree, 1 = Strongly Agree; $\alpha = .66$[6]). Higher scores represented the tightness end of the continuum, whereas lower scores represented looseness. One item was reverse-coded prior to analyses ("People in this country have a great deal of freedom in deciding how they want to behave in most situations").

Perception of host country closed-mindedness. Analysis of the interview responses revealed that many Muslims perceive that members of the mainstream society are not truly accepting of or interested in learning about other cultures. Tighter cultures tend to be more ethnocentric (Gelfand et al., 2011), so we expected that perceptions of cultural closed-mindedness in the host society might be an important mediator of tightness-looseness effects if they were found on the outcome variables.

---

[6] The alpha for the Tightness-Looseness Scale in the American sample was also .66.

We developed four items to speak to this issue in both the United States and Germany: "Even though most Americans/Germans like to think they are open-minded, they actually are not," "Most Americans/Germans are more prejudiced than they would like to believe they are," "When Americans/Germans ask me where I come from, I sense that they aren't really interested in learning about my culture," and "Most Americans/Germans are not interested in learning about other people's cultures" ($\alpha = .80$[7]).

The additional measures including the Tightness-Looseness Scale (Gelfand et al., 2011) and Perceived Host Country Closed-Mindedness Scale can be found in Appendix S.

Results

Table 6 presents the scale means and standard deviations and Table 7 shows the correlations across study variables. As with the American sample, the overall support for radicalism in the German sample was considerably low.

Moderated mediation. We proceeded to test the same moderated mediation model using the same procedure outlined in Study 1. As in Study 1, we looked at the role of other variables such as generational status, sex, and age. None of these variables changed the relationship between our predictor and outcome variables, so they were not included in the analyses.

Readiness to self-sacrifice. Marginalization predicted significance loss ($B = .23$, $SE = .04$, $p < .001$), as did perceptions of exclusion ($B = .32$, $SE = .04$, $p < .001$). This supported our hypotheses that both marginalization and exclusion would be related to greater feelings of significance loss. The interaction term for marginalization and exclusion predicted significance loss as well, such that exclusion exacerbated the

[7] The alpha for the Host Country Closed-Mindedness Scale in the American sample was .86.

relationship between marginalization and significance loss (B = .10, SE = .05, p = .02). This supported our hypothesis that exclusion would exacerbate the relationship between marginalization and feelings of significance loss.

However, significance loss did not predict readiness to self-sacrifice (B = -.03, SE = .16, n.s.). Therefore, we did not find support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. There was no direct effect of marginalization on readiness to self-sacrifice (B = -.14, SE = .11, n.s.), nor was there an indirect effect. Therefore, only the mediator portion of the model from Study 1 was replicated in Study 2. Table 8 presents the full set of results.

Support for a radical interpretation of Islam. The path to significance loss was identical to that of the analyses for willingness to self-sacrifice, such that marginalization and exclusion both predicted greater significance loss, as did the interaction term for marginalization and exclusion.

Next, significance loss predicted support for a radical interpretation of Islam (B = .21, SE = .07, p = .004). This provided support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. A negative direct effect of marginalization remained (B = -.15, SE = .05, p = .005).

We then looked to see whether there was an indirect effect of marginalization on support for a radical interpretation of Islam through significance loss. There was a positive indirect effect of marginalization through significance loss at low (B = .03, SE = .012, 95% CI [.02, .0055]), medium (B = .05, SE = .02, 95% CI [.01, .09]), and high (B = .07, SE = .03, 95% CI [.02, .13]) values of exclusion, suggesting that the indirect effect of marginalization through significance loss grew as exclusion increased. Therefore, the

relationship that we found in Study 1 for support for a radical interpretation of Islam replicated in Study 2. Please refer to Figure 7 below for a graphical depiction of the interaction between marginalization and exclusion on significance loss, and Figure 8 for a depiction of the moderated mediation relationship, including unstandardized loadings with standard errors in parentheses. Table 9 presents the full set of results.

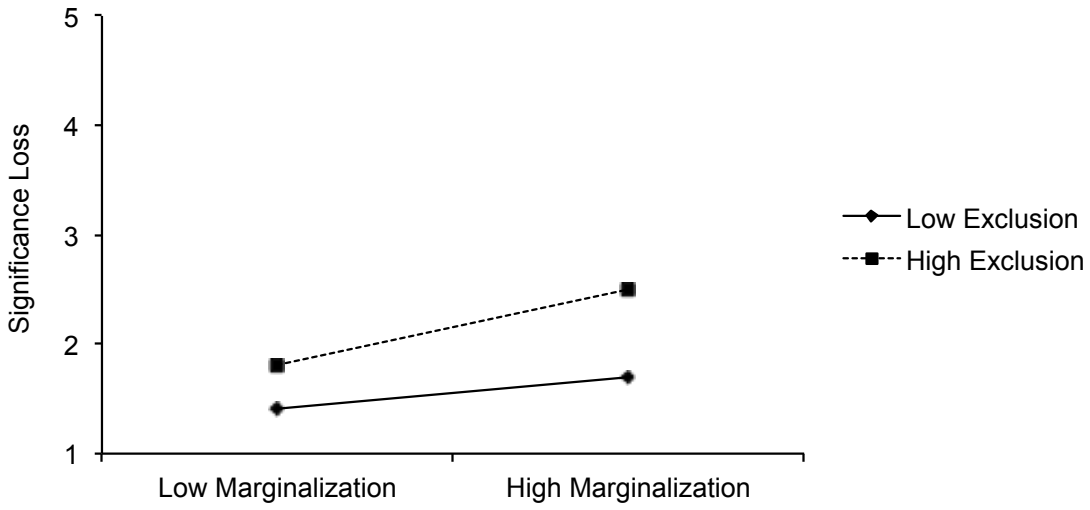

Figure 7. Interaction between marginalization and exclusion on significance loss in Study 3. Marginalization and exclusion are both depicted at +/- SD from the mean.

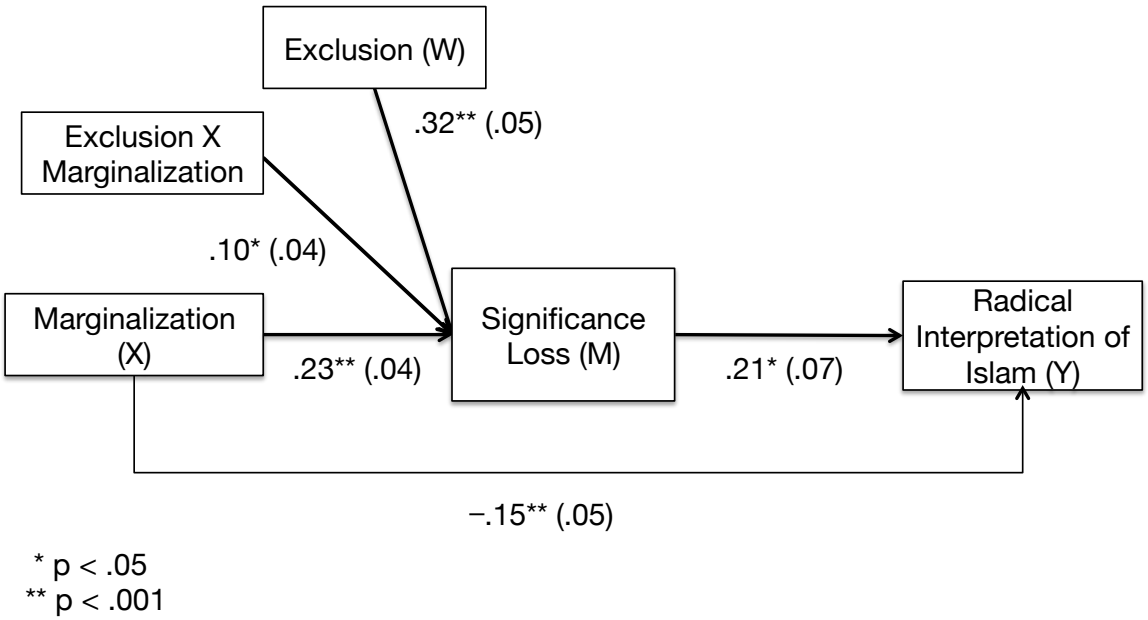

Figure 8. Moderated mediation path to support for a radical interpretation of Islam in Study 2.

Support for radical groups. The path to significance loss was identical to that of the analyses for willingness to self-sacrifice and support for a radical interpretation of Islam, such that marginalization and exclusion both predicted greater significance loss, as did the interaction term for marginalization and exclusion.

Significance loss did not, however, predict support for the group (B = .11, SE = .11, n.s.). Therefore, we did not find support for our hypothesis that feelings of significance loss would be associated with greater support for radicalism. There was no direct effect of marginalization on support for the group (B = -.03, SE = .08, n.s.), nor were there indirect effects through significance loss at any value of exclusion. Therefore, only the mediator portion of the model from Study 1 was replicated in Study 2. Table 10 presents the full set of results.

Other acculturation orientations. As in Study 1, we also report the patterns for the other acculturation orientations included as control variables. Appendix T shows that, unlike in the American sample, separation amongst Muslims in German was a risk factor

for significance loss, and it was also related to greater support for a radical interpretation of Islam and support for radical groups. Assimilation was also related to greater support for the group. Integration buffered against support for a radical interpretation of Islam as well as marginally so against readiness to self-sacrifice.

We also explored interactions between exclusion and each of the acculturation strategies on significance loss, and these results are presented in Appendices T – BB. Unlike the American sample, integration did not interact with exclusion to predict significance loss. There was a marginal interaction with separation, such that exclusion exacerbated the positive relationship between separation and significance loss. There was also a positive marginal interaction with assimilation, meaning that assimilation became a marginally significant risk factor when exclusion was high.

Study 2 Summary

As in the American sample, marginalization and exclusion interacted to predict significance loss among Muslims in Germany. This finding supported our hypothesis that marginalization is a source of significance loss for Muslim immigrants both within and outside the United States, and that this loss is exacerbated by experiences of exclusion.

Significance loss was a risk factor for support for a radical interpretation of Islam, but it did not predict readiness to self-sacrifice or support for the radical group. Instead, separation emerged as a stronger risk factor for radicalism, predicting two out of our three measured indicators. Therefore, we found partial but not full replication of the moderated mediation model that explained the data from the American sample in Study 1.

Additionally, we observed an unexpected effect for separation on both significance loss and support for radicalism, which we did not find in the American

sample. We will address potential explanations for the unique effect of separation in the German sample in the general discussion.

Exploratory Comparison of the American and German Samples

We performed t-tests to identify any differences between the American and German samples on demographic characteristics or variables included in our analyses. The American sample was older than the German sample ($t(397) = 3.00$, $p = .003$). The gender distribution was even between countries ($\chi^2(1) = .48$, n.s.).

The American sample reported a stronger endorsement of the integration orientation than the German sample ($M = 4.96$, $SD = .95$ and $M = 4.48$, $SD = 1.19$, respectively; $t(400) = 4.50$, $p = .002$), but there were no differences for marginalization, separation, or assimilation. The German sample reported experiencing more exclusion than the American sample ($M = 2.88$, $SD = .93$ and $M = 2.49$, $SD = .87$, respectively; $t(400) = 4.42$, $p < .00$), as well as greater significance loss ($M = 1.84$, $SD = .75$ and $M = 1.61$, $SD = .73$, respectively; $t(400) = 3.23$, $p = .001$).

Additionally, the German sample indicated greater support for radicalism than the American sample on two out of the three indicators. Germans reported greater readiness to self-sacrifice than the Americans ($M = 4.24$, $SD = 1.54$, and $M = 3.23$, $SD = 1.78$, respectively; $t(400) = 6.05$, $p < .001$), and also demonstrated higher support for a radical interpretation of Islam ($M = 2.56$, $SD = .80$ and $M = 2.13$, $SD = .74$, respectively; $t(400) = 5.65$, $p < .001$). The samples did not differ in terms of support for radical groups.

Finally, the two samples differed on the cultural variable of tightness-looseness. Muslims in Germany reported that the larger society was tighter than Muslims in the United States ($M = 4.00$, $SD = .65$ and $M = 3.80$, $SD = .73$, respectively; $t(400) = 2.86$, p

= .004). They also differed on perceptions of closed-mindedness in the host society, such that the German sample reported higher levels of closed-mindedness than the American sample (M = 4.20, SD = .99 and M = 3.45, SD = 1.19, respectively; $t(400) = 6.57$, $p < .001$). Please see Appendix CC for the complete list of t-test results.

Structural equivalence. Before we could conduct comparative analyses on the American and German data, it was necessary to first establish structural equivalence for all of the variables to be included in a model. In other words, we needed to determine whether or not there were any differences in the factor structure and loadings between the two samples. To this end, we performed a Procrustean factor rotation to compare the German and American patterns of responding. We carried out a target rotation such that the German data was rotated toward the American factor matrix in order to assess similarity of the factor structures. We performed the Procrustes rotation for the acculturation items and the indicators of support for radicalism. Because Tightness-Looseness and Host-Country Closed-Mindedness were only theorized to load on one factor, we were unable to perform the Procrustes rotation, as this analysis requires at least two factors. Instead, we conducted multigroup confirmatory factor analysis procedures.

We first performed the factor analysis and Procrustes rotation on the acculturation items. We used the principal axis factoring with varimax rotation, as the Procrustes procedure requires that the factors be treated as orthogonal. The factor analysis indicated that the items representing the four different acculturation orientations loaded onto the four hypothesized factors for both the American and German samples. In order to increase reliability of the marginalization measure, we used a parceling approach to consolidate the four marginalization items to two. Thus, one item from the Immigrant

Acculturation Scale was paired with one item from our original measure. After submitting the solutions to the Procrustes rotation, we looked to Tucker's Phi as an index of congruence, as is commonly used in the cross-cultural literature. Values above .95 generally demonstrate acceptable equivalence, and values below .85 indicate poor equivalence (Fischer & Fontaine, 2011; van de Vijver & Leung, 1997). Tucker's Phi was .96 for marginalization, .95 for separation, .94 for assimilation, and .98 for integration. Therefore, we found acceptable levels of structural equivalence among the acculturation orientation items.

Next, we performed principal axis factoring analyses with a varimax rotation on the radicalism variables, constraining the structure to three factors to represent the readiness to self-sacrifice, support for a radical interpretation of Islam, and support for radical groups scales. We used parcels in order to procure a more parsimonious factor structure across the groups. We consolidated the twelve-item support for radical group scale to four items consisting of one item from each of the subscales (attraction to the group, willingness to act on behalf of the group, and sympathy for the group's radical behavior). Likewise, we used parcels for the radical interpretation of Islam and readiness to self-sacrifice scales. Through the factor analyses we identified two problematic items from the support for a radical interpretation of Islam scale, which were loading on the support for a radical group factor to differing extents in the US and Germany. These items were "Muslims in America should help their oppressed brothers and sisters in other parts of the world by participating in combative jihad" and "Combative jihad is the only way to conduct jihad." After removing these two items, we created four parcels from the eight remaining items, combining high- and low-loading items with each other. We used

the same criteria for reduce the five readiness to self-sacrifice items to two parcels. We found acceptable structural equivalence for these three measures through the Procrustean rotation, with Tucker's Phi coefficients of 1.00 for support for the radical group, .98 for readiness to self-sacrifice, and .99 for support for a radical interpretation of Islam.

Because the tightness-looseness measure only consisted of a single theorized factor represented by six items, we conducted multigroup confirmatory factor analyses instead of a Procrustes factor analysis. We looked for evidence of metric invariance, or in other words, support for the assumption that the items loaded on the tightness-looseness factor similarly between the American and German samples. We used absolute and parsimony-adjusted fit indices as guidelines for assessing cross-cultural equivalence. The comparative fit index (CFI) was .93, slightly lower than the conventionally used .95 as a guideline for good absolute fit. The parsimony-adjusted root mean squared error of approximation (RMSEA) index was .06 (90% CI [.041, .081]). This was within the range of values found to demonstrate good fit (Hu & Bentler, 1999). An additional parsimony-adjusted index, the standardized root mean square residual (SRMR), could not be computed on account of missing data.

The perceptions of host-country closed-mindedness scale also only consisted of one theorized factor with four items. Therefore, we conducted multigroup confirmatory factor analyses instead of the Procrustes factor analysis to assess metric invariance. The CFI index was .92, slightly below the conventionally used value of .95 as a guideline for good absolute fit. The parsimony-adjusted RMSEA index was .13 (90% CI [.10, .17]). This was above the .08 – .10 range typically used as an indicator of mediocre fit (Milfont & Fischer, 2010; Browne & Cudeck, 1993; MacCallum, Browne & Sugawara, 1996).

However, we found an additional parsimony-adjusted index of model fit, the SRMR, to be .05, which is below the cut-off point of .08 as a marker of acceptable fit (Hu & Bentler, 1999). Therefore, we decided to move forward with including this measure in the US-Germany path model.

Path model. As reported, the German sample scored higher than the American sample on two of the indicators of radicalism. Although we had not made specific predictions as to whether to expect differences in support for radicalism between the two countries, we were interested in exploring possible explanations for this difference.

We also found that tightness scores were higher in Germany than in the United States. This is consistent with research on patterns of tightness-looseness across 33-nations, which revealed that the United States is fairly loose, while Germany is considerably tight (Gelfand et al., 2011). The same research found that tighter countries are less tolerant of outsiders. For example, tightness was found to be correlated with negative attitudes toward migrant workers. Therefore, we might expect that immigrants who live in tighter countries have a more difficult time successfully integrating into society, because there are strict norms for conforming to societal expectations in ways that might be difficult for immigrants (e.g., language, dress), and at the same time there is less open-mindedness toward diversity (Gelfand et al., 2011).

Thus, we tested a path model that looked into whether tightness in Germany might have contributed the US-Germany differences in readiness to self-sacrifice and support for a radical interpretation of Islam through producing the perception of closed-mindedness of the society and leading to less integration. We did not include significance loss in this path model, because significance loss had functioned inconsistently across the

outcome variables in the German sample. See Figure 9 below for a graphical depiction of the model.

Figure 9. Hypothesized serial mediation model between country and support for radicalism.

Serial mediation analyses. In our model, country was the predictor variable (US = 1, Germany = -1). We tested three mediators in serial. First, country led directly to tightness-looseness. Then, tightness-looseness led to perceptions of host country closed-mindedness. Next, perceptions of host country closed-mindedness led to integration. Finally, integration led to the outcome variable. The analysis for each mediator included the predictor variable (country) as well as all previous mediators in the model. We ran the model one time for readiness to self-sacrifice, and one time for support for a radical interpretation of Islam. As mentioned, two items were dropped from the support for a radical interpretation of Islam scale.

Readiness to self-sacrifice. There were country differences for tightness-looseness, such that Germany was tighter than the United States (B = -.10, SE = .03; p = .004). In turn, tightness predicted the perception of host country closed-mindedness (B = .19, SE = .08; p = .02). There were also country differences for host country closed-mindedness, such that Germans were thought to be more closed-minded than Americans (B = -.34, SE = .05; p < .001).

In the next step, host country closed-mindedness predicted lower integration scores (B = -.10, SE = .06; p = .04). There were also country differences in integration scores, as addressed previously; immigrants in the American sample were more

integrated than immigrants in the German sample (B = .21, SE = .06; p < .001). Tightness-looseness did not directly influence integration scores (B = .07, SE = .08, n.s.).

Finally, less integration predicted greater readiness to self-sacrifice (B = -.25, SE = .07; p < .001). There remained an effect of closed-mindedness (B = .25, SE = .07, p < .001) but not tightness-looseness (B = .14, SE = .12; n.s.). The direct effect of country on readiness to self-sacrifice was reduced from the total effect but still significant (B = -.34, SE = .09; p < .001, and B = -.50, SE = .08; p < .001).

The confidence intervals produced from 5000 bootstrap samples suggested an overall indirect effect of country on readiness to self-sacrifice through the mediators (B = -.0005, SE = .09; 95% CI [-.002, -.0001]). Please see Appendix DD for the complete set of results, and Figure 10 below for a graphical depiction of the model.

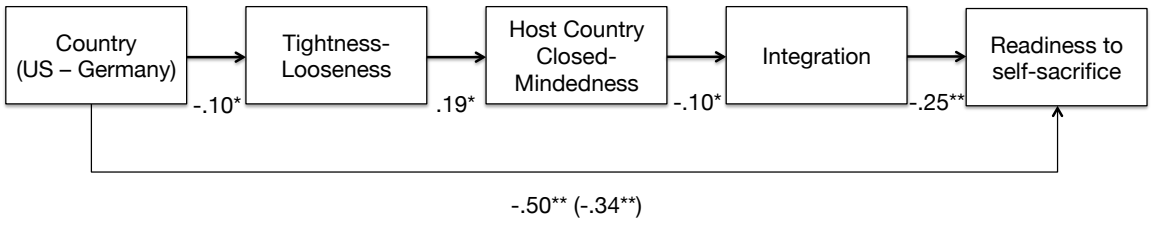

Figure 10. Serial mediation model between country and readiness to self-sacrifice.

Support for a radical interpretation of Islam. As in the previous model, there were country differences for tightness-looseness, such that Germany was tighter than the United States (B = -.10, SE = .03; p = .004). In turn, tightness predicted the perception of host country closed-mindedness (B = .19, SE = .08; p = .02). There were also country differences for host country closed-mindedness, such that Germans were thought to be more closed-minded than Americans (B = -.34, SE = .05; p < .001).

In the next step, host country closed-mindedness predicted lower integration scores (B = -.10, SE = .06; p = .04). There were also country differences in integration

scores, as addressed previously; immigrants in the American sample were more integrated than immigrants in the German sample (B = .21, SE = .06; p < .001). Tightness-looseness did not directly influence integration scores (B = .07, SE = .08, n.s.).

