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Consumer Response to the Disposal of Potentially Harmful Products: The Product Life-Cycle, Consumer Activism, and Subjective Well-Being across Borders

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CONSUMER RESPONSE TO THE DISPOSAL OF POTENTIALLY HARMFUL PRODUCTS: THE PRODUCT LIFE-CYCLE, CONSUMER ACTIVISM, AND SUBJECTIVE WELL-BEING ACROSS BORDERS

A Dissertation

by

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ABSTRACT

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This research attempts to uncover the factors that influence protest behaviors, specifically, consumer activism intention and how the factors are different between industrialized and developing countries. This research draws from the Values-Norms, Beliefs (VBN) Theory and the Not-In-My-Backyard (NIMBY) framework to test protest intention between the United States and Mexico regarding the improper disposal of potentially harmful products across borders. Further, this research attempts to extend the VBN-Theory to include trust-in-government, attitude towards the firm, and subjective well-being.

The findings of this research indicate that the VBN Theory is confirmed not only in the United States, but also in Mexico and that the VBN Theory is a superior explanation of protest intention rather than the NIMBY framework. This research contributes to theory by providing evidence that trust-in-government leads to consumer activism intention in Mexico, but not in the United States. Additionally, Mexican respondents are more likely to experience subjective well-being when engaging in consumer activism behavior while US respondents do not.

DEDICATION

I dedicate the completion of this dissertation to my parents, Guadalupe Miguel and Elvia. Without their support, cooperation, and encouragement, it would have not been possible to complete this lifetime goal. Thank you.

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INTRODUCTION

Potentially harmful products are often the byproducts of industrial processes that supply the market with a wide variety of desired products to consumers worldwide. Moreover, consumers are often pressured to buy the newest version of a product through planned obsolescence (Guiltinan, 2009) and so many perfectly good products, that are not easily recyclable, end up poisoning entire ecosystems when these products are inappropriately disposed (Glover, 2017). Altogether, the poisonous, corrosive, or flammable nature of improper product disposal can put consumers, especially in developing countries, at risk for health problems and environmental damage (Miller et al. 2009; Baldé et al. 2017).

Consumers worldwide often hold pro-environmental attitudes about product disposal, but these attitudes often fail to translate into pro-environmental behavior, such as consumer activism (Paço & Gouveia Rodrigues, 2016; Scafuto & La Berbera, 2016; Lee et al. 2014; Morren & Grinstein, 2016). Consumer activism includes behaviors such as staging protests, writing letters to elected officials, forming environmental clubs, and voting for candidates who will enforce stronger legislation to prevent the disposal of potentially harmful products in their backyards (Wolsink, 1994; Wolsink & Devilee, 2009; Lee et al. 2014). Consumer activism often materializes in wealthier, industrialized countries such as Holland, the United States, and Ireland, among many others (Wolsink & Devilee, 2009; Johnson & Scicchitano, 2012; Ferreira & Gallagher, 2010) because consumers in these countries often seek cost reductions and personal

benefits from activism (Morren & Grinstein, 2016). In these industrialized countries, consumer activism often translates into stronger regulations and laws (Harvey, 1988; Albers & Gelb, 1991; Frey, 1994; Morren & Grinstein, 2016). When regulations in industrialized countries become prohibitive or restrictive, potentially harmful products become a potential export to developing countries (Albers & Gelb, 1991; Frey, 1994). Since the late 1980s, billions of dollars of potentially harmful products that have been banned for domestic consumption in the U.S. have been exported to developing countries (Harvey, 1988). This increase of potentially harmful products from industrialized countries to developing countries is described as phenomenal and escalating out of control (Singh & Lakhan, 1989).

However, developing countries that import potentially harmful products often have limited capacity to properly dispose of and/or recycle these wastes (Frey, 1994). Potentially harmful products pose a significant danger to consumers because the infrastructure, distribution methods, and lack of training regarding the handling of these products are often weak and put consumers at risk (Harvey, 1988). Some of the health consequences include disease, cancers, skin irritations, respiratory problems, birth defects, organ damage, and even death (Frey, 1994).

Consumers often involve themselves in activist behavior when their well-being is affected, specifically when faced with the proximate disposal of potentially harmful products (Wolsink, 1994, Wolsink & Devilee, 2009, Johnson & Scicchitano, 2012, Marquart-Pyatt, 2012, Scafuto & La Berbera, 2016). Yet, when faced with potentially harmful or even deadly effects of products disposed nearby, many consumers take no action. While some research in the environmental literature examines consumer activism in response to hazardous material disposal, no clear findings about motivating factors exists. Some motivations such as egoism and altruism, may trigger consumer activism when responding to the disposal of potentially harmful products

(Binder & Blankenberg, 2016). In other cases, consumers act on not-in-my-back-yard (NIMBY) attitudes (Wolsink, 1994; Wolsink & Devilee, 2009). Moreover what triggers consumer activism in developing countries remains underexplored (Morren & Grinstein, 2016). This is important because past empirical research demonstrates that the proper disposal of products can improve a consumer's psychological well-being, both in industrialized and in developing countries alike (Ha-Brookshire & Hodges 2009; Cruz-Cárdenas & Arévalo-Chávez, 2018).

The disposal of potentially harmful products comes at the end stage of the Product Life Cycle (PLC). Traditionally, the PLC involves four stages that overlap the lifecycle of living beings: 1) market development, 2) growth, 3) maturity, and finally decline (Levitt, 1965). At the final state, consumers dispose of these products once they have found substitutes or replacements (Levitt, 1965). The different stages of the PLC are linked to consumer well-being (Lee et al. 2002; Sirgy & Lee, 2008). Consumer well-being, defined as "a desired state of objective and subjective well-being involved in the various stages of the consumer/PLC in relation to consumer goods (Sirgy & Lee, 2008, p. 381)." For example, proper disposal of products at the end of the PLC can improve a consumer's sense of orderliness, cleanliness, and improve the environment in their communities (Sirgy & Lee, 2008; Mullen et al. 2009; Cruz-Cárdenas & Arévalo-Chávez, 2018). Therefore, the improper handling or disposal of these potentially harmful products or products at the end of the PLC affects consumer well-being (Sirgy & Lee, 2008; Mullen et al. 2009; Cruz-Cárdenas & Arévalo-Chávez, 2018).

In the following section, the research problem will be further defined; then, corresponding research questions will be presented. Next, the purpose, research gaps and contributions of the study will be outlined. Finally, the study context, will be discussed where the trade of potentially harmful products will be further explained.

Research Problem

Consumer activism towards the disposal of potentially harmful products presents researchers with an interesting puzzle. Consumer activism is a proactive process where consumers engage in a wide range of activities that are rooted in social, political, or personal convictions (McGregor, 2016). In summary, consumers activists "have a cause" that they are fighting for (McGregor, 2016). In the case of product disposal, consumer activists may oppose the location of a facility that stores, recycles, or manages potentially harmful products that have reached the end of the PLC (Wolsink, 1994; Wolsink & Devilee, 2009).

Past research suggests that some motivational factors such as altruism, egoism, perceptions of costs and benefits may explain differences among consumers across borders (Lee et al. 2014; Morren & Grinstein, 2016; Scafuto & La Berbera, 2016). For example, Stern et al. (1999) found that altruism influences pro-environmental behaviors for some individuals and that altruism triggers activism behavior through values, norms, and beliefs (Stern et al. 1999). Many developing countries, however, show low levels of environmental activism, despite severe environmental degradation (Marquart-Pyatt, 2012). As a consequence, many potentially harmful products end up in developing countries where consumer activism is weak or non-existent (Albers, 2015).

Emerging research also suggests that some activism behaviors can improve a consumer's subjective well-being (Pan et al. 2007; Frey & Stutzer, 2000; Šarkutė, 2017). For example, activism behaviors are shown to induce subjective well-being and can help people feel good (Šarkutė, 2017). Also, some behaviors such as political activism and voting can significantly improve people's subjective well-being (Stutzer & Frey, 2006). However, consumer activism regarding the disposal of potentially harmful products can be easily stifled when a consumer's

well-being is dependent on the trade of these products, even when the trade hurts the environment (Scafuto & La Berbera, 2016).

With the proliferation of product disposal worldwide and the potential harmful effects to people and the environment, there is scant research regarding the factors that influence consumer activism across borders as well regarding the link between consumer activism and consumer well-being (Marquart-Pyatt, 2012; Scafuto & La Berbera, 2016; Šarkutė, 2017). Thus, this problem leads to the following research questions:

RQ1: What are the factors that influence consumer activism intention towards the disposal of harmful and unwanted products?

RQ2: How do these factors differ across borders, specifically between developing and industrialized countries?

RQ3: Does consumer activism intention influence subjective well-being?

Purpose, Research Gaps and Contributions

The purpose of this research is to fill several gaps in the consumer activism literature. First, this research will evaluate how altruism, egoism, and NIMBY motivations influence consumers to engage in consumer activism. This is important because past research has found inconclusive and mixed results (Wolsink & Devilee, 2009; Lee et al. 2014; Morren & Grinstein, 2016; Scafuto & La Berbera, 2016). Second, this research will compare these relationships in an industrialized country (e.g. USA) that regularly exports potentially harmful products for disposal to a developing country (e.g. Mexico). Last, this research will attempt to extend existing theory to include subjective well-being, attitude towards the firm, and trust in government when altruistic and egoistic values in the Values, Norms, Beliefs Theory in light of improper product disposal. Consumers may benefit from and improve subjective well-being when potentially

harmful products are disposed of properly (Bianchi & Birtwistle, 2012; Cruz-Cárdenas & Arévalo-Chávez, 2018).

This suggests that firms may benefit when their brand is associated with proper disposal of potentially harmful products. Additionally, companies are increasingly under pressure from governments and consumers to make product disposal more sustainable (Mahler et al. 2012). Although the consumption and the disposal of consumer products may be outside of a company's control, consumers' interactions with the product are largely contingent upon the company's design and marketing of its products (Mahler et al. 2012). Thus, this research will look at the relationship between the VBN and subjective well-being.

Potentially Harmful Products and Study Context

The significant levels of potentially harmful products being disposed of in the Rio Grande Valley border region with Mexico make it an interesting context to test the model of consumer well-being and intention to participate in consumer activism. Significant literature streams suggest that when consumers in industrialized countries pressure their government to enact legislation to prohibit the disposal or recycling of these harmful products in their own backyard, these harmful products are often exported to developing countries where such opposition and regulation often do not exist (Harvey, 1988; Albers & Gelb, 1991; Frey, 1994; Gallagher & Wise, 2009; Lucier & Gareau, 2015). The U.S. and Mexico have a similar relationship where some of hazardous waste that is produced in the U.S. is exported to Mexico for disposal (Harvey, 1988; Albers & Gelb, 1991; Lucier & Gareau, 2015).

The Trade of Potentially Harmful Products between the U.S. and Mexico

The U.S. Environmental Protection Agency (US-EPA) states that the U.S.-Mexico border region is one of the most dynamic in the world. The border spans an area of approximately 2,000 miles (3,100 kilometers) from the Gulf of Mexico in the east to the Pacific Ocean in the west. The border area includes noteworthy biodiversity, flora, fauna, deserts, coastal areas, national parks, and protected areas (US-EPA & SEMARNAT, 2012, p.10). The border region is home to about 14 million individuals, about 7.3 living in the United States and 6.8 million living in Mexico. About 90% of the population lives in the 15 pairs of "sister cities," while the remaining population live in small towns and rural communities. The population of the U.S.-Mexico border is primarily of Hispanic origin. Their per capita income levels are well below of US per capital income levels. Communities that are clustered around the port of entry areas along the border disproportionately suffer the health effects of the pollution in the area (Quintana et al. 2015).

When environmental restrictions became stronger in wealthier United States, the result is that marketers have found willing buyers in developing countries like Mexico and make a profit from the trade of potentially harmful products (Clapp, 1994; Kellenberg, 2010; Lusk et al. 2012; Lucier & Gareau, 2015). The increased exports to Mexico, as well as to other developing countries, have led to environmental damage or even death (Alberts & Gelb, 1991; Kulkarni, 2000). Despite attempts through bilateral agreements between the United States and Mexico, illegal exports of hazardous materials continue to undermine Mexico's environmental security and has inhibited the arrival of a solution ("Agreement Between the United States of America," 1983; Sullivan & Krieger, 2001; US-EPA & SEMARNAT, 2012; Committee for Environmental Cooperation, 2013).

While environmental restrictions are stronger in the U.S., environmental restrictions in Mexico remain weak and did not converge as expected with the passage of the North American Free Trade Agreement (NAFTA) (Gallagher & Wise, 2009). The U.S., Canadian, and Mexican governments, through their respective agencies/ministries for environmental protection, admit that regulatory frameworks regarding the international hazardous wastes trade are not equal across all three countries (Commission for Environmental Cooperation, 2013).

Empirical research suggests that foreign direct investment and lax environmental standards have a statistically positive relationship with the surge of pollution in Mexico (Waldkirch & Gopinath, 2008). Cost caps between recycling and disposing of hazardous products in Mexico versus in the United States, as well as stricter environmental standards in the United States, are key drivers of the increased exports of these products to Mexico (Adeola, 2000; Clapp, 2002; Lusk et al. 2012; Committee for Environmental Cooperation, 2013). The most problematic hazardous waste exported from the United States to Mexico include used tires (Integrated Environmental Management Services, 2012), used car batteries (or SLABs, spent lead acid batteries) (Rosenthal, 2011; Committee for Environmental Cooperation, 2013; Partlow & Warrick, 2016), and hazardous residues from the “maquiladoras” or assembly plants that operate on the Mexican side of the Texas-Tamaulipas border. In Mexico, these hazardous products are disposed of, consumed, or recycled (Williamson, 2004; Border Legislative Conference, 2010; Sullivan & Kreiger, 2001; Owens & Niemeyer, 2006). When compared to the U.S., Mexico offers a combination of low labor costs, tax breaks for large multinational corporations and lower environmental standards, all of which illustrate the important economic differences between the two countries (Passas, 2000).

Proponents of free trade, especially the NAFTA, argued that increased trade between the U.S. and Mexico would improve Mexico's poor environmental record along the lines of that of the U.S. (Gallagher & Wise, 2009; Herzog & Hayword, 2017). With a tradeoff between economic development and environmental protection (Morgenstern et al. 2002), Mexico's environmental record remains poor (Gallagher & Wise, 2009; OECD, 2013; Herzog & Hayward, 2017). Extraordinarily fast economic growth, industrialization, and a growing middle class persistently expose the economic differences that exist along the U.S.-Mexico border region, which have direct impacts on environmental policy (Sadalla, 2005). The Mexican government often fails to enforce environmental regulations (Williamson, 2004). Economic differences between the U.S. and Mexico mean that the U.S. side of the border may continue to have access to a clean environment, while the Mexican side does not (Sadalla, 2005, p. 132). Past research suggests that marginalized individuals that live in border communities along the U.S. Mexico border are often victims of the market-orientation of the global hazardous waste trade. This is because maquiladora owners and operators often make decisions as to where to build their facilities and individuals that live in the affected communities often do not have the power to contest the construction of these operations (Grineski et al. 2010).

Environmental Damage in the Rio Grande Valley

The importation of hazardous products from the United States into Mexico can fall into one or all the following three categories: 1) products routinely exported to Mexico, recycled, then exported back to the U.S. for resale; 2) products disposed of in Mexico; or 3) products that are consumed in Mexico (Sullivan & Krieger, 2001; US-EPA & SEMARNAT, 2012; Committee for Environmental Cooperation, 2013; Owens & Niemeyer, 2006). In the past 15 years, exports of hazardous materials from the United States to Mexico have surged.

This is important because some of the hazardous wastes that are exported to northern Mexico, which includes Reynosa and Matamoros, are recycled in the area and pose serious health risks such as lead poisoning, toxicity to the nervous system, heart, kidneys, and damage to fetuses, infants, and children to individuals in those communities (Commission for Environmental Cooperation, 2013). Indeed, the maquiladoras that operate on the Mexican side of the U.S.-Mexico border have proven to be an important means for illegal smuggling of hazardous wastes from the U.S. to be recycled or disposed of inexpensively in waterways, sewers, municipal landfills, and private property (Frey, 1994).

Mexico may have a comparative advantage in the disposal of potentially harmful products (Waldkirch & Gopinath, 2008). Northern Mexico, especially Reynosa, Tamaulipas, has long been a dumping ground for hazardous wastes from the U.S. (Álvarez Medina, 2004). An example of hazardous trade between the United States and Mexico is the marketing of used car batteries. U.S. exports of used car batteries to Mexico have grown more than 400% since 2016. The surge of the export of used car batteries to Mexico is suggested to be a culprit of strict environmental laws in the United States and lax controls in Mexico for recycling (Committee for Environmental Cooperation, 2013). The result of these exports and recycling in Mexico has been lead poisoning, contamination of local livestock, and even death (Partlow & Warrick, 2016). Many U.S. firms export used car batteries to Mexico for recycling and later import these refurbished products back to the U.S. for sale due to lax enforcement of environmental laws (Committee for Environmental Cooperation, 2013).

Furthermore, many car battery recycling firms that operate in Mexico are located along the U.S.-Mexico border in Reynosa, Tamaulipas. Several U.S. and Mexican firms such as M3 Resources, Black and Decker, and Controls de Reynosa operate used car battery operations in

Reynosa. Mexican authorities have uncovered unsound management of these recycling facilities in Reynosa and have reported that over 15 tons of used car batteries are stored without proper safety mechanisms. Mexican authorities have discovered many irregularities in the Reynosa region, such as the insufficient handling acids, the disregard of occupational lead levels for their employees, and the failure to adopt corrective measures (Committee for Environmental Cooperation, 2013).

Unfortunately, it appears that large portions of hazardous wastes that are produced in Reynosa and Matamoros never make it to licensed disposal facilities either in Mexico or in the U.S. (May et al. 2007). According to a 2016 report, Mexico's Environmental Secretariat (PROFEPA) carried out 87 environmental inspection visits in the Northern Tamaulipas region. PROFEPA documented irregularities in more than 20 companies and closed two companies for poor management of hazardous wastes (Hagen, 2017, March). Nonetheless, routine inspections and closures of unsafe facilities in Mexico by Mexican authorities are usually the exception and not the rule (Gallagher, 2009). Furthermore, companies authorized by the Mexican government to recycle SLABs imported from the United States usually do not report lead emissions into the air or water as required by law (Occupational Knowledge International, 2011).

Governmental estimates suggest that between 2004 and 2011, US exports of SLABs to Mexico have increased from 449% to 525%. The increase of exports to Mexico can be attributed to several US companies that have started operations in the Border States of Nuevo Leon, Baja California, and Tamaulipas (e.g. M3 Resources, Black and Decker, Controls de Reynosa) as seen in Figure 1 (Committee for Environmental Cooperation, 2013).

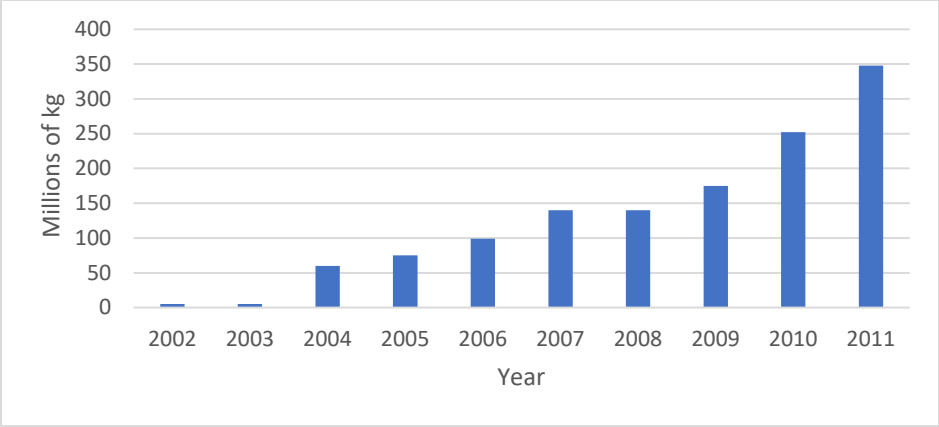

Figure 1 US Exports of SLABs to Mexico: 2002-2011

Source: Committee for Environmental Cooperation

Plan of Study

The following plan of study includes Chapter 2 and Chapter 3. In Chapter 2, relevant research regarding the PLC, consumer well-being, and consumer responses to the disposal of potentially harmful products will be reviewed. The literature review proposes a Model of Consumer Well-being and Intention to Participate in Environmental Activism, which will also be explained. In Chapter 3, the research design, measurements, questionnaire, sample, and the plan of analyses will be discussed.

CHAPTER II

LITERATURE REVIEW

The extensive literature review in this chapter reveals that although the PLC, consumer activism, and subjective well-being have been researched for decades, three gaps remain in the literature. First is related to research about the last phase of the PLC-product—product disposal, especially when the disposal of products is perceived as harmful to people or the environment as is the case with plastic straws, plastic shopping bags and used tires. The disposal of these potentially harmful products pose threats to consumers who may be driven by many reasons including egoism, altruism, or not-in-my-backyard motivations to engage in consumer activism (Wolsink & Devilee, 2009; Johnson & Scicchitano, 2012; Lee, Kim & Choi, 2014; Scafuto & LaBarbera, 2016). The factors that influence consumers' reaction towards the disposal of unwanted products remains unclear, despite the extensive research on consumer behavioral opposition to the disposal of potentially harmful products (Singh & Lakhan, 1989; Groothuis & Miller, 1994; Wolsink, 1994; Wolsink & Devilee, 2009; Marquart-Pyatt, 2012; Johnson & Scicchitano, 2012; Lee, Kim & Choi, 2014; Scafuto & LaBarbera, 2016; Paço & Gouveia Rodrigues, 2016). Some research suggests that a sense of injustice and fairness might evoke a consumer's intention to protest the disposal of unwanted products in his or her own backyard as well someone else's backyard (Wolsink, 1994; Wolsink & Devilee, 2009). Other research streams suggest that selfish and egoistic motives, such as wanting the benefits of the proper

disposal of unwanted products but wanting someone else to bear the risks, may invoke intention to protest (Groothuis & Miller, 1994; Ren et al. 2016).

Second, research regarding differences between consumer activism to the disposal of potentially harmful products in developed countries and developing countries is limited (Morren & Gristen, 2016). Consumers in industrialized countries are often motivated to protect their "backyards" from organizations wanting to dispose of or treat potentially harmful products (Wolsink & Devilee, 2009; Johnson & Scicchitano, 2012). With governments in industrialized countries often enacting strict legislation regulating the recycling and management of potentially harmful products, these harmful products end up in developing countries where consumers are often not as proactive (Harvey, 1988; Albers & Gelb, 1991; Morren & Grinstein, 2016). Additionally, some other research suggests that national culture may play a role in consumer activism (Morren & Grinstein, 2016). For example, long-term orientation has been found to influence green behaviors (Davis et al. 2009). In addition, differences in perceptions regarding costs and benefits may influence a consumer's activism behavior (Morren & Grinstein, 2016; Scafuto & LaBarbera, 2016). Trust in government may also influence a consumer's activism intention (Johnson & Scicchitano, 2012). Consumers may be more open to the disposal of potentially harmful products in their vicinity if they have higher levels of trust in their government officials (Johnson & Scicchitano, 2012).

For whatever reason, some research suggests that people can improve their subjective well-being when participating in protesting or activism behaviors (Frey & Stutzer, 2000; Pan et al. 2007), where consumer activism is defined as a wide range of behaviors that usually incorporate some sort of social, political, or personal convictions (McGregor, 2016). For example, if a consumer boycotts a polluting company, will the consumer feel good about himself

or herself, even if the firm continues to pollute? By actively responding to potential threats posed by the disposal of harmful products, consumers may actually enhance their own well-being. However, the relationship between consumer well-being and the PLC or the relationship between consumer responses to the disposal of unwanted products and consumer well-being is understudied (Mullen et al. 2009; Bianchi & Birtwistle, 2012; Cruz-Cárdenas & Arévalo-Chávez, 2018). Thus, the third gap in the literature is regarding consumer response, in this case, consumer activism, towards the disposal of unwanted products and its effects on subjective well-being (Singh & Lakhan, 1989; Wolsink, 1994; Wolsink & Devilee, 2009).

Given the lack of definitive findings about consumer reactions to the product disposal of potentially harmful products and effects, the purpose of this research is to identify factors that may motivate environmental activism and the resulting effects on consumer well-being. In addition, how these factors may be different between developed and developing countries are examined. This chapter first presents a literature review that covers the consumer behavioral responses (activism) towards the disposal of potentially harmful products, background and the importance of the PLC and consumer well-being. Then, an explanatory model that integrates prior research findings regarding consumer behavioral responses to the disposal of harmful products and effects on consumer well-being is developed for testing.

