Birthplace or Meeting Place? An Analysis of Muslim Student Radicalization in American Universities

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Birthplace or Meeting Place? An Analysis of Muslim Student Radicalization in American Universities

by

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A Thesis
Presented to the Graduate and Research Committee of Lehigh University in Candidacy for the Degree of Master of Arts in
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BIRTHPLACE OR MEETING PLACE? AN ANALYSIS OF MUSLIM STUDENT RADICALIZATION IN AMERICAN UNIVERSITIES

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Date Approved

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Abstract

This project uses a quantitative approach to conduct a preliminary analysis of Muslim student radicalization at universities in the United States. Radicalization and terrorism are topics not associated with Education, and a goal of this project is to carve out a space for Comparative and International Education in the field of terrorism studies. Government and media attention have often focused on the role that universities play in contributing to the radicalization of Muslim students that go on to become terrorists. This project takes these views by outsiders and articulates them as a premise that argues that the university experience contributes to radicalization. Quantitative survey data will be used to operationalize radicalization using three different methods. Each of these three methods will be used as the dependent variable in analyses that explore the relationship between education and radicalization in order to refute the premise that higher education contributes to radicalization.
Birthplace or Meeting Place? An Analysis of Muslim Student Radicalization in American Universities

**Introduction**

This thesis has three goals. The first is to explore the existing research on the possible connection between education, specifically higher education, and radicalization toward violence. The second is to use quantitative data to answer whether or not there is something about the higher education experience at Western universities that contributes to the radicalization of Muslim students. Finally, the third goal is to take what is learned from this and show how it can be useful to both educational researchers and practitioners who must unfortunately engage with this topic.

Terrorism and radicalization have become problems for education because of the prevalence of higher education experience among terrorists (Krueger, 2007). This results in both real problems that need to be addressed, and perceived problems that could result in further discrimination against Muslim minorities if not addressed.

Those that participate in terrorism in the name of Islamic militantism do not differ significantly from their peers. Despite calls to reduce terrorism through international development - political, economic, and educational - most terrorists are not impoverished economically or politically, nor are most uneducated. In fact, most individuals that have participated in terrorist acts against the United States and the United Kingdom since 1993 have had at least some level of higher education participation (Krueger, 2007, 2008). Studies have even shown that not
only does a higher level of education correlate with terrorism, but that more education makes terrorists more likely to succeed in their attacks (Berrebi, 2007).

But the problem goes beyond simple correlation. In several specific cases of those with higher education going on to become terrorists, certain events that those individuals participated in while on campus can be pointed out as possible contributing factors. These range from leadership positions in Muslim student organizations known for radical opinions to attending lectures by well-known figures that promote violence and terrorism. The perceived problem is that the environment of openness, tolerance, and diversity that is often promoted on Western college campuses contributes the likelihood of these events and indirectly causes the radicalization that leads to terrorism (Barrett, Sawer, & Rayment, 2010; Adam, 2010).

Although it would be difficult to prove that this is the case, it is not an uncommon perception that universities inadvertently create a breeding ground for radicalization that leads to terrorism. This perception is present in the media, but also in high-level hearings on both sides of the Atlantic. With the threat of homegrown terrorism perceived to be on the rise in both the US and the UK, increased focus has been placed on possible internal sources of radicalization, including places of higher education (Mueller, 2005).

It is my opinion that the environment of openness, diversity, and tolerance that is promoted on Western university campuses should be preserved, and that involvement, however well intentioned, of the national security apparatus will threaten it. Therefore, those involved and invested in higher education should
gain a greater understanding of this phenomenon to both address the real problem and combat false perceptions.

This project is important, however, not only because it seeks to further the understanding of the connection between higher education and radicalization, but also because it is the first project to do so from an educational research perspective. Understanding, and ultimately preventing, radicalization on campus will further educational goals in addition to national security goals. It will help foster a learning environment free from those who seek to turn young Muslims toward terror and violence, as well as free from those who see universities as just another battleground in the War on Terror.

**Definitions**

The term “radicalization” is, in some ways, difficult to define because “radical” is difficult to define. The problems of definition are not simply a semantic issue, as they have implications for policy implementation stemming from this kind of research. But, for the sake of clarity, as well as to align this project with the larger field of terrorism studies, the definition of radicalization will follow along accepted lines.

A clear articulation of radicalization as it will be used here is from McCauley and Moskalenko (2008), and they define it as, “increased preparation for and commitment to intergroup conflict” and “a change in beliefs, feelings, and behaviors in directions that increasingly justify intergroup violence and demand sacrifice in defense of the in-group” (p. 416). This is compatible with another definition, from the Danish Ministry of Justice (Precht, 2007), which describes
radicalization as, “the process of adopting an extremist belief system and the willingness to use, support, or facilitate violence and fear as a method of effecting changes in society” (p. 16).

It should also be explicitly stated that the type of radicalization and terrorism that is the focus of this project is the same type that has motivated the scrutiny of higher education’s role in terrorism: Islamic militantism. This is another definition that has troublesome implications, but here I mean the type of ideology and acts promoted and perpetrated by groups like Al Qaeda and its associates. There are, of course, many other types of terrorism and many ways to define terrorism, but this project is limited to only this one strand.

Even though, for the purposes of this project, the accepted terrorism studies definition of radicalization will be used, it is important to understand the difficulty in defining radicalization. The difficulty stems from two different problems: 1) defining the process that leads one to become a radical, and 2) defining the end point of the process - what is a radical. Part of the problem stems from the desire to create general theories of radicalization that are applicable regardless of the particular strand of radicalism. To mitigate that difficulty for this project, I will focus solely on Islamist radicalization.

With the definition of radicalization that is used for this project, it is important to understand the limitations and assumptions. Three assumptions will be discussed here. The first is the assumption that radicalization is prerequisite to violence/terrorism. The second is that radicalization is a gradual process. And finally, I will look at the assumption that radicalization is necessarily social. These three assumptions are present in the literature that
examines radicalization. These interconnected assumptions frame radicalization as a social process that contributes to an individual becoming a terrorist, and while they are essential to the definition of radicalization that will be used in this project, they should not go unquestioned.

Studies in radicalization seem to assume that radicalization is a prerequisite to terrorism. One might argue against this by pointing to examples of acts of violence that look like terrorism, but are motivated by factors other than radicalization. Examples might include Afghan resistance to Soviet occupation or sectarian violence in Iraq. These arguments hinge on the definition of terrorism, which often is not as much about methods or targets but more about subjective judgments. This is the classic refrain: “One man’s terrorist is another man’s freedom fighter.” Or, to put it more correctly, the difference between terrorism and asymmetrical warfare is somewhat subjective. The way out of this dilemma when discussing radicalization is to make the aforementioned assumption. What makes an act of violence interesting in terms of radicalization is the very presence of radicalization. So, I accept that radicalization is a necessary prerequisite to the type of violence I am interested in, because I am interested in the violence that happens as a result of radicalization.

The second assumption is that radicalization is a process that occurs over a significant amount of time. Many theories of radicalization can account for a process as short as a few days, but all seem to agree that it cannot happen instantly. Even if there is a single event that serves as a trigger or is particularly traumatic, the pre-existing conditions that would make such an event a trigger are part of the process as well. Radicalization does not happen in a vacuum. Even
those actively and explicitly radicalizing others leverage an individual’s lifetime of experiences to facilitate the process. There are certainly acts of violence and terrorism that can be spontaneously motivated by sudden events, but those are not the type of actions under scrutiny here. The levels of premeditation required to commit large-scale acts of terror necessitate a radicalization process that continues all the way up to the moment of commitment. Spontaneous acts of violence devoid of a discernible radicalization process are simply not the focus.

Finally, the assumption that radicalization is social is perhaps the most interesting to discuss, and cannot simply be accepted as part of the limited scope of the definition. The simplest defense for this assumption is that “radical” only has meaning in a social context, and therefore radicalization necessarily has a social component. While this seems readily apparent in the definition of the term, I am more concerned with the nature of the process, not the nature of the term.

The question that gets at the heart of this assumption is: To what extent can one self-radicalize? Existing theories account for the self-radicalizing loner. These are the individuals like Ted Kazinsky and the young, isolated Muslims that watch Anwar Al-awlaki’s and other pro-Jihad videos online. However, even those individuals are getting their ideas from others.

