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by

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Certifies that this is the approved version of the following report:

**Assessing and Measuring the Impact of Self-Accountability Activation on Prosocial**

**Choice: Can Efforts to Encourage Ethical Purchases be Counter-Productive?**

**APPROVED BY**

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**Assessing and Measuring the Impact of Self-Accountability Activation on Prosocial  
Choice: Can Efforts to Encourage Ethical Purchases be Counter-Productive?**

by

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Report

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*For my family*

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**Assessing and Measuring the Impact of Self-Accountability Activation on Prosocial**

**Choice: Can Efforts to Encourage Ethical Purchases be Counter-Productive?**

by

Heath Foster Cleveland, M.S. Stat

The University of Texas at Austin, 2015

SUPERVISOR: Tim Keitt

In this report, I discuss one method of prosocial marketing; evaluate it from a theoretical perspective; identify significant questions about its measurement and application; present a study and explain how the design and measurements included in that study could elucidate answers to the identified questions, pending some analysis; and discuss my current data collection plans. The method, ethical self-accountability activation, was proposed and evaluated by John Peloza, Katherine White, and Jingzhi Shang in their article titled "Good and Guilt-Free: The Role of Self-Accountability in Influencing Preferences for Products with Ethical attributes," which was published in the January 2013 issue of the Journal of Marketing.

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## Chapter 1: Identity Measurement, Goals, and Consumer Behavior

### *Introduction: Research in Consumer Behavior*

The subject matter of this research paper falls within an academic field of marketing commonly referred to as consumer behavior. To provide an academic context that will better enable the reader to understand the relevance and significance of this research, I will discuss how consumer behavior research is conducted, explain some core concepts, and identify the research areas within consumer behavior to which this paper was structured to be relevant.

Like researchers in most sciences, researchers in consumer behavior seek to connect and understand observable events by conceptualizing the unobservable mechanisms and processes between those events. More specifically, consumer behavior researchers observe the environments of individuals and their actions within those environments, and they seek to explain the connection between the observable stimuli of those environments to the observable actions taken by the individuals in response to those stimuli.

To explain that connection, consumer behavior researchers discuss and conceptualize the decision-making processes of individuals and both the cognitive and environmental dynamics that affect decision-making outcomes. To elaborate, consumer behavior researchers often view the observed action, or decision outcome, as a conscious or unconscious choice. They explain variations in choice by considering how the stimuli in an environment could have prompted and affected a decision-making process and how the cognitive state of a person could have affected the processing of environmental stimuli related to a decision (Bettman, An Information Processing Theory of Consumer Choice, 1979; Bettman, Luce, & Payne, Constructive Consumer Choice Processes, 1998)



One major challenge that consumer behavior researchers face in developing theory is the high degree of choice and preference volatility. This is due to a wide degree of variation in how a decision can be processed. For example, the same stimuli can trigger unconscious cognition, which is generally considered very low-effort processing, or it can trigger conscious cognition, which can range from “lower” effort processing to the highest-known effort processing (Greenwald & Leavitt, 1984; Hoyer, 1984). Conscious cognition in decision-making can range in its degree of abstractness, as characterized by content; a consumer may evaluate a product based on more tangible information such as price, utility, consumer reviews, and familiarity; he or she may also consider more abstract information such as consistency with and potential to fulfill values, beliefs, or social roles (Bettman, Luce, & Payne, *Constructive Consumer Choice Processes*, 1998; Reed, 2004).

Goals are a unique construct in consumer behavior because they characterize a consumer’s desired end-state, they can be consciously and unconsciously active, and they include self-regulatory components that affect motivation, effort, thought, and action. Active goals can increase or limit processing capacity and direct attention towards or away from environmental stimuli. They can also suppress, activate, or be suppressed by other goals. (Bettman, *An Information Processing Theory of Consumer Choice*, 1979; Kopetz, Kruglanski, Arens, Etkin, & Johnson, 2012). Goal and goal systems theories and measures can and have been applied to desired end-states across the range of conscious abstraction, but at higher degrees of abstraction, such as those related to social roles and identities, goal systems theory has limited applications.

One reason for this limitation is the unclear relationship between identities and goals, especially those that have been established empirically. Without clear, measurable relationships between the two constructs, or evidence of a lack thereof, the dynamics of and between two major consumer decision-making factors will remain a mystery. This issue is true of identity and most other major consumer decision-making constructs.