Consumer Activism towards the Disposal of Unwanted Products

Since the end of World War 2, the amount of potentially harmful products such as pharmaceuticals, petroleum, nuclear waste, pesticides, and other poisonous chemicals have become a major problem for communities worldwide to properly dispose of or manage (Singh & Lakhan, 1989). These dangers became apparent to consumers in the late 1970s with the emergence of the Love Canal disaster in New York, where tons of chemical waste seeped out of

storage containers and rendered large parts of Niagara Falls uninhabitable for decades (Hoffman, 1995). The Love Canal environmental disaster triggered the “not in my backyard” (NIMBY) attitude in many developed countries where local residents formed associations and protested the dumping of potentially harmful products in their communities (Singh & Lakhan, 1989; Hoffman, 1995).

Since the 1980s, research into NIMBY activism behavior has addressed individuals’ responses towards the location or planning of facilities that manage or recycle potentially harmful products in developed countries (Peelle, 1988; Groothuis & Miller, 1994; Luloff et al. 1998; Wolsink & Devilee, 2009; Ferreira & Gallagher, 2010; Johnson & Scicchitano, 2012). This past NIMBY research has attempted to explain consumer activism against the possible location of facilities that manage or recycle potentially harmful products near their homes.

In addition to NIMBY activism behavior, some research has examined environmental activism. For example, behavior that looks at citizen protest behavior against: illegal dumping (Scafuto & LaBarbera, 2016), environmental group membership and political action (Paco & Gouveia Rodrigues, 2016), environmental activism through institutional structures (Marquart-Pyatt, 2012), green purchasing, citizenship, and environmental activism (Lee, Kim & Choi, 2014), environmental activism across borders (Morren & Grinstein, 2016), and volunteering (Binder & Blankenberg, 2016).

The following discussion will briefly review the two approaches. First, the discussion will review the literature on the NIMBY attitude and the debates regarding its use to predict opposition to potentially harmful products. Second, the discussion will continue to review the literature regarding different environmental behaviors.

The social science literature is rich in the different definitions of the NIMBY attitude and is defined across disciplines (Luloff et al. 1998; Wolsink, 2006). Generally, the NIMBY attitude often arises in a community when a facility, such as a harmful product disposal site, is proposed for a community (Wolsink, 1994). Opposition to the construction of the facility, however, is at the local level and the individuals in the community usually feel that they are responsible for incurring the costs of the facility (Wolsink, 1994). This NIMBY attitude sometimes has been described as a paradox (Johnson & Scicchitano, 2012). Economists theorize that individuals are generally supportive of these types of facilities, such as a recycling plant, but they do not want these types of facilities in their backyards because of the potential costs to their health and property values (Groothuis & Miller, 1994). This is important to consider because these costs could hurt consumer well-being through health concerns or potential property value declines (Wolsink, 1994; Hermansson, 2007).

The NIMBY attitude is often invoked as an explanation for local opposition to the location of undesirable facilities that may cause harm, because the negative effects are often felt at the local level, triggering a strong opposition from those that will suffer those effects (Wolsink, 1994). Many individuals often call for public facilities to treat potentially harmful products, but often fail to support the construction of these facilities near their homes due to health concerns, risk to property values, and the overall decline in quality of life (Johnson & Scicchitano, 2012). Therefore, when the risks are perceived to be greater than the benefits, the NIMBY argument can be made (Wolsink, 1994). For example, people will defend their backyards from the construction of a hazardous waste plant, a chemical factory or even a prison (Wolsink, 1994; Hermansson, 2007).

In addition to people wanting to defend their own self-interests from the construction of a noxious facility, people also consider fairness and equity of the location of these types of facilities (Wolsink, 1994; Hermansson, 2007). NIMBY responses from the public regarding the siting or development of a facility that manages or recycles potentially harmful products often reflect their perceptions of unfair treatment (Peelle, 1988). In other words, individuals often feel that they are being asked to accrue the external costs of the facility that others have already rejected or refused (Peelle, 1988). These perceptions are often deemed logical, because of a well-established pattern of locating undesirable facilities in areas that historically have been unable to organize effective protests (Luloff et al. 1998). Nonetheless, individuals who hold NIMBY attitudes are often seen in contempt because the attitudes are deemed selfish or self-interested (Johnson & Scicchitano, 2012).

NIMBY Attitudes and Consumer Activism Intention

The NIMBY inclination originates from the individual's motivational concerns which reflect individual costs versus the public good (Wolsink & Devilee, 2009). Individuals in many cases are pressured to defend their own well-being when the costs of the location of the facility outweigh the benefits (Wolsink, 1994; Hermansson, 2007). Past research into NIMBY attitudes can be divided into three categories: perceptions (Johnson & Scicchitano, 2012), activism behavior (Hermansson, 2007; Wolsink & Devilee, 2007; Wolsink & Devilee, 2009), and willingness to take compensation to overcome objections to the location of a facility that manages potentially harmful products (Groothuis & Miller, 1994; Ferreira & Gallagher, 2010; Ren et al. 2016).

One of the first research articles that attempted to uncover the determinants and the structure of NIMBY attitudes of individuals confronting the location of a facility that manages or

recycles potentially harmful products, revealed two dimensions: tolerance and avoidance (Groothuis & Miller, 1994). Tolerance reveals that individuals accept economic arguments while avoidance reveals their fear of consequences; it should be noted that individuals can hold both feelings at the same time (Groothuis & Miller, 1994). Decisions to assess the extent to which individuals' attitudes reflect a NIMBY attitude to the construction of facility that manages potentially harmful products have also been addressed (Johnson & Scicchitano, 2012).

Second, Johnson and Scicchitano (2012) found that individuals who expressed a general interest in environmental issues were more likely to believe that facilities that manage potentially harmful products were dangerous than individuals who did not express interest in environmental issues. Though, they also found that individuals who live closer to an existing or proposed waste facility are not more likely to perceive them as dangerous as to those who lived farther away, providing evidence contrary to what NIMBY predicts.

Third, financial compensation may be offered to residents to offset any opposition from the community. Ferreira and Gallagher (2010) examined individuals' attitudes regarding compensation in communities where waste facilities were already built. Their research uncovered that only a very small percentage of respondents criticized the compensation offer and that age, economic risk, treatment method of the waste, and doubt regarding compensation lead to protest behaviors in the community.

In addition to Ferreira and Gallagher's (2010) findings, Ren et al. (2016) also researched financial compensation packages as a solution to NIMBY influenced protests of a waste facility. Ren et al. (2016) evaluated individuals' awareness, acceptance, and risk perceptions towards their willingness to accept a waste facility. Their findings revealed that individuals' education levels, gender, and experience with the stench of a waste facility, influence their risk perception,

though, their geographical location with respect to the waste facility show little statistical support. Ren et al. (2016) also pointed out that individuals' risk perception, income, opinions about the benefits of the waste facility, gender, and previous experience with the stench of the facility inflame their protest behavior. Furthermore, residents showed less interest in compensation and whether the respondent accepts or rejects the payment has little association with the amount, which corresponds with high protest attitude.

Despite the extensive use of the NIMBY framework and corresponding findings regarding behavioral reactions to the disposal of potentially harmful products (Peelle, 1988; Groothuis & Miller, 1994; Ferreira & Gallagher, 2010; Johnson & Scicchitano, 2012), another research search stream suggests that the entire NIMBY framework is flawed and should be disregarded (Wolsink, 1994; Luloff et al. 1998; Wolsink, 2007; Wolsink & Devilee, 2009). Wolsink (1994) suggested that NIMBYism does not sufficiently explain opposition to the siting of a particular facility. Wolsink (1994) argued that past NIMBY research is based solely on self-interest inclinations and that standing up for one's own interests are often seen as selfish in the controversies involving the siting of a facility. Wolsink (1994) further noted that in many cases, the NIMBY framework is indiscriminately used to explain the opposition to the siting of these public facilities while overlooking six important assumptions: 1) The decision making process involving the facility is laborious. 2) The facility in question represents a 'higher' interest than the affected individuals. 3) All of the individuals in the community agree on the usefulness of the facility. 4) All of the individuals in the community prefer not to have the facility in their own backyard. 5) All of the individuals in the community prefer to locate the facility in another community's backyard. 6) The attitudes and opinions which make up the NIMBY framework are seen as static. It is not in the scope of this research to expand on each of these assumptions.

However, Wolsink (1994) argued that most individuals opposing the placement of a public facility rarely meet each assumption; therefore, much of the research done using the NIMBY framework does not hold for most of the siting conflicts.

Early on, however, criticism of the NIMBY attitude to adequately predict oppositional behavior to an undesirable facility suggested that NIMBY has limited utility due to the absence of conceptual utility (Luloff et al. 1998). A major problem with the NIMBY attitude is that it is applied to a broad range and often different behaviors, situations, and circumstances (Luloff et al. 1998). Not all opposition to an undesirable facility comes from NIMBY attitudes but because the undesirable facility may be placed near to a location that holds value such as a national park or natural attraction (Luloff et al. 1998).

Wolsink (2006) shaped his criticism of the NIMBY framework by suggesting that not all opposition to a siting facility is necessarily based on selfish or egoistic motives. Wolsink (2006) reiterated that the NIMBY framework rests on highly questionable validity and that there is a difference between NIMBY from mere opposition. If all opposition to a siting facility were attributed to the NIMBY framework, the framework would be both hollow and at best would only explain a small part of the opposition (Wolsink, 2006). This assessment of the NIMBY framework coincided with Hermansson's (2007) argument that the NIMBY concept implies more than simply individual opposition to the siting of a facility.

The NIMBY attitude is often claimed to be egoistic and irrational (Hermansson, 2007). Individuals in a community that exhibit NIMBY attitudes are sometimes labeled as egoistic because refusal to cooperate with the construction of a facility is seen as a manifestation of their selfish reasoning and if all communities react similarly, the society at large ends up in a worse situation (Hermansson, 2007). Individuals in a community that exhibit NIMBY attitudes are also

considered irrational because they often overestimate the risks and do not have sufficient technological understanding regarding the construction of the facility and can be easily influenced by the media (Hermansson, 2007). Hermansson (2007) argues that individuals have the right to not be unfairly exposed to risks regarding the siting of a facility that manages or recycles potentially harmful products. For example, if the only justification of the facility is that it is in the interest of society, then acceptance of the risk needs to be determined by those who are exposed to the risk.

Wolsink and Devilee (2009) continued to call into question the entire NIMBY framework that has been used in past research. Wolsink and Devilee (2009) argued that the NIMBY framework has been empirically falsified and that past research that uses this framework is not sufficiently grounded with empirical evidence. They state that the selfishness assumption inherent to the NIMBY attitude has been criticized for decades (Freudenberg & Steinsapir 1991; Freudenburg & Pastor 1992). This is because the NIMBY framework needs to be distinguished from attitudes towards a facility from other reasons for oppositional behavior (Wolsink & Devilee, 2009). Wolsink and Devilee (2009) argue that the NIMBY conceptual framework is the indicator towards oppositional behavior based on selfish backyard motives. On the other hand, the attitudes in the model do not cause that behavior as seen in Figure 2.

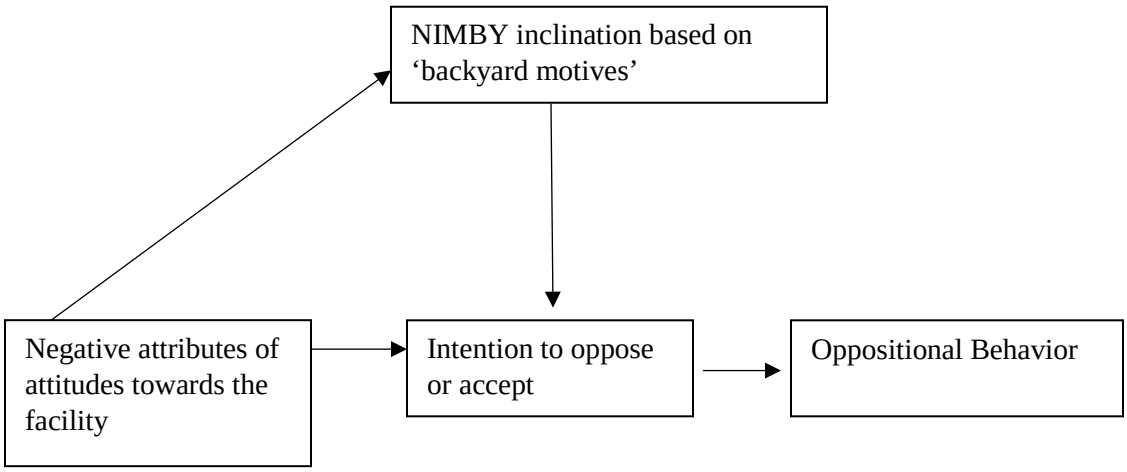

Figure 2 Wolsink and Devilee (2009) the NIMBY Conceptual Framework

Instead, Wolsink and Devilee (2009) developed a scale to measure the planners' perspective of the motives behind individual opposition and argue that the crucial factors involved are not necessarily personality traits such as selfishness or economic rationality, but rather perceived environmental injustice, fairness of the siting process of the facility, and personal commitment to others. Wolsink and Devilee (2009) proposed two conceptual models, one model to explain oppositional behavior towards a canceled facility and a second model to explain oppositional behavioral towards a built facility. They suggested that individuals' attitudes and perceptions towards the construction of a hazardous waste facility easily change once a facility is built.

Perceived environmental injustice and the fairness of the siting process of the facility are items that are included in the NIMBY inclination. When Wolsink and Devilee (2009) tested their model, they found that the relationship between perceived costs and intention to accept as insignificant, but the relationship between perceived risk and NIMBY inclination is salient. Overall, risk perception in the model is a crucial factor, and the avoidance of risk is a primary

reason for individuals to reject a hazardous waste facility, though it is only partially explained by selfish or NIMBY motives.

In the model where facilities that recycle potentially harmful products were already built, Wolsink and Devilee (2009) found that the relationship between perceived costs and the NIMBY inclination is not significant which is different from the model towards a canceled facility. Furthermore, they find no significant relationship between an individual's perceived benefits and their intention to accept. On the other hand, they found that risk perception is higher in the built waste facility model, and the variance contributes to the NIMBY inclination. Wolsink and Devilee (2009) concluded that two of the most significant differences between the two models are the diminished significance of the "backyard" motivations and that individuals' risk perception was the only factor that explained intention to accept. The most important indicator of individual resistance is the path between perceived costs, perceived risk and the perceived benefits through intention to accept to the oppositional behavior as seen in Figure 3.

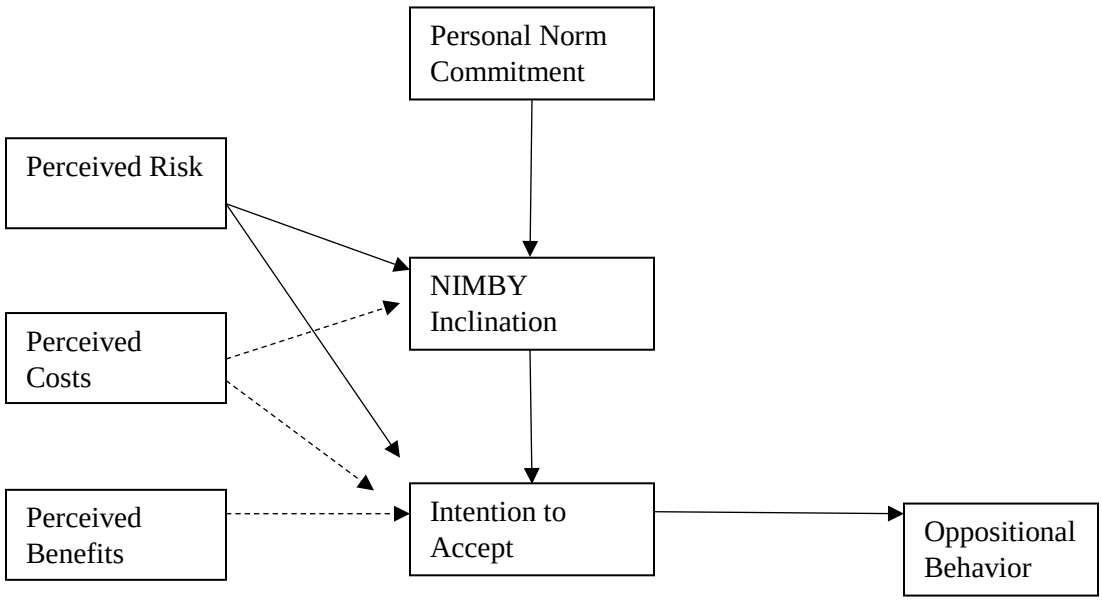

Figure 3 Wolsink and Devilee (2009) Conceptual Framework for Oppositional Behavior towards a Built Waste Facility

Wolsink and Devilee (2009) concluded that it is possible to construct a reliably and valid scale to measure NIMBY and suggest the NIMBY inclination is useful when researchers are attempting to understand individual reactions at the various phases of the decision making process of the location of a facility that recycles potentially harmful products. They stressed, however, that local opposition cannot be explained solely by selfishness and that the crucial factors in the siting of a facility are fair decision making, not causing injustices, and applying ethical principles in the distribution of risks (Wolsink & Devilee, 2009).

In summary, the NIMBY attitude is designed to predict willingness to accept compensation, perceptions of danger that could directly affect the individual's health and property values, and activism behavior to the siting of a facility that recycles potentially harmful products. Overall, past research hypothesizes that trust, attitudes, egoism, perceptions (e.g. costs, benefits, and risks), norms, and NIMBY, may influence intentions (Wolsink & Devilee, 2009; Johnson & Scicchitano, 2012). Trust in governmental institutions may reduce oppositional

behavior towards the location of a facility that recycles potentially harmful products (Johnson & Scicchitano, 2012).

Apart from the extensive literature and debates surrounding the validity, reliability, and overall effectiveness of the NIMBY framework, much of the research on NIMBY, with the exception of Ren et al. (2016), is limited to developed countries (Groothuis & Miller, 1994; Wolsink, 1994; Wolsink & Devilee, 2009; Ferreira & Gallagher, 2010; Johnson & Scicchitano, 2012). Indeed, Ren et al. (2016) suggests that awareness, knowledge, and perceptions of potentially harmful products, such as hazardous wastes, are still opaque in developing countries and suggest further research.

Therefore, Wolsink and Devilee (2009) offered a NIMBY framework that addressed previous doubts about its questionable reliability, validity, and application as seen in Figure 4. They argued that previous attempts at using the NIMBY framework, such as Groothuis and Miller (1994), did not sufficiently explain opposition to a public facility because it failed to evaluate "perceived environmental injustice, fairness of the siting of a facility, and personal commitment to others as predictors of oppositional behavior" (Wolsink & Devilee, 2009 p. 217). They concluded that their NIMBY framework can be useful when attempting to understand reactions towards a hazardous waste facility, since opposition cannot be explained by selfish or egoistic motives alone (Wolsink & Devilee, 2009).

Consumer Activism Intention and Environmental Behavior

Like the NIMBY framework, research into environmental activism and environmental behavior also attempts to predict consumer opposition to a variety of environmental threats, including the disposal of potentially harmful products (Marquart-Pyatt, 2012; Lee et al. 2014; Paço & Gouveia Rodrigues 2016; Scafuto & La Berbera, 2016; Binder & Blankenberg, 2016).

Much of the research involving both environmental activism and environmental behavior builds on Ajzen's (1991) Theory of Planned Behavior (TPB) and Stern's (2000) Value Belief Norm Theory (VBN). Therefore, the following discussion of the two theories is merited. Additionally, the following discussion reflects the literature stream involving the different explanations toward environmental activism and environmental behavior, regarding the disposal of potentially harmful products.

The TPB suggests that behavioral intentions are the determining factor of behavior and that three motivational factors: attitudes, subjective norms, and perceived behavioral control, determine behavioral intentions, as seen in Figure 4. Ajzen (1991) suggested that attitudes reflect an individual's positive or negative evaluations regarding a specific behavior and that subjective norms reflect and individual's evaluation of a specific behavior considering the opinion of others, specifically of family and friends. Ajzen (1991) defines perceived behavioral control as an individual's perceptions regarding the difficulty of executing a specific behavior. The TPB has been used widely in marketing research.

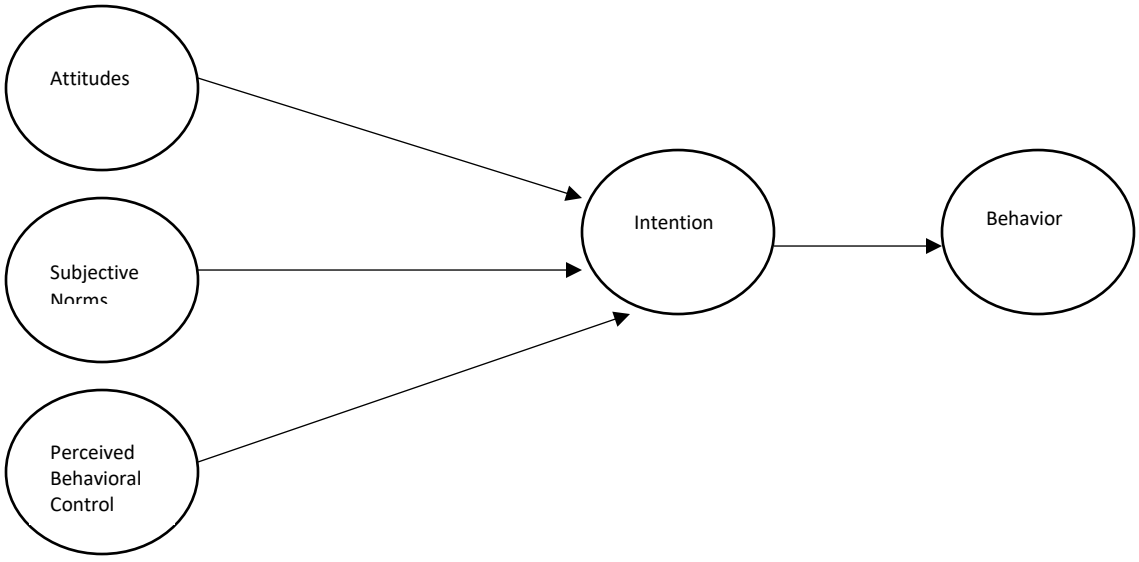

Figure 4 Theory of Planned Behavior (Ajzen, 1991, p. 182)

Stern (2000) suggested that attitudinal factors, that is, values, beliefs, and norms, have a causal relationship with environmental behaviors. Stern (2000) combined Schwartz's (1992) value theory, Schwartz's (1977) norm-action theory, and Dunlap et al.'s (2000) new ecological paradigm into a series of casual blocks. Stern (2000) postulated that values and actual behaviors are mediated by specific beliefs and personal norms guide actions. See Figure 5.

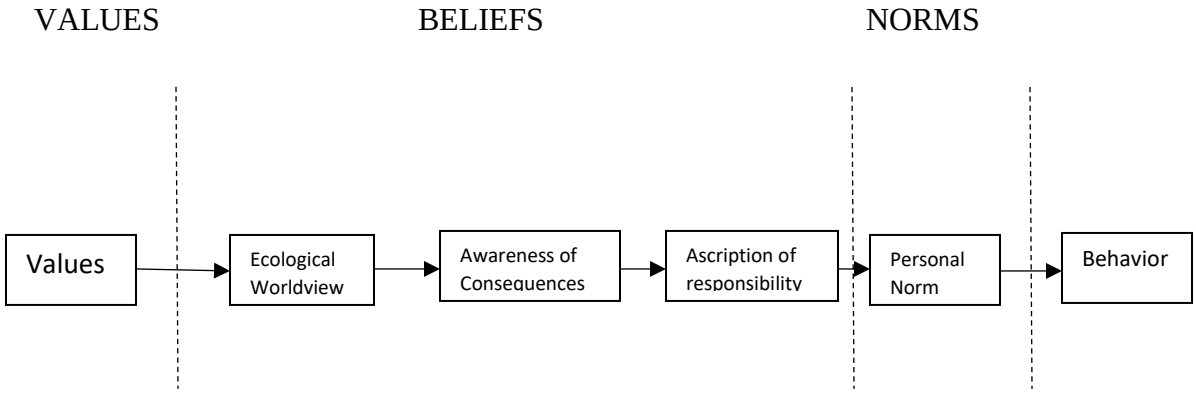

Figure 5 The Value-Belief-Norm Theory (Stern, 2000, p. 412)

The VBN classifies values as the first block in the theory. Values include three value orientations, that is, biospheric, altruistic, and egoistic values (Stern et al. 1999). Individuals that hold biospheric values will decide to act "green" mainly on their perception of costs and benefits for the environment (de Groot & Steg, 2008). Individuals that hold altruistic values make pro-environmental decisions on their perception of costs and benefits for other people (de Groot & Steg, 2008). On the other hand, individuals can also hold egoistic values and primarily make environmental decisions on their perceptions of costs and benefits for themselves (de Groot & Steg, 2008). Therefore, individuals that hold biospheric and altruistic values have been found to make pro-environmental decisions, while individuals that hold egoistic values make negative decisions towards the environment (Jansson et al. 2011).