Finally, less integration predicted greater support for a radical interpretation of Islam (B = -.11, SE = .04; p = .006). There remained an effect of closed-mindedness (B = .15, SE = .04, p < .001) but not for tightness-looseness (B = -.01, SE = .06; n.s.). The direct effect of country on support for a radical interpretation of Islam was reduced from the total effect but still significant (B = -.17, SE = .04; p < .001, and B = -.24, SE = .04; p < .001).

The confidence intervals produced from 5000 bootstrap samples did contain zero, suggesting there was not an overall indirect effect of country on support for a radical interpretation of Islam through the mediators (B = -.0002, SE = .0002; 95% CI [-.001, .0000]). The confidence intervals did suggest indirect effects through tightness and host country closed-mindedness (B = -.002, SE = .001; 95% CI [-.006, -.0003]) or through closed-mindedness and integration (B = -.004, SE = .003; 95% CI [-.01, -.0003]), but not all three mediators combined. Please see Appendix EE for the complete set of results, and Figure 11 below for a graphical depiction of the model.

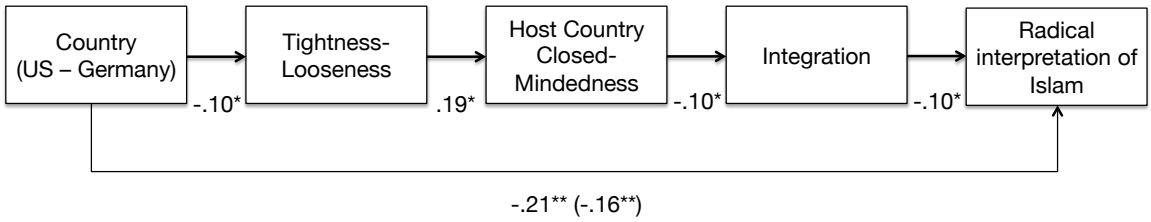

Figure 11. Serial mediation model between country and support for a radical interpretation of Islam.

Summary of Exploratory Analyses

Cross-national comparisons illuminated a number of differences between our samples. Although we did not see differences in marginalization, separation or assimilation scores, we did find that Muslim immigrants in Germany reported feeling less integrated than Muslim immigrants in the United States. We also found that Muslims in the German sample reported greater readiness to self-sacrifice and more support for a radical interpretation of Islam than Muslims in the American sample.

Therefore, we began to theorize as to how certain cultural conditions in the host society might produce more or less support for radicalism through identity processes. We knew that Germany is known to be less tolerant of deviance and norm-breaking than the United States, as per recent research on cultural tightness-looseness (Gelfand et al, 2011). Given that integrating into the host country environment means learning how to adapt to new norms while maintaining certain norms from the heritage culture, we surmised that this process might be more challenging in tighter contexts where expectations for norm following are strict and consequences for norm-breaking are severe.

As expected, participants reported that Germany was a tighter context than the United States. We found through our path model that tightness, in turn, led to perceptions of closed-mindedness, specifically with respect to cultural diversity. These perceptions of closed-mindedness predicted less successful integration, which in turn predicted support for both readiness to self-sacrifice and support for a radical interpretation of Islam. There was an overall indirect effect of country through these mediators for the former outcome variable, and partial indirect effects for the latter.

These preliminary exploratory analyses reveal that cultural characteristics of the host society play a key role in radicalization processes, and investigating other such cultural characteristics will be an important direction for future research.

Chapter 7: Immigrant Marginalization and Exclusion in the Lab (Study 3)

In Studies 1 and 2 we utilized Muslim community samples from different national contexts to explore the role of acculturation and exclusion experiences in attitudes toward the host culture and support for extremism. A key question is whether the phenomenon of immigrant radicalization is endemic to the Muslim community, or if marginalization and exclusion experiences can threaten significance loss and produce support for extremism amongst immigrants more broadly. In contrast to Studies 1 and 2, Study 3 participants came from a diverse variety of heritage culture backgrounds, including from different religions.

In addition to the shift in demographic focus, we made some changes in our methodological approach. Studies 1 and 2 were online surveys, and in Study 3 we brought participants into a more controlled setting in the lab. We collected data from participants on their acculturation orientations in advance during an online pre-test in order to have a more stable measure for predicting significance loss and support for radicalism.

Moreover, participants' exclusion experiences are likely qualitatively distinct and occur throughout different periods of time, and this is an issue we addressed in Study 3. We simulated exclusion experiences in the lab so that we could compare excluded participants against non-excluded participants. As in Studies 1 and 2, we expected marginalization to be related to greater significance loss, which would in turn predict greater support for extremism. We expected the relationship between marginalization and

significance loss to be particularly strong for participants who had undergone an exclusion manipulation, as compared to participants in the control condition.

Finally, we were also interested in what intervening processes might weaken the link between marginalization, exclusion and radicalism through significance loss that we observed in Studies 1 and 2. It is theorized that individuals pursue the quest for significance through extreme and potentially dangerous means when motivations for significance gain or restoration override other goals, such as goals pertaining to self-preservation (Kruglanski et al., 2013). For instance, in acts of suicide terrorism, losing one's life is outweighed by the gain of the status and recognition afforded by the heroic act of self-sacrifice for an important cause (Crenshaw, 2007; Kruglanski et al., 2009).

However, there may be several ways to get these self-preservation motives back on track, and this has been addressed in the context of deradicalization. Reduction of support for radical causes can occur when individuals develop the belief that their quest for significance has already been filled, such as in the case of jihadists who feel as if they have already contributed enough to their cause and no longer need to continue working on behalf of the organization (Kruglanski et al., 2013). Another option is shifting attention to alternative self-preservation goals that do not require extreme and self-sacrificial behavior (Kruglanski et al., 2013). For example, some terrorists who left the Basque organization ETA cited the desire to get married, do something else with their life, or see their family and children (Reinares, 2011; Kruglanski et al., 2013).

For marginalized and excluded immigrants who feel a threat to their significance but have not yet become radicalized, a different tactic might be needed to direct attention toward less destructive outlets for significance restoration. The path toward significance

gain need not necessarily be one of violence. For example, some work found that Shiite Muslims in Iran whose significance was threatened by reminders of their mortality supported more aggressive anti-West attitudes. However, this hostility was reduced when individuals were primed with positive verses of the Koran (Rothschild, Abdollahi, and Pyszczynski, 2009; Kruglanski et al., 2014). Therefore, we conceive that shifting the focus toward an alternative outlet for significance attainment might be an effective way to detract from the appeal of radical groups and ideologies.

We decided to explore this idea in Study 3. We hypothesized that redirecting attention toward personal significance derived from other sources in one's life (e.g., family, career goals, volunteerism) might reduce feelings of lost significance caused by marginalization and exclusion, and thereby attenuate support for radical groups and causes. To this end, we introduced a significance reminder manipulation wherein participants recalled and wrote about things that gave their life meaning. This manipulation was administered in conjunction with an exclusion manipulation, so that we could see if reminders of personal significance could attenuate the effects of exclusion. However, for reasons explained in what follows, we were not able to test this particular set of significance restoration hypotheses as planned.

Participants, Design and Procedure

Participants were 194 first- and second-generation students at the University of Maryland. We recruited participants through contacting various cultural organizations on campus as well as widespread flyer postings and e-mail announcements. Following

exclusions[8], our final sample consisted of 139 participants (mean age = 21.41; 31 male, 114 female). Of the participants, 68 reported being first-generation (mean length of time spent in the United States = 9.96 years), and 77 were second-generation. Participants represented a range of heritage culture backgrounds, including Asian (N = 85), African (N = 35), Latin American (N = 8), or other, including Middle Eastern, Eastern European or mixed heritage backgrounds (N = 17). Of the final sample, 48 participants were assigned to the control condition, 55 to the exclusion-only condition, and 42 to the exclusion + significance restoration condition. We had aimed to reach 40-50 participants per condition in order to achieve adequate statistical power.

Pretest. First, participants completed an online eligibility survey and pre-test in which they indicated their generational status in the United States as well as their heritage culture background. They also completed acculturation orientation measures prior to being invited to participate in the lab study. Other distractor questions were included in order to detract from the focus on cultural identity. The purpose of administering this pre-test at a separate time from the laboratory study was so that cultural identities would not be made too salient during the experimental procedure.

Eligibility criteria. Participants had to meet several criteria in order to be invited for the lab study. First, prospective participants had to have been born outside the United States or their parents had to have been born in another country. Second, for those born in another country, we required that they have lived in the United States for at least six

[8] In some cases, technical problems prohibited us from matching the pretest data with the experiment data, and we could not analyze all of a participant's data. There were also several participants who did not follow instructions during the experiment. Finally, we had initially invited a number of individuals to participate who had been in the United States for a very short period of time (less than six months). We ultimately decided that these individuals had not been in the country long enough to develop an American identity and removed them from the dataset.

months. The rationale for this decision is that students who have lived in another country for less than half a year have not had ample time to develop an American cultural identity. Finally, first- or second-generation students were not invited if the heritage country they listed belonged to Western Europe. This was because Western Europeans are afforded a higher status in the United States than are immigrants from other countries, and are often indistinguishable by physical appearance from white Americans, so we did not expect them to react to the exclusion manipulation in the same way as immigrants from other nationalities.

Group activities study. Participants came to the lab and were told that they would participate in a study about how people from different groups interact with each other. They were told that they would break into groups with other participants, but in reality, there was no group exercise. Participants were given a condition-specific explanation as to why they were not selected into a group activity. Then, participants were told they would be assigned to an unrelated "Student Activism" study. Half of participants in the exclusion condition underwent an additional significance restoration manipulation and were then asked to complete a short writing task about things that give their life a sense of meaning. Participants in all conditions then completed the Need Threat Scale (Williams, 2009) that was administered in both Studies 1 and 2. They were then directed to the "Student Activism" study, in which they would be asked to give their opinions about different groups on campus. As a part of this task, they read a description of a hypothetical extremist group, which was slightly modified from Studies 1 and 2 such that it spoke to immigrants and minorities more broadly rather than just Muslims. Finally,

participants completed additional extremism measures and, upon completion of the study, were fully debriefed regarding the purpose of the study and the exclusion manipulation.

Experimental manipulations

Exclusion manipulation. Our exclusion manipulation was based on an existing paradigm where a group of real participants engage in a "getting acquainted" conversation, and afterwards participants choose a group member with whom they would like to work with most (Nezlek et al., 1997; Williams, 2007). Later, participants receive feedback as to whether the other group members wanted to work with them (inclusion condition), or did not want to work with them (exclusion condition). Because all of our participants had recent immigrant backgrounds and were to be excluded by non-minority individuals, we could not assemble groups of actual participants for our manipulation. Therefore, we modified this paradigm by using a "getting to know you" worksheet featuring non-minority confederate profiles instead.

Furthermore, we modified the design of the control condition so that it did not contain elements of inclusion, because we did not want to unintentionally induce significance gain through feelings of belongingness. Therefore, we designed the control condition to be as similar to the exclusion condition as possible, such that individuals across both conditions were unable to participate in a group activity, but only individuals in the exclusion condition were made to believe this was because they were personally excluded. The specifics of each condition are described in what follows.

Exclusion condition. Participants were told that they along with the rest of the participants at the study appointment would organize into groups for a task. Participants in the exclusion condition in particular were told that that selection into groups would be

on the basis of individual preferences, such that the participant could indicate whom he or she would like to work with, and the other participants would be able to state the same preferences. Participants were alerted to the possibility that they could be assigned to an alternate activity if they were not chosen to be part of a group.

After explaining the procedure, the experimenter handed out a "Group Introduction Worksheet" in which participants were asked to fill out questions about their hobbies and interests as well as their religion and ethnic background. The experimenter took an instant photo of each participant and affixed it to the worksheet. Participants in the exclusion condition were told that the profiles would be used to pick preferred group members. The experimenter took the completed profiles and pretended to make copies for the other participants.

The experimenter returned a few minutes later with four profiles belonging to the other participants. These profiles were generated in advance to reflect a prototypical American college student. All of the students were white, and they came from Western European backgrounds. Each profile's responses were based on a survey of actual University of Maryland students' hobbies and interests. The profiles were piloted in advance to make sure that none seemed unlikeable or unrealistic, and that they were perceived to be distinct from the participants' own heritage backgrounds. See Appendix FF for the profiles.

Participants in the exclusion condition were instructed to look through the profiles and decide who they would like to work with the most. They were reminded that the other participants would also be looking at their own profiles to make their group member decisions. Then, participants were instructed to use the computer to enter the

online group assignment system. Participants in the exclusion condition first entered their top three choices for group members. Because there were four profiles, it was clear that only one profile would not be selected. After a short delay, during which time the other participants were ostensibly making their own group member preferences, the computer informed the participant that no one else had selected them as a group member. This message remained on the screen for 30 seconds before advancing to the instructions for the alternative study.

Control condition. Participants were told at the beginning that they along with the other study participants would organize into groups for a task, and that group assignment would be done randomly over the computer. The experimenter explained that in some time slots, there were not enough participants to assign everyone to the group activity. In this case, some participants could be asked to participate in an alternative activity. Participants were alerted to the possibility that they could be assigned to an alternate activity if they were unable to be assigned to a group, and that this decision would be made at random.

After explaining the procedure, the experimenter handed out the same "Group Introduction Worksheet" in which participants were asked to fill out questions about themselves. The experimenter took an instant photo of each participant and affixed it to the worksheet. Participants in the control condition were told that the profiles would be used during a "getting to know you" exercise after the group assignment. The experimenter took the completed profiles and pretended to make copies for the other participants.

The experimenter returned a few minutes later with the same four profiles belonging to the other participants that were given out to participants in the exclusion condition. Whereas participants in the exclusion condition were told that these profiles would be used for picking group members, participants in the control condition were told that they wouldn't use the profiles until after the group assignment. The participants were then instructed to use the computer to enter the online group assignment system. In the control condition, participants were told that a randomization algorithm determined that they could not partake in the group task. They were told that every participant had an equal chance of being assigned to a group, and that this was not an outcome that should be taken personally.

Thus, although all participants were ultimately unable to participate in the group activity, only participants in the exclusion condition were made to believe that they were explicitly rejected by students belonging to the mainstream culture.

Significance restoration manipulation. An additional condition consisted of participants who underwent the exclusion manipulation as well as an additional significance restoration manipulation. Following the notification that participants were not chosen for the group activity, participants in the exclusion + significance restoration condition were asked to engage in a short writing exercise: "Please write for a few minutes about what gives your life a sense of meaning; significance; importance; purpose; a feeling that you matter. There may be multiple things that come to mind, and you can write about any or all of them. Describe why you feel these things give your life significance and how they make you feel." Additional words such as "SIGNIFICANCE,"

"MEANING," "PURPOSE," and "IMPORTANCE" appeared in bold across the screen. Participants were able to proceed with the next part of the study after 5 minutes of writing.

Manipulation checks. To assess the exclusion manipulation check, participants were asked whether or not they participated in a group exercise, and if not, they were asked to explain why. We also included the nine-item exclusion scale from Studies 1 and 2, framed as being excluded by Americans more generally rather than non-Muslim Americans (Spivey, 1990; Rubin, Watt & Ramelli, 2012; α = .87). We expected that individuals in the exclusion-only condition should score higher on the scale than individuals in the control condition.

The second factor of the Need Threat Scale (Williams, 2009), which contained eleven items such as "My self-esteem is high," "I feel powerful," and "I feel important," was used to assess the effectiveness of the significance restoration manipulation. Please refer again to Appendix D for the factor loadings.

Stimuli

Marginalization and other acculturation orientations. We used the same items from the Immigrant Acculturation Scale (Bourhis & Barrette, 2006). However, due to concerns about length in the pretest, we only included one set of four items (one item per acculturation orientation) pertaining to cultural values. Additionally, we did not include the two additional marginalization items that had been created specifically for the Muslim sample in Studies 1 and 2, because participants from Study 3 came from a wide range of cultural and religious backgrounds.

Significance loss. Participants completed the same set of eight items from the Need Threat Scale (Williams, 2009) representing significance loss as in Studies 1 and 2 ($\alpha = .87$).

Support for radicalism. Study 3 included many of the same indicators of support for radicalism as in Studies 1 and 2, modified so that they were no longer oriented toward religious extremism.

Readiness to self-sacrifice. Participants completed the same five top-loading items from the Support for Martyrdom Scale (e.g., "Under the right circumstances, I would sacrifice my life for an important cause"; Bélanger, 2013). These items were measured on a seven-point scale ranging from "Very Strongly Agree" to "Not Agree at All," $\alpha = .88$.

Hypothetical group vignette. The vignette was adapted from Studies 1 and 2 such that the group's cause was to avenge injustices toward immigrants and minorities in the United States, rather than solely Muslims. The name of the group was changed to "Minorities with Might." See Appendix GG for the full text of the description.

Participants completed the same twelve items about attraction to the group, willingness to act on behalf of the group, and support for their radical activities as in Studies 1 and 2, framed at descriptive norms level ($\alpha = .90$).

Willingness to engage in radical action[9]. Participants indicated how willing they would be engage in six different extreme behaviors, such as participating in a violent demonstration, blocking a road, or damaging other people's property. Willingness to

[9] This scale was also administered in Studies 1 and 2, but the scale endpoints had been mistakenly flipped (1 = Definitely Yes, 5 = Definitely No). This led to confusion for many of the participants because the valence of the rest of the survey measures used higher scale numbers to reflect agreement with scale items, and resulted in inconsistent responding. Thus we were unable to analyze this measure in Studies 1 and 2.

participate in these behaviors was measured on a five-point scale (1 = Definitely Not, 5 = Definitely Yes; α = .82).

Anti-American Sentiment[10]. Participants responded to twelve statements that expressed negative perceptions of the American government and society (Glick et al., 2006). Participants were asked to indicate to what extent they felt these statements were characteristic of the United States on a five-point scale (1 = Not at all, 5 = Very much; α = .88). Sample items include "The US has no concern for what is best for other nations," "The US is responsible for problems in other nations," and "The US believes that own way of life is superior to all others."

Results

In what follows, we explain that the significance restoration manipulation did not appear to results in stronger perceptions of significance. Therefore, we were only able to test the part of the model pertaining to the role of exclusion, and not the role of significance restoration. Table 11 presents the scale means and standard deviations and Table 12 shows the correlations across study variables.

Manipulation checks

Exclusion. The measure of perceived exclusion revealed that participants in the exclusion-only condition did not actually feel more excluded than participants in the control condition (M = 2.59, SD = .85 and M = 2.33, SD = .89, respectively; $t(101)$ = 1.47, n.s.). Participants in the exclusion + significance restoration condition did, however, report feeling more excluded than those in the control condition ($t(88) = 2.49$, $p = .015$). We found that most participants who underwent an exclusion manipulation were able to

[10] This scale had also been administered in Studies 1 and 2, but we decided that some of the items were not appropriate for the German context and were left out of the survey. Therefore, we did not include that measure in our analyses.

correctly identify the reason that they were not able to participate in the group activity. In other words, people in both exclusion conditions (the exclusion only and exclusion + significance restoration conditions) identified that others had excluded them, whereas people in the control condition indicated that there were not enough people for the group exercise and the computer assigned them to another activity. Indeed, looking at the two exclusion conditions collapsed did reveal that individuals in both exclusion conditions combined felt more excluded than participants in the control condition ($t(142) = 2.31$, $p = .022$).

Significance restoration. Paired comparisons revealed that excluded participants who underwent the significance restoration manipulation did not feel greater significance than excluded participants who had not undergone the significance gain manipulation ($M = 3.46$, $SD = .67$ and $M = 3.55$, $SD = .60$, respectively; $t(95) = .73$, n.s.).

The significance gain manipulation did not appear to work, but participants in both exclusion conditions combined reported feeling more excluded than participants in the control condition. Therefore, we decided to collapse the two exclusion conditions in our subsequent analyses. This allowed us to explore our hypotheses about the role of actual exclusion, but meant that we were unable to test the significance restoration hypothesis as planned.

Moderated mediation. We conducted the same moderated mediation analyses as in Studies 1 and 2, substituting condition for perceived exclusion. One dummy variable for condition was included such that the exclusion-only and exclusion + significance gain conditions were combined and compared against the control condition as the reference group. Both exclusion conditions were coded as 1, and the control condition was coded as

0. Marginalization was entered as the independent variable and was mean-centered prior to analyses. Separation, assimilation and integration scores were included as controls in both paths leading to and from the mediator. We ran the analyses with 5000 bootstrap samples to generate 95% confidence intervals for the conditional indirect effect. The indirect effect for each of the analyses can be interpreted as the effect of marginalization on the dependent variable through significance loss for the exclusion conditions relative to the control group.

Readiness to self-sacrifice. First, we looked at significance loss as an outcome. There was a positive main effect for marginalization on significance loss (B = .12, SE = .05; p = .01) There was a marginally positive effect of condition on significance loss, meaning that individuals in the exclusion conditions experienced more significance loss than those in the control condition (B = .10, SE = .06; p = .09). Thus, we found support for our hypothesis that marginalization would be related to greater feelings of significance loss, and marginal support for our hypothesis that exclusion would be related to greater feelings of significance loss. Condition did not interact with marginalization to predict significance loss (B = -.01, SE = .05; n.s), so we did not find support for our hypothesis that marginalization would be associated with greater feelings of significance loss under conditions of exclusion. None of the other acculturation orientations influenced significance loss.

Next, we looked at significance loss as a predictor of readiness to self-sacrifice. Significance loss did not directly predict readiness to self-sacrifice (B = .09, SE = .19, n.s.). Therefore, we did not find support for our hypothesis that feelings of significance loss would predict greater support for radicalism. There were no direct or indirect effects

of marginalization, and none of the other acculturation orientations predicted readiness to self-sacrifice. Table 13 presents the complete set of results.

Willingness to engage in a radical act. The path to significance loss was identical to that of the analyses for readiness to self-sacrifice, such that marginalization predicted feelings of significance loss, exclusion condition marginally predicted feelings of significance loss, and there was no interaction between marginalization and condition.