To describe it generally, identity is the self-concept of an individual; it bridges internal motivations to external social roles and values (Reed, 2004). The self-concept of a person is composed of a variety of beliefs that establish both uniqueness, contrasting one's qualities and beliefs to those of others, and similarity, likening one's qualities and behaviors to those of a particular group, or a particular role within a group (Luhtanen & Crocker, 1992). A person utilizing identity in a decision may make a choice consistent with the "kind of person" he or she is, or aspires to be (Newark, 2014).

Identity has been used in consumer behavior to motivate purchases, and, like a goal, has self-regulatory effects, impacts effort in decision-processing, actions-taken, choice, and the decision process used (Oyserman, Identity-based motivation: Implications for action-readiness, procedural-readiness, and consumer behavior, 2009; Reed, 2004). Using stimuli to activate identity can motivate purchases that are viewed as consistent with a particular identity, but results are mixed and robust predictive measures have yet to be developed (Oyserman, Identity-based motivation and consumer behavior, 2009; Aquino & Reed, 2002; Reed, 2004). For this reason, although identity is widely acknowledged to be an influencer of motivation and choice, identity is often excluded as an explanatory variable in choice research mechanisms, which further inhibits the development reliable measures of identity and its relationships to other, more traditional, decision-processing constructs.

However, identity's disconnection seems to extend beyond its lack of measurability. Highly unpredictable, immeasurable, effects on choice and preferences are not unique to the identity construct in consumer behavior. A consumer's choices and preferences can vary widely, even in identical choice situations, for many reasons such as situational factors that affect cognitive capacity, active goals at the time of choice, the assortment of products available, past choices, and the social context the products are being purchased in (Bettman, Luce, & Payne, Constructive Consumer Choice Processes, 1998; Kopetz, Kruglanski, Arens, Etkin, & Johnson, 2012). The findings from consumer behavior research, even those involving core theoretical constructs, are often highly qualified. Identity's isolation from core constructs seems to be related to its "newness."

Older constructs such as goal activation and motivation, and their relationships to product attribute processing, preferences and choice have simply co-existed in decision-processing theory longer and been studied more. Therefore, the empirical evidence of their behavior as constructs and their relationships to other constructs is broader. Furthermore, theories about those constructs and their relationships have had more time to be refined accepted, and proven reliable. From a research perspective, it's intuitive that identity would not be widely used. Identity is inherently less convincing; a plausible explanation based on well-established theory is more convincing than an equally plausible explanation based on theory that isn't.

In their article, "Good and Guilt-Free: The Role of Self-Accountability in Influencing Preferences for Products with Ethical attributes," which was published in the January 2013 issue of the Journal of Marketing, John Peloza, Katherine White, and Jingzhi Shang use methods similar to those used in identity research to influence product choice. In doing so, they may have identified a concept that can be viewed and measured as both an identity and a goal, and therefore, a starting point at which goals and identities can be empirically compared.

#### *Article's Relevance to the Measurement of Goal and Identity Relationships*

In their article, Peloza, White, and Shang (hereto forth referred to as "the authors," demonstrate that a method used to motivate moral behavior, highlight a past inconsistency with moral self-standards, can increase the likelihood that a subject purchases or prefers products that are marketed by their ethical attributes. This occurs when ethical self-standards, or self-standards more generally, are used in place of moral self-standards. The article provides a promising theoretical link between identity and goal measurement for three reasons:

- 1) The method is deeply rooted in moral identity theory and is one of identity research's measurable, well-established methods. It has been widely used in moral identity research to motivate moral behavior.

- 2) While the authors do not evaluate whether identity plays a role in their subjects' subsequent preferences for products marketed by ethical attributes, they acknowledge the method's prior applications in moral identity research, liken ethical behavior to moral behavior empirically, and describe ethical self-standards as components of a person's "self-concept," a term often used synonymously with identity.
- 3) "Attributes," as a term, is typically used in goal-systems research. It provides information about a product that can be used to evaluate other products, such as price or features. It is often used to measure whether a goal prime was successful. For example, a goal prime test may proceed as follows: First, person's comparative preferences among attributes are measured; Then, half of the subject group is primed and the other half isn't; Then, each participant is presented with a product that is marketed by an attribute related to the primed goal and his or her likelihood of purchase of that product or preference among that product and other products is measured. If the primed half has the hypothesized attribute-related behavior and the other half does not, the goal prime is thought to have changed preferences in the hypothesized way. Abstract social constructs, such as identity, oft cannot be unambiguously represented or measured through a product attribute. For example, a person's sensitivity to price can be measured, but that measure cannot reliably detect whether someone is frugal; there could be many other reasons someone is price-sensitive. Similarly, a frugal identity prime isn't necessarily going to have a major impact on price-sensitivity because the terms have different meanings and the term frugality is subject to a wider degree of interpretations between people than price is because of its comparative abstractness. Some identity terms may have more consistent meanings between people and therefore more detectable primes, such as the moral identity prime, but they can't be reasonably or clearly expressed as an attribute. For example, a product that advertised, "will make you a better spouse," is unlikely to be taken as an informative, or believable, point of product evaluation by most consumers. Ethical self-standards is unique because it can be measured as a product attribute, but it's an abstract concept.

