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Predictors of Likeliness to Engage in Radical Animal Rights and Environmental Activism

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Walden University
2015

Abstract

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Patsy McKenzie

M Ed, Frostburg State University, 2005

BS, Frostburg State University, 2002

Dissertation Submitted in Partial Fulfillment

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Abstract

Radical animal rights and environmental activism is considered domestic terrorism under the Animal Enterprise Terrorism Act. Traditional models of terrorism purport that there is a path to radicalization that is influenced by an individual's sense of identity and ideological beliefs. Using collective identity theory and cognitive experiential self-theory as the framework, the purpose of this quantitative study was to examine whether social identity, cognitive processing mode, and ideological beliefs were predictors for engagement in radical animal rights and environmental activism. The Three Factor Model of Social Identity Scale, the Rational Experiential Inventory, and the Activism Orientation Scale were used to collect data from a sample of 65 self-described radical animal rights and environmental activists. Standard multiple regression analyses were used to test each hypothesis. According to the results of the study, only rational processing mode, $F(6, 64) = 3.18$, ($p < .05$), was a predictor of likeliness to engage in radical animals rights and environmental activism. Although ideology was not a significant predictor, exploratory analysis showed that ecofeminism demonstrated predictive value, $F(2, 64) = 6.12$, ($p < .05$). This study contributes to positive social change by expanding the understanding of the profile of radical activists, which may aid those who support radical actions and those who oppose such actions in opening a meaningful dialogue whereby solutions to issues facing the environment and animals can be addressed with successful outcomes.

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Dedication

This work is dedicated to five of the most important people in my life. To my husband and best friend, David, without your love and endless encouragement this project might have gotten the best of me. To my children, Christina, Aaron, and Cody. You never wavered in your belief in me and in your belief that despite years in the making, I would eventually complete this project. To my twin sister, Terri, for the years of cheering me on. Thank you all for the late night cups of tea, the words of encouragement, and the dozens of times you all read and reread drafts of this dissertation; this would not have been possible without all of you.

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Chapter 1: Introduction to the Study

Introduction

Although largely unreported by mainstream media, radical animal rights and environmental activism has become an issue of concern for the federal government, business interests, researchers, animal farmers, loggers, and others involved in environmental and animal rights issues (Federal Bureau of Investigation [FBI], 2010; Jarboe, 2002; Smith, 2008). Since the first recorded act of radical activism in the late 1970s, radical animal rights and environmental activists have caused hundreds of millions of dollars' worth of damage to universities, businesses, government agencies, and farms in the United States. In 2002, the FBI announced that radical animal rights and environmental groups were the primary domestic terrorism threat in the country (Jarboe, 2002). Due to adherence to secrecy and a leaderless resistance mode of operation, little is known about what drives individuals who engage in radical animal rights and environmental activism (FBI, 2010; Jarboe, 2002). The Department of Homeland Security (DHS, 2008) claimed that radical animal rights and environmental activists were believed to be trained in militant ecoterrorism; direct actions at Ruckus Society-sponsored events and other events sponsored by groups are considered ecoterrorist groups. Ruckus Society is an organization that openly trains grassroots organizers how to obtain their goals through a variety of means including nonviolent and violent direct action (DHS, 2008). The New American Foundation and Syracuse University's Maxwell School (2014) examined cases of domestic terrorism since the September 11, 2001

attacks and found that of the 390 persons indicted on terrorism-related charges or killed before they could be indicted, 66 were radical animal rights and environmental activists.

Radicalization alone does not lead to engaging in acts considered terrorism by the United States government; however, a path from radicalization to terrorism exists. Radical ideological beliefs may be a precursor for engaging in radical behavior including terrorism (Carpenter, Levitt, & Jacobson, 2009); however, some theories of conventional terrorism downplay the role of ideology and instead shift the attention towards cognitive processing (Borum, 2011a; Ginges, 2009) and social identity (Precht, 2007). Models of radicalization developed by the New York Police Department (NYPD) and Precht (2007) incorporate identity, ideology, and cognition and show a linear progression towards engagement in radical behavior and terrorism. These models begin with personal struggles (e.g., identity, ideology), move to trigger factors (e.g., group acceptance), and end with opportunity factors (e.g., trainings, religious events). The Joint Military Information Support Center (JMISC) also developed a model of radicalization and social identity whereby they posit ideological beliefs and influences on individual's thought processes are influenced by group rhetoric and beliefs (as cited in Borum, 2011b).

According to Borum (2011a, 2011b), the majority of theories on radicalization to terrorism are conceptual and have little, if any, empirical research support. There is no research on the radicalization process, specifically the cognition of radical individuals, and subsequent likelihood that those individuals would engage in radical animal rights and environmental activism. This gap is of particular interest because the United States government once listed radical animal rights and environmental activism (ecoterrorism)

as the primary domestic terrorism threat to the country (Jarboe, 2002). The intent of this study was to add to the knowledge base regarding predictors for likeliness to engage in radical animal rights and environmental activism by empirically examining social identity, reliance on cognitive processing modes, and ideological belief using cognitive experiential self-theory and collective identity theory as the theoretical framework. Because radical ideology and group identification have been reported to be predictors for engagement in traditional international terrorism (Carpenter et al., 2009; Precht, 2007), the three main ideologies of radical animal rights and environmental activist groups (deep ecology, ecoanarchy, and ecofeminism) are represented as ideological beliefs. The results of this study foster positive social change by adding to the knowledge base of radical animal rights and environmental activism and by initiating a dialogue between those on either side of the issue. Additionally, it is hoped that this study will encourage future research on this topic.

This chapter begins with a background of the problem, including a brief explanation of the differences between direct actions employed by mainstream activists and violent direct actions employed by radical activists which are referred to as radical activism in this study. Further discussion centers on the differences between anthropocentrism and ecocentrism—the central themes underlying the ideology of animal rights and environmental activism. The research questions and hypotheses are stated as well as the variables and the study's theoretical foundations, assumptions, scope, and limitations. Key terms are defined and the significance of the study is explained. This chapter concludes with a summary and brief explanation of Chapter 2.

Background

Although the FBI is prohibited by law from labeling and maintaining an official list of domestic groups and U.S. citizens it considers domestic terrorists unless actual crimes are committed, FBI officials have made claims in recent years that the leading domestic terrorism threat in the United States came from radical environmental groups such as the Earth Liberation Front (ELF) and Earth First! (EF!), and animal liberation groups such as Negotiation is Over!, Stop Huntington Animal Cruelty (SHAC), Arkangel, Militant Vegan, and the Animal Liberation Front ([ALF]; Amster, 2006; DHS, 2008; Southern Poverty Law Center, 2012). Activists in the animal rights and environmental movements employ a variety of tactics, and it is important to distinguish between direct action and violent direct action (radical activism) because this study is focused on the latter. Direct actions are those actions that can be labeled as civil disobedience—sit-ins, tree sits, vandalism, letter writing, and nonviolent protests. Violent direct actions (those actions that are considered radical activism in this study) are actions that go beyond civil disobedience. They employ acts of property destruction, arson, harassment, threats, physical violence, attempted assaults, and even attempted murder (Amster, 2006; DHS, 2008; FBI, 2010; Hall, 2009; Smith, 2008; Southern Poverty Law Center, 2012).

Ecocentrism versus Anthropocentrism

Modern environmentalism has developed into two philosophical trends: (a) anthropocentrism, the philosophic viewpoint that the protection of the environment is for human social well-being; and (b) ecocentrism, the assertion that the protection of nature

is beneficial for all species because it has inherent value apart from human desires and needs (Marangudakis, 2001; Naess, 2008). Ecocentrics believe that humans and nature are interconnected; humans are not the masters of nature; instead, they are one species in a web of life. Through an ecocentric view, nature is glorified (i.e., Mother Earth, Mother Nature, Gaia) and moral codes and life truths are learned (Hintz, 2007). It is this acceptance that actions and inactions impact the web of life that leads ecocentrics to profess that as intelligent beings it is the responsibility of humans to protect and preserve nature while learning valuable lessons from "her"(Harding, n.d.; Hintz, 2007; Naess, 2008).

Ecocentric environmentalists (those who identify with deep ecology, ecofeminism, ecoanarchy, and radical group philosophies like those of the ALF, ELF, EF!, SHAC, and the Justice Department) consider those who identify with anthropocentrism (mainstream groups like World Wildlife Fund, the National Wildlife Federation, and the Sierra Club) as "shallow environmentalists" for failing to recognize that humanity and nature are tightly interconnected and interdependent (Scarce, 2006). Moreover, ecocentrics assert that anthropocentric environmentalism neglects to address how environmental policy and capitalistic growth affect "deep" environmental issues (Marangudakis, 2001). Furthermore, ecocentrics characterize anthropocentrism as being representative of Western culture (i.e., individuality vs. collective good; capitalism vs. socialism) making it the primary reason for the decimation of sensitive environments and the reduction of biodiversity in all biospheres (Hintz, 2007). Mainstream environmental groups have criticized ecocentric views for being narrow minded and unwilling to

compromise (Marangudakis, 2001). Some supporters of mainstream groups have publically denounced the violent actions of radical animal rights and environmental activists saying that although their philosophies were admirable, their actions have done a disservice to protecting animals and the environment (Green Peace, n.d.).

Statement of the Problem

Although political and social activism studies exist in the literature, participation in single issue radical activism has largely gone unstudied, particularly outside of conventional activism (Cameron & Nickerson, 2009; Curtin, Stewart, & Duncan, 2010; Jennings & Anderson, 2003; Marangudakis, 2001). Social movement and political science researchers have studied the phenomenon of leftist collective action activism; however, the focus of much of that research has not involved radical underground groups (Cameron & Nickerson, 2009). Likewise, terror management researchers have studied the role of cognitive processing in terror assessments of individuals (victims and bystanders) after an actual or perceived impending terror act (Arndt et al., 1997; Pyszczynski, Greenberg, & Solomon, 1999; Schmeichel et al., 2009; Simon et al., 1997); however, a search of the literature revealed no research on cognitive processing modes or specific animal rights or environmental ideologies and the perpetrators of actual or perceived terroristic actions.

Terrorism scholars have revealed possible paths to the radicalization of traditional terrorists (Borum, 2011a; Precht, 2007), but few researchers have empirically examined the radicalization process which has led to several competing conceptual models. Literature pertaining to the process of radicalization included social identity (Taylor &

Louis, 2004; Ysseldk, Matheson, & Anisman; 2010), cultural beliefs, but not specific ideological beliefs (Mamdani, 2002; Mutua, 2002; Pedhazur, 2005; Sprinzak, 1991), economic challenges (Krueger, 2008), and anger (Sprinzak, 1991), but no research was found on either foreign or domestic terrorists or radical activists and cognitive processing modes even though the NYPD and Precht models consider, but did specify how they included, cognitive processing in the radicalization process. The literature on radical animal rights and environmental activism, which is largely qualitative, focuses on the legality of such actions and the emotional connections to places and animals, but it does not address how individuals self-identify. It also does not address what, if any, importance ideological belief plays in radical activism. Nor does it address how radical activists process the information they receive (Herzog, 1993; Nisbet, Zelenski, & Murphy, 2009).

Purpose of Study

The purpose of this quantitative study was to examine predictors of radical animal rights and environmental activism. The goals of this study were (a) to make a scholarly contribution to the field of radical activism studies, (b) to determine if reliance on either the experiential or rational information processing mode predict likeliness to engage in radical activism, (c) to determine if ideological beliefs are predictors for likeliness to engage in radical activism, (d) to determine if social identity (in-group ties, centrality, and in-group affect) predicts likeliness to engage in radical activism, and (f) to promote social change by encouraging an open dialogue between those who support radical animals right and environmental activism and those who oppose such actions.

Research Questions and Hypotheses

In this quantitative study, I addressed the following research questions:

1. Does social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, predict likeliness to engage in radical activism as measured by the Activism Orientation Scale?

2. Does reliance on either the experiential or rational system information processing mode, as measured by the Rational Experiential Inventory, predict likeliness to engage in radical activism as measured by the Activism Orientation Scale?

3. Do ideological beliefs (ecoanarchy, ecofeminism, deep ecology) predict likeliness to engage in radical activism as measured by the Activism Orientation Scale?

I examined the following hypotheses:

$H_0$1: Social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, does not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$1: Social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, does predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_0$2: Reliance on either the rational or experiential information processing modes, as measured by the Rational Experiential Inventory, does not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$2: Reliance on either the rational and experiential information processing modes, as measured by the Rational Experiential Inventory, does predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_0$3: Ideological beliefs do not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$3: Ideological beliefs do predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

Theoretical Foundation

The theoretical framework for this study was interdisciplinary in nature. The theories and instruments used for this study stem from social and personality psychology, specifically collective identity theory (Klandermans, 1997; Simon & Klandermans, 2004) and cognitive experiential self-theory (Epstein, 1994). Defining collective identity is not a simple task. It is often described as a basis for group solidarity and claims of belonging to a group (Melucci, 2005). However, many scholars insist that collective identity is more than a process leading to activism (Bobel, 2007; Saunder, 2008). It refers to an individual's perception of his/herself as a member of a group or movement based on how salient that group is in the individual's life (Choup, 2008). Some scholars believe that collective identity is fluid and that individuals move through degrees of identity salience (Holland, Fox, & Daro, 2008). Cognitive experiential self-theory (CEST) is a dual processing theory that suggests individuals rely on either the experiential (intuitive) mode or the rational (logical) mode of processing information (Epstein, 1991). CEST suggests that individuals who are impulsive, emotional, and passionate about issues rely on the

experiential mode when processing information and making decisions, whereas individuals who are logical, less emotional, and controlled rely on the rational mode of information processing (Pacini & Epstein, 1999). The influence of these theories will be discussed in more detail in Chapter 2.

Nature of the Study

A nonexperimental quantitative design employing the survey method was used to determine if the variables, social identity (in-group ties, in-group affects, and centrality), reliance on information processing modes (experiential versus rational), and ideological beliefs (deep ecology, ecofeminism, and ecoanarchy) predicted likeliness to engage in radical activism in a sample of 65 adults recruited from online animal rights and environmental groups.

Social identity perception was measured with the Three-Factor Model of Social Identity Scale (Cameron, 2004; Appendix A). The Three Factor Model of Social Identity Scale employs a three-factor model that measures in-group ties (perceptions of similarity or belonging to a group), centrality (the amount of time spent thinking about being a member of a group), and in-group affect (positive feelings associated with group membership).

Information processing system preference was measured with the 40-Item Rational Experiential Inventory (REI) developed by Pacini and Epstein (1999; Appendix B). This instrument consists of the rational and experiential subscales, which are the two main subscales, and four minor subscales that measure rational ability (logical thinking ability), rational engagement (logical thinking use), experiential ability (intuitive thinking

ability), and experiential engagement (intuitive thinking use). Because the literature regarding the use of the REI subscales is unclear on how the four minor subscales have been used, I used the two broader dimensions represented by the two main subscales.

Likeliness to engage in radical activism was measured using the Activism Orientation Scale (AOS; Corning & Meyers, 2002; Appendix C). The AOS measures likeliness to engage in radical and conventional activism. Data from each scale were analyzed according to the scale instructions. Data regarding ideological beliefs came from the participant questionnaire where participants were provided with a brief explanation of three ideologies (deep ecology, ecofeminism, and ecoanarchy) and were asked to choose the one that best resembles their ideological belief towards animal rights and environmentalism. Participants had the option to choose none of the ideologies if none were representative of their beliefs.

Definitions

Animal liberation: Illegal removal of an animal from a facility (farm, factory, laboratory) that is believed to cause pain and suffering to animals (Singer, 1991).

Animal rights: A belief that nonhuman animals have intrinsic value beyond human needs and that animals have an inalienable right to live free from pain and cruelty inflicted by humans (Regan, 1983).

Cognitive experiential self-theory (CEST): An integrated dual system theory of information processing (Epstein, 2003). According to CEST, there are two parallel information processing systems, experiential and rational, that interact with one another. Dual system theorists contend that information processing preference is a personality trait

because how an individual choses to process information directly and indirectly affects behavior and it behavior that defines personality. The main focus of CEST is the experiential (intuitive) system (Epstein, 2003).

Collective action: Any indirect or direct action by a group or individual that is used to improve a group's influence or to prevent or stop injustice against a group (van Zomeren & Iyer, 2009).

Deep ecology: Philosophy introduced by Arne Naess in the 1970s. Deep ecologists hold a belief that the earth is a living system and that humans hold no special position in nature (Naess, 2008).

Direct action: An illegal protest action often employed by radical activists. Actions can range from sit-ins to arson and bombings to attempted murder (Potter, 2009).

Domestic terrorism: The use of threat of violence against person, property, agency, or state by individuals native to the country (United States) to force, intimidate, or coerce social, political, or policy change (FBI, 2012).

Ecotage: A term used by radical activists to describe the destruction or damage of corporate, institution, agency, or personal property by radical animal rights or environmental activists to force social, political, or policy change (Jarboe, 2002).