Next, we looked at significance loss as a predictor of willingness to engage in a radical act. Significance loss did predict willingness to engage in a radical act (B = .25, SE = .09, p = .006). Therefore, we found support for our hypothesis that feelings of significance loss would predict greater support for radicalism. Marginalization emerged as a marginally significant predictor of willingness to engage in a radical act (B = .09, SE = .05, p = .07), and assimilation was a protective factor (B = -.14, SE = .06, p = .02). Unexpectedly, integration was marginally associated with greater willingness to engage in a radical act (B = .11, SE = .06, p = .07).

In line with our finding that marginalization did not interact with condition to predict significance loss, the confidence intervals suggested that there was not a conditional indirect effect of marginalization on willingness to engage in a radical act through significance loss under conditions of exclusion. Table 14 presents the complete set of results.

Support for radical groups. The path to significance loss was identical to that of the previous analyses, such that marginalization predicted feelings of significance loss, exclusion condition marginally predicted feelings of significance loss, and there was no interaction between marginalization and condition.

Next, we looked at significance loss as a predictor of support for radical groups. Significance loss did not predict support for the group (B = .21, SE = .14, n.s.). Therefore, we did not find support for our hypothesis that feelings of significance loss would predict greater support for radicalism. There were no direct effects of marginalization, nor indirect effects through significance loss. The only significant predictor of support for the group was integration as a protective factor (B = -.27, SE = .10; p = .007). Table 15 presents the complete set of results.

Anti-American sentiment. The path to significance loss was identical to that of the previous analyses, such that marginalization predicted feelings of significance loss, exclusion condition marginally predicted feelings of significance loss, and there was no interaction between marginalization and condition.

Next, we looked at significance loss as a predictor of anti-American sentiment. Significance loss did predict anti-American sentiment (B = .41, SE = .10, p < .001). Therefore, we found support for our hypothesis that feelings of significance loss would predict greater support for radicalism. There were no remaining direct effects for marginalization or any of the other acculturation orientations.

In line with our finding that marginalization did not interact with condition to predict significance loss, the confidence intervals suggested that there was not a conditional indirect effect of marginalization on support for radical groups through significance loss under conditions of exclusion. Table 16 presents the complete set of results.

Mediation analyses. Because we found that marginalization predicted significance loss, and significance loss predicted both willingness to engage in a radical

act and anti-American sentiment, we decided to explore simple mediation models for each of these two variables, leaving out the variable of exclusion. We conducted the analyses using the PROCESS macro in SPSS (Hayes, 2012) with marginalization as the independent variable, significance loss as the mediator, and willingness to engage in a radical act and anti-American sentiment as the outcome variables, respectively. Separation, assimilation and integration orientation scores were included as covariates in both paths. We ran the analyses with 5000 bootstrap samples to generate 95% confidence intervals for the indirect effect.

Willingness to engage in a radical act. In the first step of the mediation model, marginalization predicted significance loss (B = .12, SE = .05, p = .01). In turn, significance loss predicted willingness to engage in a radical act (B = .25, SE = .09, p = .006). The confidence intervals suggested an indirect effect of marginalization on willingness to engage in a radical act through significance loss (B = .03, SE = .02; 95% CI [.003, .09]). The total effect of marginalization had been significant (B = .12, SE = .05; p = .02), but when including significance loss as a mediator only a marginal direct effect remained (B = .09, SE = .05; p = .07).

With respect to the covariates, none of the other variables were related to significance loss. Assimilation was negatively related to willingness to engage in a radical act (B = -.14, SE = .06, p = .02) and integration was marginally positively related (B = .11, SE = .06, p = .08). Appendix HH presents the results, and Figure 12 below displays a visual depiction of the mediation model.

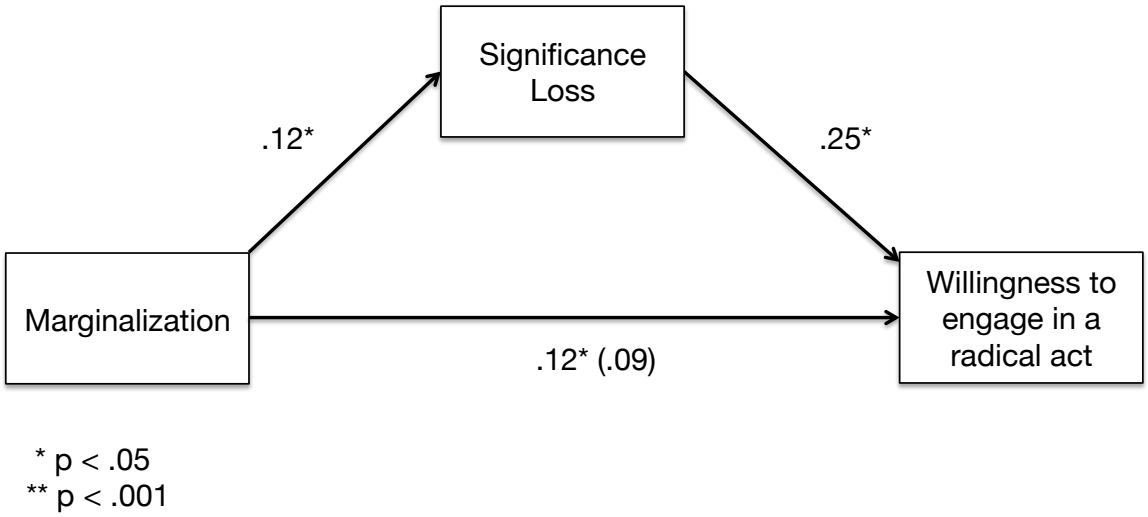

Figure 12. Mediation model for marginalization, significance loss, and willingness to engage in a radical act in Study 3.

Anti-American sentiment. In the first step of the mediation model, marginalization predicted significance loss (B = .12, SE = .05, p = .01). In turn, significance loss predicted anti-American sentiment (B = .41, SE = .10, p < .001). The confidence intervals suggested an indirect effect of marginalization on anti-American sentiment (B = .05, SE = .03; 95% CI [.007, .11]). The total and direct effects of marginalization were not significant (B = .07, SE = .06; n.s., and B = .02, SE = .06; n.s., respectively.

With respect to the covariates, none of the other variables were related to significance loss or anti-American sentiment. Appendix II presents the results, and Figure 13 below displays a visual depiction of the mediation model.

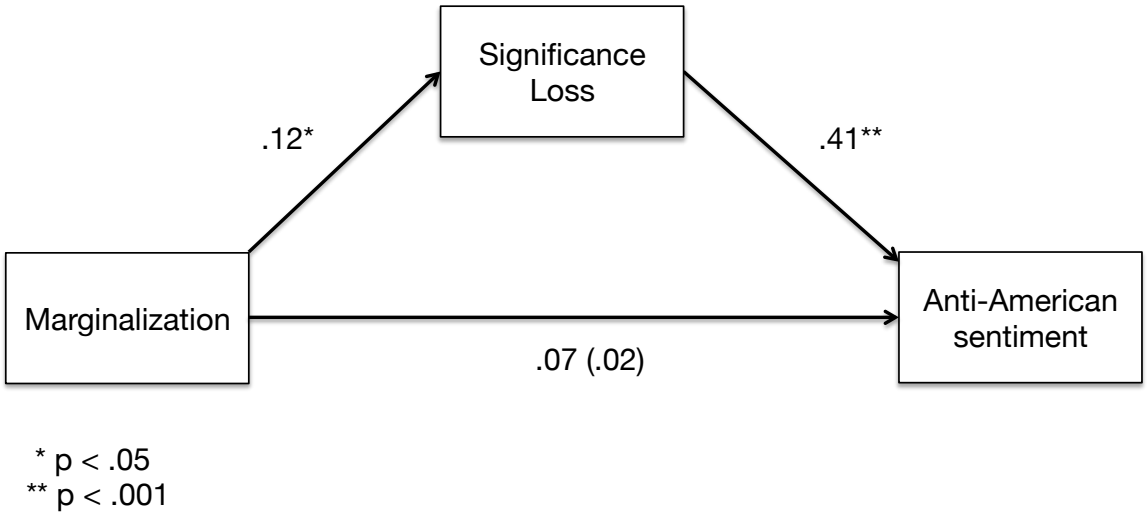

Figure 13. Mediation model for marginalization, significance loss, and anti-American sentiment in Study 3.

Study 3 Summary

Because the issues pertaining to the effectiveness of our manipulations, we were unable to test the theory as originally intended. We had planned to compare the exclusion-only condition to the control condition to explore the role of exclusion, and compare the exclusion + significance restoration condition to the exclusion-only condition to explore the role of significance restoration. Instead, we ended up combining both exclusion conditions in order to conduct our analyses on the effect of exclusion and could not examine significance gain in this study.

Despite these issues, there were a number of interesting findings in Study 3. First, we found that marginalization was related to greater significance loss, as had been predicted. Additionally, participants who were excluded experienced significance loss to a marginally greater extent than participants in the control condition. However, unlike in Studies 1 and 2, marginalization and exclusion did not interact to predict exclusion. This aspect of the findings was inconsistent with our predictions. One explanation for this lack

of replication could be that the exclusion manipulation was not strong enough relative to the control condition. We will elaborate on this issue in greater detail in the general discussion.

Next, significance loss was related to two indicators of radicalism: willingness to engage in a radical act, and anti-American sentiment. Follow-up mediation analyses revealed an indirect effect of marginalization on each of these variables through significance loss. Thus, marginalization appeared to increase support for radicalism, to the extent that it resulted in significance loss. Yet, it is important to note that significance loss did not predict two of our indicators of radicalism that it had predicted in Study 1 (readiness to self-sacrifice and support for radical groups).

In sum, we found partial replication of the theory in a non-Muslim immigrant sample. This indicates that the path from marginalization to radicalism through significance loss is not limited to the phenomenon of Islamist extremism. Rather, all immigrants struggling with the maintenance of multiple identities are at risk of experiencing significance loss, which has downstream consequences for radicalization.

Chapter 8: General Discussion

> "Islam told me God is One and the Prophet is his messenger. Adhere to the five pillars and all will be well. But we were living in a non-Muslim country. But I wasn't Dutch, nor was I secular. I had to find a way to reconcile my religious background with a secular world. I felt orphaned.
>
> And resolving that dilemma is much harder in a secular society that seems to have stopped struggling with these big questions altogether."
>
> *–Abdelkader Benali, "From Teenage Angst to Jihad: The Anger of Europe's Young Marginalized Muslims," The New York Times, January 13, 2015*

There is a crucial need to better understand the puzzle of how and why some immigrants become radicalized, and this is becoming increasingly important in the Western world. Some counterterrorism experts have postulated a link between radicalization and identity struggles (Trianni & Katz, 2014; Benac & Riechmann, 2014), and our research provides some of the first data in support of this relationship. Our study of the link between identity processes, exclusion and radicalization through significance loss comes during a critical time in the world where we are simultaneously seeing an increased threat of homegrown acts and increased public displays of anti-Islamic sentiment. In a single week during the time this manuscript was being written, anti-Islamic rallies were held in large cities throughout Germany while homegrown attacks in the name of Islam were orchestrated in France. Homegrown acts such as the Charlie Hebdo shooting in Paris engender discriminatory attitudes toward Muslims as a general group, and these discriminatory attitudes in turn fortify the view among European Muslims that Muslims are not accepted in the West. Thus, it is more important than ever

to address how acculturation and exclusion experiences can influence radicalization processes among immigrants.

Summary of Findings

In Study 1, marginalized immigrants in the United States were at a greater risk for significance loss, which in turn was related to increased support for radical groups and ideologies. This provided support for our hypothesis that significance loss would act as the mechanism for increasing risk for radicalization among marginalized immigrants. Moreover, we found that experiences of exclusion exacerbated the relationship between marginalization and significance loss. This interaction between marginalization and exclusion on significance loss was replicated among Muslims in Germany in Study 2, suggesting that this relationship is not unique to American Muslims. In Study 2, significance loss predicted support for a radical interpretation of Islam. Although the model did not replicate across all of our dependent variables, we did find some evidence that our theory applies beyond the American context. In Study 3, we found once again that marginalization was related to significance loss, and significance loss predicted willingness to engage in a radical act and anti-American sentiment. We also found a marginal effect of the exclusion manipulation on significance loss, but this did not interact with marginalization.

The main effect of marginalization on significance loss across all three studies is an important finding for significance loss theory (Kruglanski et al., 2009) and acculturation research. Previous work has linked marginalization to mental health problems and poor sociocultural adjustment (Berry, 1997; Neto, 1994; Berry & Sam, 1997; van Oudenhoven, 2006), and we have now demonstrated that marginalization is

also related to psychological threats to self-worth. This is consistent with our expectations that marginalized immigrants lack the sense of belongingness and certainty that is afforded by group-membership and contributes to a positive self-concept (Tajfel & Turner, 1979; Turner et al., 1987), and this cultural homelessness emerges as a source of significance loss.

The interaction between marginalization and exclusion on significance loss highlights how external "shocks" to significance can put marginalized immigrants at even greater risk for significance loss. It was important to then test whether exclusion interacted with other acculturation orientations to predict significance loss, or if this was a phenomenon specific to marginalization. When we explored interactions between exclusion and other acculturation orientations, we found that exclusion was also more damaging for American Muslims who were less integrated. In a way, this fits with our conceptualization of exclusion increasing significance loss among marginalized immigrants, because integration lies on the opposite end of the continuum as marginalization. We did not find exclusion to interact with assimilation or separation in the American sample, suggesting that assimilated and separated individuals are at not any extra risk for the negative psychological effects of exclusion. In Germany, however, we did find exclusion to interact with separation, a finding that we will discuss in greater detail in what follows.

We also found support for our hypothesis that exclusion would be directly related to feelings of significance loss, even when controlling for other acculturation orientations. Exclusion predicted significance loss in both of the survey studies, and to a marginal extent in the lab. The relationship between exclusion and significance loss makes sense,

given the literature linking exclusion to lowered self-esteem, control, and the perception of a meaningful existence, among other psychological threats (Williams, 2007; Williams et al., 2000). The fact that we still found this relationship in the context of other variables in our model suggests other acculturation orientations involving at least one positive cultural identity do not necessarily buffer against the effects of exclusion. Exclusion appears to produce significance loss for all immigrants, regardless of acculturation orientation.

We observed some other differences between the American and German survey samples in our exploratory analyses. First of all, although there were no differences between the samples on marginalization, separation, or assimilation, American Muslims reported feeling more integrated than German Muslims. Given the knowledge that integration is associated with the best psychological and sociocultural outcomes for immigrants (Berry & Sam, 1997; Berry, 2006a; Schmitz, 1992; Yoon et al., 2013), this is a finding of some concern. Especially taking into account our previous discussion of the relationship between separation and radicalism, it appears that German Muslims have a particularly difficult time successfully integrating into society. Indeed, they also reported experiencing more exclusion and greater significance loss than the American sample.

Yet, a finding of even more concern is that the German sample demonstrated readiness to self-sacrifice and support for a radical interpretation of Islam to a greater extent than the American sample. We drew from the cultural psychological literature to explore the role of cultural tightness in creating difficult conditions for integration, and see how these factors might explain the differences we observed in support for radicalism. Tightness has been associated with negative attitudes toward migrant workers (Gelfand et

al., 2011), and has also been linked to greater incidence of terrorist attacks (Gelfand, LaFree, Fahey & Feinberg, 2013), but this cultural dimension had not yet been applied to the study of acculturation and radicalization. Because Germany is known to be tighter than the United States (Gelfand et al., 2011), a finding that we confirmed in our own data, it seemed plausible that tightness could play a role in explaining this cross-country difference.

We conducted a path model where we showed that perceptions of tightness in the host country were directly related to the perception that the host society is not accepting of cultural diversity. This, in turn, predicted lower integration, which was related to greater support for a radical interpretation of Islam and readiness to self-sacrifice in the combined two-country sample. Our path model demonstrated that these three mediators operated in serial to explain some of the difference between the United States and Germany on the radicalism variables. Thus, these results provide some indication that tight societies may be particularly vulnerable to the radicalization of immigrants within their borders if they are unable to successfully integrate. Understanding how the path to radicalization differs for immigrants in different countries is a crucial component of our overall understanding of homegrown radicalization, and is one important direction for future research.

We then moved to the laboratory in Study 3. Despite problems with the strength of the control condition, we did find some evidence in support of the hypothesized model in a non-Muslim immigrant sample, which was the main strength of the study. Marginalization and perceived exclusion were both, to varying extents, related to significance loss, which in turn predicted willingness to engage in radical acts and anti-

American sentiment. Therefore, we can conclude that radicalization through identity process-induced significance loss is not solely a threat in the population of Muslim immigrants, and can apply to immigrants more broadly. We did not find that exclusion exacerbated the relationship between marginalization and significance loss, as we had in Studies 1 and 2, but this could be attributed to the weakness of the exclusion manipulation relative to the control condition, an issue that we will address in the discussion of methodological limitations.

Limitations and Future Directions

As with any research, we must consider problems with our methodology as well as issues regarding the theory itself. With respect to methodological limitations, we focus on the cross-sectional design of the survey studies (Studies 1 and 2) and the failed manipulations in the laboratory study (Study 3). We then go on to consider the meaning of acculturation as it was measured in our studies, the independence of the marginalization, exclusion and significance loss constructs in our model, and the extent to which our results can be applied generally to the understanding of radicalization processes. We address the benefits and drawbacks of our approaches, and possible directions that could be taken in the future to address these issues.

Methodological limitations

Cross-sectional design. First, the cross-sectional design of Studies 1 and 2 made it difficult to draw causal conclusions about the relationship between marginalization, exclusion, significance loss and radicalization. The decision to administer the survey at one time point only was to maximize anonymity for participants given the sensitive nature of the questions. It is possible to make a reverse-causation argument, such that

individuals who display radical tendencies find themselves distanced from their host and heritage cultural groups, and excluded by the mainstream society. For example, we cannot be sure whether separation caused significance loss and support for radical groups and ideologies among Germans in Study 2, or whether adoption of a radical mindset and significance loss associated with the Muslim community's grievances increased identification with the heritage culture. A natural extension of this work would be to replicate the survey studies using longitudinal design.

Experimental manipulations. The most problematic methodological limitation was the failed manipulations in Study 3. We found no evidence that the significance gain manipulation worked, and the strength of the control condition compromised our exclusion manipulation. This prevented us from drawing causal conclusions about significance restoration, and to some extent, exclusion. We were able to collapse the two exclusion conditions to make comparisons against the control group, but it was problematic that we did not find differences in perceived exclusion between the exclusion-only condition and control condition.

The exclusion manipulation was based on previous work that involved individuals being excluded from a group task (Williams, 2007; Nezlek et al., 1997). Many participants in the exclusion condition, when asked why they did not participate in the group activity, wrote that they assumed they were excluded due to their minority racial or ethnic status, suggesting that the manipulation was not lost on them. Thus, the failure of the exclusion manipulation can most likely be attributed to the strength of the control condition rather than the weakness of the exclusion manipulation. We tried to isolate the role of intentional exclusion by designing the control and exclusion conditions to be as

similar as possible, save for the reason of being left out of the group activity. However, participants in the control condition did get excluded from the activity in the end. It appears that participants in the control condition may have also been upset, even though we went to great lengths to emphasize that the assignment to the alternative non-group activity was made purely at random. The exclusion literature has shown that people feel upset even when they are excluded by computers or from groups to which they do not want to belong (Zadro, Williams & Richardson, 2004; Gonsalkorale & Williams, 2007), and exclusion by means of a random algorithm appears to be no exception. It could be described by the so-called "fear of missing out" (Przybylski, Murayama, DeHaan, & Gladwell, 2013), such that even participants in the control condition were upset by not being able to take part in the Group Activities exercise. In the future, we would suggest to researchers attempting to replicate these conditions that the control procedure be designed so as to not contain any elements of exclusion.

The reason behind why the significance gain manipulation did not work is less straightforward. First of all, the significance gain condition was only introduced in one of the exclusion conditions and not in a control condition, so it is difficult to know how the significance gain prime would have worked independently of the exclusion manipulation. An additional significance gain-only condition would have helped answer this question. Puzzlingly, our exclusion manipulation check revealed that participants in the exclusion-only condition did not feel more excluded than participants in the control condition, but participants in the exclusion condition that contained a significance restoration prime *did* feel more excluded than those in the control condition. This suggests that, if anything, individuals in the exclusion + significance restoration condition might have felt *more*

excluded than in the exclusion-only condition. Therefore, we cannot simply say that the exclusion and significance gain manipulations canceled each other out. Rather, it is possible that having the significance restoration prime directly juxtaposed with the exclusion experience made participants feel simultaneously rejected but also empowered to seek revenge. This is perhaps a more dangerous combination than feeling threatened alone, and warrants further inquiry as to whether and how significance gain can buffer against the appeal of radical groups and causes. This is a question we will address at greater length in our discussion of future research directions.

Theoretical issues

Measurement of acculturation orientations. The measurement of acculturation orientations is both a theoretical and a methodological issue. There is an extensive literature on the benefits and drawbacks of the different approaches used to measure acculturation (for a review, see Berry 2006c, or Arends-Tóth & van de Vijver, 2006), such as looking at acculturation categorically (i.e., discrete orientations) or continuously (i.e., seeing heritage and host identification as a fluid range). We included multiple measures and they each had a differential ability to predict the other variables in our model. We included one set of scales in which the heritage and host culture identification were measured separately (Hogg & Hains, 1996; Hogg, Hains, & Mason, 1998; Hogg et al., 2007), so that we could categorize individuals as belonging to different acculturation orientations according to where they scored relative to the midpoint of the scale. We also had the option to analyze these host and heritage culture identity scales as representing assimilation and separation, respectively, and create an interaction term to represent integration and marginalization. However, this measure was unable to be used because of

ceiling effects, meaning most participants reported identifying fairly strongly with both their heritage and host cultures.