Following values, beliefs impact behavior (Stern, 2000). If an individual is aware of environmental consequences and takes responsibility to themselves for engaging in preventative action, then pro-environmental norms usually influence behavior (Stern, 2000). Personal norms are experienced as feelings of a moral obligation to take action and create a willingness to act pro-environmentally (Jannsson et al. 2011). Personal norms have been found to successfully predict a variety of environmental behaviors, that is, willingness to pay more for sustainable foods (Wiidegren, 1998), purchasing organic wines (Thφgersen, 1999), and engaging in green tourism (Hunecke et al. 2001). The VBN Theory has been used to explain consumer adoption of high involvement eco-innovations (Jansson et al. 2011), sustainable behavior in marketing systems (Leary et al. 2016), and consumer environmental behavior (Cho et al. 2013), to name a few. Environmental activism is defined as "organized participation in environmental issues, comprising an example of environmentally friendly behavior rooted in the political realm (Marquart-Pyatt, 2012, p. 684)." Along these lines, past research suggested that consumers can play a key role in environmental activism (Seyfang, 2006; Paço & Gouveia Rodrigues, 2016). Individual consumption patterns are a relevant topic for environmentalists looking to promote arguments to alter consumption behaviors that are more environmentally sustainable (Seyfang, 2006; Paço & Gouveia Rodrigues, 2016). This is consistent with past marketing research that suggested that consumer well-being can be improved through pro-environmental behaviors such as consumer recycling or consumers living in a clean environment (Cruz-Cárdenas & Arévalo-Chávez, 2018).

Despite consumers' apparent environmental concerns, consumers do not always behave sustainably in the marketplace (Paço & Gouveia Rodrigues, 2016). Consumers may exhibit high levels of perceived responsibility towards the environment in their community, though, they may

also exhibit low levels of environmental activism (e.g. signing petitions, attending protests, making donations to environmental causes and/or exhibiting a general interest in environmental causes), despite a common environmental problem (Paço & Gouveia Rodrigues, 2016). In some cases, consumers may be willing to become involved in an environmental organization and donate time to it, but the majority may not be willing to contribute money to an environmental organization or start one (Paço & Gouveia Rodrigues, 2016). While, environmental activism runs higher among members of environmental groups, research by Paço and Gouveia Rodrigues (2016), failed to explain which factors impede pro-environmental behaviors, such as environmental group membership among those that hold pro-environmental attitudes. This is important because increased participation in environmental group membership may increase participation in pro-environmental behavior (Paço & Gouveia Rodrigues, 2016).

Predictors of environmental behaviors, such as environmental activism, are defined, hypothesized, and contextualized in the literature (Marquart-Pyatt, 2012; Scafuto & La Berbera, 2016). For example, environmental activism often involves behaviors like signing a petition about an environmental issue, giving money to an environmental group, and/or being a member of an environmental group (Marquart-Prayatt, 2012). Individual's attitudes, beliefs, willingness to make personal contributions to environmental causes, efficacy, and individual resources are hypothesized to predict environmental activism (Marquart-Prayatt, 2012). Marquart-Pyatt (2012) found that resources, beliefs, and attitudes determine environmental action across multiple countries.

In addition to environmental activism, intention to protest the illegal dumping of hazardous wastes in their community is another environmental behavior that is researched (Scafuto & LaBerbera, 2016). They attempted to uncover the effect of protest antecedents as well

as attempt to uncover if past participation behavior (e.g. level of activism) moderates intention to protest (Scafuto & LaBerbera, 2016). Their results suggested that there are significant effects of collective identity, sense of injustice, costs of protest, and perception of risk which can predict future intention to protest with respect to their level of activism. Specifically, Scafuto and La Berbera (2016) found positive correlations between identity and identity and efficacy, injustice, activism and intention to protest. They also found perceived cost of protest to be a significant but negative predictor of intention to protest. They suggested that in the context of their study, where high levels of unemployment, job insecurity, and criminal elements that engage in the disposal of hazardous wastes, individuals cannot easily protest due to the resource requirements and social isolation that may result from protesting the hazardous waste trade in their community.

In fact, Scafuto and LaBerbera (2016) stated that individuals will attempt to maximize benefits and minimize costs, emphasizing their own self-interests, which is a powerful factor that influences intention to participate in activism. Some individuals, however, may achieve significant benefits through activism such as acquiring a sense of satisfaction and belonging and receiving social rewards (Scafuto & LaBerbera, 2016). Like Marquart-Pyatt (2012), Scafuto and LaBerbera (2016) suggested that intention to protest may be context dependent. In this case, their research focused on a hazardous waste problem in Italy, an industrialized European country.

Perceptions about the state of the environment and their potential impact on environmental activism were investigated by Binder and Blankenberg (2016). They attempted to answer if an individuals' concerns about the environment influence their subjective well-being. They do this by investigating the interplay of concerns and volunteering on subjective well-being and showed that environmental concerns lead to an increased propensity to volunteer and that volunteering is positively related to well-being. This is only for individuals who are very

concerned about the environment, however (Binder & Blankenberg, 2016). In other words, environmental concerns do positively impact their subjective well-being, but the effect is most likely to be by concerned individuals volunteering more often and deriving satisfaction from these altruistic endeavors. On the other hand, negative influences are demonstrated by selfish concerns, such as job security, financial security, or a sense of fairness (Binder & Blankenberg, 2016).

In summary, Binder and Blankenberg (2016) found a positive impact of altruistic concerns (e.g. environmental or world peace) on subjective well-being as well as a negative impact of egoistic concerns on subjective well-being. They suggested that environmental concerns impact subjective well-being, though, this effect may be driven through concerned individuals volunteering more often and drawing satisfaction from this type of altruistic behavior (Binder & Blankenberg, 2016). This research has limitations in that it relied heavily on panel data at the expense of a deeper understanding of the underlying dimensions of individual concerns on the environment, attitudes, and more egoistic related attitudes such as NIMBY in the context of the hazardous waste trade.

Much of the research into consumer environmental behavior focuses on the purchase of green products. Lee et al. (2014), however, suggested that environmental behavior also includes good citizenship behavior and environmental activist behavior, such as writing letters to a congressman or supporting or contributing funds to an environmental group, as additional pro-environmental behaviors that consumers can exhibit. Lee et al. (2014) also proposed a model where value orientation, perceived consumer efficiency (PCE), and environmental concern affect three pro-environmental behaviors. They found that PCE and environmental concern are positively related to consumer citizenship behavior (e.g. non-purchase related activity such as

recycling) as well as green purchase behavior, although environmental activist behavior is explained only by PCE. The authors found that activist behavior was not influenced by altruistic values despite hypothesizing the effect but suggested greater external validity by studying effects in other countries and by examining different egoistic dimensions and social norms involving an environmental concern.

Research has also attempted to explain environmental behavior across borders (Morren & Grinstein, 2016). Morren and Grinstein (2016) argued that environmental behavior is a composite of pro-social activities that concern others, such as the next generation of individuals, other species, or entire ecosystems as well as self-interest activities. Considering past research (Paço & Gouveia Rodrigues, 2016; Scafuto & La Berbera 2016), they also noted that consumer pro-environmental intentions often follows through with non-environmental behavior, such as environmental activism and public participation in environmental concerns. Therefore, Morren and Grinstein (2016) investigated if there is a mediating role of development, national culture (e.g. individualism vs. collectivism) on environmental behavior. They found that in developed countries, intention to behave environmentally often materializes into actual pro-environmental behavior and that consumers' attitudes toward the environment are related to environmental intention. They argued that their findings correspond with the findings of Cho et al. (2013) and Hofstede (2001) where people in developed countries, who are mostly individualistic, often seek personal benefits from environmental behavior, which includes cost reduction and social status. Morren and Gristen (2016) further substantiate their findings with the "affluence" hypotheses, where consumers in developed countries often have more financial capabilities and technological infrastructure that can make pro-environmental behavior more feasible. This coincides with Marquart-Pyatt (2012) in that differences in levels of environmental activism worldwide may

exist and that influences on environmental activism may be context dependent. Research on environmental activism is often limited to industrialized countries. Overall, environmental attitudes, beliefs, individual resources, collective identity, sense of injustice, costs of protest, and perceptions (e.g. risk, state of the environment, and consumer efficacy) have been suggested to predict environmental behaviors (Marquart & Pyatt, 2012; Lee et al. 2014; Paço & Gouveia Rodrigues, 2016; Binder & Blankenberg, 2016; Scafuto & La Bebera, 2016).

Research on environmental behavior such as activism and protesting has revealed powerful antecedents such as collective identity, perceived risk, costs of protest, and a sense of injustice (Scafuto & LaBarbera, 2016). Nonetheless, many individuals having pro-environmental attitudes and concerns often do not engage in pro-environmental behaviors (Paço & Gouveia Rodrigues, 2016; Scafuto & La Berbera, 2016; Lee et al. 2014; Morren & Grinstein, 2016). For example, some research suggested that altruism may positively impact subjective well-being and that egotism may negatively impact subjective well-being (Binder & Blankenberg, 2016). Binder and Blankenberg (2016) pointed out that this effect may be due to omitting variables for environmental activism, such as volunteering. Marquart and Pyatt (2012) also found that altruism does not impact environmental behaviors. Much of this literature, with the exception of Binder and Blankenberg (2016), failed to incorporate more egoistic dimensions. Therefore, more work needs to be done analyzing both altruistic and egoistic motivations. Moreover, more work needs to compare consumer activism factors in developing versus industrialized countries (Marquart & Pyatt, 2012; Lee et al. 2014). In fact, Morren and Gristen (2016) argued that intention to behave environmentally is more likely to turn into actual behavior in developed and industrialized countries.

One reason there may be differences between the materialization of consumer activism in industrialized countries and developing countries is long-term orientation. Research into long-term orientation suggests that people from national cultures that are short-term orientated tend to focus more on the present and usually put off or discount future outcomes (Bearden et al. 2006). These individuals make decisions based on satisfying immediate desires without contemplating future consequences. On the other hand, long-term oriented individuals are more likely to plan ahead before making decisions and are not as easily influenced by satisfying immediate desires (Bearden et al. 2006). Past research suggests that consumers with greater adherence to long-term orientation tend to engage in green or environmental behaviors (Nguyen et al. 2017). This finding is consistent with other research that suggests that consumers that are long-term oriented are more likely to be in favor of protecting the environment in order to ensure a sustainable environment for future generations, including their children (Leonidou et al. 2010).

It appears that trust in government may also have an effect on consumer activism (Boholm & Löfstedt, 1999; Johnson & Scicchitano, 2012; Grimmelikhuijsen & Knies, 2015; Taniguchi & Marshall, 2018). Some research suggests that when people perceive the government to be working closely with business, they may believe that the government is solely pursuing monetary interests. These monetary interests often clash with what the public believe to be their best interests (Boholm & Löfstedt, 1999). On the other hand, research has found that when sufficient trust in government exists, people are less likely to engage in activist behavior (Johnson & Scicchitano, 2012). This is because when people have higher levels of trust in their government, people are less likely to believe that a particular environmental risk, such as the location of a landfill, will pose a danger to them (Johnson & Scicchitano, 2012). Therefore, research involving individual perceptions of how companies dispose of potentially harmful

products requires an evaluation of trust in government (Johnson & Scicchitano, 2012). Higher levels of trust in government have been found to be positively associated with intended as well as actual environmental activism (Taniguchi & Marshall, 2018).

When evaluating trust in government, perceived competence, perceived benevolence, and perceived integrity of the governmental institution need to be evaluated (Grimmelikhuijsen & Knies, 2015). This is because trustworthiness in governmental institutions is multidimensional and a multidimensional approach can help gain a better understanding on how people evaluate their public officials (Grimmelikhuijsen & Knies, 2015).

Finally, research has uncovered that consumer activism can negatively affect consumer attitudes towards a firm (van Den Broek et al. 2017; Bartley & Child, 2011; King, 2008). For example, when consumers protest against a firm's behavior that is perceived as environmentally unsustainable, activism behavior is found to negatively affect consumer's image of the firm (van Den Broek et al. 2017). Protest behavior against firms that engage in sweatshop behaviors can also diminish previously positive corporate reputations, but only by a modest degree (Bartley & Child, 2011). When negative media coverage of a firm is sufficiently damaging, such as declines in sales or reputations, firms often concede to protesters' demands (King, 2008).

The Product Lifecycle

For decades, the PLC has offered marketers a concise summary of the different stages a product endures based on biological analogy (Day, 1981). The traditional PLC is divided into four stages: 1) market development, 2) growth, 3) maturity, and 4) decline (Levitt, 1965). In the first stage, products are introduced into the market (Levitt, 1965), and firms may employ strategies that emphasize advertising to increase purchase frequency (Anderson & Zeithaml, 1984). In the second or growth stage when sales are increasing, firms may attempt to focus on

product segmentation and building efficiencies to meet consumers' needs (Anderson & Zeithaml, 1984). During the third or maturity stage, firms attempt to improve product process efficacies and reduce product costs while further promoting product differentiation (Anderson & Zeithaml, 1984). In the last or decline stage, consumers may have found substitutes and sales decline sharply (Levitt, 1965). During this stage, sales of products are declining, and companies likely plan for product elimination (Anderson & Zeithaml, 1984). Over the years, the PLC has been the basis of much marketing research; however, most research regarding the traditional PLC fails to include a product disposal stage once a product is no longer viable. Product disposal may include actual products remaining in inventory or byproducts of production. Byproducts could include hazardous waste from pharmaceuticals, hospitals, oil, chemicals, and pesticides, among many others (Singh & Lakhan, 1989). Not surprisingly then, the relationships of consumer well-being to the real final stage of the PLC, product disposal, has received only limited attention to-date.

Subjective Well-being and the Disposal of Unwanted Products

Companies often produce and market potentially harmful products, but if properly used, can enhance economic growth, especially in developing countries (Albers & Gelb, 1991; Mullen et al. 2009). These potentially harmful products can increase production and improve a consumer's quality of life (Albers & Gelb, 1991). On the other hand, the improper disposal of these potentially harmful products can pose significant harm to consumers such as poisoning, environmental damage or even death (Harvey, 1988; Albers & Gelb, 1991). Improper disposal can often harm people, particularly workers, because of poor training and poor safety standards (Harvey, 1988). Consumers can receive satisfaction through the proper disposal of products. Product disposal satisfaction refers to the degree of satisfaction that a consumer receives with the

disposability of their products as well as the convenience and ease of product disposal and the corresponding consequences for the environment (Lee et al. 2002).

Consumer well-being is often contingent upon the consumption and disposal of products, specifically potentially harmful products (Harvey, 1988; Albers & Gelb, 1991; Ha-Brookshire & Hodges, 2009; Bianchi & Birtwistle, 2012; Cruz-Cárdenas & Arévalo-Chávez, 2018). Economic growth can contribute to consumer well-being, but this growth often comes at a cost of environmental degradation (Mullen et al. 2009). This is because with increased trade, consumers can increase their overall consumption, putting strain on the ecosystem (Mullen et al. 2009). A side effect of increased consumption is increased waste. Much of this waste includes the disposal of potentially harmful products which affects consumers' well-being as well as the environment (Bianchi & Birtwistle, 2012 and Cruz-Cárdenas & Arévalo-Chávez, 2018).

Ideally, consumers receive benefits and improve their well-being from the disposal of potentially harmful products (Cruz-Cárdenas & Arévalo-Chávez, 2018). For example, recycling hazardous wastes brings benefits to consumers (Wolsink, 1994; Hermansson, 2007). Problems arise in the market when the costs of the hazardous waste trade, such as recycling, affects an individual while at the same time, its benefits are spread more broadly (Hermansson, 2007). Consumers at the local level usually incur most of the disadvantages of the hazardous waste trade through environmental damage (Wolsink, 1994). This is because consumers' disposal methods often determine when the product ends up in a landfill, which is crucial to the environment (Cruz-Cárdenas & Arévalo-Chávez, 2018). See Table 1 for the summary of the preceding literature stream.

Table 1 Cited Literature on Environmental Behaviors

Article	Purpose	Findings
Albers and Gelb (1991)	Argue for international framework in the trade of hazardous wastes	Excessive exports of hazardous wastes from industrialized countries to poor countries
Harvey (1988)	Better monitoring of US-exports of hazardous wastes to developing countries	MNCs in industrialized countries profit from the export of hazardous wastes to poor countries
Ha-Brookshire and Hodges (2009)	Seeks in depth understanding of consumer disposal behavior	Consumers experience utilitarian and hedonic values regarding old clothes disposal behavior
Bianchi and Birtwistle (2012)	Empirically explore antecedents of clothing disposal behavior in two countries	Consumer awareness of the environment drives donating behavior
Cruz-Cárdenas and Arévalo-Chávez (2018)	Systemize existing knowledge of the disposal of products	Disposal of products has consequences for consumer's well-being
Singh and Lakhan (1989)	Examine the nature of international trade in hazardous wastes	Argues that the export of hazardous wastes to developing countries is unethical and requires worldwide regulation
Peelle (1988)	Evaluate the uses and limits of public participation in the location of hazardous waste facilities	NIMBY situations often end in a stalemate/impasse
Groothuis and Miller (1994)	Uncover what influences the location of a hazardous waste facility in a community	Tolerance and avoidance can influence or underline NIMBY
Luloff, Albrecht and Bourke (1998)	Identify the major problems with the NIMBY concept	NIMBY concept has lack of clarity, validity, and reliability
Wolsink (1994)	Incorrect use of NIMBY could be counterproductive	Implications of NIMBY attitude; identifies six assumptions that underlie the NIMBY attitude
Wolsink (2006)	To explain why NIMBY is invalid and unreliable for research	NIMBY has questionable validity; more than just a selfish construct and involves equity
Wolsink (2007)	Past NIMBY explanations have been falsified	NIMBY needs to include equity and fairness in order for it to be valid and reliable
Wolsink and Devilee (2009)	Past NIMBY evaluations were invalid and unreliable	It is possible to construct a valid and reliable NIMBY construct; NIMBY should include equity and fairness
Ferreira and Gallagher (2010)	Illustrate distinction between hardcore and softcore protesters	People in pre-planning phases of a noxious facility are less accepting of compensation offers in NIMBY situations than facilities that have already been built
Johnson and Scicchitano (2012)	Assess the extent to which people care characterized as NIMBYists	People do not always respond to environmental risks by gut reaction or without information
Ren, Che, Yang, Tao (2016)	To identify predictors of risk perception for a waste facility	Income effects, opinions, gender and perceived impact all influence willingness to protest
Hermansson (2007)	To argue that NIMBY needs to include ethics	NIMBY attitudes are more than just egoistic and irrational
Marquart-Pyatt (2012)	Explaining environmental activism across countries	Education, awareness of consequences, and attitudes affect environmental activism across 16 different countries
Freudenberg and Steinsapir (1991)	Critics who criticize NIMBY groups often ignore that some of these groups evolve into NIABY groups	National NIMBY groups are mostly white and middle class; NIABY groups often come from minority groups and women. These groups evolve into NIABY groups
Lee, Kim, Kim and Choi (2014)	Past environmental research focused only on green behavior; this study focuses on three behaviors: green purchase behavior, good citizenship behavior and activist behavior	Altruistic values have no direct influence on behavior; activist behavior is explained by perceived consumer efficacy
Scafuto and La Barbera (2016)	Investigates the relevance of several psycho-social predictors that may influence protest behavior, drawing from different research traditions	Collective identity, sense of injustice, costs, and perceived risk all impact intention to protest; these are for non-activists

Article	Purpose	Findings
Paço and Gouveia Rodrigues (2016)	To determine if pro-environmental attitudes translate into pro-environmental behavior	Despite high levels of environmental responsibility, people do not always behave in environmental ways
Binder and Blankenberg (2016)	To find out of if perceptions of the state of the environment impact an well-being and influence behavior	Egoistic concerns have a negative impact on subjective well-being; altruistic concerns have a positive effect on subjective well-being
Stern (2000)	Presents major propositions to guide future research and to help design behavioral models for environmental protection	VBN Theory; defines terms and explains relationships among values, beliefs, and norms
De Groot and Steg (2007)	To find a distinction between altruistic, egoistic and biospheric values	Three-way distinction among altruistic, egoistic, and biospheric values
Stern, Dietz, Guagnano, and Kalof (1999)	Posits that the VBN Theory is the best theory to explain environmental behaviors when compared to others	Suggests that the VBN Theory, when compared with others, offers best account to explain environmental activism
Jansson, Marell, and Nordlund (2011)	To better understand consumer adoption of high involvement eco-innovation using VBN Theory	VBN factors were successful in explaining early adoption of eco-innovations
Seyfang (2006)	To identify the driving force of alternative sustainable consumption	Ecological citizenship may be a powerful force that influences consumption behavior
Morren and Grinstein (2016)	To test the moderating role of country development and national culture within the theory of planned behavior in the context of environmental behavior	In developed countries, intention to behave environmentally is more likely to translate to actual behavior; attitudes are related to intention

Explaining the Differences in Consumer Activism Intention between Developing and Industrialized Countries

Over the past forty years, research has attempted to explain the dichotomy between environmentalism in developing and industrialized countries (Inglehart, 1977; Inglehart & Abramson, 1994; Inglehart, 1995; Franzen, 2003; Dunlap & York, 2008; Mayer & Smith, 2017). First, postmaterialist theory argued that once a society reached above subsistence level of economic development, a society would focus on improving human rights, democracy, and the environment (Inglehart, 1977). For example, people in rich countries may start to pursue intellectual and altruistic goals, such as the care of the planet and the protection of future generations (Inglehart, 1995). This theory was later updated to include the notion that a society may begin to be concerned about environmental problems, independent of economic development (Inglehart, 1995). That is, a society may become increasingly concerned with environmental problems despite long-term economic development (Inglehart, 1995). This

amendment invited criticism of the theory due to the post-hoc manner to which the theory was updated from the original formulation (Dunlap & York, 2008).

The affluence hypothesis was another attempt to explain the differences in environmental concern between developing and industrialized countries (Franzen, 2003; Franzen & Vogl, 2013). The affluence hypothesis argued that as country's nation or personal income grows, people in the country will begin to demand improvements to their country's environmental condition (Franzen, 2003). Despite the slight differences between the postmaterialist hypothesis and affluence hypothesis, they both conclude that as societies grow wealthier, they will become more concerned with the environmental problems and will support pro-environmental policies (Mayer & Smith, 2017).

Although the extant literature supports postmaterialist and affluence hypotheses, studies show that economic development by country have failed to explain the differences about environmental concern between industrialized and developing countries (Mayer & Smith, 2017). This is because both industrialized and developing countries differ from more than just GDP and macroeconomic indicators such as quality of governmental institutions (Mayer & Smith, 2017). Mayer and Smith (2017) found that absolute differences in economic development have almost no influence on environmental concern between industrialized and developing countries, and argue that individual economic perceptions can influence environmental concern.

The quality of governmental institutions is important to consider because consumer activism in developing countries is often quite weaker when compared to consumer activism in industrialized countries; in countries where corruption, exploitation and inequality are deep rooted, participating in consumer activism can be extremely dangerous (de Zoysa, 2009).

Consumers in developing countries are often frightened to complain to authorities and have no confidence in their government officials to enforce the law (de Zoysa, 2009). For example, governments in developing countries often do not have the political will to enforce consumer protection regulations, while consumers often have insufficient knowledge of their rights which results in a weak consumer activist culture that has enough momentum to challenge violations (de Zoysa, 2009). Furthermore, consumers in developing countries often have to meet daily challenges such as poverty, hunger, and market fluctuations instead of participating in consumer activism (de Zoysa, 2009).

Proposed Model: Subjective Well-being and Consumer Activism Intention

Two, potentially competing theories have defined consumer activism toward the disposal of harmful products: NIMBY (Wolsink & Devilee, 2009) and VBN Theory (Stern, 2000). Past NIMBY research suggested that consumer activism and opposition arise from selfish and self-protection motivations in the face of threat from such actions as when harmful products were dumped 'in my backyard.' NIMBY also includes motivations of fairness and equity. Broadly, VBN Theory argued that norm based actions flow from three factors: acceptance of personal values, beliefs that issues important to those values are under threat and that individual actions can help reduce the threat and restore the values (Stern et al. 1999). Values, beliefs, and norms form a causal chain of five variables (e.g. values, ecological worldview, awareness of consequences, ascription of responsibility, and personal norms for pro-environmental action) (Stern et al. 1999). The causal chain moves left to right, forming a stable chain of elements such as personality and belief structures to more focused beliefs about human interactions with their environment as well as threats posed to valued objects, responsibility for action, and finally

activation of a notion of moral obligation that creates the initiative to act in support of pro-environmental goals (Stern et al. 1999).