In sum, behaving ethically and living up to self-standards could be the first quantifiable example of a concept that fits the qualifications for classification and measurement as both a goal and an identity. If it were, it would provide a point of comparison by which the behavior of other goals and identities can be evaluated. If so, the method could be used to differentiate the behavior of goals and identities.

#### *Article's Relevance to Prosocial Choice and Marketing*

Another goal of this research is to explore how ethical self-accountability functions when competing non-moral and non-ethical values are salient and active. While Pelozo's article did use price as a competing non-ethical value, the increased price was used to make the situation realistic for consumers. Extant research has yet to explore the effectiveness of ethical identity in motivating prosocial behavior in more significant, yet quotidian, situations of value compromise; that is, whether an individual would still be persuaded to purchase a product advertised for its ethical attributes when choosing to purchase that product would compromise, or require the suppression of, an important, active, and competing non-moral and non-ethical value. Both goal literature and identity literature have well-established occurrences of goal-goal competition, suppression, and continue suppression in future choice and identity-identity competition, suppression, and continued identity suppression choice, respectively.

For a salient ethical value, suppression in favor of a competing goal or identity may lead to not only future suppression of that value, but also the reduced effectiveness of ethical product appeals and a lower-likelihood that ethical products will be purchased in the future. Given those risks, the potentially counter-productive impact of ethical self-standard accessibility will also be evaluated in this study.

## Chapter 2: Survey Design

In this section, I will first reiterate the two relevant questions brought up in the first section. I will refer to these questions as “the objectives,” or “the objective questions.” Then, I will present an overview of the significant survey design and sections. Last, I will proceed through the sections as described in the overview and discuss the content and function of each measure within each.

### Objectives:

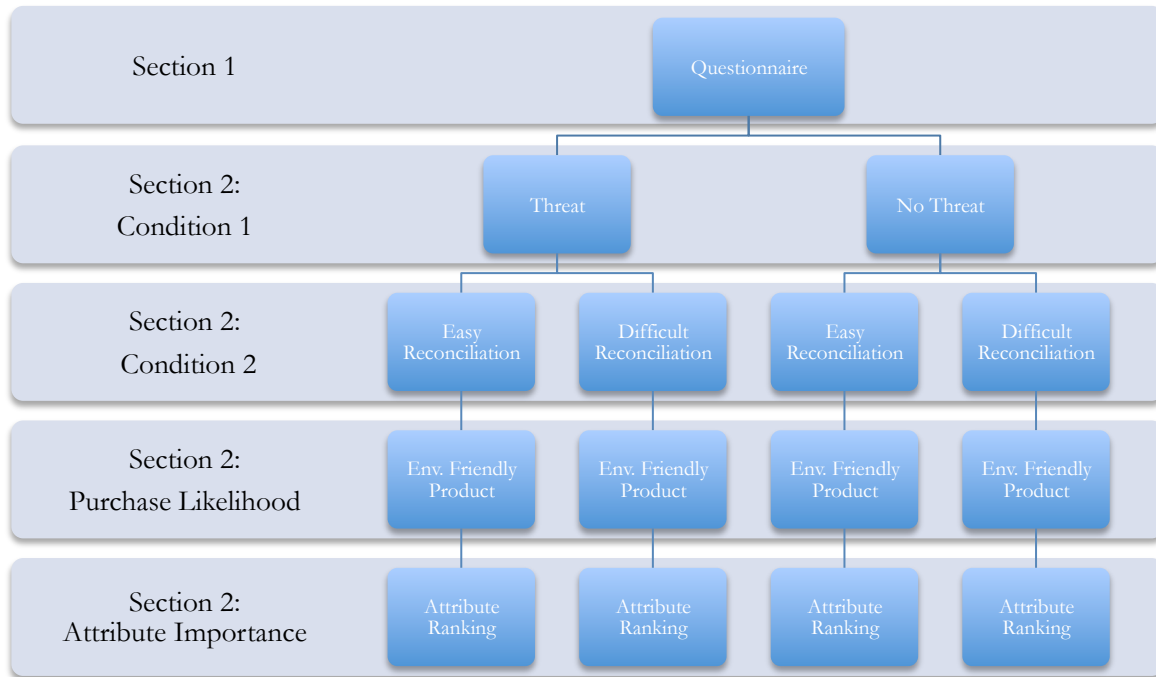
1. Can ethical self-standards connect identities and goals empirically?
2. Can the ethical self-accountability effect be moderated by competing values?