Ecoterrorism: The use or threat of violence against person, institution, agency, corporation, or property by radical animal rights or environmental activists to force social, political, or policy change that is in line with radical animal rights or environmental rhetoric (Jarboe, 2002). In accordance with domestic terrorism laws, penalties for engaging in domestic terrorist acts are severe. In 2007, the Animal

Enterprise Terrorism Act (AETA) was passed. The AETA had the following effects on acts considered domestic terrorism:

> If there is no property loss or damage, and no fear instilled in any person, the statutory penalty is a fine and/or a maximum of one year in prison.210 If there is no injury or fear by any person but there is over $10,000 damage, the statutory penalty is a fine and a maximum of five years in prison.211 If there is no injury or fear by any person but there is over $100,000 damage, the statutory penalty is a fine and a maximum of ten years in prison.212 If there is no injury or fear by any person but there is over $1 million in damage, the statutory penalty is a fine and a maximum of twenty years in prison. (Smith, 2008, p. 559)

Experiential information processing: System of information processing described by the cognitive experiential self-theory that relies on intuition to form meanings and construct beliefs of the self and world (Epstein, 2003).

Ideology: Ideology contains three basic features. First, it provides critical analysis of society. Second, it prescribes particular form of society based on certain beliefs that are periodically revised. Third, it provides platform or actions to move current society to prescribed one (Dobson, 1999/2000).

Leaderless resistance: Form of protest that encourages individuals or clandestine cells to engage in direct actions to force social or political change. This form of protest exists without a hierarchy and operates in secrecy (Joosse, 2007).

Militant interventionism: Ideological belief of some radical animal activists that covert violent actions, including murder of perceived animal abusers, are acceptable tactics to gain the release of animals from fur farms, factory farms, and vivisection laboratories (Joosse, 2007).

Monkey wrenching: Covert actions such as property damage or destruction that disrupt or cause the termination of actions that cause harm to the environment

Radical activist: An individual who is willing to use tactics that are outside of societal and legal norms to achieve ideological goals (Hadley, 2009).

Rational information processing system: System of information processing described by the cognitive experiential self-theory that relies on logic to form meanings and construct beliefs of the self and world (Epstein, 2003).

Terrorism: The illegal use of force or violence against a person or property to force a policy change, political change, or social change (FBI, 2012).

Assumptions, Limitations, and Scope of the Study

Assumptions

A key assumption of this study was the accuracy and relevance of the data collected from the online survey instruments completed by participants. Because radical groups covertly operate, there were no group membership lists from which to recruit participants; therefore, data were collected from participants who accessed several self-proclaimed animal rights and environmental online social networking groups. Accuracy of the data was dependent upon the truthfulness of the participants' responses to survey items. It was assumed that because the survey was available through a secure site and was

anonymous, participants provided truthful answers because there was no means of identification. In addition, the measures used in this study were tested for reliability by their respective developers; therefore, the accuracy of the data, assuming participant truthfulness, was assumed. A detailed discussion of the study's design and data collection procedures is provided in Chapter 3.

Limitations

A key limitation to the study was related to the collection of data. Because there were no membership lists from which to solicit participants for the study, online social networking sites for animal rights and environmental groups were relied upon for recruitment of participants. One limitation of obtaining participants from such groups was that data were collected from a sample of convenience, which may limit the generalizability of the results. Additionally, although the survey was anonymous, fear of identification might have caused some participants to downplay their likeliness to be involved in radical activism. Another limitation of this study was the narrow focus of the independent variables, which left other possible variables unaddressed by this study. The variables used in this study were social identity (in-group ties, centrality, and in-group affect) measured by the Three Factor Model of Social Identity, cognitive processing mode (rational processing mode and experiential processing mode) measured by the 40-item REI, and ideology represented by three main ideologies of radical animal rights and environmental activism (deep ecology, ecoanarchy, and ecofeminism). The dependent variable, likeliness to engage in radical activism, was measured by the 35-item AOS.

The target sample size ranged from 98-123 participants and power at.80. Data collection ran from mid-December through mid-April and concluded with usable data from 65 participants and an actual power of .58. Activists were recruited from more than 27 online animal rights and environmental groups from the United States, Australia, Canada, Ireland, and France. Although the number of members for each of the groups ranged from a few hundred to several thousand, only a small number of individuals (83 total) chose to participate in the study. As such, the results are unlikely to generalize to such a large and varied population of animal rights and environmental activists. Additionally, the surveys were self-report to which participants responded to items that asked about the likelihood that they would participate in illegal actions. It is not improbable that participants either down played their actual involvement in illegal actions out of fear of legal ramifications or individuals exaggerated their involvement either on purpose or out of false beliefs regarding their actual involvement.

Scope

In this study, I examined specific predictors for involvement in radical environmentalist and animal activism. Whether or not participants actually participated in direct action tactics or radical activism was beyond the scope of this study. Additionally, how or when participants became involved in or willing to participate in radical activism was not a consideration of this study. Finally, whether covert violent direct actions are acts of domestic terrorism was beyond the scope of this study.

Significance of the Study

Radical animal rights and environmental activism is considered domestic terrorism under the AETA, and as such, individuals convicted of such acts are subject to special sentencing conditions including longer sentences and incarceration at facilities that house convicted terrorists. Traditional models of terrorism purport that there is a path to radicalization. Models generated by various agencies include identity and ideology as part of that path (Sprinzak, 1991). Prior studies of radical activism have been largely qualitative in nature and have not examined whether social identity (in-group ties, centrality, in-group affect), cognitive processing mode (rational and experiential), and ideological belief (deep ecology, ecofeminism, ecoanarchy) were predictors of likeliness to engage in radical animal rights and environmental activism This study represents the first known quantitative study to use cognitive experiential self-theory and collective identity theory to investigate predictors of likeliness to engage in radical animal rights and environmental activism. As a result, this study could be a potential catalyst for further investigation on this subject using one or both theories. Data obtained from this study may have potential value to understanding profiles of radical activists which may aid those who support radical actions and those who oppose such actions in opening a meaningful dialogue whereby solutions to issues facing the environment and animals can be addressed with successful outcomes. Furthermore, a potential benefit of this study is its value to opponents of the U.S. Patriot Act and the AETA as a means to target and label radical activists as domestic terrorists. The results of the study may provide an alternative position to the government's rationalization that radical activists are terrorists

and not merely social activists. Of course, further research would be needed to substantiate any claims of an alternate position.

Summary and Transition

From the mid-1970s to the present day, thousands of direct actions and animal liberations have been committed with the intention to force social change (Vanderheiden, 2008). Activists who once openly protested animal research and logging in roadless areas are seemingly more willing to embrace actions that are more violent and covert. In response to the shift in tactics, the U.S. government adopted two major pieces of legislation under which direct action tactics are considered acts of terrorism if they are used to cause fear or if they interfere with a business's opportunity to make a profit (Amster, 2006). The purpose of this study was to investigate whether likeliness to engage in radical activism could be predicted by social identity, reliance on a particular information processing mode, and ideological beliefs.

Chapter 2 provides a review of the literature beginning with a brief overview of the rise of eco-terrorism in the United States. This is followed by a detailed discussion of prominent ideological and political beliefs--deep ecology, ecofeminism, and ecoanarchy, in the radical group movement. A detailed discussion of collective identity theory (Melucci, 1995) and cognitive experiential self-theory (Pacini & Epstein, 1999) the theories that make up the theoretical framework of the study is also provided in the literature review. In Chapter 3, I will present a discussion of the research methodology, the sample, the instruments, and the data analysis plan. Chapter 4 provides an explanation

of the analyses along with an examination of the results. Chapter 5 provides an interpretation of the results and considers future implications of this research.

Chapter 2: Literature Review

Introduction

Although the FBI recently replaced radical animal rights and environmental activism with domestic jihadists as the number one domestic terrorism threat in the nation, radical animal rights and environmental activism remain listed as a source of concern for domestic terrorism (FBI, 2012). Radical activism has historically been difficult to study due to a leaderless resistance style of activism and the absolute secrecy that independent activist cells operate under. The aim of this quantitative study was to explore predictors of radical animal rights and environmental activism by examining whether social identity (in-group ties, centrality, and in-group affect), reliance on either the experiential or rational information processing mode, and ideology predicted likeliness to engage in radical activism.

The literature review begins with an overview of the emergence of radical animal rights and environmental activism in the United States and is followed by a discussion of the three most prominent ideologies associated with radical animal rights and environmental activism. Research strategies are discussed and are followed by a critical review of the relevant literature. Included in the review of literature are the underlying theories for the study: collective identity theory and cognitive experiential self-theory. Results from past research are also presented as well as literature that supports the use of the methodology for the current study followed by suggestions for further research. The chapter ends with a summary of Chapter 2 and an introduction of Chapter 3.

Research Strategy

A broad review of the literature was conducted by searching the EBSCOhost (multidisciplinary) databases available from the Walden University library. Database searches included multidisciplinary searches of Sage Journals, Academic Search Premiere, PsycARTICLES, PsycINFO, SocINDEX, and the International Security and Counter Terrorism Reference Center database. Databases were searched using such terms as social identity, anarchy, delegitimation model, terrorism, identity change, collective identity, collective action, environmental activist, animal liberation, extreme activism, domestic terrorism, social protest, activism and social networks, socialization and radical activism, motivation, moral reasoning, moral justice, social justice, political salience, information processing routes, and environmental attitudes. Other search terms used were environment along with spirituality, deep ecology, ecofeminism, Marxism, and anarchy. Current literature, dating from 2007-2015, was reviewed from psychology, political science, environmental ethics, criminal justice, and sociology peer-reviewed journals. Searches also included seminal works by Seymour Epstein, Arne Naess, and Ehud Sprinzak.

The secretive nature of radical environmental and animal liberation activism and a lack of research with these groups created a need to seek out alternative sources for reports of first hand experiences of extreme activists. Videos and radical group communiqués posted on the Internet were examined as supportive nonscholarly sources. Web searches included video interviews, speeches, and workshop presentations given by Rod Coronado, a convicted eco-terrorist, and green anarchists John Zerzan, Derrick

Jensen, and Dave Watson. Books by various well-known philosophers, including Karen Warren, Arne Naess, and John Zerzan, all of whom are considered leaders in their fields, were read to provide philosophical understanding of ecofeminism, deep ecology, and anarchy, respectively. Books written by individuals directly involved in direct action campaigns were read to gain knowledge of their mindsets and reasoning. Various videos posted by Earth Liberation Front, Animal Liberation Front, and North American Animal Liberation activists were viewed to establish familiarity with visual images and the tone used to deliver prodirect action messages. ELF, Justice Department, SHAC, and ALF communiqués regarding various ecotage and animal liberation actions around the world were read to provide further understanding of common tactics, language, and philosophies used by individuals involved in extreme group movements. In addition, searches of convicted ecoterrorists' webpages were conducted, including www.supporteric.org, www.supportmariemason.org, and www.supportdaniel.org.

Various topical books on animal liberation, animal rights, ecoanarchy, and ecoterrorism were read as well. Though not scholarly works themselves, the information gleaned from the various Internet searches and topical books aided in uncovering common themes expressed by activists through their writings, speeches, media releases, and anecdotal accounts. Knowledge of these common themes aided in the selection of the theoretical framework and the formation of the hypotheses for the study. The information gleaned from the aforementioned resources provides support for or clarification of the scholarly works and topics reviewed in this chapter.

Literature Review

Ecoterrorism Defined

To understand why radical animal rights and environmental activism began to be referred to as ecoterrorism, it is crucial to understand how and when the term ecoterrorism came into the lexicon. Therefore, it is key to understand the incidents that led to its use by researchers, biomedical companies, and law enforcement. In 1981, animal rights activists infiltrated the Institute for Behavioral Research and documented 15 counts of animal cruelty including severing of primates' arms, hands, and spinal cords without anesthesia. The lead scientist and an assistant were charged with animal cruelty and the facility was shut down (Hill, 2011).

The expression ecoterrorist first appeared in a 1983 Reason magazine article by Ron Arnold, leader for the Center for the Defense of Free Enterprise (Smith, 2008). Arnold used the term to describe radical environmental and animal rights activists who chose to employ direct action tactics (arson, property destruction, harassment, and tree spiking) in an effort to further their political and social agendas. Opponents and targets of animal rights activism latched on to the ecoterrorism term and continued to use it. In 1984, the ALF released video tapes of primates suffering head injuries while strapped to a table and being repeatedly hit with a hydraulic piston causing an outcry from the public (Hill, 2011). The tapes showed primates from the University of Pennsylvania Head Injury Clinic writhing on tables, being experimented on without anesthesia, and researchers laughing at injured animals. After 4 days of sit-ins, the university lost federal funding through the National Institutes for Health, ending the study. In response to public

outcries, Congress enacted amendments to the Animal Welfare Act that included oversight of animals in research facilities (rodents, birds, fish, reptiles, and amphibians are not included under the provisions). Research institutions were required to establish Animal Welfare Center and Institutional Animal Care and Use Committees (IACUC) to oversee the use of animals in research (Hill, 2011).

While commercial industries like the cosmetics industry began to limit animal testing, many biomedical researchers lobbied Congress describing animal rights activists as liars who were determined to end scientific discovery (Hill, 2011). In 1988, the American Medical Association (AMA) drafted "white papers" to combat animal rights activism. One paper entitled "Animal Research Action Plan" urged researchers to demonstrate that animal rights activists and the animal rights movement were antiscience, violent, and a true threat to the public's freedom to choose to use animals in research (Hill, 2011). The purpose of the plan was to draw public attention from incidents of mistreatment of animals in research facilities and to place a spotlight on radical activists by highlighting the differences between the general public and the radical activist thus shrinking sympathy for the animal rights movement (Hill, 2011). Furthermore, the AMA proposed to form a special unit to monitor animal rights activists. The AMA was not the only one watching the growing animal rights and environmental movements. National media coverage of actions by animal rights and environmental groups was often portrayed as terroristic in nature (Hill, 2011).

In 1988, Time Magazine reported on the case of Fran Trutt, an animal rights activist who was arrested and convicted for placing a pipe bomb at U.S. Surgical offices.

Time referred to the case as an example of how animal rights activism had entered a "terroristic phase" (Hill, 2011). Little attention was paid to U.S. Surgical's acknowledgement that it paid a surveillance company to infiltrate an animal rights group and befriend Trutt. The surveillance company acknowledged that its operative orchestrated the bombing plot with the Norwalk police. Subsequently, in 1989 animal rights organizations were added to the FBI's unofficial domestic terrorism list (Hill, 2011).

Unlike traditional terrorism, the labeling of radical animal rights and environmental actions as domestic or ecoterrorism came at the behest of research facilities and commercial enterprises. In 1992, the research community lobbied Congress to pass the Animal Enterprise Protection Act (AEPA, 1992), the forerunner to the Animal Enterprise Terrorism Act (AETA), which uses the terrorism label for actions committed against commercial and research animal enterprises (Johnson, 2008). The goal of AEPA was to stop radical animal rights activism by criminalizing certain acts, including physical and economic disruption of animal enterprises (Hall, 2009; Hill, 2011). Although the House Judiciary Committee expressed concerns over the ambiguous definition of physical disruption, the AEPA passed and was upheld by the United States Court of Appeals for the Third Circuit (Hill, 2011). AEPA and AETA were used to convict SHAC activists. Whether or not the animal rights and environmental movements intended their actions to be terroristic, the term would follow them from the 1980s forward.

In 1988, Schmid and Jongman conducted a census of academics, law enforcement, and government agencies identifying more than 100 definitions for terrorism but none for ecoterrorism (Schmid, 2004). More than 20 years after Schmid and Jongman's census, there is still no definitive definition for terrorism or ecoterrorism (Kruglanski & Fishman, 2009). Despite the controversy and ambiguity of each term, Domestic Terrorism Section Chief Jarboe expanded Arnold's 1983 definition of ecoterrorism when he testified before Congress in 2002 by adding physical threats, assaults, home invasion, and acts that interfered with a business's ability to make a profit to the definition of domestic terrorism. Furthermore, Jarboe stated that radical activism tactics were a direct threat to innocent citizens such as homeowners, firefighters, janitors in targeted facilities, and others who may unintentionally be harmed by direct actions (Smith, 2008). Jarboe's point is best illustrated by a 1995 letter scare perpetrated by the radical group, Justice Department. Justice Department members anonymously mailed out numerous letters rigged with rat poison tainted razor blades to university and corporate scientists, corporate officers, and animal farmers. The intent of the booby-trapped letters was to scare individuals involved in animal enterprises and research out of business by threatening their wellbeing (Borum & Tilby, 2004).

In 2004, FBI Deputy Assistant Director Lewis testified before Congress that beginning in 2002 law enforcement saw an increase in the use of violent direct actions against government property as well as research facilities and personal property. Lewis reported that the incidents of arson, bombings, and other methods of intimidation had reached levels of more than 1,100 incidents since 1976 totaling more than $110 million in

damages (Jarboe, 2002). Law enforcement agencies reported a growing parallel in tactics between ecoterrorists and extreme antiabortionists. According to Nelson (2013), individuals like Steve Best, professor at University of Texas, and Camille Marino, founder of Negotiation is Over! (NIO), advocate for violence against individuals involved in medical research. Marino posted the names and contact information of potential NIO targets and referred to Dr. David Jentsch, a neuroscientist, as David "Tiller" Jentsch on the NIO website. The Tiller reference was a direct parallel to Dr. Tiller, an abortion doctor who was gunned down outside of an abortion clinic. Jentsch reported that since Marino began targeting him on NIO he received a threat stating that activists would follow him and one day walk up behind him and slit his throat. (Heller, 2013).

In 2011, researcher Dr. Donal O'Leary received an e-mail from NIO supporters that contained a threat to kidnap and torture him. The e-mail described tortures that included disembowelment and forced ingestion of Drano and napalm (Heller, 2013). Marino sent a follow-up e-mail to O'Leary stating that associates of hers would visit his house and take pictures. Marino indicated that not only would the group target O'Leary, they would target his family (Heller, 2013; Nelson, 2012). In December 2012, a Michigan judge sentenced Marino to 6 months in jail for the threats made to O'Leary. At sentencing the judge stated that he did not believe that Marino would have perpetrated the threats against O'Leary, but that she would through her website, incite others to do so (Heller, 2013).