As explained in the methods sections, we decided to utilize the method of assessing each acculturation orientation independently. This measure was strongly predictive, but it also has some limitations. For example, some of the items from the Immigrant Acculturation Scale could be seen as double-barreled (e.g., "I do not wish to maintain my heritage culture customs or adopt American customs as I feel uncomfortable with both types of customs"). Another problem with this approach is that it is possible for an individual to receive high scores on orientations that contradict with one another. Our solution to this problem was to include all orientation strategies in the model, so as to control for the unique role of marginalization as compared to scores on the other acculturation orientations. In the end, this method allowed us to have more confidence in our measure of marginalization than we would have had if we had gone with the two-dimensional approach. We would still recommend that future research test this theory using various indicators of acculturation orientations, and with larger samples that could accommodate the expected smaller proportion of marginalized immigrants using the two-dimensional mid-point split approach.

A final point to address with respect to our marginalization measure is that we included items pertaining to both the heritage country identity and the Muslim identity. Our interview responses indicated that the Muslim identity is often considered to be more important than the heritage country identity, and at the very least, much of one's heritage country identity is likely to be derived from one's identity as a Muslim. As such, it is difficult to disentangle religious and national identities in this sample. We attempted to

address this issue in our marginalization measure by including items pertaining to both, but we did not have equivalent items pertaining to the Muslim identity to fit with the integration, assimilation, or separation orientations. On top of that, the reliability of our combined four-item marginalization measure was not especially high, particularly in the German sample. Nevertheless, this suggests we had a conservative test of the theory.

Construct independence. Second, there is room for debate as to whether the constructs of marginalization, exclusion, and significance loss are completely independent from each other. We do see connections between the constructs of marginalization and exclusion, but maintain that they play separate, significant roles in our theorized model. To be sure of this assumption, we conducted factor analyses on the combined American and German survey samples, which suggested that participants did in fact distinguish between these constructs (see Appendix E). It is certainly possible that, to some extent, experiences of exclusion from both the host and heritage cultures cause marginalization. Indeed, there was a small correlation between marginalization and exclusion in the American sample, although notably none in Germany. Yet, we surmise that there are additional pathways to marginalization. After all, many immigrants experience exclusion but most do not report feeling marginalized. Likewise, some immigrants may become marginalized without having been excluded. For example, an individual might become marginalized if his parents did not uphold language and cultural customs at home, and on top of that was not completely socialized into the customs and traditions of the mainstream society.

Additionally, we maintain that exclusion is independent from the construct of significance loss. Although several items from the significance loss scale reflected

experiences of exclusion (e.g., “I feel rejected” or “I feel like an outsider”), we see significance loss as an internalization of experiences such as exclusion that result in a threatened sense of self-worth. Our exclusion items specifically spoke to social situations involving members of the mainstream culture rather than a personal sense of significance (e.g., “If I want to socialize with my non-Muslim American friends, I am generally the one who must seek them out”). Although the literature has demonstrated the damaging consequences of exclusion as a whole, we suggest that people internalize these experiences to different extents, namely that individuals with a sense of security in their cultural group memberships are less likely to let these experiences shape their sense of self-worth.

Limits of the results for explaining terrorism. In addition to the aforementioned constructs, it is necessary to critically evaluate our measures of radicalism and address the extent to which they can predict actual radical behavior. For practical reasons, it was impossible to measure actual extremism. However, there is debate as to the extent that attitudes lead to real action (Wicker, 1969; Ajzen & Fishbein, 1977). Presumably many individuals bear grievances against their host societies without ever engaging in radical activity. Our results should not be taken to mean that individuals who are marginalized or excluded and experience significance loss will eventually join a radical movement.

We should also emphasize that our theory provides just one framework for understanding the risk for radicalization. We are exploring one aspect of the complicated network of factors that influence adoption of radical beliefs and tendencies. There are many other factors that are likely to increase or lessen the appeal of radical organizations among immigrants, including life circumstances outside the realm of cultural identity.

For example, case studies of homegrown terrorists have highlighted crises such as the death of parents or financial hardships as catalysts (Kruglanski et al., 2009; Post, McGinnis, & Moody, 2014), events that can be categorized as significance loss but are in no uncertain terms related to identity processes.

Moreover, there has been debate among terrorism researchers as to whether adopting a radical ideology is a necessary prerequisite to joining a radical movement (Sageman, 2004, 2008; Kruglanski et al., 2014), but we included adoption of a radical ideology alongside other indicators of radicalism rather than as a precondition. It would be naïve to suggest that ideological beliefs always play a secondary role to identity processes in the path to radicalization. Indeed, some individuals are likely drawn to radical groups primarily because they already share the same ideology. We would simply propose that, in some cases, particularly among immigrants who are struggling to find their identity, individuals are motivated by psychological needs for personal significance and belongingness and rather than because of the ideology itself. Future longitudinal research could assess whether support for a radical ideology is developed before or after the initial stages of attraction to radical groups and causes among immigrants.

A final issue is the extent to which our measures captured different aspects of radicalization, and whether we can make claims about the predictive power of our model knowing that it did not work for all of our indicators of radicalism. We decided to assess the attractiveness of group belongingness through our inclusion of the hypothetical group scenario, the appeal of a radical ideology through measuring a radical interpretation of Islam and anti-American sentiment, and the behavioral component of extremism through our measures of readiness to self-sacrifice and engage in radical activity. We found

support for our hypothesized model across all three indicators of radicalism in the American sample in Study 1, although only for one indicator (radical interpretation of Islam) in the German sample in Study 2. In the laboratory study with the non-Muslim immigrant sample, significance loss was only related to anti-American sentiment and willingness to engage in radical action. Therefore, we found evidence for our theory with respect to some indicators of radicalism and not others, differing across cultural contexts.

Moreover, one could argue that some of our measures did not actually measure radicalization. For instance, the Self-Sacrifice Scale (Bélanger et al., 2014) covers broad ground and is not a direct measure of terrorist behavior. The more extreme items pertain to risking one's life or enduring intense suffering for a cause, but the other items are about giving up material possessions and comforts, and are devoid of a specific context. "For a cause" could mean a number of things, ranging from defending one's religion to fighting for civil rights. Readiness to self-sacrifice should not be conflated with willingness to commit a suicide attack. However, the scale has been used and validated in the context of terrorism research (Bélanger et al., 2014), hence its inclusion in our studies.

One could continue about how the hypothetical radical group task was not the same as joining a radical group, the radical interpretation of Islam scale was not the same as committing to acts of jihad, and so on. The decision to include each of these measures involved a choice between being too direct and alienating participants, or using proxies for radical behavior that do not constitute radicalism in and of themselves. Future research should look more closely as to how identity processes and significance loss relate to different individual facets of radicalism, and whether it is possible to examine

our theory with other indicators of radicalism or even actual extremist-related activity (e.g., donating to organizations known to support terrorist groups).

Future Directions

As discussed in the limitations sections, there are a number of directions that could be taken to improve upon certain weaknesses in this research. Likewise, there are a number of future research directions that could be taken to enhance our understanding of the relationship between identity processes, significance loss and radicalization. We discuss the benefits of expanding this research to include greater representation of various heritage culture and host countries across a longer period of time, focus on the role of other acculturation orientations, and perform a more in depth investigation of factors such as significance restoration that could attenuate support for radicalism.

Temporal and cultural expansion. First of all, replicating the survey studies with a longitudinal design could help us address questions about the causal role of acculturation orientations in significance loss and support for radicalism, particularly with respect to separation. Apart from our interest in the risk factors for radicalization, longitudinal work would help psychologists better understand acculturation processes in general. Acculturation is thought to be a dynamic process and not a static variable that can be reliably measured at a single time-point (Berry, 2006c). Longitudinal design would allow us to see not only how acculturation orientations influence significance loss and radicalization over time, but also how social context factors such as acculturation expectations, exclusion and discrimination, and other significance loss events affect identity processes.

In the future, we would also aim to reach larger samples with a stronger representation of various heritage culture groups. We were able to recruit substantial numbers of Pakistani Americans and Turkish Germans, but other heritage culture communities were underrepresented. We were unable to make comparisons between heritage culture groups within and across each of our country samples. Part of the reason we did not focus explicitly on one heritage culture group is that we were interested in seeing how identity processes influence significance loss among immigrants more broadly, and we would not have been able to generalize our findings had we limited ourselves to one heritage country background. Yet, there are in fact differences between heritage country backgrounds, both with respect to political, historical and cultural differences as well as unique social experiences in the context of their host communities.

Additionally, it is important to study additional host society contexts beyond the United States and Germany. To this end, we are already in the process of conducting the survey in the Netherlands, a country with a large Moroccan Muslim community that provides another European context but is lower on tightness than Germany (Gelfand et al., 2011). It is a particularly important population to study at this point in history, as tensions between the Muslim migrant minority and the mainstream Dutch society are at an all-time high. The outspoken leader of the anti-Islam Freedom Party, Geert Wilders, has been openly promoting an anti-immigrant agenda while widespread Islamophobia has permeated the general public (Lageman, 2014). In the meantime, there is a growing concern about the potential for Dutch Muslims to join organizations such as the Islamic State abroad. In the future, we plan to compare this sample against our existing American

and German samples to further explore the role of cultural tightness-looseness as it pertains to identity processes and attitudes toward radicalism.

Attention to the role of separation and other acculturation orientations. Marginalization was the focus of the present research, but other acculturation orientations deserve further attention in the context of immigrant radicalization. We would especially propose that it is important to expand on the unanticipated finding that separation was a key driver of significance loss and support for radicalism in Germany in Study 2. We discussed the reverse-causality explanation earlier, in that individuals who were already becoming radicalized could have developed a stronger attachment to their heritage culture by the time the survey was administered. However, we dismissed this reasoning because we did not observe this relationship in the United States (with the exception of the relationship between separation and support for a radical interpretation of Islam). We will elaborate on possible factors that may have contributed to this finding, and suggest how these ideas could be addressed in future research.

In Germany, the sample was majority Turkish. There is a large body of research on the acculturation patterns of German Turks, and some researchers believe that they are an exceptional immigrant group in terms of their preference for separation over integration (Kunst & Sam, 2013). However, we did not actually find the German sample to express stronger adherence to the separation orientation than the American sample. Overall, integration was the most preferred orientation in both samples. Nonetheless, it appears as though separated immigrants in Germany are at a greater risk for radicalization than separated immigrants in the United States. Therefore, it could be a specific pathway to separation in the German sample that creates the greatest conditions

for risk. Addressing how the same acculturation orientation functions differently across cultural contexts is a key direction for future research.

Societal expectations for acculturation both among immigrant peers and the mainstream society could play some part in the development of a separation orientation. Recent research has found that expectations for separation among immigrant peers can produce both separation and assimilation orientations, suggesting that normative pressure to acculturate in a specific way can result in both accordant and discordant acculturative responses (Kunst & Sam, 2013). Peer expectations for separation among Muslim youth in Europe (including 301 German Turks) were related to greater endorsement of the separation orientation, acculturative stress, and indirectly related to lower self-esteem and sociocultural adjustment. The same research theorized potential discordant responses to the mainstream society's expectations for acculturation; backlash against the pressure to assimilate can actually produce stronger endorsement of the separation orientation. We collected information on the perceived acculturation attitudes of the host society, so we were able to test this theory. The expectation that Germans preferred immigrants to assimilate was not correlated with endorsement of the separation orientation in our data, but it was negatively correlated with endorsement of both the assimilation and integration orientations. Therefore, it does appear as though the more Germans pressure immigrants to assimilate, the less the immigrants want to become a part of German culture. Our research was not about host culture expectations for acculturation per se, but this is a theme that certain warrants inclusion in future research on the relationship between acculturation and radicalization.

A final non-psychological explanation could be that political conditions in Turkey were related to support for radicalization among immigrants who maintained strong ties to their heritage culture. Political scientists have noted that Turkey's political structure, which tolerates civic activism to a greater extent than its neighboring countries, has unintentionally created a space for radical Islamists to organize and promote their agenda without experiencing legal consequences (Tezcur & Cifci, 2014). Although we are unable to test this hypothesis in our present set of studies, future work could compare samples of Turkish immigrants in Germany against Turkish immigrants in other countries or against a larger subset of another Muslim immigrant population (e.g., Pakistani) within Germany.

Protective factors against radicalization. Although the two survey studies helped us better understand the relationship between acculturation and radicalization through mediating and moderating processes, we stand to learn much more about the role of alternative sources of significance gain as a protective factor for immigrants. This was our objective for Study 3, and as was already discussed, we were unable to test the role of significance restoration due to problems with the manipulation. Yet, this is an extremely important issue for understanding if and how radicalization processes can be reversed. Reminders of social connectedness can attenuate the negative effects of exclusion (Twenge et al., 2007), and researchers should explore whether significance loss can be "undone." Personal significance has been discussed with respect to both loss and gain frameworks (Kruglanski et al., 2009; Kruglanski et al., 2014), such that joining radical groups and causes can remedy significance loss as well as provide opportunities for significance gain. However, the question remains as to whether there is something unique about radical groups as a source of significance gain and restoration, or whether these

conditions can be created elsewhere. Radical groups typically organize against a common enemy who that has wronged them, so the revenge component may play an important role in attracting immigrants who have experienced significance loss through exclusion. It will be important to explore whether joining groups or purposes that provide significance without the revenge component can hold the same appeal.

It is also important to better understand which facets of significance are most relevant for repairing loss. As discussed, personal significance encompasses a wide range of psychological motivations, and it is unclear whether deficits in significance that come from one source (e.g., threats to belongingness) can be satisfied with significance gain that is derived from another source (e.g., reminders of meaning). Some work on the effectiveness of deradicalization programs has suggested that alternative sources of significance can attenuate support for radicalism (Kruglanski et al., 2014), but we were interested in how this could work in a non-radicalized population. In our study, we attempted to counter belongingness-derived significance threats with reminders of meaning and importance. It could be that our manipulation was simply ineffective, but it is also possible that reminders of meaning were not sufficient to counter threats to belongingness. Future research could explore whether sources of significance restoration need to necessarily "match" the form of significance loss in order to protect against the appeal of radicalism. A better understanding of significance restoration could help inform the design of community programs to protect marginalized and excluded youth against radicalization.

Contributions to Theory and Practice

Theoretical implications. This research advanced both acculturation and radicalization research by connecting two literatures that thus far have rarely consulted one another. Acculturation research has largely focused on outcomes such as education and psychological adjustment, and has rarely been applied to the study of issues pertaining to social and political conflict. Seeing the need for a better understanding of radicalization processes among immigrants, we applied the immigrant acculturation framework to the domain of terrorism. In doing so, we also gleaned more basic knowledge about the benefits and drawbacks of the different acculturation orientations across various contexts.

Our findings reinforced existing work in the acculturation literature by illuminating the perils of marginalization and the benefits of integration in another context. Marginalization was a risk factor for significance loss in both of the survey studies and in the laboratory study. Although integration did not always present itself as a protective factor, it did not tend to increase risk for radicalization, with one exception where it was marginally related to willingness to engage in a radical act in Study 3.

It is important to note, however, that we did not find marginalization to have a direct effect on radicalization. In some cases, there was even a negative relationship between marginalization and radicalization once significance loss was taken into account. One interpretation of this finding is that marginalization is a risk factor for radicalization to the extent that it causes significance loss, but should not be assumed to lead directly to extremism. It is likely that some marginalized immigrants have found belongingness and significance in other communities that do not pertain to the cultural identity. Another

potential explanation could be that competing processes were at play, such that marginalized immigrants who had experienced significance loss were actively resisting being drawn into the radical faction of the Muslim community. To put our results in the context of acculturation theory more broadly, marginalization does appear to be linked to psychological threats to self-worth but is not necessarily a direct guarantee of negative social adaptation or radicalization.

In contrast to marginalization and integration, we did not find consistent relationships between separation and assimilation with respect to significance loss or support for radicalism. In some cases, separation served as a protective factor, such as against readiness to self-sacrifice in the American sample. In the same sample, separation was a risk factor for finding appeal in a radical interpretation of Islam. It could be that in the former case, one's heritage culture identity affords oneself with a sense of social connectedness that reduces the need to find significance through sacrificing oneself for a cause. In the latter case, it could be that connectedness to one's heritage culture identity results in more exposure to extreme interpretations of Islam. We also found assimilation to play an inconsistent role. Assimilation was a protective factor against significance loss in the lab study, but was related to increased support for the radical group among Germans. These findings echo our review of the literature that noted the contextual benefits and drawbacks of each of these orientations.

This work also expanded existing theorizing on the pathways to radicalization. Earlier, we addressed several frameworks for radicalization processes that had emerged in the terrorism literature. With the exception of the NYPD Radicalization and the West model (Silber & Bhatt, 2007), none of these frameworks spoke directly to the specific

issue of homegrown radicalization among immigrants. Likewise, with the exception of significance quest theory (Kruglanski et al., 2009), these theories of radicalization had seldom been subject to empirical testing. The current research does not by any means invalidate previous theorizing on radicalization; rather, we highlighted a common thread amongst the existing perspectives on risk factors—namely, identity processes—and explored the underlying psychological mechanism.

Another key contribution of our model above and beyond the other frameworks we described is the focus on cultural processes. Radicalization research thus far has for the most part ignored culture despite the clear relevance of cultural factors, with some exceptions that have linked terrorism to society-level cultural characteristics such as fatalism, low gender egalitarianism, and tightness (Gelfand et al., 2013). To our knowledge, there has been little attention paid to how culture plays a role in radicalization processes at the individual level.

This lack of focus on culture at an individual level has been a crucial missing piece of the radicalization literature, because each and every case of radicalization is situated within a unique constellation of personal, social and cultural circumstances. In particular, given that the homegrown variety of radical Islamist extremism is becoming more commonplace, understanding the role of immigrant acculturation processes and how they interact with social experiences is of critical importance. Our work not only highlighted the problem of immigrant marginalization, but also addressed the nuances of other cultural identity orientations as they pertain to risk for radicalization, and namely, how this risk can ultimately be explained through psychological processes and exacerbated by social factors such as exclusion.

In our exploratory analyses of the American and German survey data, we also connected patterns in support for radicalism to the cultural dimension of tightness-looseness. Tightness-looseness has been linked to terrorism on a national-level (Gelfand et al., 2013), and we demonstrated how this societal characteristic permeates the psychological process of acculturation on an individual level and influences immigrants' support for radicalism. This finding demonstrates the importance of conducting research that contributes to our understanding how other societal-level cultural characteristics might become manifested in individual psychological processes related to radicalism.

Relatedly, psychological science is in the unique position to identify not only risk factors but also the psychological mechanisms that explain the attraction to radical groups and causes, and identifying such explanatory mechanisms was a particular strength of this research. Previous work on radicalization had alluded to identity crises or other "trigger" events that catalyze the radicalization process (Silber & Bhatt, 2007; Sageman, 2008), but there was little empirical data to back up these theories. Ours was some of the first systematic work to capture how such identity crises and trigger events become internalized and interpreted as significance loss (Kruglanski et al., 2009).

Finally, we sought to triangulate our methods by exploring our theory in both field and laboratory settings, in the United States and abroad. This is an important piece of developing sustainable theories that can explain radicalization across social and cultural contexts. Also worth noting is that we used *non*-radicalized samples in all of our studies. Much of the existing theorizing on radicalization is drawn from the retrospective analysis of known terrorists' radicalization processes. Yet, it is perhaps even more essential to understand how non-radicalized individuals can develop support for

radicalism under the right set of circumstances. We encourage the terrorism and acculturation research communities to continue to collaborate in order to advance a better understanding of outcomes for acculturation processes and risk factors for homegrown radicalization.

Practical applications. With respect to practical implications for this research, there is not a single one-size-fits-all approach. We sampled from a non-radicalized population, and the design of interventions must take into account whether or not the radicalization process has already begun. From a preventative standpoint, we find it crucial that policymakers invest in programming geared toward providing opportunities for Muslim immigrants to actively maintain their multiple cultural identities. It is in everyone's best interest—for immigrants as well as for society as a whole—to cultivate a climate for integration.

However, fostering a more welcoming climate for integration is not as simple as merely promoting a more positive image of Islam in society. It is necessary for the people and policy-makers to acknowledge that national identities are derived from diverse sources of cultural influence, and that this includes meaningful contributions from individuals with a Muslim heritage. Muslims should not be forced to choose between their national and heritage culture identities, but rather feel as if one can develop a national identity without having to give up their cultural heritage. Unfortunately, discriminatory responses to the threat of radicalism continue to grow out of fear. For example, an anti-Islamic organization called PEGIDA, loosely translated as "Patriotic Europeans Against the Islamization of the West," has taken hold in Germany as a

response to the recent rise of the Islamic State in Syria and Iraq, organizing rallies in several large cities throughout the country (Brady, 2015).

As for young Muslims who are already feeling marginalized and excluded, community integration programs could help identify people who are at risk and steer them toward a non-radical community that can provide a sense of personal significance. However, we must note that we did not find that inducing a personal sense of significance actually increased perceptions of significance or lessened support for radicalism in Study 3, so we cannot assume that all roads toward restoring significance reduce risk of radicalization. It will be important for future research to examine what sorts of groups and activities may be perceived as attractive alternatives to radical organizations in satisfying needs for significance.

The White House has made some recent strides in the right direction since their Summit on Countering Violent Extremism in February 2015. They have proposed educational and cultural exchange projects geared toward promoting diversity, tolerance, and minority integration. They are looking to build community resilience programs for at-risk youth through programs that provide technical skills and training, and offer opportunities for civic education, community service, and empowerment. These types of programs are promising in light of the present research on the role of significance loss in radicalization, and it will be important to conduct evaluations in order to determine whether these programs are successful in providing alternative avenues toward significance gain for at-risk youth.