But let us imagine that there is an individual who, in observing the world on his own, develops opinions about a particular issue that exactly mirror those of individuals who have been radicalized through normal, understood methods. If that individual is not sharing those opinions with others and thereby participating in a feedback loop or groupthink, or radicalizing others, or actively engaging in violence in the name of those ideas - then there is no practical effect
of that radicalization. It has no existence in the world outside of that individual’s mind, and therefore no consequence. Only radicalization that has manifested itself by becoming social actually exists in a meaningful way, and therefore it must be social to exist. The social component of radicalization also provides a pool of actions from which to draw. So even if an individual self-radicalizes without external input, the external world is necessary to provide examples of how one might act on those radical ideas. To put this another way, the externally manifested “outputs” of radicalization are just as important as the “inputs” that contribute to the radicalization of an individual.

**Literature Review**

The literature review for this project will reflect the three goals of this paper. The first part will explore existing research on and models of radicalization toward violence and terrorism in the form of Islamic militantism. The second part will provide background for analyzing available quantitative data. It will begin by providing a history of the connection between higher education and terrorism, with a focus on universities in the UK and the US. As there is little academic research on this specific link, this section will mostly rely on media reports, government committee findings, and testimony at government hearings. Finally, the third part of the literature review will seek to exhaust the remaining academic research that focuses on the links between education and terrorism to show that there is a lack of academic research that examines this important connection. This section will provide support for the third goal of this
Part 1: Conceptualizing Radicalization

Even after accepting the limited scope and definition of radicalization that this project focuses on, the term radicalization remains troubling because the object of radicalization is not clear. Are those that become radicalized toward terrorism victims of radicalization or participants? Much of the research on radicalization focuses on vulnerabilities of those radicalized, suggesting that the victim interpretation has some merit, but yet more research analyzes the allure of radical narratives and groups, suggesting that those involved are not victims but willing participants.

McCauley and Moskalenko (2010) address this conundrum by pointing out that the common distinction between top-down and bottom-up (National Intelligence Council, 2007) radicalization is increasingly irrelevant, especially when it comes to the topic of this project: Muslim youth. Early adulthood is frequently about finding one’s identity, and this is even truer in those who participate in higher education where identity formation is often made an explicit part of the curriculum (Strayhorn, 2006; Lehigh University, 2011). Radical Islamist groups can provide a compelling identity to young Muslims, especially those who are victims of marginalization (McCauley & Moskalenko, 2010). In this way, those who become radicalized can be willing participants in that they might seek out radical groups on their own, but they can simultaneously be victims of marginalization or other influences that make radical ideas more alluring. Furthermore, those in radical groups are not ignorant of this (Mueller, 2005;
Jenkins, 2007), and they can actively tweak their messages to be more appealing to those seeking an identity.

The line between agents and victims of radicalization is increasingly blurry and frequently non-existent, and understanding this new reality has been the focal point of research into radicalization for at least the past decade. Since this ambiguity is especially pertinent to the radicalization of Muslim youth and students, this brief review of the literature will also attempt to illuminate the concepts of radicalized individual as both victim and agent of radicalization.

While most researchers acknowledge, like McCauley and Moskalenko, that the top-down/bottom-up distinction is no longer relevant, there appears to be a division in the aspects of radicalization that researchers choose to focus on. The literature on radicalization can be broken down into two main categories. Some theories focus on the personal and psychological factors that contribute to radicalization and make particular individuals more vulnerable to radicalizing forces. Pressman (2008), for example, breaks down sources of radicalization into macro and micro categories, but still focuses on personal psychology. She acknowledges the importance of factors such as religious, national, and political affiliations, but categorizes them as motivating factors – things that might drive one to radical beliefs.

On the other hand, other theories point to group dynamics as the source of radicalization. Sunstein (2009) argues that extremist groups in general, and radical terrorist organizations in particular, often arise spontaneously from like-minded individuals as a result of groupthink. McCauley and Moskalenko’s (2008) theory follows the same line of thought, and they hypothesize a 12-step
pathway that has personal and psychological factors as only one step along the path to radicalization. Everything else arises from meeting, or even simply being around, like-minded peers.

Stern (2010) takes the significance of groups even further and argues that some individuals become radicalized and tightly integrated into radical groups prior to fully realizing the extent or significance of the particular radical ideas. These groups can provide valuable social support to individuals who are otherwise socially vulnerable. Some individuals can even get enough benefit from belonging to the group that it outweighs what would normally be significant personal costs of believing radical ideas.

Much recent literature on terrorists seeks to disprove the commonly held idea that terrorists are members of traditionally vulnerable populations, such as the poor or the uneducated (Bergen & Pandey, 2005; Berrebi, 2007; Krueger, 2008; Krueger, 2007). This would seem to cast doubt on Stern’s theory of radical groups providing necessary social support to vulnerable individuals. However, since youth are typically targets of radicalization, it is important to be aware that young people, particularly college-aged students, can be socially vulnerable even if they are educated and wealthy.

Although much effort has gone into analyzing the psychological factors conducive to radicalization and terrorism, and this project acknowledges that there are important factors particular to Muslim youth and students that may make them more vulnerable, it should be remembered that these factors are not indicative of some abnormality. Psychologist Gerald Post emphasizes that terrorists do not tend to suffer from psychotic disorders, and are more or less
“normal.” (Post, 2007). This is corroborated by Horgan, who argues that one cannot distinguish between terrorists and the general population nor use psychological traits as predictors (Horgan, 2008). Post even suggests that terrorists groups actively screen out would-be terrorists who present symptoms of emotional distress, as they might pose a risk to the group or operation.

Post does provide an individual psychological framework to differentiate types of terrorism based on differing motivations. An example of this framework that is relevant both to the type of terrorism at hand and the population I am concerned with - students - focuses on the youth’s relationship to his parents. According to Post, youths who are rebellious, or, in his terms, disloyal to their parents, are more likely to engage in action against the regime that those parents support. Therefore, if a student is disloyal to parents who are loyal to the regime, then that student will focus his energies against the regime. Post calls this, “social revolutionary terrorism.” In the context of this project, this would be manifested in the following way: a Muslim student attends a Western university where, for various reasons, he clings more tightly to his Muslim identity and becomes increasingly devout. If his parents were more secular, this turn toward more traditional Islam is a way to rebel against them while simultaneously responding to the pressures of being a minority student. The regime that his parents are loyal to, which in this case could simply be a Western-focused secular/modernist outlook, then becomes the target of his ire.

Although the “social revolutionary” moniker that Post has attached to this outlook readily applies to leftist youth and student movements of the Cold War decades, it applies equally well to Islamist/jihadist movements. By looking at the
rhetoric of the movements’ propagandists, they seek a social revolution. According to French researcher Olivier Roy, the form and function of what Post called social revolutionary terrorism is present in both radical leftist movements of the 60s and in contemporary Jihadist movements (Roy, 2011). Roy even goes as far as to assert that many of the same individuals that find themselves in Jihadist terrorist groups today, would have instead been in radical socialist/nationalist movements if they had been born in a different time. In other words, Roy, like Post, argues that terrorists become radicalized not because of the allure of the extremist message itself, but because extremism gives them an outlet for their rebellion and access to like-minded rebels. It should be no surprise, then, that terrorists are usually young, male, and estranged from their families. These are all familiar signs of rebellious youth.

Although Post argues that individual psychology cannot be used to explain terrorism, he asserts psychology does matter, but that it is group psychology, not individual psychology that is at work. This is especially important when considering student radicalization. The individuals involved may be more or less normal students suffering from the same problems as the general student population, but the groups to which they frequently retreat suffer from a collective psychopathy that is more conducive to terrorism than others. “As observed, terrorists are not depressed, severely emotionally disturbed, or crazed fanatics. It is not individual psychopathology, but group, organizational, and social psychology, with a particular emphasis on "collective identity," that provides the most powerful lens through which to understand terrorist psychology and behavior.” (Post, 2007)
This collective identity is reflected in the data as well. In Sageman’s analysis of terrorist demographics, he noted that there seemed to be few commonalities among terrorists selected: gender and age being the most notable (Sageman, 2008). However, Sageman’s analysis included terrorists from a wide range of movements: from IRA bombers to 9/11 hijackers. In an earlier analysis by Bakker of only Islamist terrorists in Europe, he noted that while it is true that terrorists, even within the same movement, tend to have a wide range of characteristics, members within terrorist groups tended to be similar. In other words, terrorist organizations bring together individuals with similar circumstances, reinforcing Post’s argument about the importance of collective identity.

**Connecting to student radicalization.** How are students in particular vulnerable to terrorist radicalization? As mentioned previously, both terrorist organizations and their potential pool of recruits are engaged in a continuous push and pull of persuasion and marketing. The organizations actively tweak their messages and narratives to appeal to as many as possible, and the recruits frequently seek out such messages to find comfort or outlets for aggression. The most significant comfort and outlet that terrorist organizations can provide is through identity formation, and this is why Muslim students and youth are the most susceptible.