Radical group rhetoric dismisses the FBI's claims of terrorism pointing to a declassified Universal Adversary Dynamic Threat Assessment (UADTA) completed by

the Department of Homeland Security (2008) that concluded that while radical animal rights and environmental activities may pose a threat to individual citizens, universities, and businesses, they posed no serious threat to U.S. national security. A review of Office of Homeland Security Intelligence Bulletins (2010) prepared for the Department of Homeland Security and the public (Pennsylvania Bulletin No. 137; Pennsylvania Actionable Intelligence Bulletin #74) and terrorism reports from the National Consortium for the Study of Terrorism and Response to Terrorism (START), a Department of Homeland Security Center housed at the University of Maryland, animal rights and environmental radical activism is acknowledged by the federal government but often receives low risk ratings for specific threats (Institute of Terrorism Research and Response, 2010; START, 2010).

Although considered terrorism under the Patriot Act and Animal Enterprise Terrorism Act (AETA), supporters of radical animal rights and environmental activism consider violent direct actions committed by radical activists to be acts of civil disobedience or ecotage, a form of sabotage perpetrated against objects or property of those considered to be harming the environment or abusing animals. Hadley (2009) and others (Amster, 2006; Futrell & Brents, 2003; Humphrey, 2006; Kemmerer, 2008) question the validity of labeling violent direct actions as terrorism. Amster (2006) contended that direct action tactics employed by radical activists are not terrorism and pointed to former FBI Section Chief Jarboe's 2002 congressional testimony that groups like the ALF and ELF adhere to a philosophy that strongly discourages acts that harm animal or human life. While not condoning violent direct actions, Amster (2006)

questioned the government's decision to reduce the threshold of terrorism to include acts of civil disobedience and property destruction. This, Amster suggested, stifles legitimate protest. Best (2009) also claimed that broadening the definition of domestic terrorism to include radical activism amounts to government intimidation of those who wish to influence government policy through ecotage.

On the other hand, Humphrey (2006) argued that violent direct actions are not, as many radical activists proclaim, acts of civil disobedience. Civil disobedience, Humphrey opined, is not a threat in itself. It is a form of public communication with those involved willing to accept the consequences of their actions. In the case of radical activists, direct actions like harassing family members, firebombing research facilities and offices, threats of violence or death, and posting personal information on the Internet are typically done in secret with no one person claiming responsibility. Vanderheiden (2005) conceded that the lack of personal responsibility lends to the argument that radical activism falls under acts of terrorism; however, he asserted that ecotage (radical direct actions) and terrorism are conceptually different. The goal of ecotage is social change while the goal of terrorism is political or economic change through fear and force (Vanderheiden, 2005). Although Vanderheiden (2005) did not place ecotage in the same category as civil disobedience, he did accept it as a viable political tactic.

Herzog's (1993) qualitative study of animal rights activists echoed these same sentiments. Participants lamented on how the use of violence undermines the goals of their movement. However, one woman in the study commented that when she read about a burned building she was glad. Although she reasoned that violent tactics would create

fear, she believed those same acts would gain the animal rights movement media attention and prompt negative reactions. While she claimed she would not personally engage in such behaviors, she supported them as long as no one was hurt. Likewise, Gaarder (2008) found that the majority of the 27 women interviewed admitted to feeling anger and rage towards those they perceived as animal abusers. One woman in the study commented that she was so intensely involved in animal rights activism that she neglected her family in favor of protesting, being arrested, and committing direct actions in order to protect animals.

Emergence of Radical Animal Rights and Environmentalism in the United States

In 1980, a group of disgruntled environmentalists took a trip to the desert and emerged with a different approach to environmental defense. The first EF! demonstration occurred at Glen Canyon Dam in 1981 where approximately 75 people gathered to protest the dam. Six people from the group managed to scale the dam and unfurl black plastic that made it look like the dam had a huge crack in it. The huge plastic crack was not only a metaphor for the damage being done to the earth, it symbolized the EF!ers break with traditional environmentalism (Eagan, 1996).

The founders of EF!, former mainstream environmentalists, were disillusioned with the corporate-like structure of mainstream groups and the seemingly constant compromising they accused such groups of engaging in. The founders decided to model EF! after a Plains Indian tribe and England's ALF. They would be nomadic; there would be no main office. There would be no organizational structure. No one person or group would be in charge. There would be no official membership. The founders wanted only

devoted unpaid grassroots activists who were willing to employ unconventional methods to save the earth. In short, they wanted anarchy (Eagan, 1996; Scarce, 2006). Until the early 1980s, EF! and similar groups continued to employ the use of civil disobedience (blockades, removing survey stakes, chaining themselves to trees and machinery, and tree sits) as tactics. In 1984, EF! added an element of violence to their tactics and it quickly became a favorite among activists. Tree spiking involves hammering long ceramic spikes into trees. Ceramic spikes are used to prevent detection with metal detectors. The spikes are placed in areas where a logger would saw the tree. Tree spiking can be very dangerous if a saw chain hits it because it could become a flying projectile that could cause serious injury or death. In addition, when a spike is hit the chainsaw could kick back causing the logger to lose control of the saw resulting in injury from the chainsaw itself or an incorrectly felled tree. In the 1980s, the goal was only to prevent the logging of old growth trees so activists always warned loggers and the US Forest Service which section of trees had been spiked (Scarce, 2006). Only one injury has ever been reported from a tree-spiking incident. A sawmill worker received eye and head injuries when a spike was hit by the saw he operated at the mill (Scarce, 2006).

Over the years, individuals from a variety of violence-driven radical groups have made tactics aimed at harming people acceptable (Taylor, 2008). Direct action tactics have escalated from civil disobedience and tree spiking to arson, letter bombs, death threats, and property destruction. Animal liberationists adopted physically threatening tactics including sending letters containing razorblades that had allegedly been tainted with rat poison or HIV-infected blood, and harassment of individuals, their spouses, and

their children (Animal Liberation Front, 2009). Other actions employed include the release of animals from farms and research facilities, destruction of equipment, nail bombs, and dissemination of personal information via the Internet. The latter tactic is a favorite among SHAC, a group opposed to a multinational animal research corporation known as Huntington Life Sciences (Taylor, 2008). Personal information posted on the web usually includes social security numbers, home addresses, home and work numbers, employment information of spouses, and where the "targets'"" children go to school and has become a favorite tactic of the ELF and Militant Vegan (Earth Liberation Front, 2009). Demonstrators no longer just protest at worksites. Many researchers have had their homes vandalized, cars set on fire, and threats of violence against themselves and their family members, including their children (Animal Liberation Front, 2009; Munro, 2005). In one instance, radical activists firebombed a house believed to belong to an animal researcher. Unfortunately, the targeted home belonged to an elderly neighbor of the researcher. The woman escaped her home with minor injuries. No arrests have been made in this incident (Animal Liberation Front, 2009).

Philosophies of Radical Animal Rights and Environmental Activism

Deep Ecology

Deep ecology, a life philosophy that draws on the writings of Rachel Carson and Aldo Leopold, was made noteworthy by philosopher and mountaineer, Arne Naess (Sessions, 2002; Warren, 2000). Naess (2008) envisioned deep ecology as an international grassroots movement concerned with environmental justice, social justice, and peace. A primary tenant of deep ecology is the belief in the inherent value of nature aside from human wants and needs. According to deep ecologists, modern humans have lost their connection with nature leaving them (us) with a feeling of disconnection, spiritual emptiness, and confusion. To eliminate this separation from nature, deep ecology incorporates traditions and ideas from sources that are rich in nature/human connections like Buddhism, Spinoza, and Native American beliefs (Naess, 2008; Sessions, 2002; Taylor & Zimmerman, 2005). Although deep ecologists affirm that men in general have historically been the most represented group in ecological destruction, they contend that men should not be a target group singled out for persecution (Warren, 2000). Instead, they agree with other social perspectives that more inclusive groups like whites, capitalists, and westerners are more to blame than people of color, noncapitalists, nonwesterners, and any one group of men (Naess, 2008; Sessions, 2002). Also, while deep ecology acknowledges the historical domination of nature by humans it does not specifically acknowledge that the domination of women and other groups coincides with the domination of nature (Warren, 2000). This lack of acknowledgment has led critics to argue that while deep ecology is ecocentric, it is also a patriarchal and androcentric ideology, a claim that deep ecologists deny (Sessions, 2002; Warren, 2000). The fact that the majority of deep ecology's spokespersons are men is, as claimed by some, evidence

that deep ecology is a patriarchal philosophy (Sessions, 2002; Warren, 2000). Furthermore, critics claim that although deep ecologists present a somewhat unified analysis of the problem, their solutions are varied, and often conflict with each other resulting in no agreed upon solution with practical application (Sessions, 2002). Naess (2008) and other deep ecologists (Sessions, 2002) stress the importance of setting aside secondary and tertiary qualities that project human sensations and emotions upon the natural world. In his seminal work on deep ecology, Naess used the descriptions of the sea as examples of secondary and tertiary quality projection. Naess made the argument that humans should see the natural world objectively not subjectively. Nature's value does not depend on how a human sees it. Therefore, relying solely on emotional and subjective arguments for saving natural things is, according to Naess, irrational. Instead, he maintained, nature should be valued for itself, not for the monetary or emotional value placed on it by humans (Naess 2008).

Hundreds of years before Naess, Descartes asserted that animals were merely biological machines. He claimed that because animals lacked the ability to reason and use language they felt no pain. Therefore, he advocated for the vivisection of live animals without anesthetics or consideration of their suffering (Naess, 2008). Naess rejected the narrow self-interest view promoted by Descartes and instead opted for a combination of a Gestalt and Gandhian approach to his philosophy. Unlike Descartes, who Naess called immature in his relationship with animals, Naess proposed that through comprehensive maturity, or the incorporation of the importance of relationships with nonhumans with individual self-realization, humans could identify with all living beings. Many argue that

this deepening of the self makes up the basis of radical activists' moral arguments for animal liberation and radical environmentalism (Manes, 1990). For example, deep ecologist and radical activist Bill Devall said that his involvement with deep ecology did not begin with philosophical inquiry. Instead, he felt like protecting redwood forests was a personal commitment (Manes, 1990). Likewise, Paul Watson, founder of the Sea Shepherds, claimed that during a visit with the Oglala Sioux in 1973 he had a vision in which a buffalo told him to save the mammals of the sea (Manes, 1990). Later Watson would tell a story of looking in to a whale's eye as it died. He said he felt a connection with the whale; it was as though the whale conveyed its sadness to him (Animal Planet interview, n.d.). Watson claimed that this encounter affected him profoundly and said it is one of the reasons he engages in radical environmental activism to protect sea mammals (Manes, 1990).

Platform, levels, and proposals. The deep ecology philosophy allows for inclusion of a wide diversity of cultural, political, and spiritual traditions (Naess, 2008). Therefore, instead of strict principles or core values that exclude individuals based on certain cultural or social beliefs, Naess constructed a platform that consists of levels and proposals that explain the deep ecology philosophy as a way for people to live their lives. There are four levels of justification in the platform. First, worldviews and ecological belief. Second, the deep ecology proposal. Third, general consequences and guidelines for life modes. Fourth, rules, decisions, and actions. The eight proposals that make up the essence of deep ecology exist on level two and they are: (a) All life has inherent value separate from human needs or wants; (b) lower or primitive species of plants and animals

add to the richness of biodiversity and are subject to proposal one; (c) Humans only have the right to reduce richness and diversity for vital needs; (d) reduction and stabilization of global human population will take time but must happen to reduce the rate of extinction of nonhuman species; (e) it will take time for humans in first world countries to reduce their destructive consumption practices drastically. (Naess, 2008, Section 2). Although the change will be gradual, it must happen. According to Naess, this does not mean that humans should not modify some ecosystems to suit their needs. On the contrary, while Naess suggested that other species modify ecosystems and humans have done so for generations, he did suggest preserving large areas to maintain biodiversity, therefore, (f) economic growth, as it is currently encouraged by industrialized nations, is environmentally destructive because it does not take into consideration cultural diversity, biodiversity, or global concerns. Naess advocated for global action through nongovernmental agencies and grassroots movements. Further, he advocated for the use of alternative or soft technologies to promote environmentally sustainable economic growth, through (g) exchange obtaining a higher standard of living ideal for an increase in quality of life ideal. And finally, (h) by realizing, that the deep ecology umbrella covers a broad range of opinions, beliefs, cultures, and priorities those who subscribe to the philosophy must be willing to be involved in implementing the proposals to improve both the condition of nature and humanity (Naess, 2008, Section 2).

Though the eight proposals occur on level two, Naess (2008) proposed that individuals move from level to level when considering an issue and any actions or inactions they may take. A review of nonscholarly sources found that many

communiqués posted on extreme animal liberation websites include language that allude to the importance of deep ecology proposals in how activists perceive the situations they encounter. Many communiqués make reference to animal suffering, human indifference to that suffering, destructive practices of economic growth, namely capitalism, and the need for humans to lessen their impact on the natural world (North American Animal Liberation Front, 2010).

Ecofeminism

Ecofeminism, considered part of the third wave of feminism, is a social movement that emphasizes the importance of human/nature relationships (Mack-Canty, 2004; Warren & Cheney, 1991). It blends concepts from ecology, the notion of interconnectedness, and from feminism, the notion that domination of women is linked to other social and ecological ills. Ecofeminism is a global form of feminism and environmentalism that is founded on common concerns of women yet celebrates their differences (Lahar, 1991). Like deep ecologists, ecofeminists embrace the notion that humanity and nature interact; however, unlike deep ecologists, ecofeminists assert that the oppression and devaluation of nature by male dominated politics and environmentalism are linked to wrongs suffered by women (Alaimo, 1994; Warren, 2000). To an ecofeminist, understanding issues like pollution, water usage, deforestation, food production (specifically genetically modified foods and factory farming), use of animals for entertainment or research, and over population, is vital because understanding these issues leads to the understanding of how women and other populations are devalued by patriarchal capitalist policies (Birke, 1986; Warren, 2000). Specifically, ecofeminist

scholarship examines issues such as the impact of monoculture agriculture on soil fertility and food production, the introduction of global markets and the destruction of local market places, urban environmental health issues, water and air pollutant and diseases, and women's engagement in grassroots activism (Lahar, 1991). Ecofeminists claim the parallel between the domination and abuse of the natural world (animals included) and the plight of women and other marginalized populations is commonplace in western culture (Birke, 1986). They point to metaphors that personify women and nature as interchangeable- Mother Earth, fertile fields, raping the land, bitch, birdbrain, fox, she wolf, fresh meat, and old bat, as examples of this duality (Alaimo, 1994, Warren, 2000).

Unlike deep ecology, finding a voice that unifies the platforms of ecofeminism is difficult (MacGregor, 2006). Feminists insist that patriarchal societies often ignore women's daily interactions with the environment (Lahar, 1991). Furthermore, they suggest that a historical shift in cultural practices reduced women and natural resources to commodities that men dominate through the establishment of hierarchies and capitalism (Roach, 1991). The varied voices of academic and nonacademic ecofeminists agree that there is a connection between the treatment of nature and the treatment of women; however; the connection is hotly debated.

One school of ecofeminist thought, essentialism, postulates that women are biologically closer to nature than men; that women are more humane than men; and, that women have higher moral codes then men (Mack-Canty, 2004). Essentialists promote the notion that feminizing nature through images like Mother Nature or Mother Earth conveys a caring message and creates a parallel of the reproductive and nurturing

capacities of females with nature (Roach, 1991; Warren & Cheney, 1991; Warren, 2000). Therefore, they argue patriarchal societies should be dismantled, hierarchies should be eliminated, and society should be guided by socialism and matriarchal values (Mack-Canty, 2004; Warren, 2000).

Although antiessentialists agree with the dismantling of patriarchal society and hierarchies, they disagree with the idea of a biological feminine construct. In their view, feminine is a socially constructed definition and the woman-nature link is seen as exploitive (Roach, 1991; Warren, 2000). Antiessentialists believe that instead of liberating and bringing forth the importance of nature through ecocentric values, using feminizing metaphors like those mentioned previously further engrains the idea that women are somehow responsible for all that is wrong in society and nature and not instilling matriarchal values provides a solution to the problems (Mallory, 2006; Warren, 2000). Furthermore, they argue that feminizing nature perpetuates the myth that women are weaker than men are, need to be controlled and dominated, and are expected to reproduce (Mallory, 2006).

Ecoanarchy

Despite the fact that anarchy has been around since the early 1930s, and was somewhat prominent in the 1960s, there is very little quantitative literature on the subject (Williams, 2009). Like ecofeminism, one set philosophy does not define anarchy. Instead, there are variants of anarchist beliefs with two main variants standing out, red and green (ecoanarchy). Red anarchists tend to support an archo-communism and are primarily concerned with economics and social issues including classism and workers' rights.

Green anarchists or ecoanarchists focus their attention on environmental issues, worrying more about how human behavior affects biotic regions (Davidson, 2009; Williams, 2009). Like deep ecology and ecofeminism, anarchists contend that the destruction of the environment and the human spirit is due to civilization, capitalism, technology, domestication of plants and animals (farming, work, and pets), and what they call the domestification of humans through work, education, culture, and religion (Davison, 2009; Parson, 2007, Williams, 2009).