With respect to policies aimed at identifying radicals, we surmise that many of the counter-terrorism initiatives in place may actually paradoxically fuel support for

extremism. Recent examples of homegrown plots lend support to this notion. For example, Faisal Shahzad felt that Muslims were being humiliated throughout the world and struggled to find a peaceful but effective way to cope before ultimately attempting to set of a car bomb in Times Square (Elliott, 2010). Thus, racial profiling and spying programs that target Muslims are likely to induce feelings of perceived discrimination or exclusion and contribute to a sense of significance loss. We discourage policymakers from designing programs that only serve to perpetuate hostility between the Muslim community and Western governments.

Several Western nations are now faced with the task of developing policy that deals with the potential threat of nationals who have returned from fighting in Syria and Iraq. The city of Aarhus in Denmark has experienced success with their program in which law enforcement has partnered with the Muslim community to approach at-risk individuals and steer them away from engaging in radical behavior. The success of this program is not surprising, in light of the present work on cultural identity maintenance. The joint effort of the Danish and Muslim communities to engage at-risk individuals may very well reduce the likelihood of immigrants becoming marginalized and excluded. Yet, it is important to prevent certain unintended consequences of community policing, such as alienating at-risk individuals through engendering a sense distrust and suspicion between members of the Muslim community.

Finally, it is important to remember that although Islamist extremism has dominated the discussion of terrorism in the global realm, this is a phenomenon that is not inherently linked to Islam. After all, in Study 3 we found that non-Muslim immigrants can also become attracted to radicalism under conditions of significance loss.

This is a finding that needs to be reiterated in the public discourse on homegrown terrorism in order to prevent further scapegoating of Muslims.

In sum, the face of extremism is changing in that it should no longer be considered a threat that solely comes from the "outside." Counterterrorism efforts should look inward to ask what attributes of our own societies might provide fertile breeding ground for radicalism and why some people might be motivated to join extremist groups and causes. In this research, immigrant identity processes have emerged as an important contributing factor. We hope that attention to these findings may result in both more effective homeland security policy and also better integration for Muslim as well as non-Muslim immigrant communities.

Conclusion

This work connected the acculturation and radicalization literatures by highlighting the relevance of cultural identity processes in homegrown radicalization. Namely, marginalization was a key contributor of significance loss, which we found in two of our studies to be amplified by experiences of exclusion from the mainstream society. In support of the significance loss theory of radicalization (Kruglanski et al., 2009), we found that psychological threats to personal significance induced by marginalization and exclusion were indeed related to support for radical groups and causes, and that exclusion was particularly damaging for significance loss among more marginalized immigrants. Importantly, we found this to be the case in both Muslim and non-Muslim samples, within and to some extent outside of the United States. Thus, cultural identity processes and social significance loss experiences are crucial components of the pathway to radicalization for immigrants.

Tables

Table 1

Means and Standard Deviations for Variables in Study 1

	M	*SD*	*N*
Marginalization	2.72	1.03	198
Integration	4.96	.95	198
Separation	2.99	1.25	198
Assimilation	1.79	.85	198
Exclusion	2.49	.87	198
Significance loss	1.61	.73	198
Host Country Tightness-Looseness	3.80	.72	198
Host Country Closed-Mindedness	3.47	1.19	198
Readiness to self-sacrifice	3.23	1.78	198
Radical interpretation of Islam	2.13	.74	198
Support for radical group	1.77	1.06	177

Note: The support for radical group measure was inserted shortly after data collection was already underway, hence the lower participant count.

Table 2

Bivariate Correlations Among the Variables in Study 1

		1	2	3	4	5	6	7	8	9	10	11
1.	Marginalization	-										
2.	Integration	.24**	-									
3.	Assimilation	.18*	-.36**	-								
4.	Separation	.15*	.05	-.10	-							
5.	Exclusion	.21**	-.06	-.01	.31**	-						
6.	Host Country Closed-Mindedness	.21**	-.19**	.04	.10	.33**	-					
7.	Host Country Tightness-Looseness	-.09	.01	.00	-.08	-.04	.05	-				
8.	Significance Loss	.44**	-.27**	.17*	.15*	.45**	.36**	-.02	-			
9.	Readiness to Self-Sacrifice	.00	-.23**	.04	-.16*	.15*	.34**	.12	.18**	-		
10.	Support for a Radical Interpretation of Islam	.00	-.04	-.07	.42**	.35**	.24**	-.01	.17*	.10	-	
11.	Support for Radical Groups	.04	-.16*	-.05	.08	.20**	.10	.04	.28**	.16*	.44**	-

** $p < .01$

* $p < .05$

Table 3

Moderated Mediation for Readiness to Self-Sacrifice in Study 1

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.24	.04	5.60**
Exclusion	.34	.05	6.56**
Marginalization X Exclusion	.15	.05	3.06**
Integration	-.12	.05	-2.43*
Separation	.00	.03	.23
Assimilation	.04	.05	.74
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.50	.19	2.67**
Marginalization	-.17	.13	-1.28
Integration	-.39	.14	-2.76**
Separation	-.24	.10	-2.44*
Assimilation	-.15	.15	-.97
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.06	.03	[.01,.14]
Exclusion (Mean)	.12	.05	[.04,.25]
Exclusion (+1 SD from mean)	.19	.08	[.06,.38]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 4

Moderated Mediation for Support for Radical Interpretation of Islam in Study 1

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.24	.04	5.60**
Exclusion	.34	.05	6.56**
Marginalization X Exclusion	.15	.05	3.06**
Integration	-.12	.05	-2.43*
Separation	.00	.03	.23
Assimilation	.04	.05	.74
Dependent Model			
Support for Radical Interpretation of Islam			
Significance Loss	.17	.07	2.23*
Marginalization	-.10	.05	-1.91†
Integration	-.05	.06	-.97
Separation	.24	.04	6.20**
Assimilation	-.05	.06	-.83
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.02	.01	[.0012,.05]
Exclusion (Mean)	.04	.02	[.0052,.08]
Exclusion (+1 SD from mean)	.06	.03	[.0071,.13]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 5

Moderated Mediation for Support for Radical Groups in Study 1

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.27	.05	5.82**
Exclusion	.36	.06	6.48**
Marginalization X Exclusion	.15	.05	2.88*
Integration	-.11	.05	-2.26*
Separation	-.00	.04	-.04
Assimilation	.08	.06	1.36
Dependent Model			
Support for Radical Groups			
Significance Loss	.43	.12	3.52**
Marginalization	-.12	.08	-1.44
Integration	-.17	.09	-1.93†
Separation	.04	.06	.67
Assimilation	-.17	.10	-1.80†
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.06	.03	[.02,.13]
Exclusion (Mean)	.12	.04	[.05,.22]
Exclusion (+1 SD from mean)	.17	.07	[.07,.33]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 6

Means and Standard Deviations for Variables in Study 2

	M	SD	N
Marginalization	2.80	1.06	204
Integration	4.48	1.19	204
Separation	1.77	.94	204
Assimilation	3.19	1.36	204
Exclusion	2.88	.93	204
Significance Loss	2.77	.88	204
Host Country Tightness-Looseness	4.00	.65	204
Host Country Closed-Mindedness	4.20	.99	204
Readiness to Self-Sacrifice	4.20	.99	204
Radical Interpretation of Islam	3.40	.65	204
Support for Radical Group	2.80	1.06	204

Table 7

Bivariate Correlations Among the Variables in Study 2

		1	2	3	4	5	6	7	8	9	10	11
1.	Marginalization	-										
2.	Integration	-.13	-									
3.	Assimilation	.29**	-.12	-								
4.	Separation	-.18*	-.29**	-.01	-							
5.	Exclusion	.00	-.18*	-.13	.17*	-						
6.	Host Country Closed-Mindedness	.07	-.02	-.31**	.06	.22**	-					
7.	Host Country Tightness-Looseness	-.03	-.06	-.16*	-.10	-.07	.20**	-				
8.	Significance Loss	.31**	-.11	.19**	.20**	.42**	.11	-.08	-			
9.	Readiness to Self-Sacrifice	-.12	-.14*	-.08	.17*	.08	-.01	.01	-.02	-		
10.	Support for a Radical Interpretation of Islam	-.16*	-.25**	.03	.40**	.37**	.09	.00	.21**	.22**	-	
11.	Support for Radical Groups	.02	-.07	.25**	.24**	.20**	-.08	-.16*	.16*	.23**	.52**	-

** $p < .01$

* $p < .05$

Table 8

Moderated Mediation for Readiness to Self-Sacrifice in Study 2

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.23	.04	5.13**
Exclusion	.32	.05	6.63**
Marginalization X Exclusion	.10	.04	2.35*
Integration	.04	.04	1.01
Separation	.12	.03	3.37**
Assimilation	.04	.05	.88
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	-.03	.15	.83
Marginalization	-.14	.11	-1.23
Integration	-.17	.10	-1.79†
Separation	.13	.09	1.46
Assimilation	-.10	.12	-.83
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.005	.02	[-.06,.04]
Exclusion (Mean)	-.008	.04	[-.09,.07]
Exclusion (+1 SD from mean)	-.01	.05	[-.12,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 9

Moderated Mediation for Support for a Radical Interpretation of Islam in Study 2

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.23	.04	5.13**
Exclusion	.32	.05	6.63**
Marginalization X Exclusion	.10	.04	2.35*
Integration	.04	.04	1.01
Separation	.12	.03	3.37**
Assimilation	.04	.05	.88
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.21	.07	2.88**
Marginalization	-.15	.05	-2.86**
Integration	-.12	.04	-2.59*
Separation	.16	.04	3.95**
Assimilation	.02	.06	.44
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.03	.02	[.006,.07]
Exclusion (Mean)	.05	.02	[.01,.09]
Exclusion (+1 SD from mean)	.07	.03	[.02,.14]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 10

Moderated Mediation for Support for Radical Groups in Study 2

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.23	.04	5.13**
Exclusion	.32	.05	6.63**
Marginalization X Exclusion	.10	.04	2.35*
Integration	.04	.04	1.01
Separation	.12	.03	3.37**
Assimilation	.04	.05	.88
Dependent Model			
Support for Radical Groups			
Significance Loss	.11	.11	1.03
Marginalization	-.03	.08	-.38
Integration	.03	.07	.52
Separation	.20	.06	3.21**
Assimilation	.30	.08	3.63**
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.02	.02	[-.01,.06]
Exclusion (Mean)	.03	.03	[-.03,.09]
Exclusion (+1 SD from mean)	.04	.04	[-.04,.13]

† $p < .10$ * $p < .05$ ** $p < .01$

Table 11

Means and Standard Deviations for Variables in Study 3

	M	*SD*	*N*
Marginalization	2.17	1.26	145
Integration	4.97	.96	145
Separation	3.27	1.16	145
Assimilation	2.03	.99	145
Significance Loss	1.74	.66	145
Readiness to Self-Sacrifice	3.19	1.44	145
Willingness to Engage in a Radical Act	1.75	.70	145
Support for Radical Group	2.43	1.11	145
Anti-American Sentiment	3.10	.80	145

Table 12

Bivariate Correlations Among the Variables in Study 3

		1	2	3	4	5	6	7	8	9
1.	Marginalization	-								
2.	Integration	-.22**	-							
3.	Separation	.16*	-.10	-						
4.	Assimilation	.26*	-.07	-.01	-					
5.	Significance Loss	.26*	-.16	.13	.10	-				
6.	Readiness to Self-Sacrifice	.02	.02	.09	.00	.05	-			
7.	Willingness to Engage in a Radical Act	.12	.10	-.07	-.14	.22**	.30**	-		
8.	Support for Radical Groups	.07	-.25**	.04	-.03	.16*	.21*	.12	-	
9.	Anti-American Sentiment	.13	-.10	.04	.03	.35**	.12	.27**	.21*	-

** $p < .01$

* $p < .05$

Table 13

Moderated Mediation for Readiness to Self-Sacrifice in Study 3

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.12	.05	2.59*
Condition	.10	.06	1.68†
Marginalization X Condition	-.02	.05	-.36
Integration	-.06	.06	-.99
Separation	.05	.05	.30
Assimilation	.02	.06	.76
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.09	.19	.45
Marginalization	-.00	.11	-.01
Integration	.06	.13	.44
Separation	.11	.11	1.03
Assimilation	.00	.13	.04
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Condition = 0 (Control)	.01	.03	[-.03,.11]
Condition = 1 (Exclude)	.01	.02	[-.02,.08]

† $p < .10$ * $p < .05$ ** $p < .01$
Note: Condition was coded such that 0 = Control and 1 = Exclusion

Table 14

Moderated Mediation for Willingness to Engage in a Radical Act in Study 3

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.12	.05	2.59*
Condition	.10	.06	1.68†
Marginalization X Condition	-.02	.05	-.36
Integration	-.06	.06	-.99
Separation	.05	.05	.30
Assimilation	.02	.06	.76
Dependent Model			
Willingness to Engage in a Radical Act			
Significance Loss	.25	.09	2.81*
Marginalization	.09	.05	1.84†
Integration	.11	.06	1.76†
Separation	-.07	.05	-1.37
Assimilation	-.14	.06	-2.37*
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Condition = 0 (Control)	.03	.03	[-.0004,.12]
Condition = 1 (Exclude)	.03	.02	[-.002,.09]

† $p < .10$ * $p < .05$ ** $p < .01$
Note: Condition was coded such that 0 = Control and 1 = Exclusion

Table 15

Moderated Mediation for Support for Radical Groups in Study 3

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.12	.05	2.59*
Condition	.10	.06	1.68†
Marginalization X Condition	-.02	.05	-.36
Integration	-.06	.06	-.99
Separation	.05	.05	.30
Assimilation	.02	.06	.76
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.21	.14	1.45
Marginalization	.01	.08	.08
Integration	-.27	.10	-2.75*
Separation	-.00	.08	.97
Assimilation	-.07	.10	-.73
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Condition = 0 (Control)	.03	.03	[-.004,.12]
Condition = 1 (Exclude)	.02	.02	[-.004,.09]

† $p < .10$ * $p < .05$ ** $p < .01$
Note: Condition was coded such that 0 = Control and 1 = Exclusion

Table 16

Moderated Mediation for Anti-American Sentiment in Study 3

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.12	.05	2.59*
Condition	.10	.06	1.68†
Marginalization X Condition	-.02	.05	-.36
Integration	-.06	.06	-.99
Separation	.05	.05	.30
Assimilation	.02	.06	.76
Dependent Model			
Anti-American Sentiment			
Significance Loss	.41	.10	4.12**
Marginalization	.02	.06	.42
Integration	-.03	.07	-.44
Separation	-.01	.06	-.20
Assimilation	-.02	.07	-.26
Conditional Indirect Effect of Marginalization through Significance Loss			CI_{95}
Condition = 0 (Control)	.06	.04	[-.003,.16]
Condition = 1 (Exclude)	.04	.03	[-.009,.11]

† $p < .10$ * $p < .05$ ** $p < .01$
Note: Condition was coded such that 0 = Control and 1 = Exclusion

Appendices

Appendix A: Interview Protocol*

First, I'd like to learn a little bit more about you and your background.

1. Could you tell me when you or your family first came to the United States?

    a. What were their reasons for coming?

    b. Can you remember what it was like when you first arrived [2nd generation: what was it like when you were growing up here?] –are there any kinds of experiences that stand out in your mind?

    c. How many of your family members live here, and how many still live in X?

    d. Do you still go back to XX, how often, and for what purpose?

Now I'm going to ask you a few questions about the people you spend time with on a regular basis at home, at work, or in the community.

2. Who do you spend most of your time with in your daily life- would it be friends, family or co-workers? How much of your time do you spend with friends or family?

    a. What is the ethnic background of people with whom you interact with the most? Is it people from X, other Muslims in the United States, non-Muslim Americans, or all?
    b. In what situations [work, school, family, mosque, etc…] of your daily life do you interact with other people from X, American Muslims, and American non-Muslims?

3. How would you describe the time you spend with family and friends who live in the United States? Who do you rely on for emotional or moral support? How do you help each other?

4. Is there a large X community in your area?

5. Do you ever wish you had more of a sense of community here, or an opportunity to socialize more with people from X? Why or why not?

I'd like to now ask you some questions about some of your traditions and customs from your culture XX.

6. What kinds of traditions and customs do you still practice from culture XX? Do you feel like you are able to maintain customs and traditions from X culture while living in America?

   a. Do you think you're able to practice your faith the way you want to in America?

   b. What about wearing religious articles of clothing like a headscarf or a kufi?

7. To what extent do you feel like your customs and traditions are respected by other Americans? Tell us more about why you think that. Do you ever feel pressured to assimilate to American culture? Can you give me some examples? If/when you feel pressured to assimilate, where do you think that pressure generally come from? (e.g. Peer pressure? Media? School?)

   a. What makes it difficult for you to adapt to American culture? (e.g. different religious beliefs? Political system? Fashion/styles of dress? Language/communication methods? Gender relations? Concepts of modesty?)

8. To what extent do you think Americans are interested in learning about X culture? Do you find it difficult to explain your culture and personal beliefs to Americans? Do you feel like they understand your cultural heritage or your faith?

Now I'd like to ask you some questions now about your perceptions of ***American culture****.*

9. What do you think about mainstream American culture? What do you like or dislike about it?

10. Countries vary on whether they are permissive or strict. Do you think the United States is a permissive culture where there is a lot of latitude in terms of how people behave, or a strict culture where there is less latitude for how people behave? [If participant has trouble responding: In other words, do people behave however they want to, or do they tend to behave in a way that follows social norms?] Do you like or dislike this? Why?

11. Do you think there should be more or less rules for appropriate behavior in the United States than there are now? How come?

12. With respect to being a permissive or strict culture, how do you think Country X compares? Do people have more or less freedom to decide how they behave? Is there more or less disapproval for behaving inappropriately? What about within the Country X community in the United States?

13. Sometimes people adapt traditions from a new culture. What kinds of new American traditions and customs do you now practice? (probe: music, dress, food, manner of speaking). Do you feel that these practices are respected by your own ethnic group, or do you feel that some people in your group don't like these traditions? How does this make you feel? Can you tell me about how you generally handle this kind of situation?

14. As someone who lives in the US but comes from X, how much do you feel like you're a part of American culture? How much do you feel like you're part of X-culture? (Think about what matters the most to you when you introduce yourself to someone: Being a Muslim? Being a person from [X], or being an American?)

    a. Have there been times you've felt like you belong to one culture more than the other? In which culture do you find yourself better able to express yourself and be understood?

    b. Have there ever been times when you do not feel a strong connection to either culture? Please tell me a bit more about that.

    c. [Regardless of answer] How does that make you feel? Do you wish it were any different?

15. Do you think its better to raise kids in America or in X country? For what reasons?

    a. If answers is X country, do you ever plan to return to X country? Do you visit often and do your children, if any, also identify with that culture?

16. If you had the option of giving charity somewhere, would you prefer to give charity here in the US or to send it back home to X? Why?

17. Do you think that there are shared values in both cultures? If so, please give some examples.

Now I'm going to ask you some questions about the kinds of experiences you and people from X have had living in the United States.

18. To what extent do you think Americans in general have positive attitudes toward immigrants? Why or why not?

19. To what extent do you think people from your group XX feel that Americans have positive attitudes toward immigrants? Why or why not?

    a. Do you think many immigrants from X feel like they are not accepted or they are discriminated against by American society at large? If so, what are some examples?

    b. Has anyone you know personally experienced exclusion or discrimination? If so, please tell us what happened.

    c. Have you ever felt like you were treated differently [at your college/university]? Have you ever felt excluded or discriminated against by others? What happened, and how did it make you feel?

20. Based on your impressions from other non-Muslims in your surroundings as well as the media, how would you describe the image of Muslims in America?

    a. If negative: why do you think people have these images?

    b. How does this personally affect you?

    c. If negative, how would you seek to improve the image of Muslims?

21. How have your experiences while living in the US affected your image of Americans? How have your experiences affected your image of your culture X? Of Islam?

For many people from X, religion plays an important role in every day life. Now I'd like to ask you some questions about what Islam means to you.

22. Would you consider yourself a religious person? What is more important to you, your national identity or your religious identity? How come?

    a. Do you consider yourself a member of the *global ummah* ?

    b. [If yes:] Is your allegiance to the global *ummah* more important than your national identity? What does that mean for you in everyday life?

23. Do you attend a mosque? How often? Is the congregation from various ethnicities or is largely from X country?

    a. What types of topics are typically discussed in weekly Friday sermons /*khutbahs*? (e.g. *seerat*/history of the Prophet's life, moral/character development, global politics, US foreign policy, Arab-Israeli conflict?)

    b. Do you discuss problems that you and others in your group have experienced in the U.S. at the Mosque? What kinds of solutions are discussed to deal with these problems?

    c. If attends mosque, is the Imam from X country? Do you feel his sermons accurately reflect your values? Your understanding of Islam?

As you probably know from media coverage, there are some Islamic extremist groups operating in the United States. We'd like to ask for your thoughts about some of these movements. For example, Yasser Qadhi, founder of the Al-Maghrib Institute in America and well known Salafi preacher, has had five of his students linked to terrorist plots.

24. Why do you think people are joining militant movements? Do you see this as part of a larger trend occurring across the US?

25. Some people believe that violence can be an effective tool to resolve issues in certain situations. What do you think about that? If so, what kinds of situations? If not, why not?

    a. What other alternatives might there be to violence?

26. Do you think Muslim community leaders are doing enough to prevent violent extremism in your community? Why or why not?

27. Have you heard of the terms *dar ul harb* or *dar ul Islam* to describe nations? Is this framework important for Muslims in America? [If yes: How so?]

We've just discussed some challenges faced by immigrants and American Muslims in the United States. I just have a few more questions for you. We're interested in improving experiences for immigrants and Muslims in the United States, and we'd like to hear your perspective on this topic.