Rand researcher B.M. Jenkins has pointed out the persuasive power radicalization via offers of identity formation:

The more vulnerable are those who are at a stage of life where they are seeking an identity, while looking for approval and validation. They are
searching for causes that can be religiously and culturally justified, that provide them a way to identify who they are, and that provide a clear call for action. (Jenkins, 2007)

Although he was not speaking specifically about students, those close to higher education understand that identity formation is a key element of the university experience. Not only is “finding yourself” what college is commonly thought to be about, but identity development is frequently an explicit aspect of curriculum design (Strayhorn, 2006; Lehigh University, 2011).

Furthermore, in American and British universities, many of the Islamic youth are international students. So not only are they experiencing all the trials of youth, they are doing so as an immigrant minority. Jenkins cites many of the difficulties that students such as these face - “disruptive relocation, identity crises,... uncertain futures,... alienation” when highlighting potential vulnerabilities that might make someone more susceptible to radicalization (Jenkins, 2007).

Jenkins’ argument may be compelling, but not all of the literature agrees completely. While the bulk of the research confirms that much of the allure of radicalization is through identity formation for those youth seeking meaning and purpose, many researchers disagree that it is about “searching for causes that can be religious and culturally justified.” In fact, it could be quite the opposite.

Roy, in comparing contemporary jihadists to Leftist radicals of the 60s and 70s, notes that unlike the terrorists of the IRA, the Tamil Tigers, or other non-Islamist terrorist causes, radicalization toward terrorism in the name of Islamist jihad does not “run in the family.” Contemporary Muslim youth who are finding
identity in the messages of Al-Qaeda are not just fighting for something, but they 
are also rebelling against something: Western hegemony, secularism, etc. And in 
most cases, they are rebelling against their parents and other authority figures 
with whom they grew up (Roy, 2005).

**Modeling radicalization.** A method for examining radicalization used 
later in this project will draw heavily from the work of Gartenstein-Ross & 
Grossman (2009) whose study analyzed 117 homegrown terrorists in the US. By 
looking at qualitative and quantitative data for these individuals, Gartenstein-
Ross & Grossman determined, 

...Six specific behavioral manifestations of the radicalization process: the 
adoption of a legalistic interpretation of Islam, coming to trust only a 
select and ideologically rigid group of religious authorities, viewing the 
West and Islam as irreconcilably opposed, manifesting a low tolerance for 
perceived religious deviance, attempting to impose religious beliefs on 
others, and the expression of radical political views.

The model that they developed is the first (and only) of its kind. Faced 
with the same difficulties documented previously regarding pinning down 
commonalities among terrorists, they went beyond simple demographic profiling 
and looked at how 117 actual terrorists radicalized and what manifestations 
developed along the way. Their methodology involved pouring over interview 
transcripts, court documents, media reports, writings, and even conducting their 
own interviews to delve into the history of each of their 117 selected terrorists.
The path from radicalization to recruitment to terrorist was reconstructed and evaluated as to how strongly each of these manifestations was present.

They find, like others have, that demographic commonalities are insignificant and/or nonexistent. But the six manifestations they pulled out from their sample are present to some extent in all 117 terrorists. In commenting on Gartenstein-Ross & Grossman’s work, Jenkins points out that this is the first model of its kind, and it has significant implications for understanding the radicalization process. He warns, however, that it should not be used to “profile” individuals as terrorists simply because they exhibit any number of these manifestations, as even then it would be extremely unlikely that they would actually commit a terrorist act. Instead, their work should be used to understand radicalization and evaluate policy and research. And that is exactly how it will be used in this project.

**Part 2: Applying Radicalization Theory to Education**

Researchers and policymakers in the UK (and Europe) have been quicker to focus their gaze on student radicalization than their counterparts in the US. The UK’s close support for the United States in the War on Terror, and the intelligence community component of this, meant that government agencies and politicians alike scrutinized possible sites of terrorist recruitment and radicalization. In addition to traditional targets of this scrutiny - Mosques and prisons - universities became suspect as well (Neumann, 2008; Mueller, 2005; Moniquet, 2005). Media reports frequently called British universities “hotbeds” and “recruiting grounds” (Adam, 2010; Slack, 2011; Brant, 2011). All of this
resulted in investigations, both before and after Christmas Day 2009, of potential radicalization and recruitment on university campuses.

These investigations became controversial. Opponents of turning the intelligence community’s eyes on universities made allegations of racial profiling and Islamophobia (Satter, 2010). Supporters of the investigations accused university administrators of stalling, either out of a sense of political correctness, or in order to take the spotlight away from a student population that is an important source of funding (Thorne & Stuart, 2007). However, despite the controversy, there were, and continue to be, no thorough evaluations of the premise behind all of this: that universities are indeed conducive to terrorist radicalization.

Terrorist theory, legal realities, and empirical evidence show that radicalization is a separate phenomenon from recruitment (Sageman, 2008; Pressman, 2008; McCauley & Moskalenko, 2008, 2009). While they are intimately related, it is important to keep them separate. There are three main reasons for this. First, by keeping radicalization separate, participation in a terrorist organization or committing a terrorist act can be criminalized without criminalizing the desire to commit such an act.

Secondly, if researchers and the terrorist community seek to operationalize what can be learned from investigations into radicalization and recruitment at universities, they need to understand that there is significant conceptual space between being a radical and being a terrorist, or even a terrorist supporter. This is especially true on university campuses. Even if one’s goal is not to perpetuate an environment conducive to radicalism of all kinds, which is
typical on campus, it is important to not be overly aggressive in pursuit of radicals for fear of driving those who pose a true danger even further underground.

Finally, and most importantly for this project, separating radicalization from terrorist activity exposes flaw in the logic of those who assert the premise that university campuses are conducive to radicalization. Their evidence of this is that most terrorists have some level of tertiary education. But when radicalization and recruitment are analyzed as separate concepts, then it does not necessary follow that because there are higher rates of college-educated terrorists, that there are higher rates of radicalization among those with college experience. There are many other possible factors that could account for the increased education levels of terrorists, some of which will be discussed later. Separating radicalization from recruitment also provides a way to test the premise that underlies the assertion that universities are conducive to radicalization. Attempting to test this premise will make up the bulk of this project.

**Part 3: An Educational Perspective**

The focus of current policy discussions seems to be centered on the UK and Europe, even in the United States. More extensive terrorist networks, more embedded forces of radicalization, and the larger number of Muslims in the UK and Europe make it central to security efforts of both European and American interests (Moniquet, 2005). Many of the recommendations for national-level policy to combat the radicalization of Muslim students are part of larger anti-radicalization strategies and not specific to the unique situation of student
radicalization. In fact, there is a lack of national policy focus to deal with students specifically.

Currently, university administrators have a large amount of authority but no clear guidelines on how to handle suspected cases of radicalization. They must contend with conflicting political agendas, free speech and civil rights issues, pressure from local organizations and law enforcement, and financial considerations even when faced with clear evidence of radicalizing figures, organizations, or other influences. In a highly influential and damning report of higher education leaders in the UK, Anthony Glees and Chris Pope (2005) pointed to the difficulty in navigating these complex issues as a reason why it is frequently the choice of administrators to do nothing at all.

Glees and Pope argued that university heads would hide behind claims of freedom of speech and religion to justify inaction. But that, in reality, these leaders have been operating under the assumption that the radicalizing influences in question would go away on their own (since individual students are only around for 3-4 years), and thus were not worth the risk of lawsuits and possible alienation of a financially lucrative pool of potential international applicants.

This study, and other investigations (Barrett, et al., 2010; Temple-Raston, 2010) also point to the influence money can have, by revealing that many Islamic student societies in the UK receive funding from outside “Arab and Muslim investors” (Barrett, et al., 2010). According to their investigations, higher education institutions in the UK have received £260 million in donations from such investors since 2000, with little review of their sources or oversight of the
use of the funds. However, in the Glees and Pope report, the only suggestion regarding this funding is to increase regulation, but this recommendations does not provide additional details on how to determine which funding should be accepted or how it should be used (2005).

The most salient recommendation to come out of this report was the establishment of close ties between immigration departments and university registrars, which is exactly what the Student and Exchange Visitor Information System (SEVIS) does in the United States. However, this does nothing if the student in question is a British citizen. Other recommendations range from the impossibly vague (“exclude dangerous students,” p. 97-98) to the Orwellian (“establish comprehensive lists of all student societies to check membership, aims, and objectives and provide monitoring of activities,” p. 97-98).