Ecoanarchists advocate for the reconstruction of modern civilization by dismantling hierarchal governments, eliminating social and economic classes, and replacing capitalist driven economics with varying forms of collectivist economics (Parson, 2007; Williams, 2009). They reject the concept of religion, profit driven economics, education, land ownership, capitalism, and many even reject established language (Hintz, 2007). Zerzan (1999) asserts that domestification is the cause of social ills like racism and sexism. He furthers suggested that the evolution of language changed the way humans view the world. Once early humans had language, symbolic meaning was lost to precision and timelessness was lost to time. Language and the establishment of time, according to Zerzan, cause both social and economic oppression and therefore, should be abandoned (Zerzan, 1999).

Although both variants of anarchism take strong stands in favor of population control, the green anarchists are the most outspoken on the subject. The Green Anarchist Political Manifesto denounces humanitarian aid in times of natural disaster and is strongly against medical research for diseases citing that natural disasters and disease are

natural population controls (Green Anarchist Political Manifesto, n.d.). The ecoanarchist belief that modern society uses far more natural resources than can be ecologically sustained, combined with the belief that federal and state governments fail to acknowledge this fact, has been linked to acts committed by the ALF, ELF, and EF! (Scarce, 2006; Williams, 2009).

Although both the red and green factions consider themselves true anarchists, the ideological discourse between them is vast. Red anarchists charge that ecoanarchists ignore classism issues and advocate for the dismantlement of capitalism, which would negatively affect a large percentage of the world's population. They also charge that ecoanarchists fail to appreciate the importance of careful planning and execution of organized responses to issues leading red anarchists to accuse ecoanarchists of favoring uncoordinated actions and even chaos (Williams, 2009). Conversely, ecoanarchists criticize red anarchists for their support of formal organizations like labor unions. They also chastise red anarchists for putting greater emphasis on economic interests than on ecological concerns (Williams, 2009).

Some ecoanarchists, like John Zerzan, take a more radical ideological stand by urging the rewilding of humanity and nature to return balance to biotic communities (Hintz, 2007; Zerzan, 2005). Rewilding refers to the primitivism view of the transformation of modern humanity back to primitive nomadic hunter-gatherer societies. They support the use of natural resources such as animals and animal skins for food and clothing. Although primitivism is not a dominant thought in ecoanarchy its goal of destroying civilization is becoming prominent in the new philosophy of radical activism.

This shift in ideology can be traced back as early as 1997 when the Beltane communiqué was released:

> Welcome to the struggle of all species to be free. We are the burning rage of dying planet. The war of greed ravages the Earth and species die out every day. The ELF works to scare the rich, and to undermine the foundations of the state. We embrace social and deep ecology as a practical resistance movement. We have to show the enemy that we are serious and about defending what is sacred. Together we have teeth and claws to match our dreams. Our greatest weapons are imagination and the ability to strike when least expected. (Beltane, 1997, no page)

In addition, an anonymous communiqué released on August 11, 2002, shows the shift in radical activist thinking from deep ecology's concern with nature and social well-being to a militant threat against civilization.

> …Their blatant disregard for the sanctity of life and its perfect Natural balance, indifference to strong public opposition, and the irrevocable acts of extreme violence they perpetrate against the Earth daily are all inexcusable, and will not be tolerated. IF they persist in their crimes against life, they will be met with maximum retaliation… The diverse efforts of this revolutionary force cannot be contained, and will only continue to intensify as we are brought face to face with the oppressor in inevitable, violent confrontation. We will stand up and fight for our lives against this iniquitous civilization until its reign of TERROR is forced to an end – by any means necessary (Earth Liberation Front, 2002, no page).

Moreover, Derrick Jensen (2006) wrote about the difficulty facing those who wish to destroy civilization

> Bringing down civilization is millions of different actions performed by millions of different people,… it is everything from comforting battered women to confronting politicians and CEOs. It is everything from filing lawsuits to blowing up dams. It is everything from growing one's own food to liberating animals in factory farms to destroying genetically engineered crops and physically stopping those who perpetuate genetic engineering…it is destroying the capacity of those in power to exploit those around them. In some circumstances this involves education. In some situations, this involves undercutting their physical power, for example by destroying physical infrastructure…in some circumstances it involves assassination (Jensen, 2006, p. 252).

Each of these writings demonstrates the blending of ideals into a new fluid ideology that embraces some tenants from deep ecology, ecofeminism, and ecoanarchy. As Parson (2007) pointed out, radical activists are moving away from leftist liberal thought and embracing philosophies that are more open in interpretation of earlier ideologies and, they seem to be embracing philosophies that demand social and economic change at the threat of violence.

Predictors of Radical Activism

Previous research on radical activism has primarily been qualitative in nature and has been conducted with college students and predominately mainstream group members (Galvin & Herzog, 1992; Goodman & Sanders, 2011; Herzog, 1993; Mallory, 2006).

Juris and Pleyers (2009) concluded that based on ethnographic studies from 1997 to 2007 a subculture of middle-class, urban, globally concerned activists who are mainly in their twenties and early thirties has emerged. Further, Juris and Pleyers contended that the formation of a subculture among young, urban, middle class individuals reveals a highly globalized network of activists who act in collaborative forms and share information more readily across social networks and issue specific forums. In addition, previous qualitative and ethnographic research suggested a decline in young people's participation in traditional modes of political and social protest and an increase in alternative forms of participation and protest (Juris & Pleyers, 2009). Much of the criticism surrounding radical activism research centers around the fact that very little quantitative literature exists on the topic; therefore, many of the assumptions made from qualitative studies are controversial because they rely on individual explanations for behaviors not empirical data (Cherry, 2006).

Research on collective identity and political action, which again is largely qualitative in nature, suggested a strong relationship between social identity and activism (Stryker, Owens, & White, 2000). Saunders (2008) used a case study approach to examine collective identity and solidarity among members of three environmental groups. Three differing forms of identity emerged from the study. Individuals (conservationists) who were members of a conservation group who cared for a local nature reserve did not demonstrate a collective identity. Saunders posited that because the participants were open to differing opinions they did not make care of the reserve an all-encompassing facet of their lives, did not live a strict organic or other radical ideological

life, and did not self-identify with the others they shared responsibility with. Individuals (reformists) who engaged in traditional or mainstream political environmental activism demonstrated a moderate collective identity only so far as that participants demonstrated concerns and a passion for similar issues; however, issues were not the overriding focus of their lives. They lived in traditional housing, tended to be employed, and remained in mainstream culture. The third group (radical activists) studied was the only to demonstrate a collective identity based on strict adherence to radical ideologies such as anarchy. This group tended to include issues of concern into every facet of their lives from the clothes they wore to the places they slept (many were squatters) to the organic vegan food they ate to the punk music they listened to (Saunders, 2008). Other researchers suggested individuals become active or willing to engage in activism only when they had a strong self-identification or a feeling of belonging to a group (Liss, Crawford, & Popp, 2004). In a quantitative study that employed logistic stepwise regression, feminist identity was found to be the only variable that contributed to predicting feminist activism (Liss et al., 2004). Herzog (1993) found the majority of the participants in a qualitative examination of animal rights activism consider emotion to be the top reason for participation in actions and protest. Likewise, Dauvergne and Neville (2011) found emotion to be a critical pathway for engaging in activism; emotion is used by animal rights activists to establish the "us" versus "them" controversy. Animal rights activists, namely Greenpeace, Sea Sheppard's, and PETA rely heavily on emotional responses to further causes. For instance, Greenpeace's campaign to stop Canadian seal hunting relies heavily on pictures of small white seals with large black eyes and pictures

of seal hunters with clubs and hooks and ice covered blood. There are times when expression of an emotion such as anger is intertwined with collective identity (Zackariasson, 2009). Zackariasson (2009) explained that many activists in Stockholm felt anger at a young girl's rape. Their emotional response was expressed as collective action that allowed for the creation of an "us" versus "them" scenario. Jost et al., (2012) also found that emotion, specifically anger, was important to an individual's decision to engage in traditional activism, but emotion, specifically anger, was not a predictor for likeliness to engage in disruptive activism. Jost et al., argued that it is important to differentiate between what they call nondisruptive (traditional) and disruptive (radical) activism. In the case of disruptive (radical) activism, path analysis showed that identification with the teacher's union (in-group collective identity), not feelings of anger, were related to likeliness to engage in radical activism (Jost et al., 2012).

The literature reviewed has demonstrated a theme among the variables that have been studied, such that identity with a group or ideology is related to likeliness to engage in radical activism. However, what was not revealed is just as important. No study was found that examined information processing mode as a predictor for likeliness to engage in radical or traditional activism. Also, few studies were found that employed a quantitative methodology. The present study fills that gap in the literature.

Theoretical Foundation

Collective Identity

Finding a consensual definition for collective identity, much like terrorism, is difficult. According to Melucci (1995), collective identity is a basis for group solidarity

and claims of belonging to a group. He also emphasized the notion that collective identity is an interactive system of relationships and representations between several individuals whereby they share a common interest and goal. This interaction shapes the cognitive framework of groups but does not exclude differences. Instead, by framing collective identity as a process, Melucci posited that although the cognitive framework of a group is not necessarily unified, it is shaped by interaction in such a way that activists are free from completely agreeing with each other on ideologies, techniques, or goals while still maintaining the ability to come together (Melucci, 1995). Melucci has been criticized for defining collective action as a process that leads to social movement and not a 'thing' that is part of the social movement (Saunders, 2008). Although Melucci wrote about collective identity at the group and movement levels, his writings focused primarily on group levels. Snow (2001) contends that collective identity is a product not a process as suggested by Melucci. Collective identity, Snow argued, is the object that causes activists and opponents to respond. Identity, therefore is the perception of shared attributes and interests of group members also known as boundary work. Haenfler (2004) and Gamson (1997) accepted that shared commonalities helped established collective identity; however, boundary work created potential barriers between activists because it establishes an "us" and "them" mentality which causes exclusion within the larger movement. Furthermore, Swank and Fahs (2013) found that people who internalize a collective identity and framed narratives about the virtues of others based on who they believed is righteous or the in-group and who is a wrongdoer or the out-group is important in determining who will engage in activism.

Although Saunders accepted the argument that a singular collective identity was not a feature of an entire movement because of the sheer level of diversity among groups involved in different movements, she defended the notion that plural collective identities do exist at the group or individual level. In order to help differentiate between singular collective identities and plural collective identities a brief examination of the animal rights movement will be examined.

The animal rights movement is a global movement with thousands of smaller groups and individuals making up the movement itself. Those involved in the movement fall under the collective identity (singular) of animal rights supporter. A singular collective identity would consist of the lowest common denominator between all of the member groups—animals have a right to exist free from pain and suffering caused by humans. Individuals who belong to groups form their own collective identities (plural). For example, an animal rights supporter who puts a bumper sticker on a car shares the singular collective identity with every other animal rights supporter; he or she does not, however, share the collective identity of animal liberators who are actively involved in smaller groups. The animal liberators share a collective identity within the group (large or small) they belong to either by membership in the group or through employing similar tactics and organizational styles (Jasper, 1997).

Bobel (2007) supports Saunders' (2008) assertion that collective identity exists as plural and singular by acknowledging that association with a movement (singular) does not automatically earn one a collective identity as an activist (singular). Bobel's argument, that engaging in activism is not the same as being an activist, rests on the lack

of consideration that many collective identity scholars haven given to plural identities. According to Bobel, simply participating in a social movement in an ambiguous way does not determine who will and will not identity as an activist. Melucci (1989) contended that collective identity is constructed during latent moments—those day-to-day activities that include preparing for protests, spending time with other activists, and decision making. Seel and Plows (2000) also suggested that latent moments were important for collective identity formation; however, visible moments—time spent engaging in direct actions—were equally important for collective identity formation.

Saunders (2008) also challenged the assertion that collective identity cannot be stable as well as fluid as suggested by Sturmer and Simon (2004). It is possible for an individual to have many different collective identities; however, not all are salient at the same time and the readiness to define one's self as part of the collective identity of a group is largely depended upon to what extent the group is valued (Choup, 2008). Satterfield (2002) disagrees with Choup's (2008) stance. She found that collective identity is a fluid process requiring adjustment and refining. In her ethnographic study of the spotted owl controversy of the late 1980s and early 1990s, Satterfield's work showed how constructing cultural identities through differences instead of similarities created collective identities for both the loggers and the environmentalists. Each side vied for authority and recognition of their knowledge of forest ecology by attacking and counter-attacking the other. Holland, Fox, and Daro (2008) also found that collective identity is fluid. An examination of Mi'kmaq culture following the Marshall decision in 1999 showed how that culture changed dramatically, especially for fishermen. Prior to the

court ruling that upheld a treaty between the Mi'kmaq peoples and the Canadian government, the crux of the Mi'kmaq argument centered on cultural history and tradition. After the ruling however, Mi'kmaq fishermen found themselves redefining their collective identities in terms of economic opportunities, the movement that prompted the court battle, and their cultural history. They no longer collectively identified themselves as Mi'kmaq fishermen who fished for food; they now identified as fishermen who fished for profit (Holland et al., 2008).

Further, collective identity was conceptualized in this study as the plural form—from the group level because radical activists operate in clandestine cells or alone. The reason for these conceptualizations is simple; the extreme activists that are the focus of this study do not belong to a group in the traditional sense. Instead they subscribe to a philosophy that makes them part of a group. The philosophy of the movement is shared between members but members' identities are not shared with the larger movement. Simply by performing a direct action in the name of a group like the ALF, an individual becomes part of the ALF group, which is part of a larger animal rights movement.

Cognitive Experiential Self-Theory

CEST, a sociobiological theory of personality that considers neo-cortex limbic system research, suggests that individuals use two parallel systems for information processing (Epstein, 1991; 1994; 1996). The rational or logical system operates through cognition, analysis, and rationality. It is void of emotional concerns, is voluntary, and requires the individual to rely on resource knowledge or skills (Epstein, 1991; 1996; Ivan, 2011; Pacini & Epstein, 1999). The experiential system operates through emotional

responses, is involuntary, and does not require reliance on resource knowledge (Epstein, 1991; 1996; Ivan, 2011). According to Epstein (1991; 1999; 2003), the experiential system is an evolutionary processing system that operates on emotions; therefore, it produces emotions like a "gut feeling" instead of rational answers. It is specific to certain events and is generalized to memory by a connection to emotions as metaphors (Epstein, 2003). CEST is an automatic cognitive process that uses emotions to decode information and effortlessly make judgment (Epstein, 1996). More precisely, it means that when an individual perceives a situation the most emotional schema will become active for information processing (Epstein, 2003; Ivan, 2011). Pacini and Epstein (1999) posited that each processing system operates as parallel systems that are independent of each other. Ivan (2011) and Fox (1995) disagree arguing that while the systems are parallel they are also interdependent. Fox (1995) pointed to neurobiological research that demonstrated that the hemispheres of the human brain are more or less wired towards the use of degrees of rational processing.

Although a search of the literature did not reveal any studies on radical activism that used CEST as the theoretical framework, CEST has been used to study high risk behaviors like threat assessment, high risk financial investing, and gambling. Berger (2007) found that when information about a threatening action was presented in graphical or statistical form to individuals who relied on the rational information processing mode, those individuals analytically considered the threat information and showed an increase in apprehension. Conversely, individuals who relied on the experiential information processing mode showed less apprehension at the same threat information. Unlike the

rational system, the experiential system is more self-centric so individuals tend to inflate their self-beliefs and opinions and discount advice or information from outside sources (Godek & Murray, 2008). Godek and Murray (2008) examined whether likeliness to pay for financial advice was influenced by the rational or experiential information processing systems and whether decision making was influenced by either system. They found that likeliness to pay was influenced by the information presented. Rational system processors were more willing to pay for advice than experiential system processors. Experiential system processors often ignored advice or refused it because their self-centric beliefs led them to believe they understood the information presented and could make a decision without the advice of a professional financial advisor (Godek & Murray, 2008). This same reasoning may be able to be applied to radical activists. A notable decrease in radical activism did not follow the government's announcement that stricter penalties and special circumstances (i.e. terrorism) would be added to the charges of those arrested for engaging in radical direct actions. Convicted activists as well as those who anonymously post on ALF and other websites, consistently tout messages that claim a lack of apprehension or fear of being caught for engaging in radical actions and subsequently charged with terrorism circumstances under AETA.

Gunnell and Ceci (2010) found that participants identified as experiential system mode processors were more likely to be influenced by a hypothetical defendant's appearance and personality than by the evidence presented. Although rational system mode participants and experiential system mode participants convicted defendants at fairly similar rates, experiential system mode participants tended to impose harsher

sentences on less attractive defendants than did rational system mode participants. Experiential system mode participants were also more likely to say that other factors outside of the evidence presented at trial would be important in their decision to convict and impose harsh sentences. Radical animal rights and environmentalists often portray those they consider animal and environmental abusers as murderers and targets as part of an argument that relies on emotional reactions. Their communiques tend to dehumanize individuals they target. Images of suffering animals and deforested land are often used as visual aids to any explanation of radical actions. Radical activist groups do not have any formal organized structure so they rely on word of mouth, press releases, and websites to spread their messages. While not public service announcements (PSA), these activities can be framed in a similar manner as a public service announcement. Similar to Godek and Murray (2008), Nan (2009) found that degree of faith in intuition (experiential system mode) had a strong effect on anger felt by viewers of PSAs. Individuals who had strong faith in intuition felt more anger than those who used the rational system to process information. It can be argued that much of the rhetoric of radical animal rights and environmental activists is meant to provoke feelings of anger both in response to publicized animal and environmental abuses and at the alleged perpetrators of the abuses. For example, a recent news update on the North American ALF website detailed the liberation of hundreds of minks from a mink farm in the Midwest. The animals were portrayed as sweet, scared, and running for freedom while the farm was portrayed as a place of horrors, a torture shop, and inhumane. The farm owner was called a murder who

uses torture for money while the activists who participated in the raid touted themselves as saviors and friends of the mink (AFL, 2013).