Thus, these two theories provide the framework for this study designed to test effects of self-interest versus altruism on consumer activism and the effect of activism on subjective well-being. Use of NIMBY in this research is important because of the lack consistent findings in prior research regarding self-interest as motivating factor. The use of VBN theory is important because of the call for future research to be built on the VBN in order to explain environmental behaviors (Marquart & Pyatt, 2012). While some prior NIMBY research has used some components of VBN theory: ecological worldview (e.g. attitudes) (Groothuis & Miller, 1994; Wolsink & Devilee, 2009; Marquart & Pyatt, 2012; Lee et al. 2014; Ren et al. 2016; Paço & Gouveia Rodrigues, 2016), awareness (Ren et al. 2016), and personal norms (Wolsink & Devilee, 2009; Johnson & Scicchitano, 2012), VBN Theory offers two constructs that have not been explored previously in the literature involving disposal of products and the siting of facilities that manage these products: values and ascription of responsibility. Also important in this research is a test of the effects of activism on subjective well-being, a linkage not specifically examined in prior research.

Values have been conceptualized as a guiding principle that are significant to an individual's life (Schwartz, 1992; Hansla et al. 2008). The VBN chain begins with three types of values with the values posited to effect an ecological worldview. In environmental behavior research, altruistic, egoistic, and biospheric values have been identified (Hansla et al. 2008). Values are important to environmental behavior research because values determine how an individual responds to various stimuli, including threats such as a home or a community, and how actions (e.g. participating in a movement) can help resolve those threats (Stern et al. 1999).

Altruistic values are defined as a person's concern that goes beyond his or her own immediate social circle. People that have stronger altruistic values usually hold stronger pro-environmental beliefs; they also are more likely to engage in pro-environmental behaviors (Stern, 2000; De Groot & Steg, 2007). Stern (2000) posited that altruistic values have a direct positive effect on individual beliefs, in this case, awareness of consequences, since altruistic values were found to strongly activate pro-environmental norms (Stern et al. 1995 and Stern, 2000).Therefore, people with more altruistic values are concerned with the welfare of others and may be motivated to modify his or her behavior in order to reduce an environmental threat that may hurt others (De Groot & Steg, 2007).

Egoistic values are those that reflect obedience, self-discipline and family security. These values have been found to be negatively associated with environmental behaviors (Stern, 2000). This is because self-enhancement values often involve a conflict between immediate individual gains and long-term collective interests (Stern, 2000; De Groot & Steg, 2007). People with egoistic values often seek to enhance their personal interests, such as power and achievement (De Groot & Steg, 2007). The pursuit of egoistic values often conflict with environmental movement goals (Stern, 2000). For example, egoistic values are often negatively correlated with environmental beliefs, such as awareness of consequences (Stern, 2000; De Groot & Steg, 2007).

Biospheric values reflect concerns for non-human living animals and ecosystems (Stern, 2000). Like altruistic values, biospheric values tap into a person's concern for others—in this case, the biosphere or an ecosystem of non-human living creatures (Stern, 2000; De Groot, 2007). Biospheric values are activated when people are challenged with environmental problems (De Groot, 2007). This is because people who hold strong biospheric values often hold guiding principles in their lives that influence their feelings of moral obligations towards non-human

living entities (De Groot, 2007). Biospheric values have been shown to influence awareness of consequences of an environmental problem (Stern, 2000).

It should be noted that each of these values are argued to be distinct (Stern et al. 1999; Stern, 2000). Altruistic values are important to environmental behavior, and specifically VBN theory, because they explain why individuals protest environmental damage, often because of normative claims beyond individual self-interests. More recent research confirms these arguments. For example, Chua et al. (2016) find that altruistic, egoist, and biospheric values all significantly affect beliefs in an agricultural context. Similar findings are reported in regards to a variety of environmental behaviors such as water and power conservation (Bronfman et al. 2015).

Further, some research has suggested that these values may differ among different countries (Ingleart, 1995; De Groot & Steg, 2007; Lee et al. 2014; Binder & Blankenberg, 2016). Past research has suggested that the relationship between values and beliefs are not necessarily universal (De Groot & Steg, 2007) and may be contingent upon a country's level of development (Mayer and Smith, 2017). This is because people in wealthier countries often have access to more resources and can satisfy more basic needs such as food and clothing. Thus, they can begin to develop values that are more altruistic, such as values regarding the environment, when compared to people in developing countries (Mayer and Smith, 2017).

Therefore:

H1a: Altruistic values will significantly and positively affect awareness of consequences.

H1b: Biospheric values will significantly and positively affect awareness of consequences.

H1c: Egoist values will significantly and negatively affect awareness of consequences.

H1d: The effects of Altruistic values will be different for industrialized versus developing countries.

H1e: The effects of Biospheric values will be different for industrialized versus developing countries.

H1f: The effects of Egoist values will be different for industrialized versus developing countries.

Perceived cognitive effects can influence awareness of consequences, specifically economic costs and economic benefits. Potentially harmful products offer both costs and benefits to affected consumers (Harvey, 1988). Past research has suggested that consumers usually perceive very high costs and low benefits when they are confronted with the construction of a product disposal facility in their community (Wolsink & Devilee, 2009). However, some research suggests that the macroeconomic condition of a country can influence pro-environmentalism (Bruelle et al. 2012; Kahn & Kotchen, 2010; Scruggs & Benegal, 2012). For example, when the macroeconomic condition of a country is prosperous or growing, consumers will be more concerned with the condition of the environment (Mayer et al. 2017). In other words, pro-environmentalism is sensitive to consumer perceptions of the economy. Mayer and Smith (2017) found that when the national economy improves, consumers are more willing to make financial sacrifices for environmental protection.

Perceived costs refer to the negative consequences of disposing of products. In some cases, costs can be deadly or affect long-term health (e.g. cancers, respiratory problems, birth defects, even death) (Frey, 1994). In other cases, visible potentially harmful products can be perceived as being an eyesore and may be harmful to property values by consumers (Moysiadis et al. 2015). Many consumers may see the establishment of a product disposal facility in their

community as a cost which may decrease the value of their home (Wolsink & Devilee, 2009). In this case, the economic benefits of the facility may outweigh the perceived economic costs and, consumers may be motivated to protest the product disposal facility (Groothuis & Miller, 1994; Ferreira & Gallagher, 2010; Ren et al. 2016). These observations are consistent with other findings where people have expressed opposition to offshore oil and gas drilling because of the consequences on the scenic beauty of people's backyards (Marks & von Winterfeldt, 1984). For example, Wolsink (2000) finds that perceived costs directly influence opposition to windfarms.

Perceived economic benefits refers to jobs, income, and development that can arise from the disposal of potentially harmful products. In many cases, facilities that store or treat potentially harmful products provide economic benefits to a community. Past research has found that when consumers believe that the construction of a product disposal facility will bring a net benefit to the community, such as renewable energy or conservation of land, they may less likely to protest its construction (Wolsink, 1994; Wolsink, 2000; Hermansson, 2007; Wolsink & Devilee, 2009; Ren et al. 2016). Therefore:

H2: Economic costs will positively and significantly impact awareness of consequences.

H3: Economic benefits will negatively and significantly impact awareness of consequences.

Awareness of consequences is defined as an "individual's beliefs about the adverse consequences of environmental problems" (Hansla et al. 2008, p. 1). Awareness of consequences refers to beliefs about the kinds of people or things that are affected by environmental conditions (Stern et al. 1999). Thus, when an individual attempts to evaluate the consequences of an environmental problem, the individual will assess the degree to which he or she perceives danger, such as climate change (Weber et al. 2000; Yu et al. 2017). In other words, pro-

environmental behaviors are often influenced by environmental beliefs, especially when these beliefs are under threat (Stern, 2000; Cordano et al. 2010). Scholars have found that specific pro-environmental beliefs, such as awareness of consequences, predict norms, and subsequently, behavioral intentions regarding an environmental problem (De Groot, 2007).

Past research suggested that consumer activism intentions are rooted in environmental personal norms (Stern et al. 1999, Stern, 2000, and Steg et al. 2011). Environmental personal norms are defined as "a moral internal and autonomous type of motivation to comply with pro-environmental behavioral requirements" (Bertoldo & Castro, 2016, p. 46). Environmental personal norms are often invoked as the main element in environmental research related to environmental behaviors and intentions (Han et al. 2018).

Stern et al. (1999) and Stern (2000) suggested that environmental personal norms, rather than environmental social norms, are crucial to changing environmental behaviors because when individuals join to confront an environmental problem, they cannot build support on existing environmental social norms. This is important to point out because environmental personal norms have been found to be the crucial element of existing environmental research related to pro-environmental behavioral intentions (Bertoldo & Castro, 2016; Stern et al. 1999). Therefore,

H4: Awareness of consequences will significantly and positively affect environmental personal norms.

H5: Awareness of consequences will significantly and positively affect environmental social norms.

Environmental personal norms often include a moral component, especially in regard to someone's backyard and the location of a dangerous waste facility (Wolsink & Deveilee, 2009).

This is because environmental personal norms rest upon an individual's evaluation of actions congruent with his or her moral worth or value to the self (Schwartz & Howard, 1984). As a consequence, environmental personal norms often lead to efforts to attempt to reshape the obligations of the government or the obligations of business in a society (Stern et al. 1999). Past research affirmed the relationship between personal norms and activism in the contexts of driving patterns (Steg et al. 2011) and commitment to protect biodiversity (Menzel & Bögeholz, 2010). Given the past research findings, it can be argued that environmental personal norms are significant predictors of activism intention because environmental personal norms have been found to increase intentions in light of environmental problems (Han et al. 2018).

Environmental social norms, sometimes known as subjective norms, refer to perceptions about permissible behaviors in society (Ajzen & Fishbein, 1991) and affect behavior (Ajzen & Fishbein, 1991). Past research suggests that social norms influence pro-environmental behaviors (Klöckner, 2013) such as activist behavior towards invasive species on private lands (Niemiec et al. 2016) and the proper disposal of disposable tableware (Fang et al. 2017). It should be noted, however, that many developing countries tend to experience higher levels of environmental degradation and lower levels of pro-environmental behaviors when compared to industrialized countries (Farrow et al. 2017). Farrow et al. (2017) hypothesize that social norms may be less motivating of pro-environmental behaviors when compared to industrialized countries.

Therefore:

H6: Environmental personal norms will significantly and positively affect consumer activism intention.

H6a: The effects of environmental personal norms will different for industrialized versus developing countries.

H6b: Environmental personal norms will mediate the relationship between awareness of consequences and consumer activism intention for both industrialized and developing countries.

H7: Environmental social norms will significantly and positively affect consumer activism intention.

H7a: The effects of environmental social norms will different for industrialized versus developing countries.

H7b: Environmental personal norms will mediate the relationship between awareness of consequences and consumer activism intention for both industrialized and developing countries.

A behavioral intention that is influenced by awareness of consequences is consumer activism intention. Consumer activism intention is likely affected by levels of environmental concern (Paço & Gouveia Rodrigues, 2016; Scafuto & La Berbera, 2016; Lee et al. 2014; Morren & Grinstein, 2016) and describes intentions to reverse negative environmental policies. These may include intention to demonstrate, intention to vote for pro-environmental candidates, and intention to sign a petition (De Groot & Steg, 2007). Consumer activism intention usually reflects the intention to change governmental policy and/or managerial decisions (Paço & Gouveia Rodrigues, 2016). Past research has confirmed the Stern et al. (1999) findings. For example, awareness of consequences has influenced ascription of responsibility in yard burning (Van Liere & Dunlap, 1978) and vehicle emissions (Steg & De Groot, 2010). Thus:

H8: Awareness of consequences will have a positive and significant influence on consumer activism intention.

NIMBY motivations refer to people's oppositional attitudes towards a risk engendering facility, such as a facility that treats potentially harmful products, planned for a person's community or backyard (Hermansson, 2007). Policy makers have often agreed that NIMBY motivations directly generate activist behaviors when a hazardous waste facility is planned in a community (Wolsink & Devilee, 2009). NIMBY motivations include not only selfish or backyard motivations, but also feelings of equity and fairness (Wolsink & Devilee, 2009). If people perceive that the construction of a waste facility in their "backyards" is unfair, then they will protest (Wolsink & Devilee, 2009). In other words, NIMBY attitudes can influence oppositional behavior in the planning phases when locating a facility to treat potentially harmful products in someone's backyard (Wolsink & Devilee, 2009; Ferreira & Gallagher, 2010). Therefore:

H9: NIMBY attitudes will significantly and positively affect consumer activism.

Trust in government refers to the expectations that public officials will carry out duties with integrity (Grimmelikhuijsen & Knies, 2015) and can influence environmental behavior (Taniguchi & Marshall, 2018). Generally, trust is built through the accrual of social and institutional relations (Moon et al. 2017). In many cases, trust can ease social friction and promote cooperation, particularly when group actions are required (Moon et al. 2017). Institutional trust describes trust that people have that public institutions will protect their well-being (Moon et al. 2017; Smith & Mayer, 2018). In other words, when people trust their governments to carry out their functions with integrity, they often do not need to protest. Therefore:

H10: Trust in government will positively and significantly impact consumer activism.

Trust has also been found to be an important moderating variable in pro-environmental behaviors (Wu et al. 2016; Moon et al. 2017; Chang et al. 2018; Hou et al. 2019). Trust in government has been found to moderate the relationship between environmental behaviors and pro-environmental attitudes (Moon et al. 2017). This is because people who trust governmental institutions are more likely to perceive them to be credible and can resolve environmental problems reliably (Moon et al. 2017). So when people protest, they feel that their objectives can be executed by the government officials competently (Moon et al. 2017). This relationship has also been validated with regards to trust and the establishment of waste-to-energy incinerators (Hou et al. 2019). Institutional trust has been found to moderate the relationship between perceived risk and anti-incinerator sentiment in China (Hou et al. 2019). The effects of trust on the location of a toxic facility such as a waste-to-energy facility is important because distrust of government officials can influence the public's perception and opposition to their personal safety (Hou et al. 2019). Trust in government can also moderate the relationship between environmental personal norms and consumer activism intention (Moon et al. 2017). When people's norms align with those of the government, they may be more inclined to demand action from their elected officials (Moon et al. 2017).

Along these lines, people in wealthier and industrialized countries are often more likely to engage in protests to influence their government officials to do something to resolve their problems (Dalton et al. 2010). On the other hand, people in developing countries often do not protest because they perceive their government officials as incompetent (Lagos, 2012). Thus,

H10a: The effects of trust in government will moderate the relationship between awareness of consequences and consumer activism intention.

H10b: The effects of trust in government will moderate the relationship between environmental personal norms and consumer activism intention.

H10c: The effects of trust in government will be different for industrialized versus developing countries.

H10d: The effects of trust in government will moderate the relationship between environmental social norms and consumer activism intention.

Subjective well-being is defined as a broad judgement of life satisfaction (Diener et al. 1999). Subjective well-being relates to how and why individuals experience cognitive and affective reactions in their lives (Pan et al. 2007). Marketing activities such as retailing, advertising, and spending have both positive and negative influences on consumer well-being according to some research (Pan et al. 2007). Furthermore, some consumer activities such as civil rights (e.g. open and public discussion, freedom of assembly and protesting) result in higher levels of subjective well-being (Pan et al. 2007). Other research suggests that significant correlations exist between political activism and dimensions of subjective well-being (Šarkutė, 2017). Specifically, some activist behaviors such as demonstrating or participating in democratic assemblies may increase individual subjective well-being (Frey & Stutzer, 2000; Pan et al. 2007). With research suggesting that activism behaviors can contribute to subjective well-being (Frey & Stutzer, 2000; Pan et al. 2007; Šarkutė, 2017):

H11: Consumer activism intention will have a positive and significant influence on subjective well-being.

Attitudes toward a firm refer to a person's negative or positive feelings about actions of a firm (Ajzen, 1991). Specifically, attitudes can be formed about a firm's behavior regarding environmental sustainability (Ho, 2017). Consumers may form psychological perceptions about a

particular organization in this regard (Mandhachitara & Poolthong, 2011). Past research suggested that consumer activism or protest behavior toward a firm can negatively influence the firm's reputation or consumer's attitudes towards the firm (van Den Broek et al. 2017; Bartley & Child, 2011; King, 2008). Therefore:

H12: Consumer activism intention will have a positive and significant influence on attitude towards the firm.

The proposed model based on VBN as shown in Figure 6 includes all of the proposed direction and moderating relationships based on the previous literature review. According to the VBN model, values predict beliefs, beliefs predict norms, and norms predict behavioral intentions (Stern, 2000). Additionally, economic costs and benefits are hypothesized to influence beliefs (e.g. awareness of consequences). Trust in government as well as NIMBY attitudes are hypothesized to influence consumer activism intention. Finally, this research hypothesizes that consumer activism intention predicts attitude towards the firm and subjective well-being.

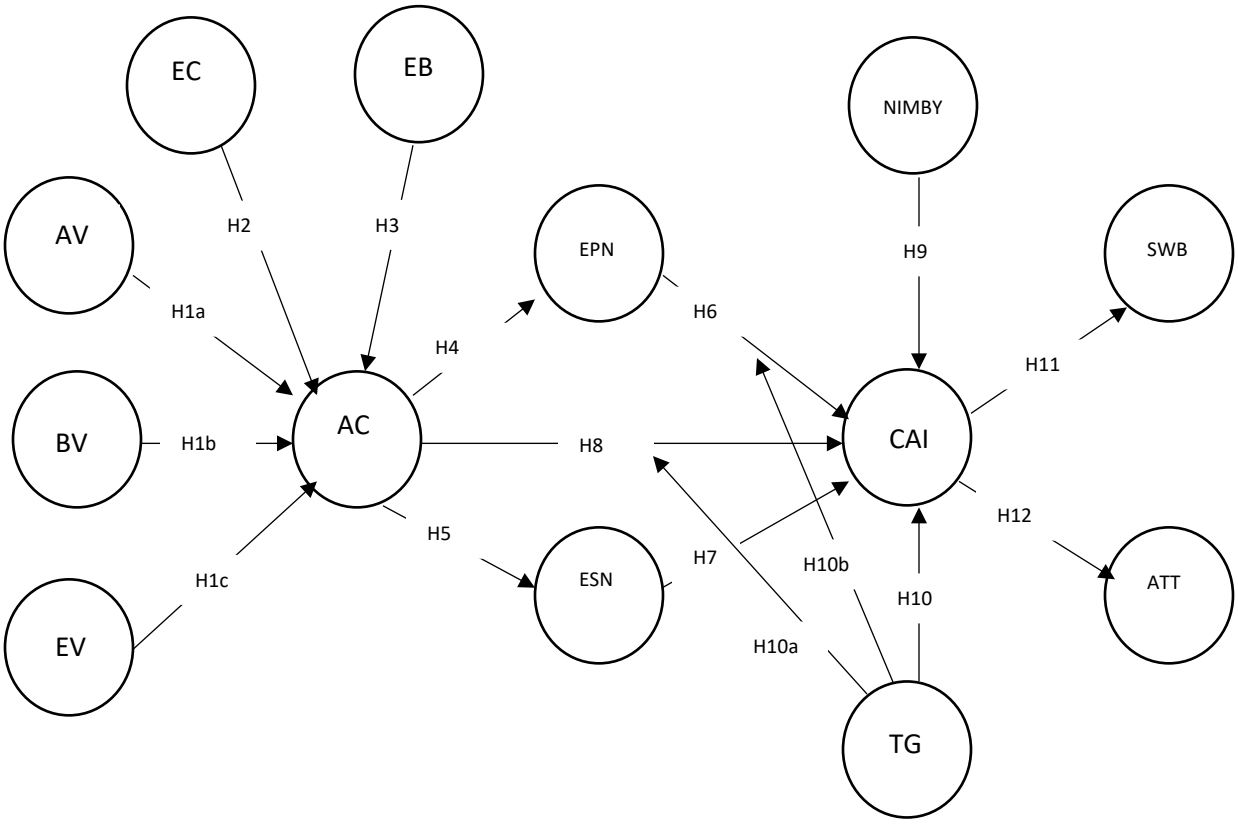

Figure 6 Consumer Well-being and Intention to Participate in Consumer Activism

Note: AV=Altruistic Values; BV=Biospheric Values; EV=Egoistic Values; EB=Economic Benefits; EC=Economic Costs; AC=Awareness of Consequences; EPN=Environmental Personal Norms; ESN=Environmental Social Norms; NIMBY=Not In My Back Yard; SWB=Subjective Well-being; ATT=Attitude towards the Firm

CHAPTER III

METHODOLOGY

This study was designed to test the differences among people's responses towards the disposal of potentially harmful products and the factors that influence consumer activism intention. The research design consisted of empirically estimating the relationships among different values, norms, and beliefs with consumer activism intention, attitude towards the firm and subjective well-being. Inferential statistics techniques were used to test the proposed model. This chapter is divided into the following sections: 1) research design, which includes the questionnaire, 2) measurements and operationalization, which includes a discussion of the validity and reliability of the measures, and 3) sampling.

Research Design

The research design consisted of empirically testing the relationships among values, norms, and beliefs as outlined by Stern et al. (1999) and Stern (2000). Other measures included consumer attitudes and motivations were tested. The data used to conduct the analysis was obtained through a survey in which respondents were asked to indicate their degree of agreement with most study measures such as values, personal norms, awareness of consequences, consumer activism intention, and subjective well-being. There were two versions of the questionnaire. The first version of the questionnaire was administered in English for the respondents in the United States. The second version of the questionnaire was administered in Spanish for the respondents

in Mexico. All scale items, therefore, were translated from English to Spanish by the bilingual researcher. In order to validate the Spanish version of the questionnaire, they were translated back into English by a second researcher. This was done to ensure accurate translations between English and Spanish, a suggestion put forth by Werner and Campbell (1970).

Measurement and Operationalization

The literature review on environmental behavior stated that values, beliefs, and norms all form a causal chain forming the Values-Beliefs-Norms Theory (Stern, 2000). The empirical support for the order of the values, beliefs, and norms came from previous work (Black et al. 1985; Stern & Oskamp, 1987; Stern et al. 1995; Stern et al. 1995; Gardener & Stern, 1996). The measures used in the VBN Theory form a chain of seven consecutive constructs that form a sequence. These measures corresponded to values (e.g. altruistic, egoistic, and biospheric), beliefs (e.g. awareness of consequences, and ascription of responsibility), norm (e.g. personal norms), and behavior (activist behavior). Stern (2000) suggested that values were the basis of environmentalism, specifically, environmental behavior. This research used the constructs from the VBN Theory, specifically, values (e.g. altruistic, egoistic, and biospheric), norms (e.g. environmental personal norms and environmental social norms), and beliefs (e.g. awareness of consequences). All of these variables predicted consumer activism intention.

Additionally, trust in government, perceived effects (e.g. economic costs and economic benefits), NIMBY attitudes, subjective well-being and attitude toward the firm were added to the model for testing. The following discussion reviews each of the proposed constructs, each of their items, and their previous psychometric measures results. There were eleven constructs, ranging from 3 to 10 items for each construct. There were 68 items total. The constructs used in this study were drawn and measured from past research, but the wording was modified with

respect to this study's context. Unless otherwise noted, each of the constructs were anchored by a five-point Likert-type scale ranging from totally agree (1) to totally disagree (5).

Values. Relevant values to environmentalism included self-interest, altruism towards other people and towards other species and the biosphere (Stern et al. 1999). Altruism often triggers such behaviors as aiding victims in an emergency or contributing to a good cause, in other words, collective goods (Schwartz, 1973). Self-interest behaviors or egoistic behaviors had four items, altruistic values had four items, and biospheric values had four items. Stern et al. (1999) reported that the Cronbach's alphas for egoism and altruism were .69 and .86 respectively. No indication of scale validity was reported. In total, there were 12 items as shown in Table 2.

Table 2 Values

Items	Scale Authors	Reliability and Validity
Egoistic Value Orientation		
(1) To me, social power is important.		α=0.69
(2) I think wealth is important.		Validity
(3) To me, authority is important.		=none reported
(4) To me, ambition is important.		
Altruistic Value Orientation	Schwarts	
(1) I think equality is important.	(1973)	
(2) To me, a world at peace is important.	Stern et	α=0.86
(3) I think social justice is important.	al.	Validity
(4) I think being helpful is important.	(1999)	=none reported
Biospheric Value Orientation		
(1) To me, preventing pollution is important.		
(2) I think respecting the earth is important.		
(3) To me, unity with nature is important.		α=none
(4) To me, protecting the environment is important.		Validity
		=none reported

Environmental Personal Norms. Environmental personal norms reveal feelings or moral obligations and are important in predicting pro-environmental behaviors, such as consumer activism regarding potentially harmful products (Stern et al. 1999). These were

modified from Schwartz (1973). Environmental personal norms included items from Stern et al. (1999) and De Groot and Steg (2007). Past research reported a Cronbach's alpha as .83. No scale validities were reported (Stern et al. 1999). In total, there were five items as seen in Table 3.