Glees and Pope acknowledge, as does the Dutch Ministry of the Interior (2004) and the Danish Ministry of Justice (Precht, 2007), the role that the university can play in anti-radicalization and even de-radicalization by promoting ideals that should be present in abundance at a Western university: tolerance, diversity, liberalism. But they insist that this should be actively done, because it is clear that simply being in the presence of such ideals does not encourage one to internalize them.

In an early paper on the subject of politically motivated student violence, following the Kent State shootings, Adamek and Lewis (1973), already rejected the idea that different socioeconomic or psychological factors contribute to radicalization. Instead, they argue that being subjected to, or witnessing others being subjected to, social control was the key factor in creating attitudes that
were favorable toward political violence. This is an important finding to consider before proposing responses to student activism, especially before involving law enforcement or the national security apparatus. In light of Oliver Roy’s argument that the mechanisms that drive youth to Islamist radicalism are the same that drove youth to radical Leftism, and even that the audience is largely the same, the applicability of Adamek and Lewis’ study of the Kent State case is made even more clear.

Even though a large number of Muslim students in the United States and the UK were born in those countries, attending college can add another layer of perceived isolation and loneliness in addition to that of being an ethnic minority. But the majority of Western-educated terrorists attended Western universities as international students, and they faced yet an even deeper layer of social isolation. The effects of studying abroad on social connections (Weiley, Sommers, & Bryce, 2008; Trice, 2007) and personal mental health (Sawir, Marginson, Deumert, Nyland, & Ramia, 2008; Black, Mendenhall, & Oddou 1991; Robertson, Line, Jones, & Thomas, 2000) are well documented. However, there is no research on the likely connection between the hardships of international students and participation in radical student groups. It is, however, well understood that there is a desire among troubled international students to self-segregate (Trice, 2007), and for many Muslims, the most visible and active student groups that will appear welcoming to them are those that have a higher chance of promoting radical beliefs.
Quantitative Analysis

The quantitative section of this project will focus on radicalization and the prevalence of radical beliefs among Muslims in the US and the UK, with a focus on the effect of higher education participation. The qualitative analysis will look primarily at how this radicalization happens and how this leads to recruitment into terrorist organizations or participation in terrorism in general. These are both essential to understanding the journey one takes to becoming a terrorist, but an emphasis will be placed on how higher education intersects with this journey.

I use publicly available datasets to evaluate the prevalence of radical beliefs among Muslims in the United States and the United Kingdom and analyze the effect, if any, of higher education participation. This is important because it allows me to test the validity of the premise that higher education participation contributes to radicalization, which has been the focus of both media and government attention. By testing this, it gives insight into what role higher education plays at the radicalization stage.

The Pew Research Center (2007) provides the most comprehensive research in this area. Their report on Muslims in America has a wealth of descriptive statistics on the characteristics of Muslims in America and how they compare to Muslims in other countries, including the UK. While a significant amount of data is available for the United States, comparable raw data is not available for the UK. While the data analysis in this section will focus on the US, there is significant evidence that the results can be generalized to at least the UK. Where available, secondary reports from the UK will be used to corroborate findings from the US.
Method

The bulk of the quantitative analysis for this project will rely on the data from the Pew Research Center’s Muslims in America survey (2007). First, there will be an analysis of the descriptive statistics, both to put the data into the context of hypothesis and purpose of this project and also to benefit from the work of Krueger who has worked with this data as well.

Secondly, I will begin my own analysis of the data. The ultimate goal of my analysis is to examine the connection between education and radicalization, and while the survey provides excellent data on the education of the Muslim respondents, that is only half of the picture. The survey does not and cannot meaningfully measure radicalization directly, so I must use a variety of methods to tease out this latent variable.

The methods I use differ primarily by the dependent variable involved. The first method is the most direct, and I use a single item in the survey - one that asks for the respondents’ level of support for religious violence - as my dependent variable. The second method is directly related to the Gartenstein-Ross & Grossman model of behavioral manifestations of radicalization. I pick out items in the survey that reflect one or more of the six types of manifestations and then total them to create a single “score” of radicalization. As there is no precedent for this type of analysis, the selection method is as robust as possible in order to include as many component variables as possible. For example, the “marry” variable, which measures whether or not the respondent believes that Muslims should be allowed to marry non-Muslims, could be included based on it being a manifestation of what Gartenstein-Ross & Grossman call, “A Legalistic
“Interpretation of Islam.” Such selections were made entirely at my discretion, based on a careful and informed reading of Gatenstein-Ross & Grossman and the Pew Research Center methodology and the resulting choices are available in Appendix A. While the second method is directly based on the work of Gartenstein-Ross & Grossman, the third method is only loosely based. This method uses factor analysis to find variables that related in a way that indicates the presence of a latent variable. The content of each factor will be explored, and the factor deemed most closely and relevantly related to radicalization will be used as a dependent variable.

The result of these analyses will be three dependent variables that reflect three different ways of measuring radicalization based on the same set of data. This is not done to compare and contrast the methods, although that would be an interesting tangent, but instead this is a way of providing thoroughness to the overall quantitative analysis.

In addition to the three different methods for creating proxy variables for the concept of radicalization, three primary independent variables will be used. The first is educational attainment level, as reported by respondents to the Pew survey. A frequency table of responses to this question is presented in Table 1 below. The second variable is enrollment status – whether or not each individual is current (at the time of the survey) enrolled in a higher education institution. Responses to this will be presented in Table 2 below. Finally, the third variable is age, and distribution information for this variable will be presented in Table 3 below.
Table 1: What is the highest level of education that you have completed?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>30</td>
<td>2.9</td>
</tr>
<tr>
<td>Highschool incomplete</td>
<td>53</td>
<td>5.1</td>
</tr>
<tr>
<td>Highschool graduate</td>
<td>198</td>
<td>19.2</td>
</tr>
<tr>
<td>technical</td>
<td>22</td>
<td>2.1</td>
</tr>
<tr>
<td>college/vocational school</td>
<td>22</td>
<td>2.1</td>
</tr>
<tr>
<td>some college (4 yr)</td>
<td>200</td>
<td>19.4</td>
</tr>
<tr>
<td>college graduate (4 yr)</td>
<td>280</td>
<td>27.2</td>
</tr>
<tr>
<td>post-graduate</td>
<td>248</td>
<td>24.1</td>
</tr>
<tr>
<td>Total</td>
<td>1031</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing System</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1050</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Are you currently enrolled in a college or university class?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>205</td>
<td>19.5</td>
</tr>
<tr>
<td>No</td>
<td>843</td>
<td>80.3</td>
</tr>
<tr>
<td>(VOL) Don't know/refused</td>
<td>2</td>
<td>.2</td>
</tr>
<tr>
<td>Total</td>
<td>1050</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Other important independent variables that might have been chosen for analysis, but were not, are gender and a measure of socio-economic status.

Gender was excluded from this analysis because, while Islamist terrorists are almost entirely male, this project is explicitly focused on a prerequisite of actual terrorist action. Not only is gender outside of the scope of this project, accounting for it by performing separate analyses (or removing females entirely) would bias the results by excluding a group known to not to participate in terrorism regardless of prerequisites such as radicalization and/or extremist views. While I
acknowledge that there are reasonable grounds for focusing solely on male Muslim youth in similar or future analyses of this type, I chose not to do so for these reasons. As for the decision to not include a variable for socio-economic status, this was informed by the work of Berrebi (2007), Sageman (2008), and Gartenstein-Ross & Grossman (2009), among others, whose analyses showed that rates of terrorism cannot be predicted by socio-economic status. Furthermore, while gender and citizenship were included as control variables, the income data available from the 2007 Pew survey is of poor quality and a preliminary analysis showed that it did not account for a significant amount of noise.

Although many projects have sought to quantify and/or profile terrorists and likely terrorists, there is no precedent for using the Gartenstein-Ross & Grossman model in this way, nor is there a precedent for attempting to measure radicalization and attitudes using survey data. By using three separate methods, I hope to “cover my bases” and provide useful findings while simultaneously charting new territory. The exact outcomes will, of course, differ, but it is expected that each method will show the same basic results for the test of the premise. Ideally, this will not only provide some insight into the content of the research question, but it will also speak somewhat to the validity of these methods.