Summary and Transition

Relevant literature relating to variables of the study including social identity, reliance on information processing mode systems, and radical animal rights and environmental ideologies, was reviewed to support the problem statement that little is known about the predictors of likelihood to engage in radical animal rights and environmental activism. This chapter reviewed studies related to (a) the historical background of the emergence of radical animal rights and environmental activism, (b) the ideologies that emerged as the major influences of animal rights and environmental activism, (c) the definition of radical animal rights and environmental activism with examples of each, (d) collective identity as part of the theoretical framework which offered an explanation of how identity forms and the importance it plays in individual's self-concept, (e) cognitive experiential self-theory as part of the theoretical framework which offered an explanation of how information is processed through a dual-processing system (g) mainstream animal rights and environmental activism, and (h) reviews of past methodologies used in radical activism studies.

Many studies that examined animal rights and environmental activism used qualitative methods to examine the emotional connections participants had towards places, animals, and the actions they engaged in (Herzog, 1993). The few quantitative studies that were found did not examine radical activism, and like the qualitative studies, they focused on emotional connections while ignoring social identity, information

processing modes, and ideologies. Studies examining radical animal rights and environmental activism have not been adequately explored. More specifically, the predictors of an individual's likeliness to engage in such behaviors has been ignored, most likely due to the leaderless style of resistance employed by radical activists that includes a code of secrecy that even federal agents have been largely unable to infiltrate.

Chapter 3 explains the methodological approach of the study. It will review how quantitative data was gathered and analyzed to answer the research questions. Additionally, there will be a review of the instrumentation, setting and sampling procedures, participant recruitment techniques, sample size, data storage, and methods used to ensure participant anonymity, and inclusionary and exclusionary criteria.

Chapter 3: Research Method

Introduction

Although not widely reported by mainstream media, radical animal rights and environmental activists continue to employ controversial tactics to further their political and social agendas (FBI, 2010). I conducted the current study to examine whether social identity (in-group ties, centrality, in-group affect), information processing mode (rational and experiential), and ideological beliefs (deep ecology, ecofeminism, ecoanarchy) were predictive of likeliness to engage in radical animal rights and environmental activism. I used cognitive self-experiential theory and collective identity theory as the theoretical framework for this study In this chapter, I describe the research design, population, sampling method and justification for the sample size, recruitment procedures, data collection, instrumentation, data analysis, procedures to protect participants from harm, and how data is securely stored.

Research Design and Rationale

In this quantitative study, I used a nonexperimental design and employed an online survey method. A nonexperimental design is appropriate when random assignment to groups is not possible, when there is no manipulation of an independent variable, or when there is no control group, all of which applied to this study. As expressed by Legewie (2010), a nonexperimental design is valuable for showing trends in data.

There is a lack of empirical research on radical activism, specifically animal rights and environmental activism. Previous research on beliefs and behaviors of those involved in radical environmental or animal liberation groups has been largely qualitative

in nature making it difficult to identify trends, identify predictors of behaviors, or generalize about groups in the radical movements (Bobel, 2007; Herzog, 1995). Qualitative research, which relies on interviews with participants, has allowed researchers to examine the process of radicalization of members of known hierarchal structured groups; however, leaderless groups like the ALF and ELF, which are secretive to the point that members are not known from cell to cell, have largely been underrepresented in both qualitative and quantitative research. Due to the legal ramifications of engaging in radical activism, specifically actions deemed ecoterrorism by the government, secrecy and anonymity were real issues for potential study participants (Klar & Kassar, 2009). Because of these issues, an interview method would not have yielded a robust sample; therefore, a survey method that allowed for anonymity was more appropriate for this study. Furthermore, Lum, Kennedy, and Sherley (2006) suggested that empirical research can provide trend information that would be useful for prevention and intervention strategy development. Legewie (2010) found that a nonexperimental design employing a survey method was valuable for showing trends for the effects of terrorist attacks on immigrant populations in Europe. In addition, Legewie (2010) found that employing a survey method yielded adequate participant response rates and data. Likeliness to engage in radical activism, the dependent variable, was operationalized by scores from the AOS. Reliance on information processing modes was parsed into two independent variables, experiential processing mode (EPM) and rational processing mode (RPM). These variables were operationalized by scores on the Rational Experiential Inventory Experiential subscale and Rational subscale, respectively. Social identity was parsed into

three independent variables that were operationalized by scores on the Three Factor Model of Social Identity (in-group affects [IGA], in-group ties [IGT], and centrality [SIC] subscales), and ideology (ID), one independent variable, was a categorical variable measured by the Participant Information Questionnaire.

There is no theoretical reason for assuming that one variable was more important than any other, and there was no need to manipulate the independent variables in this study because the intent was to examine the predictive value of the variables; therefore, simultaneous multiple regression analysis was used to analyze the data. SPSS Statistics v21.0 (IBM, 2013) was used to analyze data.

Methodology

Population

The target population of the current study was individuals who self-identified as radical environmental or animal rights activists. Convenience was a significant factor in data collection given that the radical activists who were the subject of this study operate in secrecy or as clandestine cells that do not have membership lists from which to recruit which precipitated the need to recruit participants from a sample of convenience. For this study, I collected a sample of 65 participants who were recruited from 27 Facebook pages and web forums of animal rights and environmental groups, my personal Facebook page, and other environmental, animal rights, and animal liberation websites, such as the unofficial ALF and ELF websites as well as from the official SHAC website through targeted e-mailing, postings on websites, and multipronged sampling strategies. The continual addition of groups and websites, along with the forwarding of the survey link

through adaptive strategies, allowed the study survey announcement to be posted on over two dozen animal rights, animal liberation, vegan, antifur, antifracking, antiKeystone pipeline, and other animal rights and environmental websites and Facebook pages. Continuous monitoring of the survey link and its standing in the order of posts on more than 27 sites proved to require a considerable amount of time each week. In addition, several members of groups publically discussed their concern over privacy and government involvement in this study despite reassurances to the contrary.

Each website or group employed different methods to facilitate participant recruitment in this study: direct e-mail to members from group administrators, direct online posting of the survey recruitment announcement by me, and online posting of the recruitment announcement by website administrators and forum moderators. Approval of the recruitment announcement scripts was obtained through the Walden University Institutional Review Board (IRB; Approval # 11-11-14-0056371). All approved protocols were followed regarding recruitment efforts.

Sampling and Sampling Procedure

According to law enforcement, individuals who are suspected of radical animal rights and environmental activism or who have been convicted of ecoterrorism tend to be White, middle class, individuals in their mid-20s to early 30s, and have some college education (Potter, 2009). Public records and anecdotal data provided in several publications (Herzog, 1993) support the demographic characterizations provided by law enforcement; however, more specific data on demographics are limited due to the extreme secrecy of individual animal rights and environmental activist cells. For the most

part, it was expected that participants in this study would align with known demographics; however, because the survey instruments were available online through SurveyMonkey, it was reasonable to hypothesize that individuals from a multitude of backgrounds took part in the survey. Further, to ensure participant anonymity, only age, gender, and education were collected; therefore, it is impossible to hypothesize the race or ethnicity of participants. Because radical animal rights and environmental activists are highly secretive, it was unwise to assume further similarities or differences among participants.

Although an a priori power analysis using G*Power 3.1.2 determined the necessary sample size for multiple regression analysis as 98 participants with a statistical power of .80 and a medium effect size, participant recruitment was discontinued after 4 months with a total of 73 usable data sets prior to removal of eight outliers. Data collection was discontinued after it was determined that recruitment efforts had been exhausted. Survey responses averaged one to two responses per week at the time that data collection ended. It was determined that the addition of more groups and websites and a longer period of time for data collection would not have likely yielded a significant increase in the number of total survey responses. A post hoc analysis using 65 participants realized a small effect size (f=.15) and an actual power of 0.58. A small effect size, as defined by Cohen (1988), is a difference in mean scores that is noticeably smaller than a medium effect size (f=.15).

The criteria for inclusion in the study were ability to read English, at least 18 years old or older, and ability to consent to participation as described in the consent form.

The criteria for exclusion in the study were inability to read English, under the age of 18 years old, and inability to give consent to participate as described in the consent form.

Procedures for Recruitment, Participation, and Data Collection

To protect participants' private information, all collected information including sociodemographic information and survey data is stored on a password-protected personal computer and a password-protected USB drive. Approval from the Walden University IRB was obtained before collecting data.

Participant recruitment included a multipronged sampling strategy including direct posting on my personal Facebook page, postings on the Facebook pages and webpages of various animal rights and environmental groups, and e-mail snowballing. Multipronged sampling has been shown to be useful in reaching participants that are secretive or hard to reach (Sadler, Lee, Lim, & Fullerton, 2010). In an effort to reach as many potential participants as possible, a recruitment announcement was posted on my personal Facebook page and my Facebook friends were asked to post the study link or to forward it to individuals they believed would be interested in participating in the study. In addition to posting the recruitment announcement on animal rights and environmental Facebook pages and web forums, I contacted four animal rights online forums and asked them to forward a targeted e-mail explaining the study to their members. Participants were directed to the SurveyMonkey website where they provided consent and completed the surveys and the Participant Information Questionnaire (see Appendix D). Data were collected anonymously online through SurveyMonkey and were exported into SPSS (IBM, 2013) for analysis. After completing the survey and the questionnaire, participants

were provided with contact information in case they had questions or concerns about the study.

Data Collection

Recruitment occurred through links provided on various websites including my personal Facebook page, animal welfare and animal rights Facebook webpages, environmental and conservation Facebook webpages, and various animal liberation websites. Information about the study, consent forms, and instruments were available online through SurveyMonkey. I did not have a number or a list of names of activists from which to draw a sample; therefore, participants were recruited from various websites using a multipronged sampling strategy.

Conversations with several animal rights Facebook group members led me to the existence of additional closed, private, and secret groups on Facebook. Administrators of groups can set their groups to "public" which means membership and postings are visible to any person who accesses that group's page. "Closed" groups are those that require permission from the administrator to join. The only information visible to the public is the group name and basic information regarding the purpose of the group. Closed groups may also require permission from the administrator to post comments or content on the site. "Private" groups are those that are closed and may or may not be visible to the public. "Secret" groups are those that are not visible to the public and require current member recommendation in order to join. Although two individuals claimed they did not participate in the study due to concerns over data security, they facilitated my access to three groups that were set as private. Another individual who was a member of a secret

group facilitated my access to a secret anarchy group. Members of that anarchy group directed me to additional animal rights and ecoanarchy groups. All groups permitted me to post the recruitment announcement on their sites. A survey of animal rights pages revealed that the survey link had been shared by at least four individuals, two of which was were known to me personally.

No incentives were given for participation in the study. All of the measures were self-administered through SurveyMonkey and no outside assistance was necessary; however, written instructions were provided (see Appendices A, B, C, and D). All instrument scores were tallied and data were entered into SPSS for analysis. Raw data will be available to other researchers for a 5-year period. Data are stored in a locked file cabinet that only I have access to.

Instrumentation

Permission to use the selected instruments for this study was obtained via e-mail from each of the instruments' authors. The author of the Three Factor Model of Social Identity as well as the author of the Activism Orientation Scale both responded to permission inquires by noting that the instruments were available in the public domain and therefore did not require permission for academic use. The authors of the Rational Experiential Inventory provided written permission for use of the instrument for this study. Table 1 provides the instruments' respective psychometric properties, theories, and constructs as they were examined in this study.

A participant information questionnaire was used to collect data regarding age, educational background, and ideological preference from participants. Each of the

instruments selected for this study quantified the independent variables or dependent variable and are discussed below.

Table 1
Alignment of Instruments to Theories and Variables

Instrument	Internal Consistency	Theory	Variable
Three Factor Model of Social Identity	.76-.84	CI	IGT, SIC, IGA
REI	.79-.90	CEST	RPM, EPM
AOS	.91		Likeliness to engage in radical activism

Three Factor Model of Social Identity Scale

The Three Factor Model of Social Identity Scale, developed by Cameron (2004), is a 12-item self-report scale designed to measure how three factors of social identity are conceptualized by the same individual (see Appendix A). An advantage of using The Three Factor Model of Social Identity Scale is that it is a self-report survey that takes less than 10-15 minutes for participants to complete. The items on the three subscales (in-group ties, centrality, and in-group affect) comprised the scale. Items are easily read and understood. Centrality is conceptualized as enduring psychological importance of being part of a particular group. In-group ties is conceptualized as a subjective bond with a group, and in-group affect is conceptualized as the emotional evaluation of being a member of a group (Cameron, 2004). Responses are presented on a 7-point Likert scale ranging from (1) *strongly disagrees* to (7) *strongly agrees*. Cameron (2004) conducted five studies using variations of the Three Factor Model of Social Identity Scale ranging

from 11 items to 15 items reflecting the scale's development over time. The last three of the five studies used the 12-item scale that was used in this study. Study 1 was conducted using an 11-item self-report scale with four items negatively phrased (Cameron, 2004). Participants included 167 primarily first-year undergraduate students. Study 2 was conducted using a scale of 15 items that were randomly ordered with seven items negatively phrased (Cameron, 2004). The self-report survey was administered to 148 undergraduate students in mixed sex groups of 10-15 participants. Study 3 was part of a larger survey (Cameron, 2004), which consisted of 12 items that assessed national identity, and it was mailed to an unspecified number of potential participants. Two hundred fifty-three participants (30% return rate), mean age of 48.8 years, returned completed surveys. Study 4 consisted of a survey that used the same 12 items that were used in Study 3 (Cameron, 2004). The items were adapted to assess gender-derived social identity. Three hundred twenty-one participants returned surveys for Study 4. Study 5, which included data from 189 undergraduate participants, followed the same procedure as Study 2 but used a revised scale of 12 items instead of 15 (Cameron, 2004). One hundred eighty-nine undergraduate participants completed the initial questionnaires. Participants were asked to return a week later to complete the questionnaire again. Of the original 189 participants, 176 returned to complete the retest. Internal consistency and reliability for the scale and the subscales ranged from .76 to .84 (p <.05, Cameron, 2004). Validity refers to the extent to which the items of an instrument measure what that instrument is supposed to measure. Correlational and regression analysis provided evidence of discriminant and convergent validity (Cameron, 2004).

The Three Factor Model of Social Identity was designed so that it could be easily adapted to examine social identities by inserting the name of a group being studied. For instance, the subscale In-group ties contains four statements: 1. I have a lot in common with other (in-group members). 2. I feel strong ties to other (in-group members). 3. I find it difficult to form a bond with other (in-group members). 4. I don't feel a sense of being "connected" with other (in-group members). For the purpose of the proposed study, the phrase "in-group members" were replaced with "environmental and animal rights activists" in all three subscales. Items 3, 4, 6, 8, 10, and 11 were reverse scored (Cameron, 2004). Scores on all 12 items were summed to obtain a possible range of 0-84. A high total score indicated that the individual's identity is strongly tied to a social group, in this case an animal rights or radical environmental group. Scores were also tallied for the individual subscales. High scores on the subscales indicated a strong association with that subscale and the individual's identity (Cameron, 2004).

Rational Experiential Inventory (REI)

The 40-item REI (Epstein, Pacini, & Norris, 1998) is a self-report survey consisting of two main scales that measure how individuals process information through the rational mode and the experiential mode. These two main scales are further divided into four subscales of 10 items each that measure favorability or the preference for a particular mode of thinking and ability or belief in one's personal success of using a particular mode of thinking. These subscales are (a) rational favorability, (b) rational ability, (c) experiential favorability, and (d) experiential ability. Clear directives

regarding the independent use of each the four minor subscales were not found in the literature; therefore, scores from the broader two main subscales were used for this study.

The REI used in the study is a revised version of the original Rational Experiential Inventory developed by Epstein et al. (1996). The original REI consisted of only two subscales and was unbalanced by negatively worded items that may have caused low internal consistency in the one of the original subscales (Pacini & Epstein, 1999). The revision of the 40-item REI replaced the two previous scales and added the four previously described. Items on the 40-item REI were worded in a positive manner and the 10 items for each of the four subscales were chosen from a group of 56 items (Pacini & Epstein, 1999). A factor analysis confirmed the existence of two independent main scales, the rational scale and the experiential scale. The 40-item REI was demonstrated to have adequate internal consistency and significant reliability with correlations ranging from .79 to .90 ($p < .05$) (Pacini & Epstein, 1999). High scores on the subscales indicated reliance on its respective mode of processing information. A high score on the overall scale indicated the individual is an experiential thinker and a low score indicated a rational thinker (Pacini & Epstein, 1999).