Table 3 Environmental Personal Norms

Items	Scale Authors	Reliability and Validity
Environmental Personal Norms		
(1) It's the moral thing to do to donate money to an environmental group that is fighting against the disposal of potentially harmful products in my community.	Stern et al. 1999 and De Groot and Steg (2007)	α=0.83 Validity =none reported
(2) I feel morally obliged to sign a petition against the disposal of potentially harmful products in my community.		
(3) I feel morally obliged to collect signatures against the disposal of potentially harmful products in my community.		
(4) It's the moral thing to do to demonstrate against the disposal of potentially harmful products in my community.		
(5) I feel guilty if others demonstrate against the disposal of potentially harmful products in my community while I do nothing.		

Awareness of Consequences. The awareness of consequences measure consisted of five items created to assess awareness of environmental problems associated with behavior, in this case, the disposal of potentially harmful products (De Groot & Steg 2007; Stern et al. 1999). The Cronbach's alpha obtained was .91 and no indications of scale validity were reported (Stern et al. 1999). Because awareness of consequences is conceptualized to include perceived environmental risk, which is the degree to which an individual perceives danger or hazards to either self, community, society, or all three regarding a particular environmental problem, perceived environmental risk items were also used here to assess awareness of consequences. Perceived environmental risk consisted of four items taken and were modified from Weber et al. (2000). Perceptions are important to measure because individuals may act upon them even if the perceptions in incorrect (Weber et al. 2000). The Cronbach's alpha obtained was .85 and AVE (average variance extracted) was .6523. This construct had ten items, as seen in Table 4.

Table 4 Awareness of Consequences

Items	Scale Authors	Reliability and Validity
(1) The improper disposal of potentially harmful products will be a problem for me. (2) The improper disposal of potentially harmful products will be a problem for the community as a whole. (3) The improper disposal of potentially harmful products will be a problem for other species of plants and animals. (4) The improper disposal of potentially harmful products will reduce the quality of life due to odor, mosquitos, and diseases. (5) The improper disposal of potentially harmful products near my home could affect me. (6) The improper disposal of potentially harmful products by burning them could make me sick. (7) The improper disposal of potentially harmful products into a landfill could poison the environment, making me sick. (8) The improper disposal of potentially harmful products by burning near my home could poison me. (9) The improper disposal of potentially harmful products that come from another country in near my home puts me in danger.	Stern et al. (1999) (Weber et al. 2000)	α=0.91 Validity =none reported α=0.85 AVE=.6523

NIMBY. The construct that measures NIMBY was modified from Wolsink and Devilee (2007). Wolsink and Devilee (2007) developed a reliable and valid scale for appropriately measuring personal norms about commitment (to others) and personal norms about equity. Wolsink and Devilee (2007) pointed out that individuals recognized the connection between the location of a hazardous waste facility and environmental justice. Personal norms, they argued, offer a balanced input as well as an output when people confront these types of social problems and they argued that the NIMBY construct appropriately reflects those norms. Wolsink and Devilee (2009) find that both perceived risk and personal norms are antecedents of the NIMBY. The NIMBY construct included eight items with an alpha score of 0.86. No indicators of scale validity were provided as shown in Table 5.

Table 5 NIMBY (Not-in-my-backyard) Attitudes

Items	Scale Authors	Reliability and Validity
Answer the following questions about a business that disposes of potentially harmful products near your home. I would be against a business that disposes of potentially harmful products… (1) even if there were good arguments for product disposal near my home instead of someone else's. (2) even if these products must be disposed of somewhere, I would still refuse them near my home in advance. (3) near my home because I think someone else would not accept them near their homes. (4) because I don't want to take on the burden of a problem that is caused by others. (5) because it is foolish to have this type of business near my home. (6) because this business should be located near someone else's home instead of my own. (7) because locating this type of business near someone else's home doesn't conflict with my idea about equity. **(8)** because it would only be fair to have this type of business near someone else's home.	Wolsink and Devilee (2009)	α=0.86 Validity= none reported

Perceived Effects. Perceived effects included two different cognitions: economic costs and economic benefits. The 3-item perceived economic costs measure used here was adapted from Wolsink and Devilee (2009), which was used to assess perceived consequences such as potential cleanup costs, threat to property values, and threat of medical costs, of a facility that treats potentially harmful products. The five perceived economic benefits items were also adapted from Wolsink and Devilee (2009). This measure assessed perceived benefits that may come from a facility that treats potentially harmful products such as jobs, economic growth, and outside investment. Cronbach's alphas for economic costs was 0.83 and economic benefits was .79 (Wolsink & Devilee, 2009) as shown in Table 6.

Table 6 Perceived Effects

ITEMS	Scale Authors	Reliability and Validity
Economic Costs		
(1) Businesses that dispose of potentially harmful products could affect my home's value.		
(2) If a business that disposes of potentially harmful products near my home has an accident, the cleanup will be expensive.	Wolsink and Devilee (2009)	α=0.83 Validity= none reported
(3) Health effects from the exposure to potentially harmful products could be expense for a family.		
Economic Benefits		
(1) Companies that dispose of potentially harmful products create jobs for the community.		
(2) Allowing companies to dispose of potentially harmful products in my community will attract investment.		
(3) Allowing firms to dispose of potentially harmful products will inject money into the local economy.	Wolsink and Devilee (2009)	α=0.79 Validity= none reported
(4) Firms that specialize in the disposal of potentially harmful products will have a positive impact in the local economy.		
(5) Allowing the disposal of potentially harmful products will create better infrastructure in the local community.		

Environmental Social Norms. Environmental social norms refer to perceptions of the pro-environmental institutional climate. In other words, "perceptions of formal policies, procedures, and practices relating to environmental sustainability (Prati et al. 2017, p. 178). According to the Theory of Planned Behavior, people often engage in different types of behaviors when they are under pressure or are under influence from others (Ajzen & Fishbein, 1991). Environmental social norms are imperative when evaluating environmental behaviors, including activism (Heath & Gifford, 2002; Han et al. 2010; Klöckner, 2013; Fang et al. 2017). The Cronbach's alpha for this construct was 0.70 and AVE was .539. This construct was measured by three items that have been adapted Han et al. 2018 as can be seen in Table 7.

Table 7 Environmental Social Norms

ITEMS	Scale Authors	Reliability and Validity
Most people who are important to me….		
(1) think that engaging in a protest against a business that disposes of potentially harmful products is good.	Han et al. (2018)	α=0.70 Validity /AVE= .539
(2) think I should get involved in a protest against a business that disposes of potentially harmful products in my community.		
(3) would approve of me protesting the construction of a business that disposes of potentially harmful products near my home.		

Trust in Government. Individuals often depend on their local government officials to execute and legislate effective governmental policy regarding the proper disposal of potentially harmful products (Johnson & Scicchitano, 2012; Grimmelikhuijsen & Knies, 2017). Trust in government had five items. The Cronbach's alpha was .83 and convergent validity was .662 (Grimmelikhuijsen & Knies, 2017). These can be seen in Table 8.

Table 8 Trust in Government

ITEMS	Scale Authors	Reliability and Validity
Competence		
(1) Overall, I believe that my local government officials are capable and a proficient provider of public services.	Grimmelikhuijsen and Knies, 2017	α=0.83 convergent validity= .662
(2) I believe my local officials are competent and effective in providing me public services.		
(3) In general, I believe my local government officials are knowledgeable about environmental law and regulations.		
(4) I believe that my local government officials perform their role of providing public services very well.		
(5) If I needed help, my local government officials would do everything possible to resolve my problem.		

Consumer Activism. The consumer activism measure was designed to assess consumer behavior toward negative environmental dilemmas such as the location of a business that disposes of potentially harmful products. This construct also tapped into feelings of responsibility for the negative consequences that may arise from not acting pro-environmentally (Steg & De Groot, 2010). These often involve evaluations that could help avert the consequences of an environmental problem (Stern, 2000). The ten items used in this study were modified from Steg and De Groot (2010) as well as from Scafuto and La Barbera (2016). The Cronbach's alpha was .72 though validity was not reported as seen in Table 9 (De Groot & Steg, 2007).

Table 9 Consumer Activism

Items	Scale Authors	Reliability and Validity
(1) I can prevent the dumping of potentially harmful products in my community by demonstrating. (2) I can make an impact by collecting signatures to prevent the dumping of potentially harmful products in my community. (3) I can make a difference by collecting signatures to prevent the establishment of a business that disposes of potentially harmful products in my community. (4) I can make a difference by organizing a demonstration to prevent the establishment of a company that disposes of potentially harmful products in my community. (5) I can prevent the disposal of potentially harmful products by a company in my community by complaining to the local authorities. (6) I can make a difference by passing out flyers about the dangers of potentially harmful products. (7) I can make a difference by picketing businesses that dispose of potentially harmful products in my community. (8) I can make a difference by informing people in my community by providing information about potentially harmful products on social media. (9) I can make a difference by voting for candidates that prohibit the disposal of potentially harmful products in my community. (10) I can help stop the disposal of potentially harmful products in my community by organizing public meetings.	De Groot and Steg (2007) Scafuto and La Barbera (2016)	α=0.72 Validity= None reported

Subjective Well-being. Subjective well-being is a construct that broadly captures a consumer's general affective responses toward life satisfaction and can vary with the different life stages which may include work and family (Diener et al. 1999). Subjective well-being was measured with five items and has a Cronbach's alpha of .72, though no validity was reported as can be seen in Table 10 (Diener et al. 1985).

Table 10 Subjective Well-being

ITEMS	Scale Authors	Reliability/ Validity
(1) In most ways my life is close to ideal. (2) The conditions of my life are excellent. (3) I am satisfied with my life. (4) So far I have gotten the important things I want in life. (5) If I could live my life over, I would change almost nothing.	Diener et al. (1985)	α=0.72 Validity= None reported

Attitude Towards the firm. Attitude towards the firm refers to feelings that a person may have towards a particular behavior (Ajzen, 1991) of a firm. People can form negative or positive behaviors in response to a firm's negative behavior towards the environment (Mandhachitara & Poolthong, 2011). Attitudes towards the firm were measured with three items and had a Cronbach's alpha of .93 and an AVE of .88. This construct was modified from Ho (2017) as shown in Table 11.

Table 11 Attitudes Towards the Firm

ITEMS	Scale Author	Reliability/Validity
(1) Overall, I can say good things about a business that disposes of potentially harmful products. (2) I give I give high valuation to a business that disposes of potentially harmful products and the way it does business. (3) I can always consider a business that disposes of potentially harmful products as the best in the community.	Ho (2017)	α=0.93 AVE=0.88

Sample

This research attempted to assess the differences in all constructs based on samples from the United States and from Mexico, especially regarding the disposal of potentially harmful products. Therefore, two samples were collected. The United States was chosen to represent an industrialized country and Mexico was chosen to represent a developing country. The problem of industrialized countries exporting potentially harmful products to developing countries like Mexico has been established in the literature for quite some time (Harvey, 1988; Albers-Gelb, 1991).

Student samples from both the United States and Mexico were used. The Reynosa-Mcallen border region was chosen because Reynosa is a notable part of Mexico that suffers from illegal dumping of potentially harmful products (Williamson, 2004; Committee for Environmental Cooperation, 2013). Exports of potentially harmful products from the United States to Mexico go through the Reynosa-McAllen border region (Williamson, 2004; Committee for Environmental Cooperation, 2013). Students were used because of safety issues involved in data collection, especially along the US-Mexico border. Past research involving the disposal of potentially hazardous materials followed US State Department guidelines to conduct minimum fieldwork on the Mexican side of the border (Integrated Environmental Management Services, 2012). As a consequence, students were also used on the US side of the border so that the results could be compared.

To test this study's model, a convenience sample of US students from a large South Texas university located 17 miles from the Mexico border was recruited by four marketing faculty members who agreed to distribute a link to the online, English version of the survey to their students. In exchange for study participation, students were given extra-credit points. For

the Mexican sample, a marketing consulting firm with over twenty years of experience in marketing research was retained to obtain respondents from four small-to-medium sized universities in Reynosa, Tamaulipas, about 20 miles from the US university. The firm trained three individuals to distribute a Spanish language, paper-and-pencil version of the survey to undergraduate and graduate students after receiving permission from class instructors. These students also received extra credit points for their participation in the study.

Although there are concerns about the reliability, validity, and generalizability of student samples, they are used regularly in marketing research with explicit and warranted justification (Peterson & Merunka, 2014) and the contextual setting of the research needs to be explicitly explained so that generalizability can be made (Espinosa & Ortinau, 2016). The focus group revealed that students in this region are well aware of the environmental problems of the disposal of potentially harmful products in their communities, both in the United States and in Mexico. Their responses coincide with the descriptions of the environmental problems explained earlier regarding the disposal of cars, tires, and batteries (Committee for Environmental Cooperation, 2013).

Researchers need to take into consideration appropriate sample sizes. If researchers are going to use PLS (Partial Least Squares), generally a minimum sample sizes should be equal to or larger than at least ten times the largest number of formative indicators used to measure one construct or ten times the largest number of structural paths directed at a specific latent construct in the model (Hair et al. 2011). In this case, a target sample of 150 respondents are planned for both countries for a total of 300 respondents.

CHAPTER IV

DATA ANALYSIS

This chapter presents the results of the analysis of the data collected to test the model developed in the previous chapter. This chapter begins by presenting the demographic profile of the US and Mexican respondents then explains the method of statistical analysis used to analyze the data, including criteria for evaluating the measurement model's validity and reliability and the structural model. Last, this chapter presents results of the analysis and hypothesis testing.

Sample Demographic Characteristics

The data collection process yielded a total of 389 usable surveys: 168 from the USA and 221 from Mexico. Four incomplete surveys were excluded from the data analysis; two from the USA and two from Mexico. Overall, a majority of the respondents in both countries were female (59.8% USA, 57.5% Mexico). An overwhelming number of the respondents were single (82.2% USA, 86.6% Mexico), were between 18-24 years of age (66.9% USA, 75.1% Mexico), were undergraduate students (28.4% USA, 67.4% Mexico), and were full time students (38.7% USA, 62.1%). A summary of the demographic profile is shown in Table 12.

Table 12 Demographic Profile of Respondents

Variable	USA n=168	MEXICO n=221
Gender, %		
Male	40.2%	41.6%
Female	59.8%	57.5%
No response	N/A	0.9%
Marital Status		
Married	16.0%	9.7%
Single	82.2%	86.6%
Widowed	N/A	1.8%
Divorced	1.8%	1.8%
Age		
18-24	66.9%	75.1%
24-38	27.2%	17.1%
38-65	5.9%	7.8%
Education		
High School Diploma	29%	17.9%
Technical College/Associate Degree	23.7%	4.1%
Bachelor Degree	28.4%	67.4%
Graduate Degree	18.9%	10.6%
Employment		
Full time	39.9%	21.5%
Part time	17.3%	8.7%
Student	38.7	62.1%
Unemployed	.6%	1.8%
Own Business	3.5%	5.9%

Method of Statistical Analysis

As initially discussed in Chapter 1, the purpose of this research was to predict key relationships in an existing theoretical model and to identify new constructs in the model, however, the proposed model is rather complex and includes many constructs and indicators Given these specifications relating to the research goals and the complexities of the model, the structural equation modeling (SEM) technique, Partial Lease Squares (PLS) was selected to analyze the study model. As explained by Hair et al. (2011), PLS is an iterative process where latent constructs' scores are estimated then the estimates of the outer weights, loadings and path coefficients are estimated for the partial ordinary least squares measurement model and structural model and is preferred over covarianced-based SEM when the research extends an existing

structural theory or when the model is complex. The first stage in analyzing a model using PLS is to examine appropriateness of the measures—the measurement model—then evaluate the structural model to determine the model fit with the data. For this study examining differences between two samples, PLS multi-group analysis (MGA) was used because people often respond differently to different models, especially when they are from different countries (Henseler et al. 2009).

Common Method Bias

Common method bias often plagues survey research (MacKenzie & Podsakoff, 2012; Koch, 2015). Common method bias often appears in survey research when questionnaires are too long, are difficult to understand, or when respondents want to answer in a socially desirable way (MacKenzie & Podsakoff, 2012). In this research, some precautions were taken in order to reduce common method bias such as introducing spatial and psychological separation among items (MacKenzie & Podsakoff, 2012).

When assessing common method bias in PLS, researchers can run a collinearity diagnostic where the VIFs (variance inflation factors) are assessed at the factor level (Koch, 2015). First, all latent variables are assessed on the dependent variable through the bootstrapping method. Collinearity statistics that involve a VIF higher than 3.3 provides evidence of common method bias (Koch, 2015). In order to run a thorough evaluation of common method bias, this procedure is repeated for each latent variable. Common method bias was found for three of the latent variables: 1) altruistic values, 2) awareness of consequences, and biospheric values. These values were above the recommended 3.3 cutoff. The results of the collinearity diagnostic can be seen in Table 19 below. Thus, this evidence of common method bias for these constructs will be reported as a limitation. Also, it should be noted that all research involves tradeoffs and it is

almost impossible to design an instrument that completely eliminates all method biases (MacKenzie & Podsakoff, 2012). Further, Kock (2015) points out that one of the downsides of PLS is that the algorithms may inflate collinearity VIFs when compared to classic SEM algorithms (Kock, 2015). The results of the Common Method Bias assessment can be seen in Table 13.

Table 13 Common Method Bias Results

	ATT	AVALUES	AWARECONSQ	BVALUES	CAI	EBENEFITS	ECOSTS	EPN	ESN	EVALUES	NIMBY	SWB	TIG
ATT		2.27	2.311	2.267	2.299	1.296	2.319	2.323	2.317	2.167	2.274	2.283	2.323
AVALUES	3.504		3.586	1.65	3.507	3.57	3.581	3.553	3.497	3.582	3.43	3.506	3.583
AWARECONSQ	3.784	3.803		3.35	3.801	3.798	2.405	3.653	3.443	3.781	3.7	3.704	3.801
BVALUES	4.031	1.9	3.638		4.127	4.083	4.105	4.115	4.004	4.056	3.736	4.095	4.124
CAI	1.782	1.761	1.799	1.799		1.751	1.783	1.772	1.555	1.79	1.789	1.784	1.671
EBENEFITS	1.338	2.386	2.394	2.37	2.332		2.396	2.397	2.39	2.252	2.346	2.391	2.32
ECOSTS	2.743	2.744	1.738	2.731	2.721	2.747		2.66	2.716	2.74	2.718	2.743	2.628
EPN	1.676	1.66	1.61	1.67	1.649	1.676	1.622		1.559	1.676	1.669	1.67	1.675
ESN	1.974	1.93	1.792	1.919	1.71	1.974	1.957	1.842		1.931	1.911	1.863	1.917
EVALUES	1.182	1.265	1.259	1.244	1.26	1.19	1.263	1.267	1.236		1.265	1.266	1.266
NIMBY	1.476	1.442	1.466	1.363	1.498	1.475	1.491	1.502	1.455	1.505		1.507	1.507
SWB	1.306	1.3	1.295	1.318	1.318	1.326	1.327	1.324	1.251	1.328	1.329		1.313
TIG	1.462	1.461	1.462	1.46	1.357	1.415	1.399	1.462	1.416	1.462	1.462	1.445	

Note: AV=Altruistic Values; BV=Biospheric Values; EV=Egotistic Values; EB=Economic Benefits; EC=Economic Costs; AC=Awareness of Consequences; EPN=Environmental Personal Norms; ESN=Environmental Social Norms; NIMBY=Not in My Back Yard; CAI=Consumer Activism Intention; SWB=Subjective Well-being; ATT=Attitude towards the Firm; TGC=Trust in government, competence

Measurement Model results

Using PLS-SEM, the measurement model using the full data set was evaluated to assess appropriateness of study measures. Hair et al. (2017) provided the following recommendations for evaluating reflective measurement models, which is the case in this study: composite reliabilities should be above 0.70 as a measure of internal consistency reliability; outer loadings should be above 0.70 as a measure of indicator reliability; average variances extracted (AVEs) should be above 0.50 as a measure of convergent validity; outer loadings should be higher than all cross loadings in light of the other constructs as a measure of discriminant validity; and the Fornell-Larcker criterion (the square root of each construct's AVE should be higher than its correlation with other constructs) as a measure of discriminant validity. Finally, Henseler et al. (2015) suggested using the heterotrait-monotrait (HTMT) ratios to determine discriminant validity with cutoff values between 0.85 and 0.90.

Considering all of these guidelines, 13 items were removed for not meeting the required 0.70 threshold for loadings. All factor loadings were higher than their cross loadings, providing evidence of internal reliability. The AVEs for each construct were well above the suggested 0.50, offering evidence of validity. Further, all composite reliabilities met or exceeded the minimum 0.70 threshold. The Cronbach's alphas for all constructs, except for egoistic values, also met the minimum 0.70. These statistics are all provided in Table 14.

Table 14 Scale Measures and Measure Statistics

Measure/Statistics	Measure Items	Factor Loading	Means USA	Means MEX
Altruistic Values	I think equality is important.	0.753	4.527	4.615
CR=0.881	I think a world at peace is important.	0.808	3.820	4.718
AVE=0.650	I think social justice is important.	0.836	4.347	4.603
Cronbach's Alpha=0.822	I think being helpful is important.	0.826	4.437	4.580
Egoistic Values	I think social power is important.	0.841	3.299	3.286
CR=0.827	I think authority is important.	0.839	2.892	3.645
AVE=0.705				
Cronbach's Alpha=0.582				
Biospheric Values	To me, preventing pollution is important.	0.891	4.257	4.703
CR=0.943	To me, respecting the Earth is important.	0.914	3.784	4.712
AVE=0.804	To me, unity with nature is important.	0.861	4.090	4.450
Cronbach's Alpha=0.919	To me, protecting the environment is important.	0.919	4.377	4.655
Environmental Personal Norms	I feel morally obliged to sign a petition against the disposal of potentially harmful products in my community.	0.748	3.665	3.462
CR=0.822	I feel morally obliged to collect signatures against the disposal of potentially harmful products in my community.	0.749	3.126	3.176
AVE=0.535	It's the moral thing to do to demonstrate against the disposal of potentially harmful products in my community.	0.719	3.647	3.772
Cronbach's Alpha=0.713	I feel guilty if others demonstrate against the disposal of potentially harmful products in my community while I do nothing.	0.711	3.407	3.268
Awareness of Consequences	The improper disposal of potentially harmful products will be a problem for the community as a whole.	0.794	4.365	4.635
CR=0.921	The improper disposal of potentially harmful products will be a problem for other species of plants and animals.	0.766	4.521	4.712
AVE=0.592	The improper disposal of potentially harmful products will reduce the quality of life due to odor, mosquitos, and diseases.	0.705	4.365	4.536
Cronbach's Alpha=0.901	The improper disposal of potentially harmful products that come from another country near my home puts me in danger.	0.755	4.144	4.032
	The improper disposal of potentially harmful products near my home could affect me.	0.773	4.281	4.205
	The improper disposal of potentially harmful products by burning them could make me sick.	0.796	4.240	4.294
	The improper disposal of potentially harmful products into a landfill could poison the environment and make me sick.	0.770	4.210	4.292
	The improper disposal of potentially harmful products by burning near my home could poison me.	0.793	4.186	4.477

Measure/Statistics	Measure Items	Factor Loading	Means USA	Means MEX
NIMBY CR=0.926 AVE=0.716 Cronbach's Alpha=0.901	I would be against a business that disposes of potentially harmful products even if there were good arguments for product disposal near my home instead of someone else's.	0.811	3.982	3.059
	I would be against a business that disposes of potentially harmful products even if these products were disposed of somewhere, I would still refuse them near my home in advance.	0.871	4.928	3.347
	I would be against a business that disposes of potentially harmful products near my home because I think someone else would not accept them near their homes.	0.841	3.988	2.963
	I would be against a business that disposes of potentially harmful products because I don't want to take on the burden of a problem that is caused by others.	0.830	4.048	3.316
	I would be against a business that disposes of potentially harmful products because it is foolish to have this type of business near my home.	0.876	4.796	3.264
Economic Costs CR=0.836 AVE=0.630 Cronbach's Alpha=0.704	Businesses that dispose of potentially harmful products could affect my home's value.	0.729	4.210	4.195
	If a business that disposes of potentially harmful products near my home has an accident, the cleanup will be expensive.	0.828	4.246	4.041
	Health effects from the exposure to potentially harmful products could be expense for a family.	0.820	4.311	4.249
Economic Benefits CR=0.896 AVE=0.742 Cronbach's Alpha=0.826	Allowing companies to dispose of potentially harmful products in my community will attract investment.	0.874	2.138	1.873
	Allowing firms to dispose of potentially harmful products will inject money into the local economy.	0.896	2.838	1.914
	Allowing the disposal of potentially harmful products will create better infrastructure in the local community.	0.813	3.066	2.005
Environmental Social Norms CR=0.859 AVE=0.670 Cronbach's Alpha=0.756	Most people who are important to me think that engaging in a protest against a business that disposes of potentially harmful products is good.	0.796	2.042	3.265
	Most people who are important to me think I should get involved in a protest against a business that disposes of potentially harmful products in my community.	0.790	3.635	3.051
	Most people who are important to me would approve of me protesting the construction of a business that disposes of potentially harmful products near my home.	0.867	2.994	2.986

Measure/Statistics	Measure Items	Factor Loading	Means USA	Means MEX
Trust in Government (Competence) CR=0.920 AVE=0.699 Cronbach's Alpha=0.892	Overall, I believe that my local government officials are capable and a proficient provider of public services.	0.830	3.228	3.018
	I believe my local officials are competent and effective in providing me public services.	0.879	3.234	2.959
	In general, I believe my local government officials are knowledgeable about environmental law and regulations.	0.854	3.234	2.922
	I believe that my local government officials perform their role of providing public services well.	0.846	3.120	2.621
	If I needed help, my local government officials would do everything possible to resolve my problem.	0.765	2.778	2.511
Consumer Activism Intention CR=0.914 AVE=0.572 Cronbach's Alpha=0.893	I can make an impact by collecting signatures to prevent the dumping of potentially harmful products in my community.	0.799	3.641	3.461
	I can make a difference by collecting signatures to prevent the establishment of a business that disposes of potentially harmful products in my community.	0.758	3.605	3.395
	I can make a difference by organizing a demonstration to prevent the establishment of a company that disposes of potentially harmful products in my community.	0.750	3.671	3.618
	I can prevent the disposal of potentially harmful products by a company in my community by complaining to the local authorities.	0.733	3.060	3.507
	I can make a difference by passing out flyers about the dangers of potentially harmful products.	0.755	3.000	3.589
	I can make a difference by picketing businesses that dispose of potentially harmful products in my community.	0.802	3.527	3.477
	I can make a difference by informing people in my community by providing them information about potentially harmful products on social media.	0.736	3.964	3.864
	I can help stop the disposal of potentially harmful products in my community by organizing public meetings.	0.710	3.808	3.652
Subjective Well-being CR=0.839 AVE=0.699 Cronbach's Alpha=0.717	The conditions of my life are excellent.	0.822	3.084	3.814
	I am satisfied with my life.	0.805	3.677	3.573
	So far I have gotten the important things I want in life.	0.762	3.862	3.886
Attitude Towards the Firm CR=0.839 AVE=0.699 Cronbach's Alpha=0.717	Overall, I can say good things about a business that disposes of potentially harmful products.	0.785	3.359	2.311
	I give high valuation to a business that disposes of potentially harmful products and the way it does business.	0.965	3.293	2.145
	I can always consider a business that disposes of potentially harmful products as the best in the community.	0.927	3.000	1.910

To evaluate the discriminant validity of the measures, the Fornell-Larcker criterion was used. The Fornell-Larcker criterion compares the square root of the AVE values with the latent variable correlations among the latent constructs (Hair et al. 2017). All of the AVEs are higher than the squared correlations of each construct, which fulfills the requirements suggested by Fornell and Larcker (1981). The results of the Fornell-Larcker criterion can be seen in Table 15.