**Descriptive Analysis**

The Pew study of Muslims in America asks this question that is most directly relevant to this project:
Some people think that suicide bombing and other forms of violence against civilian targets are justified in order to defend Islam from its enemies. Other people believe that, no matter what the reason, this kind of violence is never justified. Do you personally feel that this kind of violence is often justified to defend Islam, sometimes justified, rarely justified, or never justified? (p. 91)

Although in the report, responses to this question are abbreviated as support for suicide bombing, the text of the question encompasses all violent, terrorist acts that might be committed to in order to promote or defend the Islamic cause. American Muslims of roughly college age (18-29) were reported to have any amount of support for violence/suicide bombing (rarely, sometimes, or often justified) at a rate of 26%. In the UK, the rate was 35%. For the general population, American Muslims supported this type of violence at a rate of 13%. In the UK, the rate was 24%.

What is learned from these numbers is that, Muslim youth (regardless of education), have a higher rate of radicalization (i.e. any support for violence) than the general Muslim population in both the United States and the UK. It is also learned that radicalization, among both youth and the general population, is more pronounced in the UK than the United States. The most significant difference is between the general populations of each country, where Muslims in the UK are twice as likely to have radical views regarding violence in the name of Islam. This is reflected in the increased rate of radicalization among Muslim youth in the UK when compared to the United States.
Krueger (2008) has taken the Pew Research Center’s data and compared it to a compiled list of 63 alleged Islamic terrorists in the United States. His findings add an extra layer to Pew’s data, and show that his 63 terrorists are significantly more educated than the average Muslim in the United States. Almost 80% of the alleged terrorists had some college education, compared to fewer than 50% of all Muslims in the United States. Based on his small sample, each additional year of education increases the likelihood of being charged as a terrorist by 4%.

The most interesting finding to come out of Krueger’s research is that, of his 63 alleged terrorists, those with higher educational attainment were significantly more likely to be more successful in their terrorist acts. Although Krueger’s U.S. study has a small sample size, the results showing a positive correlation between education and a desire to commit terrorist acts, as well as between education and “operational success,” are consistent with findings from a study of Palestinian suicide bombers (Berrebi, 2007) and members of the Jewish Underground (Krueger & Maleèkova, 2003).

**Primary Analysis – Dependent Variable Methods**

**Method 1.** The first DVs that will be used for the analysis are pulled directly from the PRC survey questions. The relevant questions ask,

*Some people think that suicide bombing and other forms of violence against civilian targets are justified in order to defend Islam from its enemies. Other people believe that, no matter what the reason, this kind of violence is never justified. Do you personally feel that this kind of*
violence is often justified to defend Islam, sometimes justified, rarely justified, or never justified? (p. 91)

And:

**Overall, do you have a favorable or unfavorable opinion of Al Qaeda?**

For the purposes of this project, these questions were changed to vary in the same direction. For the first question, the valid responses were recoded as, “often justified” (4), “sometimes justified” (3), “rarely justified” (2), and “never justified” (1). Similarly, for the second question, the responses were, “very favorable” (4), “somewhat favorable” (3), “somewhat unfavorable” (2), and “very unfavorable” (1). Those individuals who refused to answer the questions were omitted from further analyses, and this was 6.4% of respondents for the support for violence question and 21.8% of respondents for the opinion of Al-Qaeda question. It is significant that over a fifth of participants chose not to respond to this question - more than any other question in the survey. This is also part of the reason why these two questions do not correlate significantly as expected, and why they will be used separately in the analyses to come.

The following tables show the frequency of each response for both the support for violence question (Table 3) and support for Al-Qaeda question (Table 4).
Table 3 - Do you personally feel that this kind of violence is justified to defend Islam?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Justified</td>
<td>862</td>
<td>87.7</td>
</tr>
<tr>
<td>Rarely Justified</td>
<td>42</td>
<td>4.0</td>
</tr>
<tr>
<td>Sometimes Justified</td>
<td>60</td>
<td>6.1</td>
</tr>
<tr>
<td>Often Justified</td>
<td>19</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>983</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4 - Overall, do you have a favorable or unfavorable opinion of Al Qaeda?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very favorable</td>
<td>7</td>
<td>.7</td>
</tr>
<tr>
<td>Somewhat favorable</td>
<td>26</td>
<td>2.5</td>
</tr>
<tr>
<td>Somewhat unfavorable</td>
<td>81</td>
<td>7.7</td>
</tr>
<tr>
<td>Very unfavorable</td>
<td>707</td>
<td>67.3</td>
</tr>
<tr>
<td>(VOL) Don't know/refused</td>
<td>229</td>
<td>21.8</td>
</tr>
<tr>
<td>Total</td>
<td>1050</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Method 2.** The second dependent variable is based on the Gartenstein-Ross & Grossman model of behavioral manifestations of radicalization. I chose 22 items in the survey that reflected one or more of the six types of manifestations that they highlight in their work, and recoded them into dichotomous variables. A value of 0 indicates that the response does not show a behavioral manifestation, while a value of 1 indicates that it does. The responses were then totaled to create a single “score” of radicalization, which is later referred to as the GRG Index.
Score. The complete list of variables used as well as the corresponding responses can be found in Appendix A.

Out of a maximum score of 22, the highest score among the respondents was 20 and the lowest was 0. The mean score was 8.48, SD=3.57, V=12.75. The resulting score will serve as a dependent variable in the analyses to follow.

Method 3. The final dependent variable will come from exploratory factor analysis using the principal components extraction method. This will allow for a statistical way to see what variables are related, and if they represent a latent variable that might be more accurately used as a proxy variable to measure radicalization. Using a slightly reduced set of items based on the Gartenstein-Ross & Grossman model (available in Table 5 below), I performed principal component analysis to arrive at three different factors.
Table 5 – Pew 2007 variables sorted by closest relevant Gartenstein-Ross & Grossman (2009) manifestation of radicalization

<table>
<thead>
<tr>
<th>Adopting a Legalistic Interpretation of Islam</th>
<th>Trusting Only Select Religious Authorities</th>
<th>Perceived Schism Between Islam and the West</th>
<th>Low Tolerance for Perceived Theological Deviance</th>
<th>Attempts to Impose Religious Beliefs on Others</th>
<th>Political Radicalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB2d (sexuality)</td>
<td>QD2 (Muslim friends)</td>
<td>QC1 (Afghanistan invasion)</td>
<td>QE3 (importance of religion)</td>
<td>QE8 (Mosques in politics)</td>
<td>QB2d (sexuality)</td>
</tr>
<tr>
<td>QE1 (Mosque) frequency</td>
<td>QC2 (Iraq invasion)</td>
<td>QE9 (one interpretation of Islam)</td>
<td>QG1 (female quality of life)</td>
<td>QH1 (religious violence)</td>
<td>QE1 (Mosque) frequency</td>
</tr>
<tr>
<td>QE4 (Koran is word of god)</td>
<td>QD4 (conflict with modernity)</td>
<td>QD7 (intermarriage)</td>
<td></td>
<td>QB2d (sexuality)</td>
<td>QE4 (Koran is word of god)</td>
</tr>
<tr>
<td>QE5 (Koran is literal)</td>
<td>QD5 (American customs)</td>
<td></td>
<td></td>
<td></td>
<td>QE5 (Koran is literal)</td>
</tr>
<tr>
<td>QE6 (prayer frequency)</td>
<td>QE12 (1st identity)</td>
<td></td>
<td></td>
<td></td>
<td>QE6 (prayer frequency)</td>
</tr>
<tr>
<td>QG3 (females in Mosque)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>QG3 (females in Mosque)</td>
</tr>
</tbody>
</table>
beneath the variables provided in the Pew survey. I was hoping that the analysis might show that by choosing conceptually similar (according to the Gartenstein-Ross & Grossman model) variables, they might load onto the resulting factors in such a way as to reflect the same conceptual categories. Although they did not map exactly onto the Gartenstein-Ross & Grossman manifestations of radicalization, the resulting factors do contain component variables that bear some conceptual similarities. Again, for full information about each of the component factors, see Appendix A.

The analysis was performed using a factor-based dimension reduction analysis in SPSS 20 for Mac OS X, using the principal components method to extract 3 factors. A direct oblimin rotation was chosen over other rotation methods for this principal component analysis because the resulting factors and loadings better fit the conceptual aspects of the data, and because this rotation provided significantly more components for factor 3 than other rotations. Preliminary analyses allowed for other possible rotations to be used (Field, 2009), but a promax rotation only had 4 components loaded onto factor 3. As two of these were the same variables used in the first method, this would not provide much of a statistical difference despite the drastic differences in methodology.