Activism Orientation Scale (AOS)

The AOS, developed by Corning and Myers (2002), is a published and widely recognized 35-item self-report survey questionnaire that measures an individual's likeliness to engage in social actions ranging from conventional activism (letter writing, attending a meeting) to more radical activism (participating in a protest when you know you may be arrested). By measuring activist behavior from a behavior specific

perspective instead of from an issue-specific perspective, the AOS was designed to have broad applicability (Corning & Myers, 2002). It is scored on a 4-point Likert scale where 0 is 'extremely unlikely' and 3 is 'extremely likely'. No items are reverse scored. The scale consists of two subscales, the conventional activism subscale that consists of 28 items, and the high-risk activism subscale that consists of seven items (Corning & Myers, 2002). The score on the conventional activism subscale, which includes letter writing, attending talks, and participating in discussions, can range from 0-84 with higher scores indicating greater likeliness of engaging in conventional activism. The score on the high-risk activism subscale, which includes engaging in protest that can lead to arrest can range from 0-21 with higher scores indicating greater likeliness of engaging in radical activism. The AOS is scored by totaling both scales for a possible total of 105. The authors conducted a study with environmental activists and non-activists and found that activists scored a mean score of 79.25 on the overall AOS while nonactivists scored a mean score of 48.00. Internal consistency of the original AOS was calculated using Cronbach's alpha was .96. Internal consistency for the conventional activism subscale was .96 and .91 for the high-risk activism subscale. Further, Corning and Myers (2002) investigated the psychometric properties of the AOS in regards to its ability to measure relationships between variables and predict membership in specific-issue related activism. The results showed the AOS's ability to predict membership in specific-issued related activism.

Participant Information Questionnaire

Participants were asked to complete a demographic questionnaire regarding their age, education, and ideological beliefs. A descriptive paragraph of each type of ideology (deep ecology, ecofeminism, and ecoanarchy) was presented and participants were asked to choose which, if any, ideology best reflected their personal ideological beliefs.

Data Analysis Plan

I used to SPSS Statistics Standard version 21.0 (IBM, 2013) to perform statistical analyses to test the study's three hypotheses. I used standard multiple regression modeling enter method to investigate the predictive value of social identity— IGT, SIC, and IGA; information processing mode—RPM and EPM; and ideology (deep ecology, ecoanarchy, and ecofeminism) while controlling for each variable. Ideology is a categorical variable and therefore was not parsed into separate variables for the initial regression analysis. Exploratory regression analysis driven by the results and literature was conducted to investigate the predictive values of each of the three ideologies for likeliness to engage in radical activism. I discuss the analyses and results in more detail in Chapter 4.

Data Analysis

This study examined the following research questions and hypotheses:

1. Does social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, predict likeliness to engage in radical activism as measured by the Activism Orientation Scale?
2. Does reliance on either the experiential or rational system information processing mode, as measured by the Rational Experiential Inventory, predict

likeliness to engage in radical activism as measured by the Activism Orientation Scale?

3. Do ideological beliefs (ecoanarchy, ecofeminism, deep ecology) predict likeliness to engage in radical activism as measured by the Activism Orientation Scale?

This study examined the following hypotheses.

$H_0$1: Social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, does not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$1: Social identity (in-group ties, in-group affect, and centrality), as measured by the Three Factor Model of Social Identity, does predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_0$2: Reliance on either the rational or experiential information processing modes, as measured by the Rational Experiential Inventory, does not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$2: Reliance on either the rational or experiential information processing modes, as measured by the Rational Experiential Inventory, does predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_0$3: Ideological beliefs do not predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

$H_1$3: Ideological beliefs do predict likeliness to engage in radical activism as measured by the Activism Orientation Scale.

Multiple regression is useful for estimating relationships between predictor variables and criterion variables and, for determining which predictor variable, if any, is important for the explanation of change in the criterion variable. The purpose of the study was to determine if social identity factors (in-group ties, in-group affect, and centrality), information processing mode factors (experiential mode and rational mode), and ideology predicted likeliness to engage in radical activism; therefore, simultaneous multiple regression, which considers all of the independent variables concurrently, was used as the analysis (Warner, 2008). When multiple regression is used, it is assumed that (a) linear relationships exist between predictor and the criterion variables, (b) there is multivariate normality, (c) there is no or little multicollinearity, and (d) the variance of errors is the same across all levels of the predictor variables (homoscedasticity). P-P Plot Assumption of Normality was used to test for normality. Multicollinearity was examined through bivariate correlation and examination of the variance inflation factor. Residual effects and outliers were examined through Mahalanobis Distance and Cook's Distance. Mahalanobis Distance testing revealed the presence of eight outliers. A review of the literature revealed considerable disagreement regarding the removal of outliers for analysis (Bakker & Wicherts, 2014; Cousineau & Chartier, 2010; Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007) suggest that outliers should be removed and replaced with the means of the remaining corresponding data. While this argument has merit, Cousineau and Chartier (2010) contend that removing outliers increases the chance for Type I errors. Bakker and Wicherts (2014) examined 2,667 studies and found that removing the outliers was not significantly related to weaker evidence for rejecting the

null hypothesis. However, because I was unable to determine if the outliers were produced from standardized failure (the participant's experience while completing the survey) or if the outliers were actually legitimate despite the small sample size, the outliers were excluded from the analyses.

Threats to Validity

External validity. Identifying and acknowledging potential threats to validity is essential for generalizability and integrity of the study results (Lui, Bowling, Huang, & Kent, 2013; Siah 2005). A common threat to external validity is sampling error and generalizability (Siah, 2005). In order to reduce sampling error, a recruitment announcement was posted on Facebook pages and web-based forums from a sampling frame of more than 27 animal rights and environmental web-based groups. Numerous members indicated their places of residence on their profiles. Countries of residence included the United States, Ireland, Australia, United Kingdom, Canada, France, and Indonesia. Although individual profile information and residency of group membership were not considered as a factors for including a group in recruitment efforts, the public profile information lent support to the representativeness of the sampling frame and the sample.

Another plausible threat to validity is insufficient effort responding (IER) to a survey. As pointed out by Liu, Bowling, Huang, and Kent (2013), IER occurs when participants fail to adequately read and respond to survey questions, when they arbitrarily choose responses to survey items, or when they fail to follow survey instructions which can lead to Type I errors. In order to reduce the possibility of such incidents, I chose

instruments that were reliable and valid. The REI, for instance, contains statements written in both positive and negative forms, which would therefore, allow for the detection of conflicting answers. One individual did post a comment on a group's Facebook page that encouraged individuals to participate in the survey but to not complete it so that the data would be unusable. This individual justified his comments by incorrectly stating that the study was being conducted in conjunction with law enforcement. The group administrator e-mailed me privately and I addressed her concerns, after which she removed the individual's comments from the recruitment announcement's comment section. I found 10 incidents out of 83 surveys that could not be used due to missing or incomplete data.

Participant fraud and participants over or underrepresenting their involvement in radical animal rights and environmental activism was also a concern for external validity (Siah, 2005). Participant fraud occurs when participants intentionally mislead researchers and the data by purposefully being deceptive in their responses. While this was a concern, the use of instruments that contained positive/negative item structures should have limited this behavior from impacting the results. Further, demographic data were limited to education level, gender, age, and ideological beliefs with one option for ideological belief being "I do not subscribe to any of these ideologies." Participant over or underrepresentation of involvement in radical activism was a concern; however, the data were collected anonymously and the IP collection function was turned off so no identifying information was collected. This information was included in the recruitment scripts as well as the informed consent.

One of the most significant threats to generalizability is small sample size and low statistical power. After several months of data collection it was determined that the threshold of willing participants had been reached. A total of 83 surveys were completed with 73 being usable for data analysis; however, eight outliers were removed prior to analysis.

Internal validity. While threats to internal validity must be seriously considered (Campbell & Stanley, 1963, Cook & Campbell, 1979) it is important to consider threats in the context of the study being undertaken. Several issues including history, maturation of participants, testing effects on outcomes of subsequent tests, changes in instrumentation over time, regression to the mean, confounding variables and the Simpson Paradox, and experimental mortality are threats to validity to experimental quantitative design but not all are necessarily threats to the nonexperimental quantitative design which was employed in the current study (Onwuegbuzie, 2003). Confounding variables and the Simpson Paradox posed the largest threat to validity for this study. While the survey instruments were designed to be self-report instruments and therefore it was assumed that participants would answer the items using careful self-reflection, the notion that participants may have answered survey questions based on what they thought friends and family expected cannot be ruled out. Participant conformity cannot be ruled out as a confounding because there is no way of knowing if participants filled out the survey items privately or in a group setting. Willingness to participate was also a concern. One subject posted on an animal rights group Facebook page "I didn't think your survey was so long! I started it but didn't finish it!" This led to a reply from another member

stating, “thought about taking it…not gonna now. thx.”

Construct validity. In an effort to address potential threats to construct validity, I implemented the following strategies. First, in order to address potential issues with operational definitions, I used operational definitions that were found in peer reviewed literature. The use of operational definitions that have been scrutinized and agreed upon in the literature allows for the avoidance of definitions that do not clearly or accurately define constructs which could lead to inaccurate data and interpretation (Cook & Campbell, 1979; Trochim (2006). A second threat to construct validity is mono-method bias whereby reliance on a single measure fails to provide complete measurement of a construct (Trochim, 2006). To avoid this, I provided peer reviewed operational definitions and used reliable and valid instruments that were specifically designed to measure the constructs as defined. Another threat to construct validity is hypothesis guessing which occurs when participants try to guess or figure out the purpose of the study so they can answer instrument questions in certain ways (Trochim, 2006). To avoid this issue, when asked about the purpose of the study, I provided the approved script that simply stated the study was investigating psychological variables and engagement in activism as an answer.

Over the course of the four months of data collection, numerous individuals questioned whether this study was being conducted in conjunction with or for law enforcement. In an effort to alleviate the emergence of participant anxiety produced by belief that law enforcement was involved with this study, I provided my contact information to individuals who questioned the intentions of the study and I assured

individuals that this study was not affiliated with law enforcement. Because this study was conducted through online data collection by posting recruitment announcements on over two dozen animal rights and environmental group webpages and forums, threats to construct validity manifested in the form of individuals who were openly hostile to the study posting negative, and often, inaccurate comments regarding the study, the instruments, and what they believed I would do with the results. Individuals who engaged in the behavior encouraged others to either not participate or to agree to participate but to deliberately provide inaccurate or missing data. In an effort to curb this threat, I addressed each individual poster's concerns by reassuring individuals that the study was a dissertation study and had no affiliation with law enforcement. I reiterated that all data would be collected anonymously and that all results would be reported as a group.

Measures for the Protection of Participants' Rights and Privacy

Walden University IRB approval was obtained prior to conducting research and collecting data. Participants were informed that their participation in this study was voluntary and they could choose to end their participation at any time. Participants were asked to read an informed consent form that outlined the ethical guidelines of this study. Consent was implied if participants continued to the survey. All ethical considerations for this study were based on the APA ethical guidelines as well as Walden University's IBR guidelines. Although none of the instruments used in this study was anticipated to cause harm or distress to participants, the AOS asked participants to indicate the likelihood of their participation in actions that are considered ecoterrorism by the United States government, which may have caused some participants distress. Participants were assured

that survey data were anonymous and did not contain identifying information. Participants were informed that the survey link and the survey pages were SSL encrypted for security and the IPO function was turned off. Participants were provided with my contact information in case they required more information about the study and data storage.

Data were stored in password-protected files on a secure server through SurveyMonkey. All data integrated into SPSS were stored in password protected files on my private laptop computer, which is also password protected. All data located on my laptop were transferred to an encrypted USB drive and is stored in a locked box in my home. Data files on my laptop computer have been deleted. After five years, the encrypted USB drive will be destroyed.

Summary

I conducted this study to investigate the predictive value of social identity (IGT, SIC, and IGA), information processing mode (RPM and EPM), and ideological beliefs on the likeliness to engage in radical animal rights and environmental activism. To determine predictive value, I used a quantitative design and all data were collected through an anonymous online survey. Three empirically validated surveys, the Three Factor Model of Social Identity, REI, and the AOS, as well as a demographic participant survey were accessible for 4 months through a link for SurveyMonkey. Participants were recruited from numerous animal rights and environmental web based groups using a multipronged approach. In order to safeguard participant welfare participants were asked to read an informed consent form provided on the link. Agreeance to participate in the

study was assumed when the participant continued to the survey. I used multiple regression analysis to determine the predictive value of IGT, SIC, IGA, RPM, EPM and ideological beliefs on likeliness to engage in radical activism. In an effort to determine if the identified outliers had impact on the acceptance or rejection of the null hypotheses multiple regression analysis was run with and without the outliers.

In Chapter 4, I will provide an overview of the results of the study including demographic information, statistical analyses, and tables for ease of interpretation.

Chapter 4: Results

Introduction

In the following chapter, I present the study's findings, which help provide an understanding of radical animal rights and environmental activism. I begin with an explanation of the study timeframe, the difficulties encountered while attempting to recruit individuals who belonged to secretive groups, and the circumstances that led to the decision to terminate data collection. Further, I present participant demographic information, including age, education level, and gender, as an indication that the sample was representative of the population and that the sample aligns with known radical activist demographics. Lastly, I present the results and the statistical analyses used to test the research hypotheses.

Data Collection

Time Frame, Actual Recruitment, and Response Rates

The online self-report survey was available through three SurveyMonkey Web Link Collector ULRs. An initial sample of 98-123 participants was targeted based on an a priori power analysis which was discussed in Chapter 3. Eighty-three participants accessed the survey from mid-December 2014 to mid-April 2015. Of those, 10 surveys were deemed unusable due to incomplete or missing data. The overall usability rate, total-to-usable surveys completed, was 88%.

Of the 73 usable surveys, none had missing data points for the Three Factor Model of Social Identity Scale (in-group ties, centrality, and in-group affect). Seven responses had missing data for the REI scale. Six responses were missing one data point,

and one response had two missing data points. Five responses had data points missing from the AOS with none missing more than one data point. Only one survey had data points missing from both the REI and AOS; however, the missing data points were limited to one point on each scale. According to A. Corning (personal communication, January 19, 2015), the standard procedure for dealing with missing data is mean substitution, which is a standard practice in the social sciences. Downey and King (1998) suggested that mean substitution was acceptable for data where <20% of data values were missing. The REI had a missing data value of .002% and the AOS had a missing data value of .001%, both well below the no more than 20% suggested by Downey and King. Surveys that had missing responses for the Participant Questionnaire, specifically the ideology section, were not included in the analyses as there was no mean value to replace missing values due to the fact the values were categorical.

Adverse Events and Participant Comments

Throughout the data collection timeframe, no participants reported psychological stress or adverse events due to participation in the study. A few individuals did express concern over data security and whether or not law enforcement was involved in the study. I addressed these concerns with each individual; however, it is not known if any of the concerned individuals participated in the study. Two individuals publically supported the study and even shared the link but both stated that they would not participate unless I met with them face to face. I explained that due to the study's design and financial concerns, I would be unable to do that. Both explained that they feared the involvement of law enforcement (a recurring theme) and would feel better if they could meet with me.

Another individual posted a comment that she completed the survey but realized that I was "working with the cops." She warned me that she was going to find me and burn my house down. I notified the group administrator who removed the comments. The administrator also informed me of the individual's self-reported location, and I determined that her threats did not constitute any real danger to myself or my family. One male participant from one of the secret ecoanarchy groups publically stated that he participated in the survey but did not answer the "last bunch of questions" (AOS scale). Furthermore, he encouraged others to do the same to "screw with the data." Seven of the 10 unusable surveys were missing all responses for the AOS. It is unknown if the individuals who completed these seven surveys were following the suggestion of the male who posted the comment about the data or if there were other reasons, such as responder fatigue, that prevented them from completing the AOS. Many individuals, on the other hand, posted good wishes for the outcome of my study and asked me to post the results on group websites when available.

Data Cleaning Procedures

No matter how well the design of a study is, data errors can occur; therefore, it is necessary to clean data prior to analysis and to report the methods used to clean data (Van den Broek, Cunningham, Eeckels, & Herbst, 2005). Van de Broeket al. (2005) suggested a 3-step method to data cleaning: (a) screening, (b) diagnosing, and (c) editing. Screening began with reviewing survey responses as they appeared on SurveyMonkey prior to importation in to SPSS. I examined the responses in each survey to determine if there were missing data, incomplete surveys, or patterns of participant response fraud whereby

a participant chose a single answer for every question without regard for the truth or validity of his or her answer. Once data were imported into SPSS, I screened the data again and identified potential issues such as missing data and incomplete responses. Survey responses that contained partially or wholly incomplete data points (> 20%) were excluded from analysis. Survey responses that contained missing data points for ideology were excluded from analysis for the reason stated earlier. In total, 10 responses were excluded from analysis leaving 73 usable surveys. I employed mean substitution for all missing data points. There were seven missing data points for the REI and five missing data points for the AOS. There were no missing data points for the SI.

Data cleaning was also used to identify any potential issues with outliers, degree of linearity of the variables, and the shape of the distribution. In order to identify potential multivariate outliers in the data (i.e., values for IGT, SIC, IGA, RPM, EPM, and ID), I ran a Mahalanobis' D^2 test (IBM, 2013). Using a critical X^2 value = 12.59, p = .001, and df = 6 as parameters, the maximum Mahalanobis value of 29.87, mean = 7.89 indicated there were eight outliers present. These eight outliers were removed prior to analysis leaving 65 usable surveys.

Results

Demographic Characteristics of the Sample

Table 2 shows descriptive statistics (age, gender, and education level) for 73 adults who participated in this study. Fifty females (68.5%) and 22 males (30.1%) participated. Twenty-five individuals aged 18-29 years constituted 34.2% of the sample; 17 individuals aged 30-39 years constituted 23.3% of the sample; 13 individuals aged 40-

49 years constituted 17.8% of the sample; and 18 individuals over the age of 50-years-old constituted 24.7% of the sample. Fifteen (20.5%) of those who participated in the study had a high school or equivalent education. Twenty-five (34.2%) had some college. Twenty (27.4%) had a bachelor's degree and 13 (17.8%) had a graduate degree. In order to maintain participant anonymity, no other demographic information was collected.