Table 15 Discriminant Validity of Constructs: Fornell-Larcker criterion

	ATT	AVALUES	AWCONSQ	BVALUES	CAI	EBENEFITS	ECOSTS	EPN	ESN	EVALUES	NIMBY	SWB	TGC
ATT	0.896												
AVALUES	-0.105	0.807											
AWCONSQ	-0.070	0.493	0.769										
BVALUES	-0.115	0.718	0.551	0.897									
CAI	0.033	0.240	0.144	0.222	0.756								
EBENEFITS	0.589	-0.092	-0.077	-0.139	-0.036	0.862							
ECOSTS	0.011	0.282	0.601	0.297	0.177	-0.007	0.794						
EPN	-0.027	0.272	0.381	0.271	0.304	-0.037	0.356	0.732					
ESN	0.039	0.074	-0.029	0.096	0.465	0.030	0.075	0.250	0.818				
EVALUES	-0.078	0.180	0.157	0.215	0.159	0.051	0.089	0.112	0.171	0.840			
NIMBY	0.292	0.080	0.173	-0.049	0.205	0.294	0.225	0.143	0.204	0.068	0.846		
SWB	0.155	0.189	0.225	0.159	0.137	0.140	0.185	0.139	0.207	0.089	0.192	0.797	
TGC	0.179	-0.017	-0.170	-0.020	0.315	0.210	-0.157	0.018	0.314	0.068	0.122	0.133	0.836

Note: ATT=Attitude towards the firm; AVALUES=Altruistic values; AWCONSQ=Awareness of consequences; BVALUES=Biospheric values; CAI=Consumer activism intention; EBENEFITS=Economic benefits; ECOSTS=Economic costs; EPN=Environmental personal norms; ESN=Environmental social norms; EVALUES=Egoistic values; NIMBY=Not in my back yard; SWB=subjective well-being; TGC=Trust in government, competence

Recently, there has been some criticism of the adequacy of the Fornell-Larcker criterion for discriminant validity assessment (Hair et al. 2017). In some cases, cross loadings may fail to indicate a lack of discriminant validity when two constructs are perfectly correlated. This can happen with the Fornell-Larcker criterion even when the correlations differ only slightly (Hair et al. 2017). Thus, Henseler et al. (2015) suggest using the heterotrait-monotrait (HTMT) as an additional assessment of construct validity. HTMT ratios were calculated and can be seen in Table 16. The HTMT ratios are all below the 0.85 maximum threshold, which provides additional evidence of the constructs' discriminant validities.

Table 16 Discriminant Validity of Constructs: Heterotrait-Monotrait ratios

	ATT	AVALUES	AWCONSQ	BVALUES	CAI	EBENEFITS	ECOSTS	EPN	ESN	EVALUES	NIMBY	SWB	TGC
ATT													
AVALUES	0.116												
AWCONSQ	0.073	0.555											
BVALUES	0.115	0.82	0.598										
CAI	0.049	0.284	0.162	0.246									
EBENEFITS	0.701	0.114	0.092	0.16	0.097								
ECOSTS	0.046	0.364	0.758	0.368	0.214	0.046							
EPN	0.098	0.335	0.464	0.321	0.37	0.079	0.49						
ESN	0.086	0.094	0.056	0.114	0.549	0.075	0.111	0.335					
EVALUES	0.117	0.263	0.214	0.293	0.218	0.075	0.137	0.22	0.262				
NIMBY	0.334	0.093	0.196	0.062	0.221	0.347	0.281	0.168	0.245	0.112			
SWB	0.221	0.236	0.272	0.187	0.165	0.203	0.255	0.214	0.276	0.134	0.24		
TGC	0.201	0.084	0.195	0.06	0.35	0.249	0.201	0.074	0.374	0.121	0.135	0.175	

Note: ATT=Attitude towards the firm; AVALUES=Altruistic values; AWCONSQ=Awareness of consequences; BVALUES=Biospheric values; CAI=Consumer activism intention; EBENEFITS=Economic benefits; ECOSTS=Economic costs; EPN=Environmental personal no norms; ESN=Environmental social norms; EVALUES=Egoistic values; NIMBY=Not in my back yard; SWB=subjective well-being; TGC=Trust in government, competence

Structural Model Results and Hypotheses Testing

SmartPLS was used to assess the structural model and guidelines provided by Hair et al. (2017) were followed. The recommended steps include assessing collinearity using VIF and tolerance, examining the path coefficients and significance using bootstrapping, assessing R^2 values and assessing the predictive relevance Q^2. As previously noted, multicollinearity was not an issue as evidenced by the VIF values seen previously in Table 13.

The path coefficients were examined for significance using the bootstrapping procedures in SmartPLS by setting the number of subsamples to 5,000 and selecting the settings to "no sign change" and "bias-corrected/accelerated bootstrap." Results, including those by country sample, are provided in Figure 7, Table 17 and Table 18.

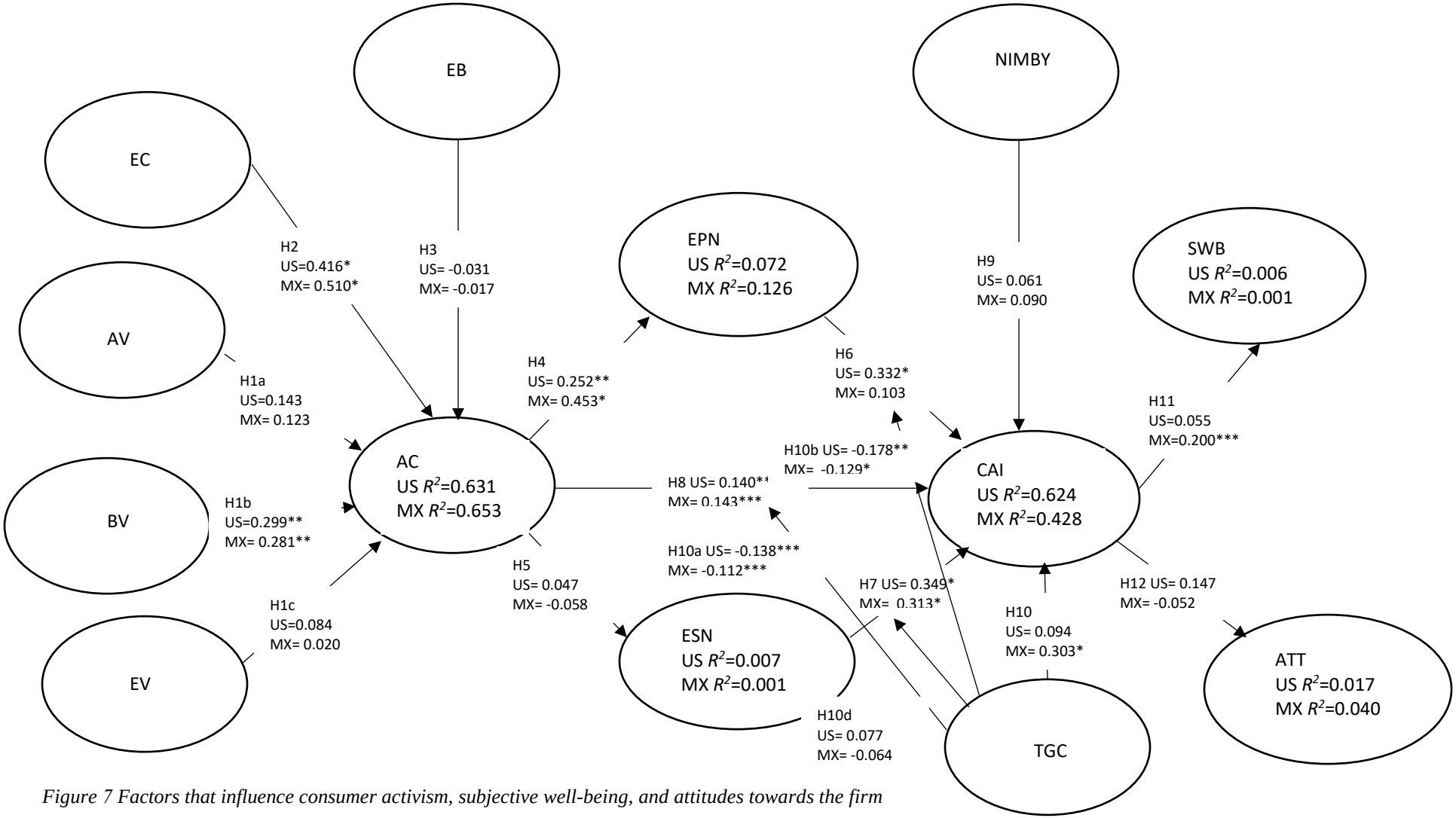

Figure 7 Factors that influence consumer activism, subjective well-being, and attitudes towards the firm

*Note: AV=Altruistic Values; BV=Biospheric Values; EV=Egotistic Values; EB=Economic Benefits; EC=Economic Costs; AC=Awareness of Consequences; EPN=Environmental Personal Norms; ESN=Environmental Social Norms; NIMBY=Not in My Back Yard; CAI=Consumer Activism Intention; SWB=Subjective Well-being; ATT=Attitude towards the Firm; TGC=Trust in government, competence*p≤ .000; **p≤.00; ***p≤.05*

Table 17 Hypotheses-Testing Results

	USA Respondents				Mexico Respondents				USA vs. Mexico	
Hypotheses	Path Coefficients	SD	*t* Value	*p* Value	Path Coefficients	SD	*t* Value	*p* Value	Hypotheses	*p* Value
H1a: AV→AC	0.143	0.082	1.757	0.079	0.123	0.080	1.536	0.125	H1d:	0.427
H1b: BV→AC	0.299	0.088	3.397	0.001	0.281	0.098	2.867	0.004	H1e:	0.446
H1c: EV→AC	0.084	0.068	1.233	0.218	0.020	0.046	0.446	0.656	H1f:	0.209
H2: EC→AC	0.416	0.080	5.196	0.000	0.510	0.077	6.612	0.000	H6a:	0.039
H3: EB→AC	-0.031	0.065	0.475	0.635	-0.017	0.061	0.275	0.783	H7a:	0.314
H4: AC→EPN	0.252	0.087	2.910	0.004	0.453	0.054	8.429	0.000	H10c:	0.029
H5: AC→ESN	0.047	0.090	0.527	0.598	-0.058	0.062	0.937	0.349		
H6: EPN→CAI	0.332	0.089	3.717	0.000	0.103	0.084	1.230	0.219		
H7: ESN→CAI	0.349	0.085	4.124	0.000	0.313	0.066	4.761	0.000		
H8: AC→CAI	0.140	0.071	1.969	0.049	0.143	0.069	2.056	0.040		
H9: NIMBY→CAI	0.061	0.084	0.724	0.469	0.090	0.063	1.425	0.154		
H10: TGC→CAI	0.094	0.074	1.287	0.198	0.303	0.061	4.946	0.000		
H10a: TGC*AC	-0.138	0.053	2.610	0.010	-0.112	0.055	2.018	0.045		
H10b: TGC*EPN	-0.178	0.058	3.053	0.002	-0.129	0.064	2.017	0.044		
H10d: TGC*ESN	0.077	0.080	0.955	0.340	-0.064	0.065	.984	0.325		
H11: CAI→SWB	0.055	0.084	0.724	0.469	0.200	0.077	2.591	0.010		
H12: CAI→ATT	0.147	0.174	1.261	0.207	-0.052	0.105	0.495	0.621		

Note: SD=Standard deviation; AV=Altruistic Values; BV=Biospheric Values; EV=Egotistic Values; EB=Economic Benefits; EC=Economic Costs; AC=Awareness of Consequences; EPN=Environmental Personal Norms; ESN=Environmental Social Norms; NIMBY=Not in My Back Yard; CAI=Consumer Activism Intention; SWB=Subjective Well-being; ATT=Attitude towards the Firm; TGC=Trust in government, competence

Table 18 Hypotheses Test Summary Results

	Hypotheses Supported?		Difference Hypotheses	Hypotheses Supported?
Direct Effects	USA	Mexico		
H1a: AV→AC	No	No	H1d:	No
H1b: BV→AC	Yes	Yes	H1e:	No
H1c: EV→AC	No	No	H1f:	No
H2: EC→AC	Yes	Yes	H6a:	Yes
H3: EB→AC	No	No	H7a:	No
H4: AC→EPN	Yes	Yes	H10c:	Yes
H5: AC→ESN	No	No		
H6: EPN→CAI	Yes	No		
H7: ESN→CAI	Yes	Yes		
H8: AC→CAI	Yes	Yes		
H9: NIMBY→CAI	No	No		
H10: TGC→CAI	No	Yes		
H11: CAI→SWB	No	Yes		
H12: CAI→ATT	No	No		
Moderating Effects				
H10a: TGC*AC	Yes	Yes		
H10b: TGC*EPN	Yes	Yes		
H10d: TGC*ESN	No	No		

Note: AV=Altruistic Values; BV=Biospheric Values; EV=Egotistic Values; EB=Economic Benefits; EC=Economic Costs; AC=Awareness of Consequences; EPN=Environmental Personal Norms; ESN=Environmental Social Norms; NIMBY=Not in My Back Yard; CAI=Consumer Activism Intention; SWB=Subjective Well-being; ATT=Attitude towards the Firm; TGC=Trust in government, competence

As shown, eight of the proposed relationships were significant for the US sample and nine were significant for the Mexican sample. Specific path coefficients, their significance and R^2 values are discussed next where R^2 values of 0.25, 0.50, and 0.75 suggest weak, moderate, and substantial effects, respectively (Hair et al. 2017). Further, the two samples were evaluated using multi-group analysis, which is recommended for comparing two different populations (Hair et al. 2017).

Three types of values, altruistic, biospheric and egoistic, were proposed to affect awareness of consequences as were perceived economic costs and benefits. Of the three values constructs proposed to affect awareness of consequences, effects of only biospheric values were significant for both samples. Altruistic values had no significant effects on awareness of consequences for either the US (t_{US}=1.757, p=.0079) or the Mexican (t_{MEX}=1.536, p=.125) sample. Thus, H1a was not supported. Bisopheric values had a positive and significant effect for both US (t_{US}=3.397, p=.00) and Mexican consumers (t_{MEX}=2.867, p=.00) providing support for H1b. Egoistic values did not have a significant impact on awareness of consequences (t_{US}=1.233, p=.218; t_{MEX}=0.446, p=.656); consequently, there was no support for H1c. In summary, for both US and Mexico respondents, only biospheric values were found to positively and significantly affect awareness of consequences. Perceived economic costs but not perceived economic benefits were found to positively and significantly affect awareness of consequences for both the US (t_{US}=5.196, p=.000) and Mexican respondents (t_{MEX}=6.612, p=.000). Thus respectively, H2 was supported while H3 was not supported (t_{US}=0.475, p=.635; t_{MEX}=0.275, p=.783). Together, the three value constructs and the two perceived effect constructs for both the US and Mexican samples explained a significant amount of variance in awareness of consequences (R^2_{US} =.631, R^2_{MEX}=.653). These effects are moderate using the guidelines by Hair et al. (2017).

Next, this study proposed that consumer activism intention would be affected by awareness of consequences, environmental personal and social norms, NIMBY, and trust-in-government directly and as a moderator. Positive and significant relationships between awareness of consequences and environmental personal norms were found for both US (t_{US}=2.910, p=.00) and Mexican respondents (t_{MEX}=8.429, p=.000), providing empirical support for H4. The R^2 values for environmental personal norms were .072 for the US sample and .126 for the Mexican sample, weak relationships in both cases using the Hair et al. (2017) guidelines. No significant relationship was found between awareness of consequences and environmental social norms, however, thus H5 was not supported (t_{US}=0.527, p=.598; t_{MEX}=0.937, p=.349). Not surprisingly then, the R^2 values for environmental norms were weak at 0.007 for the US sample and .001 for the Mexican sample.

A positive and significant relationship between environmental personal norms and consumer activism intention was found for US respondents (t_{US}=3.717, p=.000), but no such relationship was found for Mexican respondents (t_{MEX}=1.230, p=.219). Thus, H6 was supported for the US sample only. On the other hand, a positive and significant relationship between environmental social norms and consumer activism intention was found for both US (t_{US}=4.124, p=.000) and Mexico (t_{MEX}=4.761, p=.000) respondents. Thus, H7 was supported. Finally, awareness of consequences had a direct and significant effect on consumer activism intention for both samples (t_{US}= 1.969, p=.05; t_{MEX}=2.056, p=.05), lending support to H8. As a test of the VBN competing NIMBY theory, NIMBY was proposed to affect consumer activism intention but was found to have no significant effect on consumer activism intention for either sample; thus, no support was found for H9 (t_{US}= 0.724, p=.469; t_{MEX}=1.425, p=.154). The direct effect of

trust-in-government (competence) was found only for the Mexican sample (t_{MEX}=1.287, p=.000). Thus, H10 was supported for Mexico.

The mediation analysis was completed along the lines of the recommendations suggested by Zhao et al. (2010) using the Preacher-Hayes PROCESS macro plug-in for SPSS. Consumer activism intention was set as the outcome variable, awareness of consequences as the independent variable, and environmental personal norms and environmental social norms as the mediating variables. The 95% bias-corrected confidence interval results as well as the 5,000 bootstrap samples were used. This was done for both the US and Mexican samples. According to Zhao et al. (2010), indirect effects are significant if a value of zero is not present within the confidence interval. Thus, the mediation analysis finds that only environmental personal norms mediates the relationship between awareness of consequences and consumer activism intention for the US sample only. As shown in Table 19, environmental social norms mediated the relationship between awareness of consequences and consumer activism intention for the US sample only. Thus, H6b was partially supported. Environmental social norms did not mediate the relationship between awareness of consequences and consumer action intention; thus, no support for H7b was found.

Table 19 Mediation Effects Bootstrapping Results

	US Sample				Mexican Sample			
	Indirect Effect	SE	Lower CI	Upper CI	Indirect Effect	SE	Lower CI	Upper CI
H6b, EPN	.1789	.0755	.0509	.3348	.0013	.0182	-.0029	.0595
H7b, ESN	.0047	.0147	-.0.414	.0224	-.0028	.0145	-.0471	.0133

Note: Bias-corrected confidence intervals; 5,000 bootstrap samples; 95% confidence intervals (CIs); SE=Standard Error

Further, trust-in-government was proposed to moderate the relationship between awareness of consequences and consumer activism intention, with the direct effects found positively significant for both the US (t_{US}=2.610, p=.00) and the Mexican (t_{MEX}=2.018, p=.05) samples. To test for moderating effects of trust-in-government, an interaction term was developed to account for the interrelationship between the latent variable and the moderator variable. In this case, the moderating variable of trust-in-government was developed and included consumer activism intention as the dependent variable and awareness of consequences as the independent variable. A second interaction term was also included: trust-in-government as a moderating variable and consumer activism intention as the dependent variable with environmental personal norms as the independent variable. A third moderating variable was developed with environmental social norms as the independent variable, keeping trust-in-government as the moderating variable and consumer activism intention as the dependent variable. The moderating relationships were tested using the two-stage approach recommended when the objective is to identify the statistical significance of the moderator. Moreover, the two-stage approach is generally preferred because it is the most versatile (Hair et al., 2017).

As a result of the test of moderation effects, trust-in-government was found to significantly but negatively moderate the relationship between awareness of consequences and consumer activism intention for both samples (t_{US}=2.610, p=.01; t_{MEX}=2.018, p=.05) and the relationship between environmental personal norms and consumer activism intention, also for both samples (t_{US}=3.053, p=.00; t_{MEX}=2.017, p=.05). Thus, H10a and H10b were supported. Trust-in-government did not moderate the relationship between environmental social norms and consumer activism intention; no support was found for 10d. The three moderation relationships can be seen graphically in Figures 8, 9 and 10 respectively.

As seen in Figure 8, trust-in-government weakens the relationship between awareness of consequences and consumer activism intention. The slope in the middle of the plot illustrates the relationship without the moderating effect of trust-in-government. In other words, trust-in-government at the mean. Trust-in-government, therefore, has a negative effect as awareness of consequences increases along the x-axis.

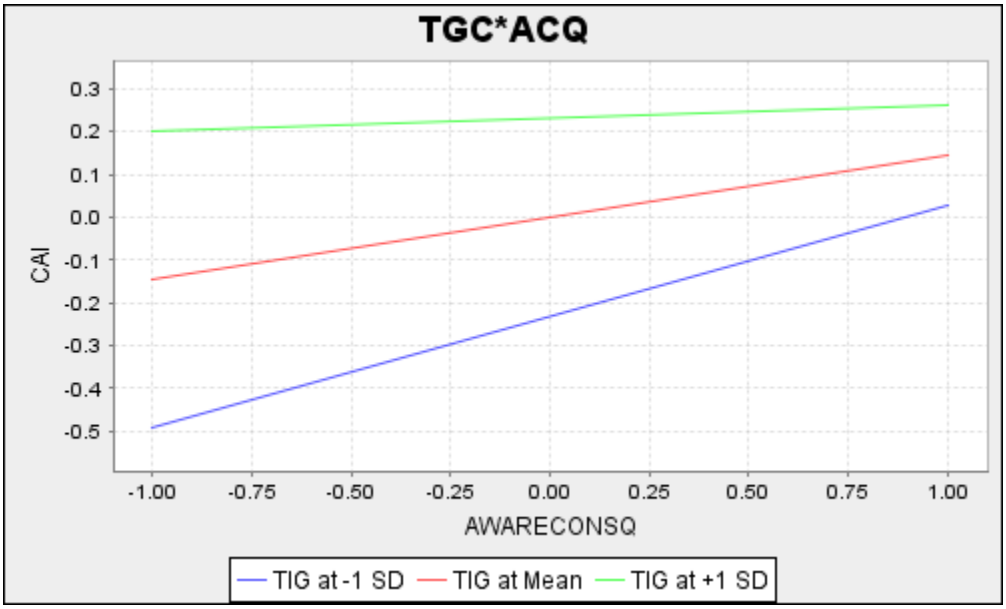

Figure 8 Moderating Effect of Trust-in-Government on Awareness of Consequences and Consumer Activism Intention

A second moderating effect was found. As seen in Figure 9, trust-in-government also weakens the relationship between environmental personal norms and consumer activism intention. The slope in the middle of the plot indicates the relationship without the moderating effect of trust-in-government. Trust-in-government, therefore, has a negative effect as environmental personal norms increases along the x-axis.