The following table (Table 6) shows the three factors as well as the variables that load onto each.
Table 6 – Principal Component Analysis Results with Gartenstein-Ross & Grossman (2009) variables loaded onto 3 extracted factors.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>xFAqe6 salah</td>
<td>.814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqe3 religious importance</td>
<td>.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqe1 mosque freq</td>
<td>.739</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqe12 1st identity</td>
<td>.605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqe2 mosque activities</td>
<td>.576</td>
<td>.334</td>
<td></td>
</tr>
<tr>
<td>xFAqb2d sexuality</td>
<td>.510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqd2 friends</td>
<td>.447</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqg3 females in mosques</td>
<td>.312</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xFAqc2 invasion afghan</td>
<td></td>
<td>.731</td>
<td></td>
</tr>
<tr>
<td>xFAqh4 WoT sincerity</td>
<td></td>
<td>.727</td>
<td></td>
</tr>
<tr>
<td>xFAqc1 invasion iraq</td>
<td>.611</td>
<td>.354</td>
<td></td>
</tr>
<tr>
<td>xFAqe9 one interpretation</td>
<td></td>
<td>-.406</td>
<td></td>
</tr>
<tr>
<td>xFAqh5 AQ support</td>
<td></td>
<td>.653</td>
<td></td>
</tr>
<tr>
<td>xFAqh4a Israel</td>
<td></td>
<td>.627</td>
<td></td>
</tr>
<tr>
<td>xFAqd4 modernity</td>
<td></td>
<td>.533</td>
<td></td>
</tr>
<tr>
<td>xFAqd7 marry</td>
<td></td>
<td>.410</td>
<td></td>
</tr>
<tr>
<td>xFAqh1 violence</td>
<td></td>
<td>.403</td>
<td></td>
</tr>
<tr>
<td>xFAqd5 adapt</td>
<td></td>
<td>.389</td>
<td></td>
</tr>
<tr>
<td>xFAqg1 females</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 9 iterations.

The first factor can be interpreted to represent a latent religiosity variable.
The second factor represents attitudes toward the United States’ actions in the War on Terror. The third factor contains a wider variety of items than the other factors, but it can be interpreted as a combination of two important manifestations from the Gartenstein-Ross & Grossman model: 1) Perceived Schism Between Islam and the West and 2) Political Radicalization (p. 13).
Variables such as “adapt,” “marry,” “modernity,” and “females” (for full description, see Appendix A), show a respondent’s rejection of Western values regarding integration, mixed marriage, and gender equality. Combined with support for the anti-Western agenda of Al-Qaeda (“AQ support”) and rejection of Palestinian coexistence with Israel (“Israel”), these variables show both politically radical attitudes and the perception of fundamental divides between Islam and the West.

While Gartenstein-Ross & Grossman believe that all six manifestations are exhibited in most examples of radicalization, these seem to be the most extreme. This factor is also the one that most closely aligns with their established model of radicalization. Finally, this factor contains both the support for violence variable as well as the opinion of Al-Qaeda variable. For these reasons, this factor will be the one used for the final dependent variable.

**Premises & IVs**

Now that the dependent variables have been established, here, again, are the premises that will be tested.

*P1: The environment at institutions of higher education contributes to the radicalization of Muslim youth.*

If P1 is to hold, then one or both of the following must be true:

*P1a) Muslims with higher education degrees will hold beliefs indicative of radicalization at a higher rate than non-college educated Muslims.*

OR
P1b) Muslims enrolled in higher education will hold beliefs indicative of radicalization at a higher rate than college-aged Muslims who are not in college.

Beliefs indicative of radicalization are measured using the three methods covered previously. The same 2007 Pew Research Center study also provides data that can be used to evaluate these premises. Each respondent was asked about educational achievement level, current higher education enrollment status, and age. These will be the independent variables for each of the analyses to follow.

Results

Method 1: Ordinal Logistic Regression

Using ordinal logistic regression, a non-parametric equivalent of linear regression, I tested the effect of age, educational achievement, and current enrollment status in higher education against the proxy variables for radicalization. In this case, that variable was a measurement of support for violence in the name of religion, and a measurement of support for Al-Qaeda. If the stated premise was to hold, then the result would show a positive correlation between educational achievement and support for violence, or a positive correlation between those enrolled in higher education and support for violence.

My tests did not show this to be the case. Using ordinal logistic regression I found that there was no significant effect of current college enrollment status on support for religious violence. I found a negative relationship between educational attainment and support for violence. For a one unit increase in education level, the expected ordered log odds decreases by -.193 (p = .001) as you move to the next higher category of support for violence. I also found a
negative relationship between age and support for violence. For a one year increase in age, the expected ordered log odds decreases by -0.039 (p < .001) as you move to the next higher category of support for violence.

There’s a similar picture for opinion of Al-Qaeda. I found that there was no significant effect of current college enrollment status on opinion of Al-Qaeda. I found a negative relationship between educational attainment and opinion of Al-Qaeda. For a one unit increase in education level, the expected ordered log odds decreases by -0.326 (p = .001) as you move to the next higher category of opinion of Al-Qaeda. I also found a negative relationship between age and opinion of Al-Qaeda. For a one year increase in age, the expected ordered log odds decreases by -0.022 (p < .001) as you move to the next higher category of support for violence.

A Mann-Whitney Test, a non-parametric equivalent of the t-test, confirms that there is no significant difference between those enrolled in higher education and those not enrolled when it comes to support for violence (p = 0.053) or opinion of Al-Qaeda (p=0.86).

In other words, college enrollment has no effect on extremism, and higher levels of education make one less likely to hold extremist views. However, youth and extremism were related. To show this more clearly, 26% of Muslims surveyed between the ages 18 and 29 (roughly college age) support violence at some level, compared to 13% of the general Muslim population and 16% of those enrolled in tertiary education. This data shows that holding extremist beliefs is a function of youth, not tertiary education. Both P1a and P1b fail, and the premise does not hold.
Method 2: Regression on Gartenstein-Ross & Grossman Index Score

Dependent Variable

Based on the work of Gartenstein-Ross & Grossman, a set of 19 variables from the Pew Research Center report on Muslims in America (2006) were selected for a factor analysis. Each of the 19 variables selected corresponds to one of the six behavioral manifestations of radicalization that Gartenstein-Ross & Grossman found to be significant in their population of 117 homegrown terrorists in the US. These variables, and the manifestation-type they most closely resembled, are presented in Table 1 above.

With the GRG index score as a second dependent variable method, I can now perform parametric tests such as linear regression. Depending on the strength of the primary independent variables in predicting this score, enrollment status and educational attainment, this method can be used to determine whether or not the premises hold. The results of multiple linear regression with the relevant variables (enrollment status, age, and educational attainment) is presented below.
Table 7 - Regression Table for 2\textsuperscript{nd} DV – Gartenstein-Ross & Grossman Index

Score, a proxy variable for radicalization using Method 2 to generate a dependent variable.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>B</th>
<th>t</th>
<th>Sig.</th>
<th>Part.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>10.79</td>
<td>.019</td>
<td>554.39</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>.128</td>
<td>.008</td>
<td>.016</td>
<td>16.59</td>
<td>.001</td>
<td>.015</td>
</tr>
<tr>
<td>Age</td>
<td>-.039</td>
<td>.000</td>
<td>-.151</td>
<td>-160.31</td>
<td>.001</td>
<td>-.142</td>
</tr>
<tr>
<td>Educ. Attainment</td>
<td>-.410</td>
<td>.002</td>
<td>-.202</td>
<td>-225.03</td>
<td>.001</td>
<td>-.199</td>
</tr>
</tbody>
</table>

*Control variable for gender and citizenship not shown.

While statistically significant, enrollment was not a strong predictor of GRG score, $B = .128$, $t(1017) = 16.59$, $p < .001$, and only accounted for 1.5\% of the total variability. However, both age, $B = -.039$, $t(1017) = -160.31$, $p < .001$, and educational attainment, $B = -.410$, $t(1017) = -225.03$, $p < .001$, were significant predictors of the GRG score of radicalization. A higher level of educational attainment or a higher age predict lower levels of GRG radicalization score. Combined, they account for over a third of the variance in the GRG score.

**Method 3: Regression Using Extracted Factor from Gartenstein-Ross & Grossman Analysis via Principal Component Analysis**

For the final dependent variable method, factor analysis was chosen for its ability to reduce a large number of variables into just a few factors while retaining statistical information. Because of the 19 variables that matched one or more of Gartenstein-Ross & Grossman’s behavioral manifestations of radicalization, and the varied nature of those variables, factor analysis is a suitable and sound
method for compressing that data into a more manageable set of factors.