Table 2
Demographics of Sample (N = 73)

Variable	n	%
Sex		
Female	50	68.5
Male	22	30.1
Not disclosed	1	1.4
Age		
18-29 years	25	34.2
30-39 years	17	23.3
40-49 years	13	17.8
Over 50 years	18	24.7
Education Level		
High School/GED	15	20.5
Some College	25	34.2
Bachelor's degree	20	27.4
Graduate degree	13	17.8

Assumptions Testing

To test for linearity of the variables I generated partial regression plots for each of the variables. Plots for all variables showed linear relationships between the predictor variables and the criterion variable. Scatterplots revealed adequate consistency within each distribution which demonstrated homoscedasticity. Tests for skewness and kurtosis for in-group ties, centrality, in-group affect, rational processing mode, experiential

processing mode, and ideology showed both platykurtic and leptokurtic distributions, thus allowing for the assumption of normality (see Table 3).

Table 3
Central Tendency, Standard Deviation, Skewness, and Kurtosis for Predictor Variables (N = 65)

Variable	*M*	*SD*	Skewness	Kurtosis
IGT	21.00	4.73	-.50	-.59
SIC	18.27	3.46	-.78	.06
IGA	24.67	3.46	-.77	-.20
RPM	70.58	6.30	-.07	.09
EPM	66.55	9.30	-.46	-.20
ID	1.91	1.27	.79	-1.23

Note. IGT = in-group ties; SIC = centrality; IGA = in-group affect; RPM = rational processing mode; EPM = experiential processing mode; ID = ideology

Scatterplots of studentized residuals revealed random distributions among data points. A Durbin Watson statistic (d = 1.41) indicated the lack of serial correlation in the regression model. In order to test for multicollinearity, I examined collinearity statistics tolerance (> .90) and VIF (<10). Tolerance ranged from .50-.90. VIF ranged from 1.12-2.02 (< 10); thus, the model demonstrated that the predictor variables were not highly correlated; therefore, the model met the assumption regarding multicollinearity.

Research Question 1

The first research question examined whether social identity (in-group ties, in-group affect, and centrality) as measured by the Three Factor Model of Social Identity predicts likeliness to engage in radical animal rights and environmental activism as measured by the AOS. To test the hypothesis, I employed standard multiple regression

analysis using the enter function to determine the predictive value of social identity which was parsed into three variables—in-group ties, centrality, and in-group affect.

Table 4
Regression Coefficients for Social Identity (N = 65)

Variable	B	Std E	Beta	*t*	Sig,
IGT	-.08	.19	-.07	-.42	.67
SIC	.41	.23	.26	1.77	.08
IGA	.38	.27	.22	1.41	.17

As shown in Table 4, data analysis indicated that none of the social identity variables was a significant predictor of likeliness to engage in radical animal rights and environmental activism ($p < .05$). A linear relationship existed between the three social identity variables and likeliness to engage in radical activism, and no serious violations of normality were detected. Residual plots did not indicate any detectable pattern; therefore, it was assumed that there was no violation of homoscedasticity.

Research Question 2

In the second research question, I examined whether information processing mode (rational processing and experiential processing) as measured by the REI predicts likeliness to engage in radical animal rights and environmental activism as measured by the AOS. To test the hypothesis, I employed standard multiple regression analysis to determine the predictive value of information processing which was parsed into two variables—rational processing and experiential processing.

Table 5
Regression Coefficients for Cognitive Processing Mode (N = 65)

Variable	B	Std E	Beta	t	Sig,
RPM	-.33	.11	-.37	-.31	**.003**
EPM	-.01	.08	-.10	.-10	.92

Note. Rational processing mode is significant at $p < .05$

The coefficient table indicated that rational processing mode was a significant predictor at a significance level of $p < .05$ indicating that high REI rational subscale scores were predictive of likeliness to engage in radical activism (see Table 5). A linear relationship existed between the two information processing mode variables and likeliness to engage in radical activism, and no serious violations of normality were detected. Residual plots did not indicate any detectable pattern; therefore, it was assumed that there has been no violation of homoscedasticity.

Research Question 3

In the third research question, I examined whether ideology (deep ecology, ecofeminism, and ecoanarchy) predicted likeliness to engage in radical activism as measured by the AOS. To test the hypothesis, I employed standard multiple regression analysis to determine the predictive value of ideology. Ideology was not parsed into three variables due to lack of convincing evidence to do so in the literature. Ideology was treated as categorical variable and dummy variables were created in order to complete the analysis.

Table 6
Regression Coefficients for Ideology (N = 65)

Variable	B	Std E	Beta	t	Sig.
ID	.22	.55	.05	.40	.69

The coefficient table indicated that ideology was not a significant predictor at a significance level of $p < .05$ (see Table 6). A linear relationship existed between the two information processing mode variables and likeliness to engage in radical activism, and no serious violations of normality were detected. Residual plots did not indicate any detectable pattern; therefore, it was assumed that there has been no violation of homoscedasticity.

Regression Model Analysis

After reviewing the literature, none of the six predictor variables was any indicated to be more or less important in determining likelihood to engage in animal and environmental activism; therefore, standard multiple regression using the enter method was employed to examine the combined predictive values of the variables.

Table 7
Regression Summary (N = 64)

Variable	B	SE	β	*t*	95% CI		Tolerance	Sig
(Constant)	16.22	10.37		1.60	[-4.13	37.36]		.11
IGT	-.80	.19	-.07	-.42	[-.46	.30]	.49	.67
SIC	.41	.23	.26	1.77	[-.05	.88]	.61	.08
IGA	-.38	.27	.22	1.41	[-.16	.91]	.55	.17
RPM	-.33	.11	-.37	-3.11	[-.54	-.12]	.90	**.003**
EPM	-.01	.08	-.01	-.10	[-.16	.15]	.76	.92

Table 7 continued

Variable	B	SE	β	*t*	95% CI		Tolerance	Sig
ID	.22	.55	.05	.40	[-.87	1.31]	.83	.69

Note. R = .498; Adjusted R^2= .170; $F(6, 64) = 3.18$; RPM ($p < .05$)

Table 8
Model Summary[b] of Multiple Correlation, R Square, Adjusted R Square, and Standard Error of the Estimate- All variables

Model	R	R Square	Adjusted R Square	Standard Error of Estimate
1	.498[a]	.248	.170	5.04

Note. a. Predictors: (Constant), IGT, SIC, IGA, RPM, EPM and ID
b. Dependent variable: likeliness to engage in radical activism

Regression analysis showed the *R* (.50) was statistically significant, $F(6, 64) = 3.18$, $p = .009$, *Adjusted* $R^2 = .140$ (see Table 8). Table 7 shows that rational processing mode was significant ($\beta = -.37$, $p = .003$*)* and accounted for 32% of the variance for likeliness to engage in radical activism. SIC, IGT, IGA, EPM, and ID were not significant predictors for likeliness to engage in radical activism.

Exploratory Regression Analysis: Ideology

An exploratory regression analysis was conducted to examine whether DE and EF were predictors of likeliness to engage in radical activism. EA was excluded from the analysis due to missing correlations. Table 11 shows the statistical contributions of the three categories of ideology.

Table 9
Regression Coefficients: Deep Ecology and Ecofeminism (N =65)

Variable	B	Std E	Beta	*t*	*p*
DE	2.20	1.63	.19	1.35	.183
EF	7.38	2.16	.49	3.42	**.001**

Note. EF was significant at $p < .05$
EA was excluded from analysis due to missing correlations

Random distributions among data points were revealed among scatterplots of studentized residuals. A Durbin Watson statistic ($d = 1.41$) indicated the lack of serial correlation in the regression model. In order to test for multicollinearity I examined collinearity statistics tolerance (> .90) and VIF (<10). Tolerance was .668 for both DE and EF (< .90). VIF was 1.50 for both DE and EF (< 10); thus, the model demonstrated that the predictor variables were not highly correlated. Therefore, the model met the assumption regarding multicollinearity.

Table 10
Model Summary DE, EA, and EF (N =65)

Model	*R*	*R Square*	*Adjusted R Square*	*Standard Error of Estimate*
1	.406 [a]	.165	.138	5.14

Regression analysis showed the R (.41) was statistically significant, $F(2,65) = 5.14$, $p = .004$, Adjusted $R^2 = .197$ (Table 10). Table 9 shows EF was statistically significant ($\beta = .49$, $p = .001$) and accounted 49% of the variance for likeliness to engage in radical activism in the ideology and likeliness to engage in radical activism model.

Summary

The analyses of data led to several interesting and significant findings. Standard multiple regression analysis revealed that social identity, a variable considered important to traditional terrorism models, was not a significant predictor for likeliness to engage in radical activism. The results also showed that rational information processing mode (RPM) had a significant negative relationship with the criterion variable, while experiential information processing mode showed no significant value in predicting likeliness to engage in radical activism. Further, an exploratory regression analysis was performed using the three categories of ideology. While ideology as a single variable was not statistically significant as a predictor of likeliness to engage in radical activism, ecofeminism was found be significant as a predictor of likeliness to engage in radical activism. Overall, the results support the hypothesis that information processing mode, specifically rational information processing mode, predicts likeliness to engage in radical activism. The hypothesis that ideology is a predictor for likeliness to engage in radical activism was not supported by the results; however, when the categories of ideology were examined, ecofeminism was found to be significant. The hypothesis that social identity predicts likeliness to engage in radical activism was not supported by the results.

In Chapter 5, I will present a summary of the study and an interpretation of the analyses and results. Further, I will discuss the limitations presented in Chapter 1 with those that were encountered in the study; and I will discuss the implications of the results for future research, possible legislative concerns, and a general understanding of the

factors that contribute to an individual's desire to engage in actions deemed ecoterrorism by the government.

Chapter 5: Discussion, Conclusions, and Recommendations

Although political and social activism studies exist in the literature, participation in single issue radical activism has largely gone unstudied, particularly outside of conventional activism (Curtin et al., 2010; Cameron & Nickerson, 2009; Jennings & Anderson, 2003; Marangudakis, 2001). I conducted the current study to examine whether social identity (in-group ties, centrality, in-group affect), information processing mode, and ideology predict likeliness to engage in radical animal rights and environmental activism. I employed a nonexperimental quantitative design that used an online survey method. The criterion variable, likeliness to engage in radical activism, was measured with the 35-item AOS. Social identity was measured with the 12-item Three Factor Model of Social Identity scale, which was comprised of three subscales—in-group ties (IGT), centrality (SIC), and in-group affect (IGA). Information processing mode was measured with the REI, which is comprised of two main subscales that measured rational information processing mode (RPM) and experiential processing mode (EPM). Ideology was a categorical variable and was measured in the Participant Questionnaire.

As noted in Chapter 4, the regression analysis showed the R (.49) was statistically significant, $F(6,65) = 3.18$, $p = .009$, Adjusted $R^2 = .170$. RPM was significant ($\beta = -.37$, $p = .003$). In addition to the regression analysis containing all variables, an exploratory analysis was performed to examine whether any of the categories of ideology were significant predictors of likeliness to engage in radical activism. While deep ecology proved nonsignificant and ecoanarchy was removed from the analysis due to issues of multicollinearity, the regression analysis showed EF was statistically significant ($\beta = .49$,

p = .001). While EF was significantly significant, it is possible that the results reflect omitted variable bias; that is, when EA was omitted from analysis EF may have been artificially inflated as a result.

Interpretation of the Findings

Social Identity

Research on collective identity and political action, which is largely qualitative in nature, suggested a relationship between social identity and activism (Stryker, Owens, & White, 2000). Individuals become active or willing to engage in activism only when they have a strong self-identification or a feeling of belonging to a group (Liss, Crawford, & Popp, 2004). However, few scholars have examined the three types of social identity—in-group ties, centrality, and in-group affect—as predictors for engagement in radical activism. Contrary to the qualitative literature, I found that no tenant of social identity was a significant predictor for likeliness to engage in radical animal rights and environmental activism. This was surprising given the plethora of literature suggesting that identity is strongly correlated with activism (Cameron & Nickerson, 2009; McGarty, 2006). However, the fact that social identity was not significant as a predictor for likeliness to engage in radical activism may not be contrary to the nature of radical animal rights and environmental activism. I found that individuals tended to be members of multiple groups that represented many different causes and actions, which according to Gamson (1991), Crowley (2008), and Della Porta (2005), is not atypical for social movement activists. While conducting this study for instance, it was not unusual to see individuals from a marine mammal group posting on that group's website and on other

websites supporting actions to end the dog meat and dog leather trades in Asia. Cross membership between groups seemed, at least on the surface, not to be uncommon. Furthermore, groups like the ALF and ELF post anonymous communiques and promote anonymity. Individuals cannot join these and other groups like them as there is no central organizational structure to these groups. All an individual needs to do is commit an act in the name of one of the groups, post a communique, and that leads to affiliation or membership in the movement. Because members act alone or in small groups there is no large group to identify with or conform to. Instead, it might be that individuals identify with groups based on tactics used by members of certain groups (Jasper, 1997). Because the tenets of social identity were not predictors for likeliness to engage in radical activism may actually be in line with the leaderless resistance style of operation of radical animal and environmental group identity which seem to emphasize cause identity over social identity. Therefore, future research should consider identity based on tactics or visible actions as suggested by Jasper (1997) and Seel and Plows (2000).

Cognitive Processing Mode

The results of the second research question revealed a significant negative relationship between RPM and likeliness to engage in radical activism. EPM did not yield significant results. Individuals who relied on the rational information processing mode, those individuals who analytically considered threat information, showed an increase in apprehension and were, therefore, less likely to take high stakes risks (Berger, 2007; Epstein, 1995). The negative relationship between RPM and likeliness to engage in radical activism suggests that activists prone to rational cognitive processing are less

likely to take high stakes risks, which, in the case of radical animal rights and environmentalism, could include special circumstances terrorism charges and prolonged incarceration. Conversely, experiential thought and intuition, was not influential in likeliness to engage in radical activism which was unexpected because emotional appeal has been important in animal rights and environmental PSAs and rhetoric. The finding that experiential cognition was nonsignificant raises questions about the value of radicalization models that place emotional thinking as a mediator for ecoterrorism although such questions must be asked with caution as the results seen in this study may not be seen in a larger sample. Still, as noted in Chapter 2, much of the material presented by groups such as ALF and Negotiation is Over! rely on threats of harm to individuals and threats of damage to property-- all of which are designed to create anxiety and fear in target individuals. The literature is almost devoid of studies on CEST in relation to activism. While this study was small, and the results may not generalize to the larger population, the finding that experiential processing mode was not significant and that rational processing mode was negatively significant begs for further investigation.

Ideology

In the third research question, I examined the predictive value of ideology on likeliness to engage in radical activism. Ideology as a single variable that encompassed all three major ideological thoughts (deep ecology, ecoanarchy, and ecofeminism) did not predict radical activism. This result is counter to the findings of traditional terrorism and radicalization models (Precht, 2007); however, traditional models have not included radical animal rights and environmental ideologies. Only ecofeminism had predictive

value for likeliness to engage in radical activism. This finding both supports and contradicts qualitative findings regarding ideological significance (Herzog, 1993; Sprinzak, 1995). According to ecofeminism, the destruction of the environment and mistreatment of animals are directly related to the treatment of women in a male-dominated society. This result supports those of Liss et al. (2004) whereby feminist identity was found to be the only variable that contributed to predicting feminist activism.

Limitations of the Study

In this study, I employed an online self-report survey and used a sample of convenience. The sample consisted of 73 adults who were recruited from online animal rights and environmental groups. After removal of outliers, data from 65 surveys were used for analyses. As such, the current study was subject to limitations that may have impacted the quality of the data. These limitations were (a) secrecy of radical groups, (b) truthfulness of participants due to legal concerns, (c) accuracy of participants' assessments of their involvement in radical or traditional activism, (d) time frame, and (e) small sample size.

Radical animal rights and environmental activists are notoriously secretive (FBI, 2010). They tend to operate in a leaderless resistance lone wolf style. Small groups of individuals typically make up clandestine cells that are unknown to other cells. This style of activism has made identification of group members difficult (FBI, 2010); therefore, there were no membership lists from which participants could be recruited. Instead, participants were recruited from over 27 online Facebook animal rights and environmental groups and forums using a multipronged sampling strategy. Although

most of the online groups showed membership in the hundreds or even thousands, not every individual who was a member of any particular group could be presumed to be a radical animal rights or environmental activist. Also, as I learned through discussions with individuals in a few of the groups, there are "layers" of groups, particularly on Facebook. As I discussed in Chapter 3, it took time to build trust with group members. Once trust was built, I was able to access groups that were closed and private. This, in theory, provided me more access to the radical individuals I intended to study; whether individuals in the more radical closed and private groups actually participated in the study is unknown. Because I cannot verify who participated in the study, this limits generalizability to radical activists. Radical activists tend to engage in actions that are deemed ecoterrorism by the federal government and are subject to special terrorism circumstances if convicted of an ecoterrorism offense. More than once, potential participants contacted me for assurances that I was not working with law enforcement. A few individuals posted erroneous comments to the study recruitment notice warning others that the study was being monitored by law enforcement. Fear of legal ramifications may have caused some individuals to down play their actual activism behaviors and their identification with radical groups. In doing so, participants who were not truthful may have inadvertently influenced the reliability of the data, especially data for IGT, SIC, IGA, and AOS. Conversely, it is possible that some participants overestimated their actual group identification and their engagement in radical behaviors. By using the wording "likeliness to engage," I asked participants to consider what they would be willing to do, not what they had actually done. This may have caused an artificial

inflation in reporting of radical behaviors; however, because only rational cognitive processing was significant, I assumed that this was probably not the case.