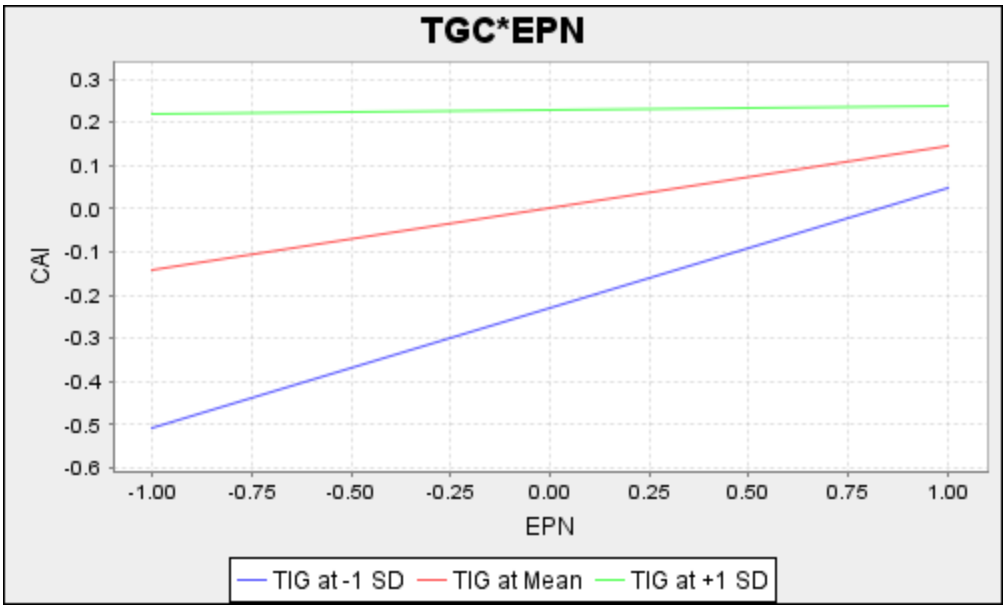

Figure 9 Moderating Effect of Trust-in-government on Environmental Personal Norms and Consumer Activism Intention

As seen in Figure 10, trust-in-government does not strengthen the relationship between environmental social norms and consumer activism intent. Thus, no moderating effect was found.

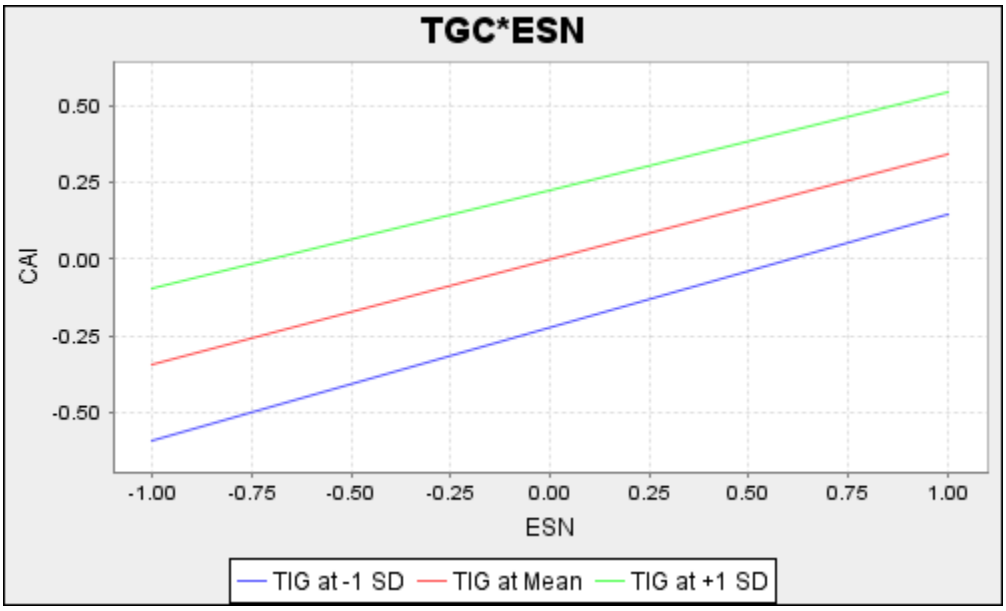

Figure 10 Moderating Effect of Trust-in-government on Environmental Social Norms and Consumer Activism Intention

Altogether, effects of awareness of consequences, environmental personal and social norms, NIMBY, and trust-in-government on consumer activism intention were moderate with a R^2 value of .642 for the US sample and a weak R^2 value of .428 for the Mexican sample.

Finally, consumer activism intention was posited to affect subjective well-being and attitudes toward the firm. The analysis showed that consumer activism intention had a positive and significant effect on subjective well-being for Mexican respondents (t_{MEX}=2.591, p=.05), but not for US respondents (t_{US}=0.724, p=.469), thus the R^2 values were quite weak (R^2_{US}=.006, R^2_{MEX}=.001). Thus, H11 was partially supported. Consumer activism intention had no significant effect on attitude towards the firm for either country sample (t_{US}=1.261, p=.207; t_{MEX}=0.495, p=.621) and the relationship was weak with an R^2 of 0.017 for US respondents and .040 for Mexican respondents. Thus, no support was found for H12.

The two samples were evaluated using multi-group analysis, which is recommended for comparing two different populations (Hair et al. 2017). PLS-MGA (Partial least squares-multi-group-analysis) has been increasingly recommended for use in international marketing and international business research (Henseler et al. 2009). MGA has been used previously to compare US and Mexico consumption patterns (Toudert & Bringas-Rábago, 2019) and in other cross-cultural comparative research (Wu et al. 2016) as well as in comparing two different populations using the Values-Beliefs-Norms Theory (Ghazali et al. 2019). As also seen in Table 17, no significant differences between US and Mexican respondents were found in the relationships between altruistic values and awareness of consequences, between biospheric values and awareness of consequences, and between egoistic values and awareness of consequences. Thus, no support was found for H1d, H1e, and H1f. Similarly, no significant

differences between US and Mexican respondents were found regarding environmental social norms; thus, H7a was not supported. Significant differences, however, were found between US and Mexican respondents regarding environmental personal norms (p=0.039) and trust-in-government (p=0.029). Thus, H6a and H10c were supported.

As a final test of the overall structural model fit and the predictive power of the model two tests were run. The standardized root mean square (SRMR) is a model fit measure that is well known from covariance based structural equation modeling (CB-SEM) and has been recently recommended for use with PLS-SEM. SRMR refers to the discrepancy between the observed correlations and implied correlations of the proposed model (Hair et al. 2017). In CB-SEM, a SRMR value of <0.08 suggests a sufficient overall model fit (Henseler et al. 2016). Nonetheless, Hair et al. (2017) suggest that this value may be too low for studies using PLS-SEM. The SRMR for this model was 0.09; thus slightly above the 0.08 cutoff but likely within the looser interpretation of the statistic adopted by Hair et al. (2017). To determine the predictive power of the overall structural model, Stone–Geisser's Q^2 values generated by the blindfolding procedure in SmartPLS were examined to find that all Q^2 values except for those for environmental social norms and attitudes towards the firm were higher than the recommended 0 (Henseler et al. 2016; Hair et al. 2017). Thus, awareness of consequences (Q^2=0.285), environmental personal norms (Q^2=0.069), consumer activism intention (Q^2=0.169), and subjective well-being (Q^2=0.008) all have predictive power in the model.

CHAPTER V

DISCUSSION AND CONCLUSION

Industrialized countries like the United States have been regularly exporting potentially harmful products for disposal to developing countries like Mexico for more than 40 years. Some research suggested that consumers in those developing countries are different than in industrialized countries in that they are less likely to participate in pro-environmental activism behaviors (Marquart-Pyatt, 2012; Binder & Blankenberg, 2016; Morren & Grinstein, 2016). This research attempted to uncover factors that influence consumer activism intention regarding the disposal of potentially harmful products and, based on post-materialist theory, how these factors differ by consumers in an industrialized versus a developing country. To accomplish these two goals, this research used and extended the VBN (Values-Beliefs-Norms) theory to include trust-in-government, attitude towards the firm, and subjective well-being. This research also evaluated two competing explanations of how people react regarding the disposal of potentially harmful products: NIMBY (Not-in-my-backyard) and VBN.

By meeting these goals, this study contributed significantly to theory and research regarding consumer response to the disposal of potentially harmful products as well as to research about cross-country differences. For example, this research empirically identified which values influence beliefs, which norms influence consumer activism behavior, and how these

factors differ by neighboring country respondents, one in an industrial country and the other in a developing country. A brief discussion of the research's results, contribution to theory and the literature, as well as managerial and policy implications, research limitations, and future research follow.

First, in this study, VBN theory was used to discern consumer activism intention. Stern's (1999) VBN theory posited that values (altruistic, biospheric and egoistic) influence beliefs (awareness of consequences), which then influence norms (environmental personal norms and environmental social norms). Finally, norms influence behavioral intent (consumer activism intention). As a contribution to the literature and theory, for the most part, VBN theory was substantiated by the model tested in this research. One dimensions of values was found to affected awareness of consequences, which, along with norms affected consumer activism intention as posited. However, only the effects of biospheric values were significant while no significant effects of altruistic values or egoistic values on awareness of consequences were found in this study. This result is, however, consistent with Stern's (2000) argument that biospheric values would be more important in stimulating pro-environmental behaviors such as consumer activism. Past research also failed to find a significant relationship between egoistic values and beliefs (Steg et al. 2005; Ghazali et al. 2019).

These findings regarding values were the same for both US and Mexican respondents and are consistent with past cross-cultural research. For example, altruistic values did not impact beliefs as hypothesized by Stern (2000) when evaluating power and water conservation in Chile (Bronfman et al. 2015), green consumption in Korea (Lee et al. 2014), and energy policies related to carbon dioxide in Holland (Steg et al. 2005). Indeed, past research has suggested that beliefs, such as awareness of consequences, are influenced primarily by biospheric values rather

than by egoistic values for consumers around the world (Bronfman et al. 2015). These findings are notable because other research has suggested or found that beliefs that are predicted by values (e.g. altruistic, egoistic, and biospheric) differ by country (Lee et al. 2014; Morren & Grinstein, 2016; Scafuto & La Berbera, 2016). The lack of differences by country in values effects found in this study may be explained by the close proximity of the samples. No more than 40 miles separates respondents from the two groups so have been exposed to similar cultures, experiences and may even have shared family members. In other words, respondents' values and perceived effects along the US-Texas-Mexico-Tamaulipas border may be quite similar. Also, for the past 30 years both the US and Mexican governments have invested substantial resources in educating the public on both sides of the border about the importance of environmental protection. Given that these campaigns are directed at people on both sides of the border, their effects may converge ("Agreement Between the United States of America," 1983; Border Legislative Conference, 2010; US-EPA & SEMARNAT, 2012; Committee for Environmental Cooperation, 2013).

Effects of perceived economic costs and benefits on awareness of consequences were also tested in the proposed model. Economic costs refer to the potentially negative consequences that the improper disposal of potentially harmful product could have on a consumers' health, property values, and cleanup costs. Economic benefits refer to the jobs, development, and tax revenues that could be created with the establishment of a firm that disposes of potentially harmful products in a community. For both the US and Mexico, no significant relationship between perceived economic benefits and awareness of consequences was found; however, the relationship between the economic costs of improperly disposing of potentially harmful products and awareness of consequences for consumers was significant. This finding is consistent with

other research measuring oppositional or pro-environmental behaviors (Wolsink & Devilee, 2009; Dervisoglu & Tankus, 2015). However, the finding of no significant differences in economic effects by country was contrary to other past research (Lee et al. 2014; Morren & Grinstein, 2016; Scafuto & La Berbera, 2016). Again, this lack of difference may be attributable to the proximity and interrelated nature of the region as one combined entity, known as "the Valley" as described previously.

VBN theory (Stern et al. 1995; Stern, 2000) also proposes that awareness of consequences influences norms. Two norms incorporated into this study's model include environmental personal norms, where personal norms measure feelings or moral obligations to the surrounding environment, and environmental social norms, where social norms measure perceptions of the pro-environmental institutional climate (Stern et al. 1999; Prati et al. 2017). This research found that awareness of consequences influenced environmental personal norms but not environmental social norms for both the US and Mexico study respondents. That is, awareness of potentially harmful effects of product disposal significantly impacts the way that people feel about the environment. This finding is consistent with the VBN Theory and with past empirical research regarding environmental problems (Stern et al. 1999; Stern, 2000).

Next in the VBN chain is the relationship between awareness of consequences and environmental personal and social norms on consumer activism intention. As hypothesized, this research found a direct and significant relationship between awareness of consequences, a belief, and consumer activism intention for both the US and Mexican sample. This finding suggests that awareness of consequences is sufficient to motivate consumers to take action when confronted with the problem of improper disposal of potentially harmful products, if needed. This finding is

consistent with the findings of Marquart-Pyatt (2012) where awareness of consequences was found to influence environmental activism.

Of the two norms examined, environmental social norms had a significant effect on consumer activism for both samples, but personal environmental norms effects were significant only for the US sample. According to Hofstede, Mexico is more collectivistic than the US. Thus, people in the US may take it upon themselves to resolve problems that are important to them personally and not rely on society in general or the authorities to take action (Gordon, 2010; van Hooft, 2011). Also, because people with strong personal environmental norms attempt to comply with pro-environmental behaviors that are developed from within (Bertoldo & Castro, 2016), perhaps the Mexican respondents had not developed environmental personal norms sufficiently strong to yield action.

In addition to testing the VBN model with two samples from two countries, this research makes a new contribution to theory and the literature by extending the VBN model to include trust-in-government, subjective well-being, and attitude towards the firm. Findings regarding these new variables are discussed next.

A direct and significant relationship was found between trust-in-government and consumer activism intention for the Mexican sample but not for the US sample. These results revealed that, for the Mexican respondents, the greater the trust in government officials, specifically, competence, the *stronger* the intention to participate in activism behaviors. This is an interesting finding given that past research found that consumers in developing countries often fear government officials, especially in regards to the improper disposal of potentially harmful products (de Zoysa, 2009). Perhaps, only when consumers trust their government officials do they feel safe enough to complain (de Zoysa, 2009) or protest. In addition, the

Mexican sample may feel that their protest behaviors will be effective and worthwhile only if the government is trusted to respond.

As hypothesized in this research, trust-in-government was found to be a significant moderator, albeit negative, of the relationship between awareness of consequences and consumer activism intention as well as of the relationship between environmental personal norms and consumer activism intention for both the US and Mexican sample. This finding suggests that the positive effects of awareness of consequences and environmental personal norms on consumer activism intention can be reduced by trust-in-government. The greater the trust-in-government, the less likely that awareness of consequences and environmental personal norms will lead to activism. Conversely, if consumers have little trust in the government to act, they may more likely to protest. Again, this relationship was found for both the US and Mexican respondents. Both of these moderating effects illustrate the importance that trust-in-government has on consumer activism intention such that governments can ameliorate consumer activism behavior by engaging in activities that inspire public trust in the government. No significant moderating effect of trust-in-government was found on the relationships between environmental social norms and consumer activism intention.

Unique to this study, consumer activism intention was proposed to affect subjective well-being, a hypotheses that was supported by the Mexican sample results. The intention to engage in environmental activism appeared to make the Mexican respondents feel good about themselves. This may be because activities designed to overcome feelings of injustice or lack of fairness can improve self-evaluation of one's life (Wolsink, 1994; Wolsink & Devilee, 2009). This result is consistent with past empirical research (Pan et al. 2007; (Frey & Stutzer, 2000; Šarkutė, 2017), especially research in Mexico (Soltero, 2019) that found that Mexicans tend to

have higher levels of subjective well-being when compared to other cultures. For Mexicans, subjective well-being is rooted in the culture where happiness and life satisfaction are emphasized in the democratic process, work, religion, and business (Soltero, 2019).

Finally, the proposed model examined effects of consumer activism intention on attitude toward the firm, an hypothesis that was not supported by either the US or Mexican sample. Although this result could suggest that US consumer activism intention does not affect feelings toward firms that dispose of potentially harmful products in their communities, the lack of effects could be attributable to the measure and study design as too general. Results may have been different had this study used a scenario approach whereby a specific firm was identified as disposing of a toxic material that would or could have an adverse effect on the respondent.

A fourth contribution of the study to the literature and theory was the test of NIMBY theory as a competing theoretical explanation of consumer activism intention. However, no significant relationship between NIMBY and consumer activism intention was found for either the US or Mexican sample. This may be because past research has suggested that intention to accept a facility is a mediator between NIMBY and activism behavior (Wolsink & Devilee, 2009). This research only broadly tested the direct relationship between NIMBY and oppositional behavior as hypothesized by Groothius and Miller (1994) rather than attitudes towards a specific facility. This finding is important because VBN Theory and NIMBY are competing theories that attempt to predict consumer activism behavior, namely, opposition to the construction of a facility that treats potentially harmful products. Overall, VBN Theory has many intervening variables that form a chain of effects, which were confirmed by this research. This was not the case with the NIMBY framework. Even so, the work done by Wolsink and Devilee (2009) stated that the NIMBY framework does have flaws and that frameworks that include

ethical components should be used. As already discussed, the VBN model includes altruistic, egoistic, and biospheric values all of which attempt to assess consumers' moral evaluations towards an environmental problem.

A final contribution of this study to research is country effects. As stated previously, PLS-MGA was used to compare some key hypothesized differences between the US and Mexican samples. Surprisingly few differences between the two samples from the two countries were found. The only significant differences by country were found in the effects of environmental personal norms on consumer activism intention, effects of trust-in-government on consumer activism intention and effects of consumer activism intention on subjective well-being. Environmental personal norms were more likely to lead to a greater intention toward activism for the US sample, trust-in-government was more likely to affect consumer activism for the Mexican sample and consumer activism intention was more likely to improve subjective well-being for the Mexican sample.

No significant differences were found between US and Mexican respondents with regard to significant effects of values and awareness of consequences despite some past research suggesting that values may differ across countries (Ingleart, 1995; De Groot & Steg, 2007; Lee et al. 2014; Binder & Blankenberg, 2016). Indeed, some research suggests that as countries develop, more altruistic values develop and consequently, people begin to think about others once their own needs are satisfied (Mayer & Smith, 2017). Thus, the hypothesized differences between the US and Mexico samples as explained by the post-materialist theory were not substantiated. This may be due to the fact that the samples were not national samples, but were regional samples that focused on only one part of the United States that adjoins one part of Mexico. In fact, some research suggests that some border cities in Mexico have experienced

shrinking income gaps which include the area of study—Reynosa-McAllen border region (Anderson & Gerber, 2017). Further, Anderson and Gerber (2017) suggest that Reynosa has experienced significant economic development in the past decade and shares important economic, cultural, and political linkages with McAllen, Texas on the US side of the border.

In summary, the findings of this research contribute to the literature by testing and extending the VBN theory, by testing NIMBY as an alternative theory to VBN and by examining differences in effects based on country. This research involving a common environmental problem, the disposal of potentially harmful products, confirmed that values, norms, and beliefs are antecedents to consumer activism intention. As an extension to VBN theory, the study found that the Mexican sample was more inclined towards consumer activism if they had higher levels of trust in their government and that activism significantly affects subjective well-being. Finally this study identified VBN theory differences (and similarities) based on sample country. Country effects are important to study because past research into environmental behaviors is generally limited to an individual country or a to a single context (Wolsink and Devilee, 2009; Lee et al. 2014; Binder & Blankenberg, 2016; Scafuto & La Barbera, 2016).

Managerial and Policy Implications

With the disposal of potentially harmful products a problem in marketing for well over 40 years (Harvey, 1988; Albers & Gelb, 1991; Frey, 1994), the findings of this research have important implications for businesses, non-governmental organizations, and all levels of government. First, firms that dispose of potentially harmful products should assess and consider the biospheric values, environmental personal and social norms, awareness of consequences, and trust-in-government factors of their constituents when developing product disposal strategies to avoid negative ramifications of consumer activism behavior. By understanding that values,

norms, awareness of consequences, firms may be able to better manage consumer perspectives of their disposal efforts through public relations campaigns that downplay negative environmental consequences of product disposal, emphasize potential benefits or that attempt to alter existing values and norms accordingly.

Businesses that plan to export potentially harmful products to developing countries such as Mexico should understand that if consumers are sufficiently aware of negative consequences to consumers, they may engage in consumer activism behaviors that could come at the expense of the firm. For example, consumers could pressure governments to more strongly regulate product disposal, to fine firms for disposal, or to halt the importation of potentially harmful products altogether. Further, the subjective well-being of consumers in developing countries may be enhanced by engaging in protests, thus encouraging more activism behaviors. Despite efforts to monitor, control, and punish the illegal and dangerous dumping of hazardous wastes in developing countries, stronger public awareness and participation is key to successful waste management (Hasan, 2004). Public education of the consequences of poor waste management have been found to increase public awareness and participation in the resolution of waste management problems (Hasan, 2004).

Non-governmental organizations as well as governments interested in protecting the environment should note potential similarities and differences in consumers based on country and respond accordingly. In both the US and in Mexico, consumers may be primarily motivated toward consumer activism though their awareness of consequences of potentially harmful effects of product disposal and through environmental social norms. Thus, an important take away is that institutions wanting to inspire consumer activism should publicize negative consequences of product disposal and try to affect environmental social norms but realize that consumers' trust-

in-government may play a differing role depending on country. This study found that Mexican respondents are more likely to engage in protest behaviors if they trust their government while trust-in-government did not affect activism intention in the US sample. This has important implications because some have argued that in countries with high levels of corruption and violence, people may be too frightened to get involved in protesting behaviors (de Zoysa, 2009; Scafuto & La Barbera, 2016). Governments, international institutions, and non-governmental organizations may want to invest in more resources to protect activist groups where there are low levels of trust-in-government to make sure that unscrupulous firms do not take advantage of high levels of distrust that some may have toward their government officials.

Limitations and Future Research

This research has limitations as does all research. First, this research used a survey to collect data for the analysis which inherently introduces flaws. One flaw is common method bias which can contaminate survey research, especially when ethical or moral questions are involved. Another flaw arises with respondents themselves. For example, respondents may answer questions in a way they think complies with social desirability, they may not be fully aware of their own intentions and perceptions when answering questions and they may not have understood questions as intended.

Other limitation of the study come from the sample and survey administration. In this study, the survey administration differed slightly for the two samples. The US sample was given asked to complete the survey online while the Mexican sample responded to their surveys on hard copy in the presence of training researchers. Had respondents from both samples taken the survey in the same manner, results may have been different. Also, a majority of the sample consisted of 18 to 22-year-old students. Students may hold more environmentally-favorable

views than the general public, so results of this study may not be generalizable to the population as a whole. Further, the student sample in the US completed the surveys through an online questionnaire while the student sample in Mexico completed the surveys through a paper-and-pencil method. Although a slight difference, this could have affected the results.

Finally, the model fit statistic did not strictly comply with the established threshold set forth by Hair et al. (2017). The number of constructs as well as the complexity could have contributed to the higher than expected model fit index. Another limitation may be the attitude toward the firm construct used in this study. Had a more specific firm attitude measure been used rather than the general one employed here, results may have been different.

Future research should be designed to overcome this study's limitations. For example, samples should be drawn from the general public rather than from students to provide results that are more generalizable. Future research could also address the differences that consumers in industrialized versus developing countries have in confronting an environmental problem by employing quasi-experiments such as scenarios. As a retest of NIMBY, this could mean, for example, a scenario where a potential polluter is located within a city block of the respondent versus located in another, distant country. Scenarios involving specific situations with a named firm might also be examined for effects. Instead of evaluating attitudes towards the firm, future research could also examine attitudes toward the exporting country. In many cases, attitudes toward the country of origin as opposed to the firm have been used in past research (Harvey, 1988; Albers & Gelb, 1991; Frey, 1994). Finally, measures that evaluate respondents' perceptions of their country's or community's economic development or benefits resulting from product disposal could be examined in a scenario or in real life. This is important because perceptions of economic development of one's country or community as a direct result of

product disposal could play a moderating role in the relationship between awareness of consequences and consumer activism intention.

Future research should also include other moderators relating to public authorities, such as perceptions of corruption, perceptions of government integrity, or even perceptions of crime. These are important to think about because in many cases, especially in developing countries, criminal gangs in cooperation with local authorities often facilitate the importation and improper disposal of hazardous wastes into people's communities (de Zoysa, 2009; Scafuto & La Berbera, 2016).