Furthermore, while these factors will be useful for further analyses, they also provide an evaluation of how well Gartenstein-Ross & Grossman’s model maps onto a real population.

Using factor 3 from the previous factor analysis, I have another continuous variable that can be used as the dependent variable in standard linear regression.

Table 8 - Regression Table for 3rd DV – Principal Component Analysis, Factor 3:
A proxy variable for radicalization using Method 3 to generate a dependent variable

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
<th>Part.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.042</td>
<td>.007</td>
<td>139.58</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>.045</td>
<td>.003</td>
<td>.021</td>
<td>15.09</td>
<td>.001</td>
<td>.019</td>
</tr>
<tr>
<td>Age</td>
<td>-.008</td>
<td>.000</td>
<td>-.114</td>
<td>-82.53</td>
<td>.001</td>
<td>-.104</td>
</tr>
<tr>
<td>Educ. Attainment</td>
<td>-.284</td>
<td>.001</td>
<td>-.461</td>
<td>-356.65</td>
<td>.001</td>
<td>-.451</td>
</tr>
</tbody>
</table>

*Control variable for gender and citizenship not shown.

Again, like the GRG score, enrollment status significant but not a strong predictor of Factor 3, B = .045, t(437) = .15.09, p < .001. But both age, B = -.008, t(437) = -82.53, p < 0.001, and educational attainment, B = -.284, t(437) = -356.65, p < .001, again show a significant negative relationship to the dependent variable. A higher level of educational attainment or a higher age predicts lower levels of the Factor 3 latent variable. Combined, they account for over half of the variance in Factor 3.
Regardless of the methods used to derive the dependent variable, all analyses point to the same conclusion. There is a significant negative relationship between both age and educational attainment and radicalization. As individuals get older or become more educated, their rates of radicalization decrease. Enrollment status at time of survey has no significant relationship to radicalization rates.

To revisit this in terms of the original sub-premises:

P1a) **Muslims with higher education degrees will hold beliefs indicative of radicalization at a higher rate than non-college educated Muslims.**

OR

P1b) **Muslims enrolled in higher education will hold beliefs indicative of radicalization at a higher rate than college-aged Muslims who are not in college.**

Since higher levels of educational attainment predict lower levels of radicalization, P1a cannot hold. The analyses show that completing higher education does not result in higher levels of radicalization, but in fact decreases levels of radicalization across all three measures of radicalization. P1b also fails to hold, since none of the methods used showed any relationship between current higher education enrollment status and radicalization. As long as age and attainment level are held constant, analyses show that enrollment status is not a significant predictor of radicalization.

Although not directly related to either sub-premise, age was included in all analyses in order to further refute the original premise. Those individuals who are of the age traditionally found in higher education (18-29) have been shown to
have higher rates of radicalization according to these analyses, but that it due to their age, not their enrollment status. In other words, Muslim youth, many of whom participate in higher education, do have higher rates of radicalization, but this is not related to their higher education participation.

The statistics from the UK paint a similar picture. The Centre for Social Cohesion along with YouGov (Thorne & Stuart, 2008) performed a survey of students across the UK, specifically to measure the attitudes of Muslim students. This data shows, that like their American counterparts, Muslim youth are more likely to support radical ideas than both the general Muslim population and the general population. The relevant question for the British study is not exactly the same as the suicide bomber question from the Pew Research Center's survey of American Muslims, but it is similar enough: “Is it ever justifiable to kill in the name of religion?” Responses that will indicate radical views, for my purposes, are, “Yes, in order to preserve and promote that religion.” And, “Yes, but only if that religion is under attack” (p. 43). Questions from both the Pew Research Center (PRC) and Centre for Social Cohesion/YouGov (CSC) studies are broad in terms of types of violence (PRC: “suicide bombing and other forms of violence” vs. CSC: “killing”) as well as motivation (PRC: “defend Islam from its enemies” vs. CSC: “to preserve and promote” and “if that religion is under attack”).

A third of Muslim students in the UK (32%) responded positively to this question, compared to 2% of non-Muslim students. This is roughly the same as the Pew Research Center’s reported rate of support among college-aged Muslim youth (18-29) in the UK of 35%. Based on these findings alone, it appears as if
extremist views are more a factor of youth than anything happening in higher education.

Since both sub-premises fail in both the American and British contexts, the primary hypothesis does not hold. Thus, the following is not proven:

P1: The environment at institutions of higher education contributes to the radicalization of Muslim youth.

**Discussion**

So, to return to the original research question: Why do terrorists have a higher rate of university participation than the general population? One possibility is that terrorist recruiters have such a large pool of potential recruits that they can be selective, and that they choose candidates most likely to be successful. It should then be no surprise that college-educated individuals, especially those with backgrounds in technical fields, would be viewed as preferable to those without the same level and type of education.

However, it is not clear that the recruit pool is actually that large. Many researchers (Berribi, 2007; Jenkins, 2007; Atran, 2008; Brachman, 2010) actually argue the opposite - that there is a limited supply of individuals who are genuinely willing to actively participate in terrorist activities. There are many “jihobbyists,” but fewer jihadists. Furthermore, many of those who do take the step toward action were not recruited in the traditional sense at all, and therefore could not be selected or screened out by discerning recruiters.

Although I have shown that university participation does not increase the rates of radicalization, it is my belief that the university can play an important
role in catalyzing radicalization into radical action. Youth enrolled in universities may have radical desires as the same rate as youth not enrolled in universities, but I argue that those who participate in the university are more likely to have greater access and more frequent contact with like-minded individuals, and as shown, this is a significant component of turning radical desires into reality. Therefore, universities are not involved in radical Islamist terrorism as birthplaces of radical ideas, but they can provide important meeting places for those who hold those ideas.

The role of student Islamic societies in promoting radicalization has been the central focus of many journalists in the UK. Not only are the members of these societies shown to have higher rates of radicalization, they are viewed as prime recruiting grounds for more radical groups not affiliated with the university and ultimately for terrorist organizations (Glees & Pope, 2005). Certainly these organizations are self-selecting and self-reinforcing, in that they likely have a reputation for radicalism and appeal to those with radical tendencies, thus strengthening their reputation. Their possible connections to outside organizations and their activities on campus have warranted the most attention from university administrators, security experts, and the press. However, the extent of these groups and their influence, and the methods by which they operate, are understudied.

**Limitations**

Both the quantitative and qualitative aspects of this project suffer from a reliance on secondary data. Although the data is of a high quality, none of it has
been gathered specifically for this kind of analysis. This manifests itself in multiple ways. For the quantitative data, the analysis of the situation in the United Kingdom suffers because of a reliance on two separate surveys. The YouGov/CSC study only provides data for students in the UK, while a separate Pew Research Center study is necessary to compare the student results to the general population. In both cases, this project also relies on reported, “cooked” data - as the raw data is not available for more customized analysis.

In the case of the data from the United States, the Pew Research Center has released the raw data of its survey of American Muslims which allows for more sophisticated analysis. It also allows a comparison between Muslim higher education students and the general population from the same dataset. However, when comparing results between the US and the UK, I was forced to rely on datasets that do not use the same sampling method or the same instrument. This is clearly evident when creating the variable for support for violence, a measure of radical beliefs. The YouGov/CSC survey and Pew survey use questions that are similar, but not the same, and their methodologies are different.

Finally, although I have an insider’s prospective on higher education in the West, this project focuses on individuals that are outsiders. Despite my research into the topic, I have not actually experienced higher education as an outsider. I do not have first-hand experience in the outsider experience in general or the Muslim experience in particular. I do acknowledge this limitation, and this project is intended to be valuable to those who are also intimately involved with higher education but who must deal with individuals who are outsiders. Regardless, a lack of familiarity with the Muslim experience in particular, but
also a general outsider’s perspective on whatever marginalized group is in question, is an acknowledged limitation for terrorism studies. To account for this, I do not attempt to claim that this research was objective, or hide behind supposed objectivity of quantitative data and statistics. Instead, I acknowledge the presence of subjectivity that is true of all social research. Taking inspiration from Beachum, McCray, and Huang (2010), I aspire to interpretations that, while subjective, are “tempered with understanding, research rigor, and socio-historical insight.”

**Conclusion**

This project has shown that universities do not contribute to the radicalization of Muslim youth, yet radicalization is not a topic that they can ignore. Using a quantitative analysis of the Pew Research Center Muslims in America Survey (2007) I have shown that the assumption by many that universities contribute to radicalization is not true. What this means is that university participation is not correlated with radicalization, and that universities do not contribute to radicalization. However, youth is strongly correlated with radicalization, and college-aged youth are the prime age bracket for radicalization and recruitment. Furthermore, any site where large numbers of youth gather, especially those that feel marginalized, is a potential site of radicalization.