28. If you or another member of the X or Muslim community were concerned or dissatisfied with policies implemented by the US government, how would you seek to remedy the problem?

    a. Do you feel like people from X, or Muslims in general, have a voice in America to address problems? What are some ways people from X or Muslims are able to express their voice?
    b. Is engaging in inter-faith dialogues between Muslims and non-Muslims a productive activity? Is it helpful for Muslims to be involved in social and community services with non-Muslims?

    c. Do you feel like your community's needs are better addressed through political channels, social network/cultural affiliations or through the mosque?

    d. Does the government or community do enough to reach out to the Muslim community in America to build better relationships and to seek their input on policies? Or do you think the government makes policies against Muslims in America? How could this be improved?

This concludes the interview. Thank you so much for sharing your thoughts and experiences with us. Now is the chance for you to tell us anything else that might have been on your mind during the interview or if you have any questions for me. Otherwise, we'll finish here.

**The interview protocol was in German and referred to Germany rather than the United States in Study 2. The German version also made more locally relevant references to homegrown threats.*

Appendix B: Acculturation Strategy Measures*

Please indicate the extent to which you agree or disagree with the following statements.

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

1. I wish to maintain my heritage culture values rather than adopt American values. *(separation, values)*	1	2	3	4	5	6
2. I wish to maintain my heritage culture values and also adopt key features of American values. *(integration, values)*	1	2	3	4	5	6
3. I wish to give-up my heritage culture values for the sake of adopting American values. *(assimilation, values)*	1	2	3	4	5	6
4. I do not wish to maintain my heritage culture values or adopt American values as I feel uncomfortable with both types of values. *(marginalization, values)*	1	2	3	4	5	6
5. I wish to maintain my heritage culture customs rather than adopt American customs. (separation, customs)	1	2	3	4	5	6
6. I wish to maintain my heritage culture customs and also adopt key features of American customs. *(integration, customs)*	1	2	3	4	5	6
7. I wish to give-up my heritage culture customs for the sake of adopting American customs. *(assimilation, customs)*	1	2	3	4	5	6
8. I do not wish to maintain my heritage culture customs or adopt American customs as I feel uncomfortable with both types of customs. *(marginalization, customs)*	1	2	3	4	5	6
9. There are times when I feel like I don't belong to any culture. *(additional marginalization item)*	1	2	3	4	5	6
10. Sometimes I don't feel part of American culture or part of Muslim culture. *(additional marginalization item)*	1	2	3	4	5	6

**The measure was in German and referred to Germany in Study 2.*
Source: Bourhis & Barrette, 2006

Appendix B: Acculturation Strategy Measures (cont'd)

Directions: **Please answer the following questions about your thoughts about your heritage country.**

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

Heritage country:

1. I feel similar to other people from my heritage country in terms of general attitudes and beliefs.	1	2	3	4	5	6
2. I like the people from my heritage country.	1	2	3	4	5	6
3. I feel I fit in with other people from my heritage country.	1	2	3	4	5	6
4. I feel the people from my heritage country have a sense of solidarity.	1	2	3	4	5	6
5. My heritage country identity is important to me.	1	2	3	4	5	6
6. I identify with other people from my heritage country.	1	2	3	4	5	6
7. My ties with other people from my heritage country are strong.	1	2	3	4	5	6
8. I am glad to be a member of my heritage country's culture.	1	2	3	4	5	6
9. I see myself as a member of my heritage country's culture.	1	2	3	4	5	6

Host country:*

1. I feel similar to other Americans in terms of general attitudes and beliefs.	1	2	3	4	5	6
2. I like American people.	1	2	3	4	5	6
3. I feel I fit in with other American people.	1	2	3	4	5	6
4. I feel the American people have a sense of solidarity.	1	2	3	4	5	6
5. My American identity is important to me.	1	2	3	4	5	6
6. I identify with other Americans.	1	2	3	4	5	6
7. My ties with other Americans are strong.	1	2	3	4	5	6
8. I am glad to be part of America's culture.	1	2	3	4	5	6
9. I see myself as part of America's culture.	1	2	3	4	5	6

**The measure was in German and referred to Germany in Study 2.*
Source: Hogg & Hains, 1996; Hogg, Hains, & Mason, 1998; Hogg et al., 2007

Appendix C: Exclusion Measure*

Please indicate the extent to which you agree or disagree with the following statements.

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

1. I sometimes feel that other non-Muslim Americans avoid interacting with me.	1	2	3	4	5	6
2. I can't rely on my non-Muslim American friends or family in times of need.	1	2	3	4	5	6
3. Non-Muslim Americans often seek out my company.	1	2	3	4	5	6
4. If I want to socialize with my non-Muslim American friends, I am generally the one who must seek them out.	1	2	3	4	5	6
5. I am fortunate to have many caring and supportive non-Muslim American friends.	1	2	3	4	5	6
6. Non-Muslim Americans shun me.	1	2	3	4	5	6
7. I think there are many non-Muslim American people who like to be with me.	1	2	3	4	5	6
8. I often feel like an outsider in non-Muslim American social gatherings.	1	2	3	4	5	6
9. I feel welcome in most non-Muslim American social situations.	1	2	3	4	5	6

**The measure was in German and referred to Germany in Study 2.*
Source: Spivey, 1990; Rubin, Watt & Ramelli, 2012

Appendix D: Significance Loss Factor Structure and Loadings

Item	Factor 1	Factor 2	Factor 3
I feel ashamed.	**.73**		
I feel humiliated.	**.73**		
I feel rejected.	**.61**		
I feel meaningless.	**.52**		
I feel hopeless.	**.50**		
I feel like an outsider.	**.50**		
I feel nonexistent.	**.48**		
I feel disconnected from other people.	**.44**		
I feel angry.*	.38		
I feel invisible.*	.32		
I feel like others interact with me.		**.76**	
I feel that others like me.		**.74**	
My self-esteem is high.		**.70**	
I feel powerful.		**.69**	
I feel important.		**.66**	
I feel I have the ability to significantly alter events in my life.		**.60**	
I feel I belong.		**.57**	
I feel satisfied.		**.56**	
I feel good about myself.		**.56**	
I feel useful.		**.53**	
I feel I have control over my life.		**.52**	
I feel confused.			**-.85**
I feel uncertain.			**-.77**
I feel unsure of myself or my future.			**-.66**
I feel indecisive.			**-.57**
I feel torn.			**-.56**
I feel insecure.			**-.53**

Note: Extraction Method: Principal Axis Factoring
Rotation Method: Direct Oblimin
**Items with loadings less than .40 were not included in the factor.*

Appendix E: Significance Loss, Exclusion and Marginalization Factor Structure and Loadings

Item	Factor 1	Factor 2	Factor 3	Factor 4
I feel nonexistent.	**.85**			
I feel meaningless.	**.85**			
I feel rejected.	**.85**			
I feel humiliated.	**.75**			
I feel hopeless.	**.74**			
I feel ashamed.	**.66**			
I feel like an outsider.	**.55**			
I feel disconnected from other people.	**.51**			
I think there are many non-Muslim American people who like to be with me.		**.73**		
Non-Muslim Americans often seek out my company.		**.70**		
I am fortunate to have many caring and supportive non-Muslim American friends.		**.70**		
I feel welcome in most non-Muslim American social situations.		**.69**		
I sometimes feel that other non-Muslim Americans avoid interacting with me.		**-.64**		
If I want to socialize with my non-Muslim American friends, I am generally the one who must seek them out.		**-.64**		
I can't rely on my non-Muslim American friends or family in times of need.		**-.55**		
I often feel like an outsider in non-Muslim American social gatherings.		**-.53**		
Non-Muslim Americans shun me.		**-.50**		
There are times when I feel like I don't belong to any culture.			**.97**	
Sometimes I don't feel part of American culture or part of Muslim culture.			**.85**	
I do not wish to maintain my heritage culture values or adopt American values as I feel uncomfortable with both types of values.				**.72**
I do not wish to maintain my heritage culture customs or adopt American customs as I feel uncomfortable with both types of customs.				**.72**

Note: Extraction Method: Principal Axis Factoring
Rotation Method: Direct Oblimin
Results include data from both the American and German samples (N = 402)

Appendix F: Self-Sacrifice Scale

Read each of the following statements and decide how much you agree with each according to your beliefs and experiences. Please respond according to the following scale:

1 Not Agree at All	**2 Very Slightly Agree**	**3 Slightly Agree**	**4 Moderately Agree**	**5 Mostly Agree**	**6 Strongly Agree**	**7 Very Strongly Agree**

1. I would defend a cause to which I am truly committed even if my loved ones rejected me.	1	2	3	4	5	6	7
2. I would be prepared to endure intense suffering if it meant defending an important cause.	1	2	3	4	5	6	7
3. I would be ready to give my life for a cause that is extremely dear to me.	1	2	3	4	5	6	7
4. I would be willing to give away all my belongings to support an important cause.	1	2	3	4	5	6	7
5. I would be ready to give up all my personal wealth for a highly important cause.	1	2	3	4	5	6	7

Source: Bélanger, Caouette, Sharvit, & Dugas, 2014

Appendix G: Radical Interpretation of Islam Scale

Please indicate the extent to which you agree or disagree with the following statements.

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

1. The Quran should only be understood according to its literal meaning	1	2	3	4	5	6
2. Western nations are forcing their values on Muslims throughout the world	1	2	3	4	5	6
3. Muslims in America should help their oppressed brothers and sisters in other parts of the world by participating in combative jihad.	1	2	3	4	5	6
4. Combative jihad is the only way to conduct jihad.	1	2	3	4	5	6
5. It is important to give to Islamic charities, even if their ideological beliefs may be extreme at times.	1	2	3	4	5	6
6. Those who do not practice Islam properly are non-believers/Kafirs.	1	2	3	4	5	6
7. Islam cannot be fully practiced in a non-Muslim state	1	2	3	4	5	6
8. Most non-believers are trying to discredit Islam	1	2	3	4	5	6
9. Muslims who live in non-Muslim countries are obligated to immigrate to Muslim countries	1	2	3	4	5	6
10. America is a good place to practice my faith and be Muslim.	1	2	3	4	5	6

**The measure was in German and referred to Germany in Study 2.*
Source: Kruglanski, Gelfand, Sheveland, Babush, Hetiarachchi, Bonto, & Gunaratna, 2015

Appendix H: Radical Group Description in Studies 1 and 2*

On the next page you will read a description of a new organization for Muslim Americans. Please read the description carefully. You will then answer some questions about the passage.

Fundamental Muslim is a growing organization composed of young Muslims in the United States who will not compromise our core Islamic values. Our mission is clear: to advocate for Muslims in a country that doesn't respect us. We will find a place for Islam in American politics and retaliate against injustices suffered by Muslims in America, and around the world. True Islam is at odds with American moral values and therefore we must work to undermine their corrupt cultural and political fabric in order to create a truly just society under the rule of Allah. The United States is intent on subverting the interests of the Islamic Ummah and we must use everything in our power to stop it. America is unwelcoming to Muslims no matter what country you are from, no matter how long you've lived here, so join our struggle if you want real change.

Our leadership is exceptionally bright and determined, and our members unite behind us in the execution of our goals. We take pride in the loyal commitment of our members—once a member, always a member—this is our pledge of support. We work swiftly and efficiently. We're about action, not talk. The United States is a legitimate target of our action until it changes its anti-Muslim agenda. Protest – and vigorously. Rallies – large, loud ones. March-outs. We'll blockade the streets if we have to. Muslims can't be pushed around. There's no way Americans can take our religion away from us– we'll stop at nothing to protect Islam and our brothers.

**The script was in German and referred to Germany rather than the United States in Study 2.*
Source: adapted from Hogg, Meehan & Farquharson, 2010

Appendix I: Support for Radical Group Measures

To what extent do you think **MOST PEOPLE YOU KNOW** would…

1	**2**	**3**	**4**	**5**	**6**	**7**
Not at All						**Very Much**

1. Want to join the group	1	2	3	4	5	6	7
2. Identify with the group	1	2	3	4	5	6	7
3. Like the group's members and the group as a whole	1	2	3	4	5	6	7
4. Perceive personal similarity to the group and its members	1	2	3	4	5	6	7

How likely do you think **MOST PEOPLE YOU KNOW** would participate in the following activities for the group?

1	**2**	**3**	**4**	**5**	**6**	**7**
Very Unlikely	**Unlikely**	**Somewhat Unlikely**	**Undecided**	**Somewhat Likely**	**Likely**	**Very Likely**

1. Attend monthly meetings	1	2	3	4	5	6	7
2. Lobby, petition, and letter-write on behalf of the group	1	2	3	4	5	6	7
3. Participate in demonstrations, sit-ins, and blockades on behalf of the group	1	2	3	4	5	6	7
4. Act as a representative of the group	1	2	3	4	5	6	7

To what extent do you think **MOST PEOPLE YOU KNOW** would understand if this group participated in the following behaviors?

1	**2**	**3**	**4**	**5**	**6**	**7**
Not at All						**Very Much**

1. Participating in an illegal demonstration	1	2	3	4	5	6	7
2. Participating in a violent demonstration	1	2	3	4	5	6	7
3. Writing a political slogan on a public wall	1	2	3	4	5	6	7
4. Damaging other people's property	1	2	3	4	5	6	7

Source: Hogg, Meehan & Farquharson, 2010; Simon, Reichert & Grabow, 2013

Appendix J

Exploratory Analyses for Integration: Moderated Mediation for Readiness to Self-Sacrifice in Study 1.

		B	*SE*	*t*
Mediator Model				
Significance Loss				
	Integration	-.13	.05	-2.65**
	Exclusion	.32	.05	6.22**
	Integration X Exclusion	-.18	.05	-3.40**
	Marginalization	.22	.04	5.26**
	Separation	-.01	.04	-.36
	Assimilation	.05	.05	1.04
Dependent Model				
Readiness to Self-Sacrifice				
	Significance Loss	.50	.19	2.67**
	Marginalization	-.17	.13	-1.28
	Integration	-.39	.14	-2.76**
	Separation	-.24	.10	-2.44*
	Assimilation	-.15	.15	-.97
Conditional Indirect Effect of Integration through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	.01	.03	[-.05,.08]
	Exclusion (Mean)	-.06	.04	[-.19,-.006]
	Exclusion (+1 SD from mean)	-.14	.07	[-.34,-.04]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix K

Exploratory Analyses for Integration: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Integration	-.13	.05	-2.65**
Exclusion	.32	.05	6.22**
Integration X Exclusion	-.18	.05	-3.40**
Marginalization	.22	.04	5.26**
Separation	-.01	.04	-.36
Assimilation	.05	.05	1.04
Dependent Model			
Support for Radical Interpretation of Islam			
Significance Loss	.17	.07	2.23*
Marginalization	-.10	.05	-1.90†
Integration	-.05	.06	-.97
Separation	.24	.04	6.20**
Assimilation	-.05	.06	-.83
Conditional Indirect Effect of Integration through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.005	.01	[-.02,.03]
Exclusion (Mean)	-.02	.02	[-.07,-.0004]
Exclusion (+1 SD from mean)	-.05	.03	[-.12,-.004]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix L

Exploratory Analyses for Integration: Moderated Mediation for Support for Radical Groups in Study 1.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Integration	-.13	.05	-2.54*
	Exclusion	.34	.06	6.10**
	Integration X Exclusion	-.16	.06	-2.94**
	Marginalization	.24	.05	5.41**
	Separation	-.02	.04	-.55
	Assimilation	.09	.06	1.61
Dependent Model				
	Support for Radical Groups			
	Significance Loss	.43	.33	4.73**
	Marginalization	-.12	.08	-1.44
	Integration	-.17	.09	-1.93†
	Separation	.04	.06	.67
	Assimilation	-.17	.10	-1.80†
Conditional Indirect Effect of Integration through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	.006	.03	[-.06,.06]
	Exclusion (Mean)	-.05	.04	[-.16,.0003]
	Exclusion (+1 SD from mean)	-.12	.06	[-.27,-.02]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix M

Exploratory Analyses for Separation: Moderated Mediation for Readiness to Self-Sacrifice in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Separation	-.0009	.04	-.03
Exclusion	.32	.05	6.18**
Separation X Exclusion	.04	.04	.94
Marginalization	.23	.04	5.21**
Integration	-.11	.05	-2.26*
Assimilation	.05	.05	.95
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.50	.19	2.67**
Marginalization	-.17	.13	-1.28
Integration	-.39	.14	-2.76**
Separation	-.24	.10	-2.44*
Assimilation	-.15	.15	-.97
Conditional Indirect Effect of Separation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.02	.02	[-.07,.02]
Exclusion (Mean)	-.0005	.02	[-.04,.04]
Exclusion (+1 SD from mean)	.02	.03	[-.03,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix N

Exploratory Analyses for Separation: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Separation	-.0009	.04	-.03
Exclusion	.32	.05	6.18**
Separation X Exclusion	.04	.04	.94
Marginalization	.23	.04	5.21**
Integration	-.11	.05	-2.26*
Assimilation	.05	.05	.95
Dependent Model			
Support for Radical Interpretation of Islam			
Significance Loss	.17	.07	2.23*
Marginalization	-.10	.05	-1.90†
Integration	-.05	.06	-.97
Separation	.24	.04	6.20**
Assimilation	-.05	.06	-.83
Conditional Indirect Effect of Separation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.006	.01	[-.03,.007]
Exclusion (Mean)	-.0002	.01	[-.01,.02]
Exclusion (+1 SD from mean)	.006	.01	[-.01,.04]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix O

Exploratory Analyses for Separation: Moderated Mediation for Support for Radical Groups in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Separation	-.01	.04	-.24
Exclusion	.35	.06	6.20**
Separation X Exclusion	.05	.04	1.07
Marginalization	.25	.05	5.45**
Integration	-.11	.05	-2.11*
Assimilation	.09	.06	1.58
Dependent Model			
Support for Radical Groups			
Significance Loss	.43	.33	4.73**
Marginalization	-.12	.08	-1.44
Integration	-.17	.09	-1.93†
Separation	.04	.06	.67
Assimilation	-.17	.10	-1.80†
Conditional Indirect Effect of Separation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.02	.02	[-.07,.01]
Exclusion (Mean)	-.004	.02	[-.04,.03]
Exclusion (+1 SD from mean)	.01	.03	[-.04,.08]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix P

Exploratory Analyses for Assimilation: Moderated Mediation for Readiness to Self-Sacrifice in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Assimilation	.06	.05	1.03
Exclusion	.32	.05	6.15**
Assimilation X Exclusion	.09	.06	1.45
Marginalization	.22	.04	5.01**
Integration	-.12	.05	-2.48*
Separation	-.003	.04	-.09
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	.50	.19	2.67**
Marginalization	-.17	.13	-1.28
Integration	-.39	.14	-2.76**
Separation	-.24	.10	-2.44*
Assimilation	-.15	.15	-.97
Conditional Indirect Effect of Assimilation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.01	.03	[-.10,.04]
Exclusion (Mean)	.03	.03	[-.02,.11]
Exclusion (+1 SD from mean)	.07	.06	[-.01,.22]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix Q

Exploratory Analyses for Assimilation: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 1.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Assimilation	.06	.05	1.03
Exclusion	.32	.05	6.15**
Assimilation X Exclusion	.09	.06	1.45
Marginalization	.22	.04	5.01**
Integration	-.12	.05	-2.48*
Separation	-.003	.04	-.09
Dependent Model			
Support for a Radical Interpretation of Islam			
Significance Loss	.17	.07	2.23*
Marginalization	-.10	.05	-1.90†
Integration	-.05	.06	-.97
Separation	.24	.04	6.20**
Assimilation	-.05	.06	-.83
Conditional Indirect Effect of Assimilation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.003	.01	[-.03,.01]
Exclusion (Mean)	.01	.01	[-.01,.04]
Exclusion (+1 SD from mean)	.02	.02	[-.004,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix R

Exploratory Analyses for Assimilation: Moderated Mediation for Support for Radical Groups in Study 1.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Assimilation	.10	.06	1.70†
	Exclusion	.35	.06	6.13**
	Assimilation X Exclusion	.09	.06	1.42
	Marginalization	.24	.05	5.20**
	Integration	-.12	.05	-2.30*
	Separation	-.01	.04	-.36
Dependent Model				
	Support for Radical Groups			
	Significance Loss	.43	.33	4.73**
	Marginalization	-.12	.08	-1.44
	Integration	-.17	.09	-1.93†
	Separation	.04	.06	.67
	Assimilation	-.17	.10	-1.80†
Conditional Indirect Effect of Assimilation through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	.01	.03	[-.05,.07]
	Exclusion (Mean)	.04	.03	[-.01,.12]
	Exclusion (+1 SD from mean)	.08	.05	[-.002,.21]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix S: Additional Measures

*Host Country Closed-Mindedness**

We will now ask you about your perceptions of cultural openness in the United States. Please indicate the extent to which you agree or disagree with the following statements.

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

1. Even though most Americans like to think they are open-minded, they actually are not.	1	2	3	4	5	6
2. Most Americans are more prejudiced than they would like to believe they are.	1	2	3	4	5	6
3. When Americans ask me where I come from, I sense that they aren't really interested in learning about my culture.	1	2	3	4	5	6
4. Most Americans are not interested in learning about other people's cultures.	1	2	3	4	5	6

*Host Country Tightness-Looseness**

The following statements refer to ***the United States*** as a whole. Please indicate whether you agree or disagree with the following statements using the following scale. Note that the statements sometimes refer to "*social norms*", which are standards for behavior that are generally unwritten.