Finally, future research should evaluate the public's political inclinations. Pro-business conservatives as compared to liberals may be more forgiving of a business that handles the disposal of potentially harmful products despite potential risks these business present (Groothuis & Miller, 1994). Further, respondents may be more trusting of their government officials if they are of the same political party (Dalton, 2005).

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APPENDIX

Consumer response to the disposal of potentially harmful products: The product life-cycle, consumer activism, and subjective well-being across borders
ENGLISH VERSION

This survey is being conducted by Sergio E. Robles, PhD Candidate of Business Administration at The University of Texas Rio Grande Valley (email:sergio.robles01@utrgv.edu).

The purpose of this study is to examine and compare the differences in consumer activism towards the disposal of potentially harmful products between consumers in the US and consumers in Mexico.

This survey should take about 25-30 minutes to complete.

Participation in this research is completely voluntary. Choosing not to participate will not adversely affect your grade or standing in the class. If there are any individual questions that you would prefer to skip, simply leave the answer blank. If you are consenting to take the survey - you can skip any question or stop any time - then click next. If not, you may exit.

You must be at least 18 years old to participate. If you are not 18 or older, please do not complete the survey.

All survey responses that we receive will be treated confidentially and stored on a secure server. However, given that the surveys can be completed from any computer (e.g., personal, work, school), we are unable to guarantee the security of the computer on which you choose to enter your responses. As a participant in our study, we want you to be aware that certain technologies exist that can be used to monitor or record data that you enter and/or websites that you visit.

Any individually identifiable responses will be securely stored and will only be available to those directly involved in this study. De-identified data may be shared with other researchers in the future, but will not contain information about your individual identity.
This research has been reviewed and approved by the Institutional Review Board for Human Subjects Protection (IRB). If you have any questions about your rights as a participant, or if you feel that your rights as a participant were not adequately met by the researcher, please contact the IRB at (956) 665-2889 or irb@utrgv.edu

Please indicate how strongly you agree with the following statements on a scale of 1 to 5 where 1 indicates 'strongly disagree' and 5 indicates strongly agree.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It's the moral thing to do to donate money to an environmental group that is fighting against the disposal of potentially harmful products in my community.	1	2	3	4	5
I feel morally obliged to sign a petition against the disposal of potentially harmful products in my community.	1	2	3	4	5
I feel morally obliged to collect signatures against the disposal of potentially harmful products in my community.	1	2	3	4	5
It's the moral thing to do to demonstrate against the disposal of potentially harmful products in my community.	1	2	3	4	5
I feel guilty if others demonstrate against the disposal of potentially harmful products in my community while I do nothing.	1	2	3	4	5
Please indicate which of the following is important to you…					
Social Power	1	2	3	4	5
Wealth	1	2	3	4	5
Authority	1	2	3	4	5
Ambition	1	2	3	4	5
Equality	1	2	3	4	5
World at Peace	1	2	3	4	5
Social Justice	1	2	3	4	5
Being Helpful	1	2	3	4	5
Preventing Pollution	1	2	3	4	5
Respecting the Earth	1	2	3	4	5
Unity with Nature	1	2	3	4	5
Protecting the Environment	1	2	3	4	5
The improper disposal of potentially harmful products…					
will be a problem for me.	1	2	3	4	5
will be a problem for the community as a whole.	1	2	3	4	5
will be a problem for other species of plants and animals.	1	2	3	4	5
will reduce the quality of life due to odor, mosquitos, and diseases.	1	2	3	4	5
The improper disposal of potentially harmful products…					
that come from another country near my home puts me in danger.	1	2	3	4	5
near my home could affect me.	1	2	3	4	5
by burning them could make me sick.	1	2	3	4	5
into a landfill could poison the environment, making me sick.	1	2	3	4	5
by burning near my home could poison me.	1	2	3	4	5
Businesses that dispose of potentially harmful products near my home could affect my home's value.	1	2	3	4	5
If a business that disposes of potentially harmful products near my home has an accident, the cleanup will be expensive.	1	2	3	4	5
Health effects from the exposure to potentially harmful products could be an expense for a family.	1	2	3	4	5
Companies that dispose of potentially harmful products create jobs for the community.	1	2	3	4	5
Allowing companies to dispose of potentially harmful products in my community will attract investment.	1	2	3	4	5
Allowing firms to dispose of potentially harmful products will inject money into the local economy.	1	2	3	4	5

Please indicate how strongly you agree with the following statements on a scale of 1 to 5 where 1 indicates 'strongly disagree' and 5 indicates strongly agree.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Firms that specialize in the disposal of potentially harmful products will have a positive impact in the local economy.	1	2	3	4	5
Allowing the disposal of potentially harmful products will create better infrastructure in the local community.	1	2	3	4	5
Overall, I would say good things about a business that specializes in the disposal of potentially harmful products.	1	2	3	4	5
I give high valuation to businesses that dispose of potentially harmful products and the way they do business.	1	2	3	4	5
I can always consider businesses that dispose of potentially harmful products as the best in the community.	1	2	3	4	5
In most ways my life is close to ideal.	1	2	3	4	5
The conditions of my life are excellent.	1	2	3	4	5
I am satisfied with my life.	1	2	3	4	5
So far I have gotten the important things I want in life.	1	2	3	4	5
If I could live my life over, I would change almost nothing.	1	2	3	4	5
I can prevent the dumping of potentially harmful products in my community by demonstrating.	1	2	3	4	5
I can make an impact by collecting signatures to prevent the dumping of potentially harmful products in my community.	1	2	3	4	5
I can make a difference by collecting signatures to prevent the establishment of a business that disposes of potentially harmful products in my community.	1	2	3	4	5
I can make a difference by organizing a demonstration to prevent the establishment of a company that disposes of potentially harmful products in my community.	1	2	3	4	5
I can prevent the disposal of potentially harmful products by a company in my community by complaining to the local authorities.	1	2	3	4	5
I can make a difference by passing out flyers about the dangers of potentially harmful products.	1	2	3	4	5
I can make a difference by picketing businesses that dispose of potentially harmful products in my community.	1	2	3	4	5
I can make a difference by informing people in my community by providing information about potentially harmful products on social media.	1	2	3	4	5
I can make a difference by voting for candidates that prohibit the disposal of potentially harmful products in my community.	1	2	3	4	5
I can help stop the disposal of potentially harmful products in my community by organizing public meetings.	1	2	3	4	5
Overall, I believe that my local government officials are capable and proficient providers of public services.	1	2	3	4	5
I believe my local officials are competent and effective in providing me public services.	1	2	3	4	5
In general, I believe my local government officials are knowledgeable about environmental law and regulations.	1	2	3	4	5
I believe that my local government officials perform their role of providing public services very well.	1	2	3	4	5
If I needed help, my local government officials would do everything possible to resolve my problem.	1	2	3	4	5
If I required help, my local government would do its best to help me.	1	2	3	4	5
I believe that my local government officials would act in my best interest.	1	2	3	4	5
My local government is interested in my wellbeing, not just its own.	1	2	3	4	5
My local government is truthful in its dealings with me.	1	2	3	4	5
My local government officials are sincere and genuine.	1	2	3	4	5
My local government officials would keep its commitments.	1	2	3	4	5
I would characterize my local government officials as honest.	1	2	3	4	5
If I were to protest the construction of a business that disposes of potentially harmful products near my home, people who are important to me would approve.	1	2	3	4	5
Most people who are important to me think that engaging in a protest against a business that disposes of potentially harmful products is good.	1	2	3	4	5
Most people who are important to me think that I should get involved in a protest against a business that disposes of potentially harmful products in my community.	1	2	3	4	5
I respect tradition.	1	2	3	4	5
Family heritage is important to me.	1	2	3	4	5

Please indicate how strongly you agree with the following statements on a scale of 1 to 5 where 1 indicates 'strongly disagree' and 5 indicates strongly agree.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I value a strong link to my past.	1	2	3	4	5
Traditional values are important to me.	1	2	3	4	5
I plan for the long-term.	1	2	3	4	5
I work hard for success in the future.	1	2	3	4	5
I don't mind giving up today's fun for success in the future.	1	2	3	4	5
Persistence is important to me.	1	2	3	4	5
I prefer blue to other colors.	1	2	3	4	5
I like the color blue.	1	2	3	4	5
I like blue clothes.	1	2	3	4	5

Answer the following questions about a business that disposes of potentially harmful products near your home**:** **I would be against a business that disposes of potentially harmful products…**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
…even if there were good arguments for product disposal near my home instead of someone else's.	1	2	3	4	5
…even if these products must be disposed of somewhere, I would still refuse them near my home in advance.	1	2	3	4	5
…near my home because I think someone else would not accept them near their homes.	1	2	3	4	5
…because I don't want to take on the burden of a problem that is caused by others.	1	2	3	4	5
…because it is foolish to have this type of business near my home.	1	2	3	4	5
…because this business should be located near someone else's home instead of my own.	1	2	3	4	5
…because locating this type of business near someone else's home doesn't conflict with my idea about equity.	1	2	3	4	5
…because it would only be fair to have this type of business near someone else's home.	1	2	3	4	5

I sometimes litter.	**T**	**F**
I always admit my mistakes openly and face the potential negative consequences.	T	F
In traffic I am always polite and considerate of others.	T	F
I have never tried illegal drugs (for example, marijuana, cocaine, etc.).	T	F
I always accept others' opinions, even when they don't agree with my own.	T	F
I never take out my bad moods on others.	T	F
I have never taken advantage of someone else.	T	F
In conversations, I always listen attentively and let others finish their sentences.	T	F
I never hesitate to help someone in case of an emergency.	T	F
When I have made a promise, I keep it—no ifs, ands, or buts.	T	F
I don't speak badly of others behind their backs.	T	F
I would never live off other people.	T	F
I always stay friendly and courteous with other people, even when I am stressed out.	T	F
During arguments, I always stay objective and matter-of-fact.	T	F
I always return an item that I borrowed.	T	F
I always eat a healthy diet.	T	F
I help out without expecting something in return.	T	F

Demographic Questions

What is your age? _____ years old

What is your gender? Male ☐ Female ☐

What is your marital status? Married ☐ Single ☐ Widowed ☐ Divorced/Separated ☐

What is your highest educational attainment? High school Diploma ☐ Technical College/ Associate Degree ☐

Bachelor's degree ☐ Graduate/Professional Degree ☐

What is your current employment status? Work full-time ☐ Student ☐

Work part-time ☐ Own Business ☐

Unemployed ☐

The University of Texas Rio Grande Valley

Guion de reclutamiento para sujetos de investigación

Hola. Soy Sergio Enrique Robles Avila, candidato a doctor en ciencias administrativas de la Facultad de Administración de Empresas de la Universidad de Texas-Rio Grande Valley. Los estoy invitando a que participen en un proyecto de investigación relacionado con mi tesis doctoral. Estoy investigando las diferencias entre los consumidores de los Estados Unidos y los consumidores de Mexico con respecto al desecho de productos potencialmente dañinos y activismo del consumidor.

Este estudio ha sido revisado y aprobado por el Comité del UTRGV Institutional Review Board for the Protection of Human Subjects (IRB).

Para participar en este estudio, deberias tener por lo menos 18 años de edad. Mujeres embarazadas, menores de edad, personas con discapacidades, y prisioneros no serán incluidos en este estudio.

Su participacion es completamente voluntario y puedes abandonar o no participar en este estudio sin pena alguna.

En rellenar este cuestionario se tardará como máximo 25 minutos.

Todas las respuestas son confidenciales y serán codificados para proteger la identidad de los participantes. Sólo los investigadores tendran acceso a los datos de los participantes.

Si tiene alguna pregunta o duda, favor de comunicarse conmigo al 01 (956) 665- 3324 o por correo electrónico a sergio.robles01@utrgv.edu.

Tambien, se puede ponerse en contacto con el profesor Penny Simpson (956) 665.2829 o por correo electrónico penny.simpson@utrgv.edu.

Indique en qué medida está de acuerdo con las siguientes afirmaciones en una escala del 1 al 5, donde 1 indica "totalmente en desacuerdo" y 5 indica “totalmente de acuerdo.”	Totalmente en desacuerdo	En desacuerdo	Neutral	De acuerdo	Totalmente de acuerdo
Es lo moral que hay que hacer para donar dinero a un grupo ambientalista que lucha contra la desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Me siento moralmente obligado/a a firmar una petición contra del desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Me siento moralmente obligado/a a recolectar firmas contra del desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Es lo moral que hay que hacer para demostrar en contra del desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Me siento culpable si otros se manifiestan en contra del desecho de productos potencialmente dañinos en mi comunidad mientras no hago nada.	1	2	3	4	5
Por favor, indique cuál de las siguientes oraciones es importante para usted...					
Poder social	1	2	3	4	5
Riqueza	1	2	3	4	5
Autoridad	1	2	3	4	5
Ambición	1	2	3	4	5
Igualdad	1	2	3	4	5
La paz del mundo	1	2	3	4	5
Justicia social	1	2	3	4	5
Ayudar al prójimo	1	2	3	4	5
La prevención de la contaminación	1	2	3	4	5
Respetando la tierra	1	2	3	4	5
Unidad con la naturaleza	1	2	3	4	5
Protegiendo al medio ambiente	1	2	3	4	5
El desecho incorrecto de productos potencialmente dañinos ...					
podría ser un problema para mí.	1	2	3	4	5
podría ser un problema para toda la comunidad	1	2	3	4	5
podría ser un problema para otras especies de plantas y animales.	1	2	3	4	5
podría causar problemas relacionados con el medio ambiente.	1	2	3	4	5
podría reducir la calidad de vida debido a olores, mosquitos y enfermedades.	1	2	3	4	5
El desecho de productos potencialmente dañinos...					
que provengan de otro país cerca de mi casa me pone en peligro.	1	2	3	4	5
cerca de mi casa podría afectar a mi persona.	1	2	3	4	5
quemándolos podría enfermar a mi persona.	1	2	3	4	5
en un basurero podría envenenar al medio ambiente, enfermando a mi persona.	1	2	3	4	5
quemándolo cerca de mi casa podría envenenar a mi persona.	1	2	3	4	5
Indique en qué medida está de acuerdo con las siguientes afirmaciones en una escala del 1 al 5, donde 1 indica "totalmente en desacuerdo" y 5 indica “totalmente de acuerdo.”	Totalmente en desacuerdo	En desacuerdo	Neutral	De acuerdo	Totalmente de acuerdo
Las empresas que desechan productos potencialmente dañinos cerca de mi hogar podrían afectar el valor de mi hogar.	1	2	3	4	5
Si un negocio que desecha productos potencialmente dañinos cerca de mi casa tiene un accidente, la limpieza será costosa.	1	2	3	4	5

Indique en qué medida está de acuerdo con las siguientes afirmaciones en una escala del 1 al 5, donde 1 indica "totalmente en desacuerdo" y 5 indica “totalmente de acuerdo.”	Totalmente en desacuerdo	En desacuerdo	Neutral	De acuerdo	Totalmente de acuerdo
Los efectos en la salud de la exposición a productos potencialmente dañinos podrían ser un gasto para una familia.	1	2	3	4	5
Las empresas que desechan productos potencialmente dañinos crean puestos de trabajo para la comunidad.	1	2	3	4	5
Permitir que las empresas desechan productos potencialmente dañinos en mi comunidad atraerá inversiones.	1	2	3	4	5
Permitir que las empresas desechan productos potencialmente dañinos inyectará dinero en la economía local.	1	2	3	4	5
Empresas que se especializan en el desecho de productos potencialmente dañinos tendrán un impacto positivo en la economía local.	1	2	3	4	5
Permitir el desecho de productos potencialmente dañinos resultará con mejor infraestructura en la comunidad local.	1	2	3	4	5
Por lo general, yo diría buenas cosas de una empresa que se especializa en el desecho de productos potencialmente dañinos.	1	2	3	4	5
Yo valoro las empresas que desechan productos potencialmente dañinos y su manera de hacer negocios.	1	2	3	4	5
Siempre puedo considerar que las empresas que desechan productos potencialmente dañinos como las mejores en la comunidad.	1	2	3	4	5
En la mayoría de los casos, mi vida está cerca de lo ideal.	1	2	3	4	5
Las condiciones de mi vida son excelentes.	1	2	3	4	5
Estoy satisfecho(a) con mi vida.	1	2	3	4	5
Hasta ahora, he conseguido las cosas importantes que quiero en la vida.	1	2	3	4	5
Si pudiera volver vivir mi vida, no cambiaría casi nada.	1	2	3	4	5
Puedo prevenir el desecho de productos potencialmente dañinos en mi comunidad haciendo protestas.	1	2	3	4	5
Puedo hacer un impacto al recopilar firmas para evitar el desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Puedo hacer una diferencia al recopilar firmas para bloquear el establecimiento de un negocio que desecha productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Puedo hacer una diferencia al organizar una demostración para prevenir el establecimiento de una empresa que desecha productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Puedo prevenir el desecho de productos potencialmente dañinos por parte de una empresa en mi comunidad quejándome a las autoridades locales.	1	2	3	4	5
Puedo hacer una diferencia al repartir folletos sobre los peligros de productos potencialmente dañinos.	1	2	3	4	5
Puedo hacer una diferencia al protestar empresas que desechan productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Puedo hacer una diferencia al informar a la gente de mi comunidad al proporcionar información sobre productos potencialmente dañinos en las redes sociales.	1	2	3	4	5
Puedo hacer una diferencia al votar por candidatos que prohíban el desecho de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Puedo ayudar a detener el desecho de productos potencialmente dañinos en mi comunidad mediante la organización de reuniones públicas.	1	2	3	4	5
Por lo general, creo que los funcionarios públicos de mi gobierno local son proveedores capaces y competentes de servicios públicos.	1	2	3	4	5
Creo que los funcionarios públicos de mi localidad son competentes y efectivos para brindarme servicios públicos.	1	2	3	4	5
Por lo general, creo que los funcionarios públicos de mi municipio tienen conocimiento sobre las leyes y regulaciones ambientales.	1	2	3	4	5
Creo que los funcionarios públicos de mi gobierno local cumplen muy bien su función de proporcionar servicios públicos.	1	2	3	4	5
Si yo necesitara ayuda, los funcionarios públicos de mi gobierno local harían todo lo posible para resolver mi problema.	1	2	3	4	5
Si necesito ayuda, mi gobierno local hará todo lo posible por ayudar a mi persona.	1	2	3	4	5
Creo que los funcionarios públicos de mi gobierno local actuarían en mi mejor interés.	1	2	3	4	5
Mi gobierno local está interesado en mi bienestar, no solo en el suyo.	1	2	3	4	5
Mi gobierno local es honesto en sus tratos conmigo.	1	2	3	4	5
Los funcionarios públicos de mi gobierno local son sinceros y genuinos.	1	2	3	4	5
Los funcionarios públicos de mi gobierno local cumplirían con sus promesas.	1	2	3	4	5
Yo podría caracterizar a los funcionarios públicos de mi gobierno local como honestos.	1	2	3	4	5
Si tuviera que protestar en contra de la construcción de un empresa que desecha productos potencialmente dañinos cerca de mi casa, las personas que son importantes para mí lo aprobarían.	1	2	3	4	5

Indique en qué medida está de acuerdo con las siguientes afirmaciones en una escala del 1 al 5, donde 1 indica "totalmente en desacuerdo" y 5 indica “totalmente de acuerdo.”	Totalmente en desacuerdo	En desacuerdo	Neutral	De acuerdo	Totalmente de acuerdo
La mayoría de las personas que son importantes para mí piensan que participar en una protesta contra un negocio que desecha de productos potencialmente dañinos es bueno.	1	2	3	4	5
La mayoría de las personas que son importantes para mí piensan que debería participar en una protesta contra un negocio que desecha de productos potencialmente dañinos en mi comunidad.	1	2	3	4	5
Respeto la tradición.	1	2	3	4	5
Las tradiciones familiares son imporantes para mí.	1	2	3	4	5
Valoro un fuerte vínculo con mi pasado.	1	2	3	4	5
Los valores tradicionales son importantes para mí.	1	2	3	4	5
Planeo para el largo plazo.	1	2	3	4	5
Trabajo duro para el éxito en el futuro.	1	2	3	4	5
No me importa renunciar a la diversión de hoy para tener éxito en el futuro.	1	2	3	4	5
La persistencia es importante para mí.	1	2	3	4	5
Prefiero el azul a otros colores.	1	2	3	4	5
Me gusta el color azul.	1	2	3	4	5
Me gusta la ropa azul.	1	2	3	4	5

Responda las siguientes preguntas sobre un negocio que elimina productos potencialmente dañinos cerca de su hogar: Estaría en contra de un negocio que desecha de productos potencialmente dañinos ...	Totalmente en desacuerdo	En desacuerdo	Neutral	De acuerdo	Totalmente de
... incluso si hubiera buenos argumentos para el desecho de productos dañinos cerca de mi casa en lugar de la casa de otra persona.	1	2	3	4	5
... incluso si estos productos tienen que ser desechados en algún lugar, los rechazaré de antemano cerca de mi casa.	1	2	3	4	5
... cerca de mi casa porque creo que alguien más no los aceptaría cerca de sus casas.	1	2	3	4	5
... porque no quiero asumir la carga de un problema causado por otros.	1	2	3	4	5
... porque es una tontería tener este tipo de negocio cerca de mi casa.	1	2	3	4	5
... porque este negocio debería estar ubicado cerca de la casa de otra persona en lugar de la mía.	1	2	3	4	5
... porque ubicar este tipo de negocio cerca de la casa de otra persona no está en conflicto con mi idea sobre la equidad.	1	2	3	4	5
... porque sería justo tener este tipo de negocio cerca de la casa de otra persona.	1	2	3	4	5

Contesten las siguientes preguntas con V (verdadero) o F (Falso)		
A veces tiro basura en la calle.	V	F
Siempre admito mis errores abiertamente y enfrento las posibles consecuencias negativas.	V	F
En el tráfico siempre soy educado y considerado con los demás.	V	F
Nunca he probado drogas ilegales (por ejemplo, marihuana, cocaína, etc.).	V	F
Siempre acepto las opiniones de los demás, incluso cuando no están de acuerdo con las mías.	V	F
Procuro que mi mal humor no afecte a los demás.	V	F
Nunca me he aprovechado de otra persona de ninguna forma.	V	F
En las conversaciones, siempre escucho con atención y dejo que otros terminen sus oraciones.	V	F
Nunca dudo en ayudar a alguien en caso de emergencia.	V	F
Cuando he hecho una promesa, la cumplo; sin titubeos y querellas.	V	F
No hablo mal de los demás a sus espaldas.	V	F
Nunca viviría de otras personas.	V	F
Siempre me mantengo amable y cortés con otras personas, incluso cuando estoy estresado.	V	F
Durante discusiones, siempre me mantengo objetivo/a y recto/a.	V	F
Siempre devuelvo un artículo que tomé prestado.	V	F
Siempre me alimento sanamente.	V	F
Presto ayuda sin esperar nada a cambio.	V	F

Preguntas demográficas:

¿Cuántos años tienes?_____

Género: Masculino ☐ Femenino ☐

Estado civil: Casando/a ☐ Soltero/a ☐ Viudo/a ☐ Divorciado/a ☐

Escolaridad
- Secundaria ☐
- Preparatoria ☐
- Licenciatura incompleta ☐
- Tecnica ☐
- Licenciatura ☐
- Maestria ☐

Situación laboral
- Tiempo Completo ☐
- Retirado ☐
- Tiempo parcial ☐
- Estudiante ☐
- Desempleado ☐
- Trabajo por cuenta propi ☐

BIOGRAPHICAL SKETCH

Sergio Enrique Robles-Avila (robles.avila@yahoo.com.mx) earned his Doctor of Philosophy in Business Administration, with majors in Marketing and International Business, from the University of Texas-Rio Grande Valley (UTRGV) in August 2019. He also earned a Master's degree in International Relations and Area Studies from Kyung Hee University in South Korea as well as an MBA from the EGADE Business School at the Instituto Tecnológico y de Estudios Superiores de Monterrey in Monterrey, Mexico. Dr. Robles-Avila completed his undergraduate work at the University of Akron.

Dr. Robles-Avila worked as a research assistant and assistant instructor at UTRGV for four years. His research interests include consumer activism, international business, and business ethics. Some of his work has been presented at top marketing conferences sponsored by the American Marketing Association and Society for Marketing Advances. Dr. Robles-Avila was also elected secretary of the PhD Project's Minority Doctoral Student Association between 2018 and 2019.

Prior entering academia, Dr. Robles-Avila worked for almost four years in innovation consulting. He worked in over eight Asian countries as an external consultant for the Asian Development Bank. He also worked at the University of Texas-Pan American at their Office of Technology Transfer. Before working in consulting, Dr. Robles-Avila worked for four years in banking and credit for several financial institutions in Northeast Ohio.