I would like to stress again that such a phenomenon is true regardless of the content or participants of that radicalization. This is important to remember for two reasons. The first is that it has long been known, accepted, and sometimes encouraged the idea that universities are sites where radical ideas flourish. Thus
it should not be surprising when radical Islam rears its head as well. Likewise, while I acknowledge that universities are sites of radicalization, it should not then be concluded that universities are the birthplace of these ideas.

The second reason follows from this: it is essential to counter-radicalization efforts that Muslim youth not be further marginalized through demonization. Part of the ideal university experience is to flirt with radical ideas, and seeking to persecute radical Islam while allowing radical Leftist, Christian, or National movements is both discriminatory and counterproductive. As Neumann (2011) said before Congress,

“One of the greatest obstacles to introducing counter-radicalization to the United States is the word “radical.” Not only is being a radical no crime in America, the very idea of “radicalism” has positive connotations in a nation whose founding principles were seen as radical, even revolutionary, at the time.” (2011)

I believe that educators are responsible for maintaining an inclusive learning environment that tolerates radicalism while simultaneously being critical of violent extremism. Educators should continue this role, and its importance in combatting extremist narratives should be emphasized, but this is a role that educators should play regardless of the students in their class and the current status of the War on Terror. It is the mission of the Western university to maintain an inclusive, tolerant environment, and that mission just so happens to align with one of the best strategies in combatting terrorism. But educators
should leverage that alignment themselves in order to prevent their mission from being subverted by the national security apparatus.

Finally, I hope that this project has shown the vital role that educators can and must play in the years ahead. Not only are educators important stakeholders in higher education, but they are often the best positioned and best equipped to combat radicalizing influences. Educators must not ignore the problem, or pretend that it is not within their purview. Higher educational faculty and administrators must engage with the research and be prepared to face the problem head on. They should do this not only because they are the best positioned and best equipped, but also because if they do not take charge, then the national security apparatus will be ready to step in.
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Appendix A

The following are the variables from the 2007 Pew Research Center Study that comprise both the composite score dependent variable and the variables of the factor analysis. Bolded responses are those that I chose to count as a “positive” response, or a response indicating one of Gartenstein-Ross & Grossman’s manifestations of radicalization, for the purposes of the composite score variable in Method 2 of the quantitative analysis.

**Adopting a Legalistic Interpretation of Islam**

**Q.B2d** Here are a few pairs of statements. For each pair, tell me whether the FIRST statement or the SECOND statement comes closer to your own views — even if neither is exactly right.

- Homosexuality is a way of life that should be accepted by society
  
  [OR]

- Homosexuality is a way of life that should be discouraged by society

- Neither/Both equally (VOL.)

- Don’t know/Refused (VOL.)

**Q.E1** On average, how often do you attend the mosque or Islamic center for salah and Jum’ah prayer?

- More than once a week
• • Once a week for Jum’ah prayer
• • Once or twice a month
• • A few times a year, especially for the Eid
• • Seldom
• • Never
• • DK/Refused (VOL.)

Q.E4 Which comes closest to your view? [READ, IN ORDER]

IF BELIEVE KORAN IS WORD OF GOD (Q.E4=1), ASK:

Q.E5 And would you say that [READ, IN ORDER]?

• • The Koran is the word of God, (NET)
  • o The Koran is to be taken literally, word for word,
  • o That not everything in the Koran should be taken literally, word for word.
  • o Other/Don’t know/Refused (VOL. DO NOT READ)

• • The Koran is a book written by men and is not the word of God (NET)
  • • Other (VOL. DO NOT READ)
  • • Don’t know/Refused (VOL. DO NOT READ)

Q.E6 Concerning daily salah or prayer, do you, in general, pray all five salah daily, make
some of the five salah daily, occasionally make salah, only make Eid prayers, or do you
never pray?

- **Pray daily (NET)**
- **Pray all five salah**
- Make some of the five salah daily
- Occasionally make salah
- Only make Eid prayers
- Never pray
- Don’t know/Refused (VOL.)

**Q.G3** When men and women pray in a mosque, do you think that

- **Women should be separate from men, in another area of the mosque or behind a curtain**
- Women should pray behind men, with no curtain
- Women should pray in an area alongside men, with no curtain
- Other (VOL.)
- Don’t know/Refused (VOL.)

**Trust Only Select Religious Authorities**

**Q.D2** How many of your close friends are Muslims?

- **All of them**
- **Most of them**
- Some of them, or
• •  Hardly any of them
• •  None of them (VOL.)
• •  Don’t know/Refused (VOL.)

**Perceived Schism Between Islam and the West**

**Q.C1** Do you think the U.S. made the right decision or the wrong decision in using military force in Afghanistan?

• •  Right decision
• •  **Wrong decision**
• •  Don’t know/Refused (VOL.)

**Q.C2** Do you think the U.S. made the right decision or the wrong decision in using military force against Iraq?

• •  Right decision
• •  **Wrong decision**
• •  Don’t know/Refused (VOL.)

**Q.D4** Do you think there is a natural conflict between being a devout Muslim and living in a modern society, or don’t you think so?

• •  **Yes, there is a conflict**
• •  No, don’t think so
• • DK/Refused (VOL.)

Q.D5 Which comes closer to your view?
  • • Muslims coming to the U.S. today should mostly adopt American customs and ways of life
  • • Muslims coming to the U.S. today should mostly try to remain distinct from the larger American society
  • • Both (VOL.)
  • • Neither (VOL.)
  • • Don’t know/Refused (VOL.)

Q.E12 Do you think of yourself first as an American or first as a Muslim?
  • • American
  • • Muslim
  • • Both equally (VOL.)
  • • Neither/Other (VOL.)
  • • DK/Refused (VOL.)

Low Tolerance for Perceived Theological Deviance

Q.E3 How important is religion in your life – very important, somewhat important, not too important, or not at all important?
• • Very important
• • Somewhat important
• • Not too important
• • Not at all important
• • DK/Refused (VOL.)

**Q.E9** Which statement comes closest to your view?

• • There is **only ONE true way to interpret the teachings of Islam,**

• • There is **MORE than one true way to interpret the teachings of Islam**

• • Other (VOL.)

• • Don’t know/Refused (VOL.)

**Q.D7** Do you personally think it is okay or not okay for a Muslim to marry someone who is not a Muslim?

• • Okay for a Muslim to marry someone who is not a Muslim

• • **Not okay for a Muslim to marry someone who is not a Muslim**

• • Depends (VOL.)

• • Don’t know/Refused (VOL.)

**Attempts to Impose Religious Beliefs on Others**
Q.E8 In your opinion, should mosques keep out of political matters – or should they express their views on day-to-day social and political questions?

• Should keep out
• Should express views
• Don’t know/Refused (VOL.)

Q.G1 Overall, do you think that the quality of life for Muslim women in the U.S. is better, worse, or about the same as the quality of life for women in most Muslim countries?

• Better
• Worse
• About the same
• DK/Refused (VOL.)

Political Radicalization

Q.F1 How concerned, if at all, are you about the rise of Islamic extremism around the WORLD these days? Are you very concerned, somewhat concerned, not too concerned or not at all concerned about the rise of Islamic extremism around the world these days?

• Very concerned
• Somewhat concerned
• • Not too concerned
• • Not at all concerned
• • DK/Refused (VOL.)

**Q.H1** Some people think that suicide bombing and other forms of violence against civilian targets are justified in order to defend Islam from its enemies. Other people believe that, no matter what the reason, this kind of violence is never justified. Do you personally feel that this kind of violence is often justified to defend Islam, sometimes justified, rarely justified, or never justified?

• • Often justified
• • Sometimes justified
• • Rarely justified
• • Never justified
• • DK/Refused (VOL.)

**Q.H4** Do you think the U.S.-led war on terrorism is a sincere effort to reduce international terrorism or don’t you believe that?

• • Sincere effort
• • Don’t believe that
• • Both (VOL.)
Q.H4a And which statement comes closest to your opinion?

- A way can be found for the state of Israel to exist so that the rights and needs of the Palestinian people are taken care of
- The rights and needs of the Palestinian people cannot be taken care of as long as the state of Israel exists
- Don’t know/Refused (VOL.)

Q.H5 Overall, do you have a favorable or unfavorable opinion of Al Qaeda?

- Very favorable
- Somewhat favorable
- Somewhat unfavorable
- Very unfavorable
- Don’t know/Refused (VOL.)
Vita

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