1 Strongly Disagree	**2 Disagree**	**3 Somewhat Disagree**	**4 Somewhat Agree**	**5 Agree**	**6 Strongly Agree**

1. There are many social norms that people are supposed to abide by in this country.	1	2	3	4	5	6
2. In this country, there are very clear expectations for how people should act in most situations.	1	2	3	4	5	6
3. People agree upon what behaviors are appropriate versus inappropriate in most situations in this country.	1	2	3	4	5	6
4. People in this country have a great deal of freedom in deciding how they want to behave in most situations.	1	2	3	4	5	6
5. In this country, if someone acts in an inappropriate way, others will strongly disapprove.	1	2	3	4	5	6
6. People in this country almost always comply with social norms.	1	2	3	4	5	6

**The measures were in German and referred to Germany in Study 2.*
Source: Gelfand et al., 2011

Appendix T

Exploratory Analyses for Integration: Moderated Mediation for Readiness to Self-Sacrifice in Study 2.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Integration	.05	.04	1.19
	Exclusion	.31	.05	6.45**
	Integration X Exclusion	.02	.04	.66
	Marginalization	.24	.05	5.27**
	Separation	.12	.04	3.34**
	Assimilation	.05	.05	.93
Dependent Model				
	Readiness to Self-Sacrifice			
	Significance Loss	-.03	.16	-.21
	Marginalization	-.14	.11	-1.23
	Integration	-.17	.10	-1.79†
	Separation	.13	.09	1.45
	Assimilation	-.10	.12	-.83
Conditional Indirect Effect of Integration through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	-.0008	.01	[-.03,.01]
	Exclusion (Mean)	-.002	.01	[-.03,.01]
	Exclusion (+1 SD from mean)	-.002	.01	[-.05,.02]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix U

Exploratory Analyses for Integration: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 2.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Integration	.05	.04	1.19
Exclusion	.31	.05	6.45**
Integration X Exclusion	.02	.04	.66
Marginalization	.24	.05	5.27**
Separation	.12	.04	3.34**
Assimilation	.05	.05	.93
Dependent Model			
Support for Radical Interpretation of Islam			
Significance Loss	.21	.07	2.88**
Marginalization	-.15	.05	-2.86**
Integration	-.12	.05	-2.58*
Separation	.16	.04	3.94**
Assimilation	.02	.06	.43
Conditional Indirect Effect of Integration through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.01	.01	[-.01,.03]
Exclusion (Mean)	.01	.01	[-.004,.04]
Exclusion (+1 SD from mean)	.01	.02	[-.01,.05]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix V

Exploratory Analyses for Integration: Moderated Mediation for Support for Radical Groups in Study 2.

		B	*SE*	*t*
Mediator Model				
Significance Loss				
	Integration	.05	.04	1.19
	Exclusion	.31	.05	6.45**
	Integration X Exclusion	.02	.04	.66
	Marginalization	.24	.05	5.27**
	Separation	.12	.04	3.34**
	Assimilation	.05	.05	.93
Dependent Model				
Support for Radical Groups				
	Significance Loss	.11	.11	1.03
	Marginalization	-.03	.08	-.38
	Integration	.03	.07	.52
	Separation	.20	.06	3.21**
	Assimilation	.30	.08	3.63**
Conditional Indirect Effect of Integration through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	.003	.01	[-.007,.03]
	Exclusion (Mean)	.005	.009	[-.004,.04]
	Exclusion (+1 SD from mean)	.008	.01	[-.008,.06]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix W

Exploratory Analyses for Separation: Moderated Mediation for Readiness to Self-Sacrifice in Study 2.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Separation	.12	.03	3.54**
	Exclusion	.33	.05	6.66**
	Separation X Exclusion	.06	.03	1.77†
	Marginalization	.24	.04	5.40**
	Integration	.05	.04	1.20
	Assimilation	.05	.05	1.00
Dependent Model				
	Readiness to Self-Sacrifice			
	Significance Loss	-.03	.16	-.21
	Marginalization	-.14	.11	-1.23
	Integration	-.17	.10	-1.79†
	Separation	.13	.09	1.45
	Assimilation	-.10	.12	-.83
Conditional Indirect Effect of Separation through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	-.002	.01	[-.03,.02]
	Exclusion (Mean)	-.004	.02	[-.05,.04]
	Exclusion (+1 SD from mean)	-.01	.03	[-.07,.05]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix X

Exploratory Analyses for Separation: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 2.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Separation	.12	.03	3.54**
Exclusion	.33	.05	6.66**
Separation X Exclusion	.06	.03	1.77†
Marginalization	.24	.04	5.40**
Integration	.05	.04	1.20
Assimilation	.05	.05	1.00
Dependent Model			
Support for Radical Interpretation of Islam			
Significance Loss	.21	.07	2.88**
Marginalization	-.15	.05	-2.86**
Integration	-.12	.05	-2.58*
Separation	.16	.04	3.94**
Assimilation	.02	.06	.43
Conditional Indirect Effect of Separation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.01	.01	[.0004,.04]
Exclusion (Mean)	.03	.01	[.007,.06]
Exclusion (+1 SD from mean)	.04	.02	[.009,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix Y

Exploratory Analyses for Separation: Moderated Mediation for Support for Radical Groups in Study 2.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Separation	.12	.03	3.54**
	Exclusion	.33	.05	6.66**
	Separation X Exclusion	.06	.03	1.77†
	Marginalization	.24	.04	5.40**
	Integration	.05	.04	1.20
	Assimilation	.05	.05	1.00
Dependent Model				
	Support for Radical Groups			
	Significance Loss	.11	.11	1.03
	Marginalization	-.03	.08	-.38
	Integration	.03	.07	.52
	Separation	.20	.06	3.21**
	Assimilation	.30	.08	3.63**
Conditional Indirect Effect of Separation through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	.008	.01	[-.005,.04]
	Exclusion (Mean)	.01	.02	[-.01,.05]
	Exclusion (+1 SD from mean)	.02	.02	[-.02,.08]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix Z

Exploratory Analyses for Assimilation: Moderated Mediation for Readiness to Self-Sacrifice in Study 2.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Assimilation	.02	.05	.37
Exclusion	.34	.05	6.74**
Assimilation X Exclusion	.12	.06	1.88†
Marginalization	.24	.04	5.44**
Integration	.05	.04	1.21
Separation	.12	.03	3.46**
Dependent Model			
Readiness to Self-Sacrifice			
Significance Loss	-.03	.16	-.21
Marginalization	-.14	.11	-1.23
Integration	-.17	.10	-1.79†
Separation	.13	.09	1.45
Assimilation	-.10	.12	-.83
Conditional Indirect Effect of Assimilation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	.003	.02	[-.02,.06]
Exclusion (Mean)	-.001	.01	[-.03,.01]
Exclusion (+1 SD from mean)	-.004	.02	[-.06,.04]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix AA

Exploratory Analyses for Assimilation: Moderated Mediation for Support for a Radical Interpretation of Islam in Study 2.

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Assimilation	.02	.05	.37
Exclusion	.34	.05	6.74**
Assimilation X Exclusion	.12	.06	1.88†
Marginalization	.24	.04	5.44**
Integration	.05	.04	1.21
Separation	.12	.03	3.46**
Dependent Model			
Support for a Radical Interpretation of Islam			
Significance Loss	.21	.07	2.88**
Marginalization	-.15	.05	-2.86**
Integration	-.12	.05	-2.58*
Separation	.16	.04	3.94**
Assimilation	.02	.06	.43
Conditional Indirect Effect of Assimilation through Significance Loss			CI_{95}
Exclusion (-1 SD from mean)	-.02	.02	[-.07,.01]
Exclusion (Mean)	.004	.01	[-.02,.04]
Exclusion (+1 SD from mean)	.03	.02	[.0005,.10]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix BB

Exploratory Analyses for Assimilation: Moderated Mediation for Support for Radical Groups in Study 2.

		B	*SE*	*t*
Mediator Model				
	Significance Loss			
	Assimilation	.02	.05	.37
	Exclusion	.34	.05	6.74**
	Assimilation X Exclusion	.12	.06	1.88†
	Marginalization	.24	.04	5.44**
	Integration	.05	.04	1.21
	Separation	.12	.03	3.46**
Dependent Model				
	Support for Radical Groups			
	Significance Loss	.11	.11	1.03
	Marginalization	-.03	.08	-.38
	Integration	.03	.07	.52
	Separation	.20	.06	3.21**
	Assimilation	.30	.08	3.63**
Conditional Indirect Effect of Assimilation through Significance Loss				CI_{95}
	Exclusion (-1 SD from mean)	-.01	.02	[-.07,.007]
	Exclusion (Mean)	.003	.01	[-.009,.04]
	Exclusion (+1 SD from mean)	.02	.02	[-.01,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix CC

T-tests between the American and German Samples

	U.S.		Germany		
	M	SD	M	SD	*t*(400)
Marginalization	2.72	1.03	2.80	1.06	.81
Integration	4.96	.95	4.48	1.19	4.50**
Separation	2.99	1.25	1.77	.94	1.52
Assimilation	1.79	.85	3.19	1.36	-.23
Exclusion	2.49	.87	2.88	.93	4.42**
Significance loss	1.61	.73	2.77	.88	3.23**
Readiness to self-sacrifice	3.23	1.78	4.20	.99	6.05**
Radical interpretation of Islam	2.13	.74	3.40	.65	5.65**
Support for radical group*	1.77	1.06	2.80	1.06	1.35
Tightness-Looseness	3.80	.73	4.00	.65	2.86*
Host Country Closed-Mindedness	3.48	1.19	4.20	.99	6.57**

† *p* < .10 * *p* < .05 ** *p* < .01
**df* = 378

Appendix DD

US-Germany Serial Mediation Model to Readiness to Self-Sacrifice

	B	*SE*	*t*
Tightness-Looseness			
Country	-.10	.03	-2.86*
Host Country Closed-Mindedness			
Tightness-Looseness	.19	.08	2.36*
Country	-.34	.05	-6.21**
Integration			
Host Country Closed-Mindedness	-.10	.05	-2.07*
Tightness-Looseness	.07	.08	.92
Country	.21	.06	3.75**
Readiness to Self-Sacrifice			
Integration	-.25	.08	-3.37**
Host Country Closed-Mindedness	.25	.07	3.33**
Tightness-Looseness	.14	.12	1.15
Country	-.34	.09	-3.89**
Indirect Effects of Country			CI_{95}
#1	-.01	.01	[-.05,.006]
#2	-.0045	.003	[-.01,.0008]
#3	.0018	-.003	[-.001,.01]
#4	-.0005	.0004	[-.002,.0001]
#5	-.08	.03	[-.16,-.03]
#6	-.01	.01	[-.02,-.001]
#7	-.05	.02	[-.11,-.02]

† $p < .10$ * $p < .05$ ** $p < .01$

Note: Country was coded as -1 = Germany, 1 = United States

Indirect effect key:

#1: Country → Tightness-Looseness → Readiness to Self-Sacrifice
#2: Country → Tightness-Looseness → Host Country Closed-Mindedness → Readiness to Self-Sacrifice
#3: Country → Tightness-Looseness → Integration → Readiness to Self-Sacrifice
#4: Country → Tightness-Looseness → Host Country Closed-Mindedness → Integration → Martyrdom
#5: Country → Host Country Closed-Mindedness → Readiness to Self-Sacrifice
#6: Country → Host Country Closed-Mindedness → Integration → Readiness to Self-Sacrifice
#7: Country → Integration → Readiness to Self-Sacrifice

Appendix EE

US-Germany Serial Mediation Model to Support for a Radical Interpretation of Islam

	B	*SE*	*t*
Tightness-Looseness			
Country	-.10	.03	-2.86*
Host Country Closed-Mindedness			
Tightness-Looseness	.19	.08	2.36*
Country	-.34	.05	-6.21**
Integration			
Host Country Closed-Mindedness	-.10	.05	-2.07*
Tightness-Looseness	.07	.08	.92
Country	.21	.06	3.75**
Support for a Radical Interpretation of Islam			
Integration	-.11	.04	-2.76*
Host Country Closed-Mindedness	.15	.04	3.93**
Tightness-Looseness	-.01	.06	-.15
Country	-.17	.04	-3.84**
Indirect Effects of Country			CI_{95}
#1	.00	.02	[-.01,.02]
#2	-.003	.001	[-.01,.02]
#3	.001	.001	[-.001,.004]
#4	-.0002	.0002	[-.001,.0000]
#5	-.05	.02	[-.09,-.03]
#6	-.004	.003	[-.01,-.002]
#7	-.02	.01	[-.05,-.005]

† $p < .10$ * $p < .05$ ** $p < .01$

Note: Country was coded as -1 = Germany, 1 = United States

Indirect effect key:

#1: Country → Tightness-Looseness → Support for a Radical Interpretation of Islam

#2: Country → Tightness-Looseness → Host Country Closed-Mindedness → Support for a Radical Interpretation of Islam

#3: Country → Tightness-Looseness → Integration → Support for a Radical Interpretation of Islam

#4: Country → Tightness-Looseness → Host Country Closed-Mindedness → Integration → Martyrdom

#5: Country → Host Country Closed-Mindedness → Support for a Radical Interpretation of Islam

#6: Country → Host Country Closed-Mindedness → Integration → Support for a Radical Interpretation of Islam

#7: Country → Integration → Support for a Radical Interpretation of Islam

Appendix FF: Group Introduction Worksheet Profiles from Study 3

Introduction Worksheet

Please answer some questions to create a personal profile about yourself.

Name: Andrea

Year in college: Grad Student

Major: Education

Hobbies: Reading, travel

Favorite food: Sushi

Favorite TV show: How I met your Mother

Favorite music: pop / R+B, Rihanna

Favorite movie: Bridesmaids, Silver Linings Playbook

Religion: Christian

What is your ancestry? (i.e., what countries does your family come from?)

Germany, Ireland (Europe)

Appendix FF: Group Introduction Worksheet Profiles from Study 3 (cont'd)

Introduction Worksheet

Please answer some questions to create a personal profile about yourself.

Name: Aaron

Year in college: Freshman

Major: Engineering

Hobbies: Gaming, Programming

Favorite food: Steak

Favorite TV show: family Guy

Favorite music: alt. rock

Favorite movie: The Hangover, Superbad

Religion: N/A

What is your ancestry? (i.e., what countries does your family come from?)

Scotland, UK

Appendix FF: Group Introduction Worksheet Profiles from Study 3 (cont'd)

Introduction Worksheet

Please answer some questions to create a personal profile about yourself.

Name: Kelsey

Year in college: Sophomore

Major: Criminology

Hobbies: Baking, Singing

Favorite food: Chipotle

Favorite TV show: Big Bang Theory

Favorite music: Beyoncé

Favorite movie: Mean Girls

Religion: Presbyterian

What is your ancestry? (i.e., what countries does your family come from?)

France, Spain, Ireland

Appendix FF: Group Introduction Worksheet Profiles from Study 3 (cont'd)

Introduction Worksheet

Please answer some questions to create a personal profile about yourself.

Name: Greg
Year in college: Junior
Major: Computer science
Hobbies: Photography, gaming
Favorite food: Wings + pizza
Favorite TV show: Breaking Bad
Favorite music: Daft Punk
Favorite movie: Shawshank Redemption
Religion: Catholic
What is your ancestry? (i.e., what countries does your family come from?)
Italy, the UK, + Germany

Appendix GG: Radical Group Description in Study 3

We are interested in understanding more about student activism and want to know what kinds of organizations will appeal to students. We will show you one or more descriptions of groups geared toward students, and will ask you about your perceptions of these groups.

Minorities with Might is a growing organization composed of young immigrants and minorities in the United States who will not compromise our core cultural values. Our mission is clear: to advocate for minorities in a country that doesn't respect us. We will find a place for our culture in American politics and retaliate against injustices suffered by minorities in America, and around the world. We are at odds with American moral values and therefore we must work to undermine their corrupt cultural and political fabric in order to create a truly just society. The United States is intent on subverting the interests of immigrants and minorities and we must use everything in our power to stop it. America is unwelcoming to immigrants no matter what country you are from, no matter how long you've lived here, so join our struggle if you want real change.

Our leadership is exceptionally bright and determined, and our members unite behind us in the execution of our goals. We take pride in the loyal commitment of our members—once a member, always a member—this is our pledge of support. We work swiftly and efficiently. We're about action, not talk. The United States is a legitimate target of our action until it changes its anti-minority agenda. Protest – and vigorously. Rallies – large, loud ones. March-outs. We'll blockade the streets if we have to. Minorities can't be pushed around. There's no way Americans can take our culture away from us– we'll stop at nothing to protect our cause.

Appendix HH

Exploratory Analyses: Mediation Model for Willingness to Engage in a Radical Act

		B	*SE*	*t*
Mediator Model				
Significance Loss				
	Marginalization	.12	.05	2.53*
	Integration	-.07	.06	.23
	Separation	.05	.05	.97
	Assimilation	.02	.06	.43
Dependent Model				
Willingness to Engage in a Radical Act				
	Significance Loss	.25	.09	2.82*
	Marginalization	.09	.05	1.84†
	Integration	.11	.06	1.76†
	Separation	-.07	.05	-1.37
	Assimilation	-.14	.06	-2.38*
Total, Direct, and Indirect Effects				
	Total effect of Marginalization	.12	.05	2.43*
	Direct effect of Marginalization	.09	.05	1.84†
				CI_{95}
	Indirect effect of Marginalization	.03	.02	[.003,.09]

† $p < .10$ * $p < .05$ ** $p < .01$

Appendix II

Exploratory Analyses: Mediation Model for Anti-American Sentiment

	B	*SE*	*t*
Mediator Model			
Significance Loss			
Marginalization	.12	.05	2.53*
Integration	-.07	.06	.23
Separation	.05	.05	.97
Assimilation	.02	.06	.43
Dependent Model			
Anti-American Sentiment			
Significance Loss	.41	.10	4.12**
Marginalization	.02	.06	.42
Integration	-.03	.07	-.44
Separation	-.01	.06	-.20
Assimilation	-.02	.07	-.26
Total, Direct, and Indirect Effects			
Total effect of Marginalization	.07	.06	1.24
Direct effect of Marginalization	.02	.06	.42
			CI_{95}
Indirect effect of Marginalization	.05	.03	[.007,.11]

† $p < .10$ * $p < .05$ ** $p < .01$

References

Ahmed, S. R., Kia-Keating, M., & Tsai, K. H. (2011). A structural model of racial discrimination, acculturative stress, and cultural resources among Arab American adolescents. *American Journal of Community Psychology, 48*(3-4), 181-192. doi: 10.1007/s10464-011-9424-3

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*(5), 888-918. doi:10.1037/0033-2909.84.5.888

Amer, M. M., & Hovey, J. D. (2007). Socio-demographic differences in acculturation and mental health for a sample of 2nd generation/early immigrant Arab Americans. *Journal of Immigrant and Minority Health, 9*(4), 335-347.

Arends-Tóth, J., & van de Vijver, F. R. (2006). Assessment of psychological acculturation. In D. L. Sam, J. W. Berry (Eds.) , *The Cambridge handbook of acculturation psychology* (pp. 142-160). New York, NY, US: Cambridge University Press.

Atran, S. (2003). Genesis of suicide terrorism. *Science, 299*(5612), 1534-1539. doi: 10.1126/science.1078854

Barrett, R. (2014). Foreign Fighters in Syria. *The Soufan Group*. Retrieved from http://soufangroup.com/wp-content/uploads/2014/06/TSG-Foreign-Fighters-in-Syria.pdf

Benac, N., & Riechmann, D. (2014, September 20). Tracing shift from everyday American to jihadis. *Associated Press*. Retrieved from:

http://bigstory.ap.org/article/3d58257d6abc4ee384644f99503f0e83/tracing-shift-everyday-american-jihadis

Bélanger, J. J., Caouette, J., Sharvit, K., & Dugas, M. (2014). The psychology of martyrdom: Making the ultimate sacrifice in the name of a cause. *Journal Of Personality And Social Psychology, 107*(3), 494-515. doi:10.1037/a0036855

Berry, J. W. (1970). Marginality, stress and ethnic identification in an acculturated aboriginal community. *Journal of Cross-Cultural Psychology, 1*(3), 239-252. doi: 10.1177/135910457000100303

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*(1), 5-34. doi: 10.1080/026999497378467

Berry, J. W. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. Balls Organista & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research.* (pp. 17-37). Washington, DC US: American Psychological Association.

Berry, J. W. (2006a). Stress perspectives on acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 43-57). New York, NY US: Cambridge University Press.

Berry, J. W. (2006b). Contexts of acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 27-42). New York, NY US: Cambridge University Press.

Berry, J. W. (2006c). Design of acculturation studies. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 129-141). New York, NY US: Cambridge University Press.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant Youth: Acculturation, Identity, and Adaptation. *Applied Psychology: An International Review, 55*(3), 303-332. doi: 10.1111/j.1464-0597.2006.00256.x

Berry, J. W., & Sabatier, C. (2010). Acculturation, discrimination, and adaptation among second generation immigrant youth in Montreal and Paris. *International Journal of Intercultural Relations, 34*(3), 191-207. doi: 10.1016/j.ijintrel.2009.11.007

Berry, J. W., & Sam, D. L. (1997). Acculturation and adaptation. *Handbook of cross-cultural psychology, 3*, 291-326.

Bjelopera, J. P., & Randol, M. A. (2010). American jihadist terrorism: Combating a complex threat. *Congressional Research Service*.

Borum, R. (2003). Understanding the terrorist mindset. *FBI Law Enforcement Bulletin*.

Borum, R. (2011). Radicalization into Violent Extremism II: A Review of Conceptual Models and Empirical Research. *Journal of Strategic Security, 4*(4), 3.

Bourhis, R. Y. & Barrette, G. (2006). *Notes on the Immigrant Acculturation Scale (IAS).* Working Paper, LECRI, Département de psychologie, Université du Québec à Montréal, Canada. November 2006.

Bourhis, R. Y., & Dayan, J. (2004). Acculturation orientations towards Israeli Arabs and Jewish immigrants in Israel. *International Journal of Psychology, 39*(2), 118-131. doi: 10.1080/00207590344000358

Brady, K. (2015, January 5). Germany set for new PEGIDA marches. *Deutsche Welle*. Retrieved from http://dw.de/p/1EEzP

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*(5), 475-482. doi: 10.1177/0146167291175001

Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods and Research, 21*, 230–258.