Data were collected over a period from December 14, 2014 until mid-April 2015. I had initially expected to collect data for a longer period of time; however, participant activity slowed to approximately three to five surveys per week in April with the majority of the surveys that were removed from the data set for incompletion occurring in that time frame. Additional online groups were added in March; however, the addition of those sites did not significantly increase participation in the study. The sample at the close of data collection consisted of 83 surveys, but 10 were removed due to incomplete data points and eight were excluded as outliers. A final sample of 65 surveys was included in the final analysis. The target sample size was 98-123 participants with a statistical power of .80 and a medium effect size. A post hoc analysis using 65 participants realized a medium effect size (f=.15) and an actual power of .58. The sample size limits generalization of the results to other radical animal rights and environmental activists.

Recommendations

In this study, I was the first researcher to quantitatively examine the influences of social identity (in-group ties, centrality, and in-group affect), cognitive processing mode, and ideology as predictors of the likeliness that an individual would engage in radical animal rights and environmental activism. In light of the findings, I would make the following recommendations for future study.

Research Design

In designing this study, I chose a quantitative, nonexperimental design. While the results demonstrated the value of such a design, I believe a mixed-method design would have been more revealing, and I would recommend its use for future study. Several individuals either contacted me directly or commented on the recruitment announcement that they would have liked to have discussed their activism behaviors and the importance activism plays in their lives with me in addition to responding to the survey items.

The dependent variable, likeliness to engage in radical activism, was measured using the AOS, a 35-item self-report survey. The AOS includes many of the actions that are considered terrorism under the AETA (blocking a building entrance, engaging in actions that may result in arrest); however, an examination of the content of radical animal rights and environmental webpages, like the one for Negotiation is Over!, exposed often violent actions promoted by some radical groups. These actions or behaviors (fire bombings, arson, bombings, booby trapped letters, harassment, threats of physical violence, and even death threats) have not yet been included in a survey instrument like the AOS. Future studies concerning radical activism behaviors should look to include instruments that measure a wider range of radical activist behaviors.

Social Identity

Social identity has been well studied in conventional activism (Barr & Drury, 2009; Bobel, 2007; Klar & Kasser, 2009); however, the results of the current study posit the value of examining the parts of social identity (in-group ties, centrality, and in-group affect) as opposed to just examining social identity's value as a single variable especially

when studying secretive radical groups. Jasper (1997) suggested that collective identity can be framed around tactics and group structural styles. The instrument used to measure social identity did not focus on tactics or group structural styles. Simply identifying with a particular group or issue was not predictive of engagement in radical activism in this sample. The oversimplification of social identity in terrorism and radical activism models may be misleading. While identity with a particular group or ideology may be an important factor for radicalization for traditional terrorism, the concept of identity among radical activists needs further study. The leaderless resistance style of group structure coupled with the fact that it is not uncommon for activists to have overlapping interests in both the animal rights and environmental movements suggests that identity may be fluid among activists as suggested by Della Porta (2005) and Gamson (1991). Therefore, future scholars should consider a mixed-method design on activist to activist interactions, the importance of tactic and group organization to activists, and how activists move between groups as a way to examine the potential importance of social identity.

Cognitive Processing

I found a negative relationship between rational cognitive processing mode and likeliness to engage in radical activism. No significant relationship existed between experiential cognitive processing (emotional/intuitive) and likeliness to engage in radical activism. This finding was the most intriguing because no studies were found in the literature on either foreign or domestic terrorists or radical activists and cognitive processing modes even though the NYPD and Precht models consider cognitive processing in the radicalization process. The literature on radical animal rights and

environmental activism, which is largely qualitative, focuses on the emotional connections to places and animals that activists may experience. Moreover, prior researchers focused on emotion in the form of anger as a correlate; however, no studies found in the course of the review of literature for this study addressed how individual activists process information they receive (Herzog, 1993; Nisbet, Zelenski, & Murphy, 2009). Individuals who relied more on rational processing, a voluntary system that operates through analysis and cognition that is void of emotion and requires individuals to rely on knowledge, were less likely to engage in radical animal rights and environmental activism (Epstein, 1991, 1995).

Ideology-Ecoanarchy

Ecoanarchy presented an interesting challenge due to the fact that very little quantitative data exist in the literature regarding ecoanarchists' participation in activism (Williams, 2009). Anarchists by definition, do not conform to traditional political cultures; however, red anarchists are highly involved in worker related actions and often follow the political climate. Conversely, green anarchists do not, on principle, participate in the political process (Davidson, 2010). Because anarchy was a founding principle of EF!, and ecoanarchy is considered one of the main schools of thought in radical animal rights and environmentalism, it was included in this study. As such there was some expectation that ecoanarchy would influence ideology's value as a predictive variable, but that assumption was incorrect. The AOS contained items that asked about participation in the traditional political process, a process ecoanarchists reject. Therefore,

reframing radical activism without the inclusion of the political process may lead to more insight into what propels ecoanarchists to engage in radical activism.

Implications for Positive Social Change

The purpose of this study was to aid in the understanding of radical animal rights and environmental activism through quantitative investigation. The findings of the current study bring to light the need for more quantitative examination of radical activism. Over the last two decades, radical animal rights and environmental groups have seen a fundamental shift in tactics from nonviolent direct actions to violent direct actions (arson, bombings, threats of murder, harassment of targets and their families), which has only fueled the debate over whether these nonconventional methods are legitimate methods of protest of if they are in fact acts of terrorism. While the delineation of whether radical animal rights and environmental activism is civil disobedience or terrorism was beyond the scope of this study, the results raised questions concerning beliefs about radical activists and their motivators. For instance, ideology undefined was presented through qualitative studies and proanimal enterprise rhetori0c to be a motivator for radical activism; however, the current findings question whether this long held belief is accurate. Radical activists have long been thought to place high value on their overall social identity with particular groups; however, the current findings suggest more research is needed as social identity was not found to predict engagement in radical activism. Furthermore, the implications of this study and further empirical studies could promote meaningful social change by helping construct a more accurate portrait of those who engage in radical animal rights and environmental activism. Further quantitative

studies may aid in shifting the focus from trying to understand the acts and means used by radical activists to trying to understand the individuals who engage in radical activism which may help to facilitate a more productive dialogue between those who support or engage in radical animal rights and environmental activism and those who deem it domestic terrorism or ecoterrorism.

Conclusion

Radical animal rights and environmental activism is a complex issue that has become a hotly debated topic. Mainstream groups advocate the use of education and legal processes while radical groups that historically used nonviolent civil disobedience have shifted to the use of violent actions and threats of murder. Economic and medical research interests aligned with political powers and pushed the passing of the AETA, legislation that makes interfering with a business's ability to make a profit an act of terrorism despite the fact that terrorism has been poorly defined in the literature and by the federal government for more than 30 years. Opponents of radical activism claim activists are terrorists while proponents disagree. A review of the literature revealed that very little is known about radical animal rights and environmental activism outside of qualitative studies. In order to further the understanding of radical activism, specifically the complex reasons that propel individuals to engage in radical activism, the current study examined social identity, information processing mode, and ideology as predictors of likeliness to engage in radical animal rights and environmental activism. The findings did not support previous findings that identity is strongly related to activism despite the assertion of at least two terrorism radicalization models. Although it has been suggested

as a potential factor for the path to radicalization (Borum, 2011a; 2011b), cognitive processing mode had not been examined as a predictor for radical activism. The current study found that rational cognitive processing, not experiential processing mode, had predictive value for the sample. Finally, it has been suggested that ideology has a role in activism. The three main animal rights and environmental ideological schools of thought (deep ecology, ecoanarchy, and ecofeminism) were examined as a single predictor variable and were found to have no predictive value. Upon further exploratory analysis of each ideology as separate predictor variables, ecofeminism was found to have strong predictive value while the other two ideologies were not predictive in the sample.

Animal rights and environmental issues are extremely complex. With the use of electronic social media, individuals in the United States are made aware of issues like the dog meat and dog leather trade in parts of Asia. Social media has provided individuals with avenues to discuss concerns and beliefs with others who are like minded and it has allowed individuals to consider and even act in illegal ways to stop what they believe to be atrocities against the natural world and the animals in it. Whether individuals who engage in radical activism are terrorists is a discussion best left to philosophers and legal scholars, but examining radical activists in the context of how they think and what propels them to act brings a complex issue closer to understanding.

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Appendix A: Three Factor Model of Social Identity

Instructions. Please read each item carefully and please answer every item. There are no "right" or "wrong" answers. The questionnaire consists of 12 questions pertaining to activism actions. Choose from: *(1) "Strongly Disagree*," to *(7) "Strongly Agree"*

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. I have a lot in common with other environmentalists or animal rights supporters.
2. I feel strong ties to other environmental or animal rights groups.
3. I find it difficult to form a bond with other environmental or animal rights supporters
4. I don't feel a sense of being "connected" with other environmental or animal rights supporters.
5. I often think about the fact that I am an environmental or animal rights supporter.
6. Overall, being an environmental or animal rights supporter has very little to do with how I feel about myself.
7. In general, being an environmental or animal rights supporter is an important part of my self-image.
8. The fact that I am an environmental or animal rights supporter rarely enters my mind.
9. In general, I'm glad to be an environmental or animal rights supporter.
10. I often regret that I am an environmental or animal rights supporter.
11. I don't feel good about being an environmental or animal rights supporter.
12. Generally, I feel good when I think about myself as an environmental or animal rights supporter.

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Scoring: range 0-84. Reversed scored items are: 3, 4, 6, 8, 10, 11.

Appendix B: Rational Experiential Inventory

Please read and answer the following 40 questions. Please use the following scale to answer these questions.

(1) Completely False (2) Mostly False (3) Undecided (4) Mostly True (5) Definitely True

1. _____ I have a logical mind.

2. _____ I prefer complex problems to simple problems.

3. _____ I believe in trusting my hunches.

4. _____ I am not a very analytical thinker.

5. _____ I trust my initial feelings about people.

6. _____ I try to avoid situations that require thinking in depth about something.

7. _____ I like to rely on my intuitive impressions.

8. _____ I don't reason well under pressure.

9. _____ I don't like situations in which I have to rely on intuition.

10. _____ Thinking hard and for a long time about something gives me little satisfaction.

11. _____ Intuition can be a very useful way to solve problems.

12. _____ I would not want to depend on anyone who described himself or herself as intuitive.

13. _____ I am much better at figuring things out logically than most people.

14. _____ I usually have clear, explainable reasons for my decisions.

15. _____ I don't think it is a good idea to rely on one's intuition for important decisions.

16. _____ Thinking is not my idea of an enjoyable activity.

17. _____ I have no problem thinking things through carefully.

18. _____ When it comes to trusting people, I can usually rely on my gut feelings.

19. _____ I can usually feel when a person is right or wrong, even if I can't explain how I know.

20. _____ Learning new ways to think would be very appealing to me.

21. _____ I hardly ever go wrong when I listen to my deepest gut feelings to find an answer.

22. _____ I think it is foolish to make important decisions based on feelings.

23. _____ I tend to use my heart as a guide for my actions.

24. _____ I often go by my instincts when deciding on a course of action.

25. _____ I'm not that good at figuring out complicated problems.

26. _____ I enjoy intellectual challenges.

27. _____ Reasoning things out carefully is not one of my strong points.

28. _____ I enjoy thinking in abstract terms.

29. _____ I generally don't depend on my feelings to help me make decisions.

30. _____ Using logic usually works well for me in figuring out problems in my life.

31. _____ I think there are times when one should rely on one's intuition.

32. _____ I don't like to have to do a lot of thinking.

33. _____ Knowing the answer without having to understand the reasoning behind it is good enough for me.

34. _____ Using my gut feelings usually works well for me in figuring out problems in my life.

35. _____ I don't have a very good sense of intuition.

36. _____ If I were to rely on my gut feelings, I would often make mistakes.

37. _____ I suspect my hunches are inaccurate as often as they are accurate.

38. _____ My snap judgments are probably not as good as most people's.

39. _____ I am not very good at solving problems that require careful logical analysis.

40. _____ I enjoy solving problems that require hard thinking

Appendix C: Activism Orientation Scale

Instructions. Please read each item carefully and please answer every item. There are no "right" or "wrong" answers. The questionnaire consists of 39 questions pertaining to activism actions. Choose from: "Extremely Unlikely," "Unlikely," "Likely," or "Extremely Likely."

How likely is it that you will engage in this activity in the future?

Extremely Unlikely	**Unlikely**	**Likely**	**Extremely Likely**

1. Display a poster or bumper sticker with a political message?

0 1 2 3

2. Invite a friend to attend a meeting of a political organization or event?

0 1 2 3

3. Purchase a poster, t-shirt, etc. that endorses a political point of view?

0 1 2 3

4. Serve as an officer in a political organization?

0 1 2 3

5. Engage in a protest activity in which you knew you will be arrested?

0 1 2 3

6. Attend an informational meeting of a political group?

0 1 2 3

7. Organize a political event (e.g. talk, support group, demonstration)?

0 1 2 3

8. Give a lecture or talk about a social or political issue?

0 1 2 3

9. Go out of your way to collect information on a social or political issue?

0 1 2 3

10. Campaign door-to-door for a political candidate?

0 1 2 3

11. Present facts to contest another person's social or political statement?

0 1 2 3

12. Donate money to a political organization?

0 1 2 3

13. Vote in a non-presidential federal, state, or local election?

0 1 2 3

14. Engage in a physical confrontation at a demonstration??

0 1 2 3

15. Send a letter or e-mail expressing a political opinion to the editor of a periodical or television show?

0 1 2 3

16. Engage in a political activity in which you feared that some of your possessions would be damaged?

0 1 2 3

17. Engage in an illegal act as part of protest?

0 1 2 3

18. Confront jokes, statements, or innuendoes that opposed a particular group's cause?

0 1 2 3

19. Boycott a product for political or personal reasons?

0 1 2 3

20. Distribute information representing a particular social or political group's cause?

0 1 2 3

21. Engage in a political activity in which you suspect there would be a confrontation with the police or possible arrest?

0 1 2 3

22. Send a letter or email about a political issue to a public official?

0 1 2 3

23. Attend a talk on a particular group's social or political

0 1 2 3

24. Attend a political organization's planning meeting?

0 1 2 3

25. Sign a petition for a cause?

0 1 2 3

26. Encourage a friend to join an organization that you support?

0 1 2 3

27. Try to change a friend or acquaintance's mind about a social or political issue?

0 1 2 3

28. Block access to a building or public area with your body?

0 1 2 3

29. Donate money to an organization that supports your beliefs on certain issues?

0 1 2 3

30. Try to change a relative's mind about a social or political issue?

0 1 2 3

31. Wear a t-shirt or button with a social message?

0 1 2 3

32. Keep track of the views of members of Congress regarding an issue important to you?

0 1 2 3

33. Participate in discussion groups designed to discuss issues or solutions of a particular social or political group?

0 1 2 3

34. Campaign by phone for a political organization?

0 1 2 3

35. Engage in any political activity in which you fear for your personal safety?

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Appendix D: Participant Information Questionnaire

Instructions: Please answer each of the following items.

What is your age?

_____18–29

_____30–39

_____40–49

_____Over 50

Educational background (check the highest level earned or currently working on):

_____High School Degree

_____Some college

_____Bachelor's Degree

_____Graduate Degree

Instructions: Please read each of the following three philosophical descriptions carefully then answer the items that follow.

Deep ecology: A philosophy that asserts that nature has inherent value beyond its usefulness to humans. Humans have lost their connection to nature and environmental destruction is the result. All life is interconnected through a web of life and human-nature connections are important even in spiritual beliefs. Although men have been singled out as the main culprits of environmental destruction, no one gender is responsible, instead

inclusive groups like whites, capitalists, and westerners are more to blame. Believe that capitalistic economic systems and hierarchies should be dismantled.

Ecoanarchy: A philosophy that contends that destruction of the human spirit and the environment is due to civilization, capitalism, technology, and the domestication of plants and animals. Strong pro-population controls stand even in times of natural disaster. Two forms- bioregionalism (decisions regarding natural resources should be made within a region) and primitivism (rewilding or a return to hunter-gatherer societies). Believe that capitalistic economic systems should be dismantled. Also believe that in the dismantling of a central national government, social and economic hierarchies, and educational systems.

Ecofeminism: A philosophy that asserts that nature has inherent value beyond its usefulness to humans. Contends that destruction of the natural world (including the use of animals for research) are a direct link with the historical oppression of women and minority groups. Strong belief in dismantling patriarchal societies and replacing them with matriarchal ones. Essentialist view promotes notion that feminizing nature conveys a caring message and demonstrates a parallel between reproductive and nurturing capacities of females and nature. Anti-essentialists promote the notion that feminizing nature demonizes and demoralizes women by presenting women as the reason for environmental problems.

Please select the statement below that most accurately describes your ideological beliefs.

_____ I identify/somewhat identify with the principles of deep ecology.

_____ I identify/somewhat identify with the principles of ecoanarchy.

_____ I identify/somewhat identify with the principles of ecofeminism.

_____ I do not identify with any of these ideologies.