Carter-Sowell, A. R., Chen, Z., & Williams, K. D. (2008). Ostracism increases social susceptibility. *Social Influence, 3*(3), 143-153. doi: 10.1080/15534510802204868

Chun, K. M., & Akutsu, P. D. (2003). Acculturation among ethnic minority families. In K. M. Chun, P. Balls Organista & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research.* (pp. 95-119). Washington, DC US: American Psychological Association.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. doi: 10.1037/0033-2909.98.2.310

Crenshaw, M. (2007). Explaining suicide terrorism: A review essay. *Security Studies, 16*(1), 133-162.

Crone, M., & Harrow, M. (2011). Homegrown terrorism in the West. *Terrorism and Political Violence, 23*(4), 521-536. doi: 10.1080/09546553.2011.571556

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268. doi:10.1207/S15327965PLI1104_01

DeWall, C. N., Twenge, J. M., Gitter, S. A., & Baumeister, R. F. (2009). It's the thought that counts: The role of hostile cognition in shaping aggressive responses to social

exclusion. *Journal of Personality and Social Psychology, 96*(1), 45-59. doi: 10.1037/a0013196

Durkheim, E. (1951). *Suicide*. New York, NY US: Free Press.

Elliott, A. (2010, May 15). For Times Sq. Suspect, Long Roots of Discontent, *The New York Times*. Retrieved from http://www.nytimes.com/2010/05/16/nyregion/16suspect.html

Eyou, M. L., Adair, V., & Dixon, R. (2000). Cultural identity and psychological adjustment of adolescent Chinese immigrants in New Zealand. *Journal of Adolescence, 23*(5), 531-543. doi: 10.1006/jado.2000.0341

Fischer, R., & Fontaine, J. J. (2011). Methods for investigating structural equivalence. In D. Matsumoto, F. R. van de Vijver, D. Matsumoto, F. R. van de Vijver (Eds.) , *Cross-cultural research methods in psychology* (pp. 179-215). New York, NY, US: Cambridge University Press.

Fiske, S. T. (2010). *Social beings: Core motives in psychology*. Hoboken, NJ: John Wiley and Sons.

Frankl, V. E. (2000). *Man's search for ultimate meaning*. New York, NY: Basic Books.

Gelfand, M. J., LaFree, G., Fahey, S., & Feinberg, E. (2013). Culture and extremism. *Journal Of Social Issues, 69*(3), 495-517. doi:10.1111/josi.12026

Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness.*Journal Of Applied Psychology*, *91*(6), 1225-1244. doi:10.1037/0021-9010.91.6.1225

Gelfand, M., Raver, J. L., Nishii, L., Leslie, L. A., Lun, J., Lim, B. C., & ... Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. *Science, 332*(6033), 1100-1104. doi:10.1126/science.1197754

Glazer, N., & Moynihan, D. P. (1963). *Beyond the melting pot: The Negroes, Puerto Ricans, Jews, Italians and Irish of New York City*. Oxford England: Massachusetts Inst. Technology Pres.

Glick, P., Fiske, S. T., Abrams, D., Dardenne, B., Ferreira, M. C., Gonzalez, R., . . . Yzerbyt, V. (2006). Anti-American Sentiment and America's Perceived Intent to Dominate: An 11-Nation Study. *Basic and Applied Social Psychology, 28*(4), 363-373. doi: 10.1207/s15324834basp2804_10

Gonsalkorale, K., & Williams, K. D. (2007). The KKK won't let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology, 37*(6), 1176-1186. doi: 10.1002/ejsp.392

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf

Higgins, E. T. (2012). *Beyond pleasure and pain: How motivation works*. New York, NY: Oxford University Press.

Hoffman, B. (2006). *Inside Terrorism*: Columbia University Press.

Hogg, M. A., & Hains, S. C. (1996). Intergroup relations and group solidarity: Effects of group identification and social beliefs on depersonalized attraction. *Journal of Personality and Social Psychology, 70*(2), 295.

Hogg, M. A., Hains, S. C., & Mason, I. (1998). Identification and leadership in small groups: Salience, frame of reference, and leader stereotypicality effects on leader evaluations. *Journal of Personality and Social Psychology*, *75*(5), 1248.

Hogg, M. A., Meehan, C., & Farquharson, J. (2010). The solace of radicalism: Self-uncertainty and group identification in the face of threat. *Journal of Experimental Social Psychology, 46*(6), 1061-1066. doi: 10.1016/j.jesp.2010.05.005

Hogg, M. A., Sherman, D. K., Dierselhuis, J., Maitner, A. T., & Moffitt, G. (2007). Uncertainty, entitativity, and group identification. *Journal of Experimental Social Psychology, 43*(1), 135-142. doi: 10.1016/j.jesp.2005.12.008

Horgan, J. (2003). The search for the terrorist personality. *Terrorists, victims and society: Psychological perspectives on terrorism and its consequences*, 1-27.

Horverak, J. G., Bye, H. H., Sandal, G. M., & Pallesen, S. (2013). Managers' evaluations of immigrant job applicants: The influence of acculturation strategy on perceived person-organization fit (P-O fit) and hiring outcome. *Journal of Cross-Cultural Psychology, 44*(1), 46-60. doi: 10.1177/0022022111430256

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.

Jaarsveldt, V. J. (2014, November 12). Turkish youth, Jihadism report angers Muslims, *NL Times*. Retrieved from http://www.nltimes.nl/2014/11/12/turkish-youth-jihadism-report-angers-muslims/

Kaleem, J. (2013, April 26). Boston Bomber Suspects Had Attended Cambridge Mosque, Officials Say, *The Huffington Post*. Retrieved from

http://www.huffingtonpost.com/2013/04/20/boston-bombers-mosque-cambridge_n_3125192.html

King, M., & Taylor, D. M. (2011). The radicalization of homegrown Jihadists: A review of theoretical models and social psychological evidence. *Terrorism and Political Violence, 23*(4), 602-622. doi: 10.1080/09546553.2011.587064

Kleinmann, S. M. (2012). Radicalization of homegrown Sunni militants in the United States: Comparing converts and non-converts. *Studies in Conflict & Terrorism, 35*(4), 278-297. doi: 10.1080/1057610X.2012.656299

Kohlmann, E. F. (2008). 'Homegrown' terrorists: Theory and cases in the war on terror's newest front. *Annals of the American Academy of Political and Social Science, 618*(1), 95-109. doi: 10.1177/0002716208317203

Kosic, A. (2006). Personality and individual factors in acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 113-128). New York, NY US: Cambridge University Press.

Kosic, A., Kruglanski, A. W., Pierro, A., & Mannetti, L. (2004). The Social Cognition of Immigrants' Acculturation: Effects of the Need for Closure and the Reference Group at Entry. *Journal of Personality and Social Psychology, 86*(6), 796-813. doi: 10.1037/0022-3514.86.6.796

Kruglanski, A. W., Bélanger, J. J., Gelfand, M., Gunaratna, R., Hettiarachchi, M., Reinares, F., & ... Sharvit, K. (2013). Terrorism—A (self) love story: Redirecting the significance quest can end violence. *American Psychologist, 68*(7), 559-575. doi:10.1037/a0032615

Kruglanski, A. W., Chen, X., Dechesne, M., Fishman, S., & Orehek, E. (2009). Fully committed: Suicide bombers' motivation and the quest for personal significance. *Political Psychology, 30*(3), 331-357. doi: 10.1111/j.1467-9221.2009.00698.x

Kruglanski, A. W., Gelfand, M. J., Bélanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology*, *35*(Suppl 1), 69-93. doi:10.1111/pops.12163

Kruglanski, A. W., Gelfand, M., & Gunaratna, R. (2012). Terrorism as means to an end: How political violence bestows significance. In P. R. Shaver & M. Mikulincer (Eds.), *Meaning, mortality, and choice: The social psychology of existential concerns.* (pp. 203-212). Washington, DC US: American Psychological Association.

Kruglanski, A. W., Gelfand M. J., Sheveland, A., Babush, M., Hetiarachchi M., Bonto, M. N., Gunaratna R. (2015). What a Difference Two Years Make: Patterns of Radicalization in a Philippine Jail. Unpublished manuscript.

Kruglanski, A. W., & Orehek, E. (2011). The role of the quest for personal significance in motivating terrorism. In J. P. Forgas, A. W. Kruglanski & K. D. Williams (Eds.), *The psychology of social conflict and aggression.* (Vol. 13, pp. 153-164). New York, NY US: Psychology Press.

Kunst, J. R., & Sam, D. L. (2013). Relationship between perceived acculturation expectations and Muslim minority youth's acculturation and adaptation. *International Journal Of Intercultural Relations*, *37*(4), 477-490. doi:10.1016/j.ijintrel.2013.04.007

Lageman, T. (2014, September 5). Islamic State fears take hold in Netherlands. *Aljazeera*. Retrieved from http://www.aljazeera.com/indepth/features/2014/09/islamic-state-fears-take-hold-netherlands-201492131426326526.html

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497.

Lu, Y., Samaratunge, R., & Härtel, C. E. J. (2012). The relationship between acculturation strategy and job satisfaction for professional Chinese immigrants in the Australian workplace. *International Journal of Intercultural Relations, 36*(5), 669-681. doi: 10.1016/j.ijintrel.2012.04.003

MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1*(2), 130-149. doi:10.1037/1082-989X.1.2.130

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50,* 370–396. doi:10.1037/h0054346

McCauley, C., & Moskalenko, S. (2008). Mechanisms of political radicalization: Pathways toward terrorism. *Terrorism and Political Violence, 20*(3), 415-433. doi: 10.1080/09546550802073367

McCoy, T. (2014, June 17). How ISIS and other jihadists persuaded thousands of Westerners to fight their war of extremism. *The Washington Post*. Retrieved from http://www.washingtonpost.com/news/morning-mix/wp/2014/06/17/how-isis-persuaded-thousands-of-westerners-to-fight-its-war-of-extremism/

Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross-cultural research. *International Journal of Psychological Research (Special Issue on Current Issues in Exploratory and Confirmatory Data Analysis), 3*, 112-131.

Moghaddam, F. M. (2005). The Staircase to Terrorism: A Psychological Exploration. *American Psychologist, 60*(2), 161-169. doi: 10.1037/0003-066X.60.2.161

Montreuil, A., & Bourhis, R. Y. (2001). Majority acculturation orientations toward 'valued' and 'devalued' immigrants. *Journal of Cross-Cultural Psychology, 32*(6), 698-719. doi: 10.1177/0022022101032006004

Neto, F. (1994). Le stress d'acculturation chez des jeunes d'origine portugaise en France. *Enfance, 1*, 83-94. doi: 10.3406/enfan.1994.2087

Nezlek, J. B., Kowalski, R. M., Leary, M. R., Blevins, T., & Holgate, S. (1997). Personality moderators of reactions to interpersonal rejection: Depression and trait self-esteem. *Personality and Social Psychology Bulletin, 23*(12), 1235-1244. doi: 10.1177/01461672972312001

Nguyen, H. H. (2006). Acculturation in the United States. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 311-330). New York, NY US: Cambridge University Press.

Paraszczuk, J. (2014, November 12). The Frequently Asked Questions of Aspiring Jihadists. The Atlantic. Retrieved from http://www.theatlantic.com/international/archive/2014/11/the-frequently-asked-questions-of-aspiring-jihadists/382678/

Passel, J. S., & Cohn, D. (2012). US foreign-born population: How much change from 2009 to 2010. *Pew Research Center.* Washington, DC. Retrieved from http://www.pewhispanic.org/files/2012/01/Foreign-Born-Population.pdf

Peeters, M. C. W., & Oerlemans, W. G. M. (2009). The relationship between acculturation orientations and work-related well-being: Differences between ethnic minority and majority employees. *International Journal of Stress Management, 16*(1), 1-24. doi: 10.1037/a0014832

Phalet, K., & Kosic, A. (2006). Acculturation in European societies. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 331-348). New York, NY US: Cambridge University Press.

Phinney, J. S., Horenczyk, G., Liebkind, K., & Vedder, P. (2001). Ethnic identity, immigration, and well-being: An interactional perspective. *Journal of Social Issues, 57*(3), 493-510. doi: 10.1111/0022-4537.00225

Post, J. M., McGinnis, C., & Moody, K. (2014). The changing face of terrorism in the 21st century: The communications revolution and the virtual community of hatred. *Behavioral Sciences & The Law*, *32*(3), 306-334. doi:10.1002/bsl.2123

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers In Human Behavior*, *29*(4), 1841-1848. doi:10.1016/j.chb.2013.02.014

Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American anthropologist, 38*(1), 149-152.

Reinares, F. (2011). Exit from terrorism: A qualitative empirical study on disengagement and deradicalization among members of ETA. *Terrorism and Political Violence, 23*, 780–803. *doi:10.1080/09546553.2011.613307*

Rothschild, Z. K., Abdollahi, A., & Pyszczynski, T. (2009). Does peace have a prayer? The effect of mortality salience, compassionate values, and religious fundamentalism on hostility toward out-groups. *Journal of Experimental Social Psychology, 45*, 816–827. doi:10.1016/j.jesp.2009.05.016

Rosenbach, M., & Stark, H. (2011, May 11). German Jihad: Homegrown terror takes on new dimensions. *Spiegel Online International.* Retrieved from: http://www.spiegel.de/international/germany/german-jihad-homegrown-terror-takes-on-new-dimensions-a-761391.html

Rubin, M., Watt, S. E., & Ramelli, M. (2012). Immigrants' social integration as a function of approach–avoidance orientation and problem-solving style. *International Journal Of Intercultural Relations*, *36*(4), 498-505. doi:10.1016/j.ijintrel.2011.12.009

Sageman, M. (2004). *Understanding terror networks*: University of Pennsylvania Press.

Sageman, M. (2008). A Strategy for Fighting International Islamist Terrorists. *The ANNALS of the American Academy of Political and Social Science, 618*(1), 223-231. doi: 10.1177/0002716208317051

Sageman, M. (2011). *Leaderless Jihad: Terror Networks in the Twenty-First Century*: University of Pennsylvania Press, Incorporated.

Salgado de Snyder, V. N. (1987). The role of ethnic loyalty among Mexican immigrant women. *Hispanic Journal of Behavioral Sciences, 9*(3), 287-298. doi: 10.1177/07399863870093005

Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science, 5*(4), 472-481. doi: 10.1177/1745691610373075

Sang, D. L., & Ward, C. (2006). Acculturation in Australia and New Zealand. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 253-273). New York, NY US: Cambridge University Press.

Schaafsma, J., & Williams, K. D. (2012). Exclusion, intergroup hostility, and religious fundamentalism. *Journal of Experimental Social Psychology, 48*(4), 829-837. doi: 10.1016/j.jesp.2012.02.015

Schmitz, P. G. (1992). Acculturation styles and health. In S. Iwawaki, Y. Kashima & K. Leung (Eds.), *Innovations in cross-cultural psychology.* (pp. 360-370). Lisse Netherlands: Swets & Zeitlinger Publishers.

Schmitz, P. G. (1994). Acculturation and adaptation processes among immigrants in Germany. In A.-M. Bouvy, F. J. R. van de Vijver, P. Boski & P. G. Schmitz (Eds.), *Journeys into cross-cultural psychology.* (pp. 142-157). Lisse Netherlands: Swets & Zeitlinger Publishers.

Schwartz, S., Dunkel, C. S., & Waterman, A. S. (2009). Terrorism: An identity theory perspective. *Studies in Conflict & Terrorism, 32*(6), 537-559. doi: 10.1080/10576100902888453

Shane, S. (2013, April 20). Suspect With Past in 2 Worlds, Perhaps Echoing Plots of Past, *The New York Times*. Retrieved from http://www.nytimes.com/2013/04/21/us/boston-suspects-confused-identities-and-conflicting-loyalties.html

Silber, M. D., Bhatt, A., & Analysts, S. I. (2007). *Radicalization in the west: The homegrown threat*. New York: Police Department.

Simon, B., & Grabow, O. (2010). The politicization of migrants: Further evidence that politicized collective identity is a dual identity. *Political Psychology, 31*(5), 717-738. doi: 10.1111/j.1467-9221.2010.00782.x

Simon, B., Reichert, F., & Grabow, O. (2013). When dual identity becomes a liability: Identity and political radicalism among migrants. *Psychological Science (Sage Publications Inc.), 24*(3), 251-257. doi: 10.1177/0956797612450889

Simon, B., & Ruhs, D. (2008). Identity and politicization among Turkish migrants in Germany: The role of dual identification. *Journal of Personality and Social Psychology, 95*(6), 1354-1366. doi: 10.1037/a0012630

Sirin, S. R., & Fine, M. (2007). Hyphenated selves: Muslim American youth negotiating identities on the fault lines of global conflict. *Applied Developmental Science, 11*(3), 151-163. doi: 10.1080/10888690701454658

Sirin, S. R., & Gupta, T. (2012). Muslim, American, and immigrant: Integration despite challenges. In A. S. Masten, K. Liebkind & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth.* (pp. 253-278). New York, NY US: Cambridge University Press.

Sontag, D., Herszehorn, D. M., & Kovaleski, S. F. (2013, April 27). A Battered Dream, Then a Violent Path, *The New York Times*. Retrieved from http://www.nytimes.com/2013/04/28/us/shot-at-boxing-title-denied-tamerlan-tsarnaev-reeled.html

Spivey, E. (1990). Social exclusion as a common factor in social anxiety, loneliness, jealousy, and social depression: Testing an integrative model. Unpublished thesis. Winston-Salem, NC: Wake Forest University.

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*(1), 80-93. doi: 10.1037/0022-0167.53.1.80

Stillman, T. F., & Baumeister, R. F. (2009). Uncertainty, belongingness, and four needs for meaning. *Psychological Inquiry*, *20*(4), 249-251. doi: 10.1080/10478400903333544

Stillman, T. F., Baumeister, R. F., Lambert, N. M., Crescioni, A. W., DeWall, C. N., & Fincham, F. D. (2009). Alone and without purpose: Life loses meaning following social exclusion. *Journal of Experimental Social Psychology*, *45*(4), 686-694. doi: 10.1016/j.jesp.2009.03.007

Stroink, M. L. (2007). Processes and preconditions underlying terrorism in second-generation immigrants. *Peace and Conflict: Journal of Peace Psychology*, *13*(3), 293-312. doi: 10.1080/10781910701471322

Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in Hispanic-American youths. *International Journal of intercultural relations, 4*(3), 353-365.

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W.Austin & S.Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47).

Taylor, M., & Horgan, J. (2006). A conceptual framework for addressing psychological process in the development of the terrorist. *Terrorism and Political Violence, 18*(4), 585-601. doi: 10.1080/09546550600897413

Tezcur, G.M., & Cifci, S. (2014, November 11). Radical Turks: Why Turkish citizens are joining ISIS. *Foreign Affairs*. Retrieved from http://www.foreignaffairs.com/articles/142352/gunes-murat-tezcur-and-sabri-ciftci/radical-turks

Torres-Matrullo, C. (1976). Acculturation and psychopathology among Puerto Rican women in mainland United States. *American Journal of Orthopsychiatry, 46*(4), 710-719. doi: 10.1111/j.1939-0025.1976.tb00969.x

Trianni, F., & Katz, A. (2014, September 5). Why Westerners are fighting for ISIS. *TIME*. Retrieved from: http://time.com/3270896/isis-iraq-syria-western-fighters/

Tummala-Narra, P., & Claudius, M. (2013). A qualitative examination of Muslim graduate international students' experiences in the United States. *International Perspectives In Psychology: Research, Practice, Consultation, 2*(2), 132-147. doi:10.1037/ipp0000003

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group. A self-categorization theory*.

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of*

Personality and Social Psychology, 81(6), 1058-1069. doi: 10.1037/0022-3514.81.6.1058

Twenge, J. M., Zhang, L., Catanese, K. R., Dolan-Pascoe, B., Lyche, L. R., & Baumeister, R. F. (2007). Replenishing connectedness: Reminders of social activity reduce aggression after social exclusion. *British Journal of Social Psychology, 46*(1), 205-224. doi: 10.1348/014466605X90793

Tyler, T. R., & Huo, Y. J. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. New York, NY US: Russell Sage Foundation.

U.S. House of Representatives, Committee on Homeland Security. (2014, September 17). FBI, DHS, NCTC heads agree: ISIS recruitment and radicalization of Americans dangerous and difficult to track. [Press release]. Retrieved from: http://homeland.house.gov/press-release/fbi-dhs-nctc-heads-agree-isis-recruitment-and-radicalization-americans-dangerous-and

van de Vijver, F. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA, US: Sage Publications, Inc.

van Oudenhoven, J. P. (2006). Immigrants. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology*. (pp. 163-180). New York, NY US: Cambridge University Press.

Victoroff, J., Adelman, J. R., & Matthews, M. (2012). Psychological factors associated with support for suicide bombing in the Muslim diaspora. *Political Psychology, 33*(6), 791-809. doi: 10.1111/j.1467-9221.2012.00913.x

Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations, 18*(3), 329-343.

Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology, 30*(4), 422-442. doi: 10.1177/0022022199030004003

Westin, C. (2006). Acculturation in the Nordic countries. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology.* (pp. 368-384). New York, NY US: Cambridge University Press.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66,* 297–333. doi:10.1037/h0040934

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal Of Social Issues*, *25*(4), 41-78. doi:10.1111/j.1540-4560.1969.tb00619.x

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology, 58,* 425-452. doi: 10.1146/annurev.psych.58.110405.085641

Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology, 79*(5), 748-762. doi: 10.1037/0022-3514.79.5.748

Yoon, E., Chang, C.-T., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., . . . Gomes, A. M. (2013). A meta-analysis of acculturation/enculturation and mental health. *Journal of Counseling Psychology, 60*(1), 15-30. doi: 10.1037/a003065210.1037/a0030652.supp (Supplemental)

Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal Of Experimental Social Psychology*, *40*(4), 560-567. doi:10.1016/j.jesp.2003.11.006