### *Design overview:*

This study is designed as a 2x2. The two randomly assigned conditions are high(low) self-accountability and high(low) value-competition. The study will be distributed electronically on mTurk, and it will proceed through the five following elements in order:

1. Value Importance Questionnaire
2. Self-Accountability Condition (2)
3. Value-Competition Condition (2)
4. Post Conditions Likelihood of Purchase Measurement
5. Post Conditions Attribute Ranking

The graphic below displays the process flow for each condition, starting with the questionnaire:



**Figure 1**

The questionnaire will be described in the Appendix. All other survey elements, components will be discussed in this chapter.

(1) *Ethical Self-Standards Importance Measure*

As mentioned previously, the authors show that enhanced self-accountability leads to a higher preference and/or purchase likelihood of products marketed by ethical attributes. Enhancing self-accountability can only work if the subject who is primed holds ethical self-standards to be important. Moral identities researchers hypothesize that the increased moral behavior happens because people who consider a self-standard important to their self-concept seek to behave consistently with that identity, in general; therefore, becoming aware of behavior inconsistent with an important self-standard leads to a desire to re-establish a sense of consistency with that self-standard. Subsequent opportunities to re-establish a sense of consistency would then be more pronounced to and more likely to be utilized by the subject (Aquino & Reed, 2002). Therefore, a measure of self-standard importance is required because it has been essential to measuring the effects of self-standard inconsistency. In moral identity research and in the authors' research, this has been done using a questionnaire. The authors use an environmental self-standard as an ethical self-standard, so this survey will use similar measures. The authors also used four questions to measure importance, each with a 7-point Likert-scale. So the participants do not know the true purpose of the study, these questions are embedded in a questionnaire and presented among other questions so the participants do not know what exactly is being tested and respond inaccurately. The table below displays the environmental importance questions to be used in this study.

Environmental Sustainability	
<b>Likelihood</b>	When deciding between similar products, how likely are you to choose the product option that is the most environmentally friendly?
<b>Agree/Disagree</b>	When shopping, to what degree do you prefer or avoid purchasing products that do not conserve natural resources?
<b>Prefer/Avoid (reverse-coded)</b>	When shopping, to what degree do you prefer or avoid purchasing products that do not conserve natural resources?
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid purchasing products that negatively impact the environment?

Table 1



(2) *Self-Accountability Condition*

The authors then activate a self-standard by contrasting the self-standard and the subject's past behavior. Although the authors use many methods to activate self-accountability, asking participants to discuss in writing past behavior inconsistent with a self-standard is the most explicit method of activating self-standard inconsistency. It is also used in moral identity research for the same purpose. Moral identity research follows the same steps in the same order. First, the importance of a moral self-standard to a subject is measured. Second, a contrast between that self-standard and the subject's past behavior is made salient. Similarly, after the method is applied, subjects have been shown to be more likely to engage in behavior that is associated with the moral self-standard (Aquino & Reed, 2002).

Condition 1 Prompts & Questions		
Condition	Threat	No Threat
Prompt	Using the three questions below, please describe a recent time in which you made a decision that was not consistent with positive environmental values. That is, describe a time in which you had an option between an action that would have been considered better for the environment and an action that would have been considered worse for the environment, but you chose the environmentally worse option. Please answer each question directly, carefully, and honestly in complete sentences. The character minimum for each answer corresponds to a minimum of 1-2 sentences.	*none*
Question 1 (Text Entry)	What was this situation and what were your options?	*none*
Question 2 (Text Entry)	Which option did you choose, and why was it not as environmentally friendly as the other option(s)?	*none*
Question 3 (Text Entry)	Why do you think you chose the less environmentally friendly option in that situation?	*none*

Table 2

(3) *Value-Competition Condition*

The value above refers to either goals or identities. Goal competition can lead to suppression of a conflicting goal, and identity competition can lead to the suppression of an active identity (Kopetz, Kruglanski, Arens, Etkin, & Johnson, 2012; Karelaia & Guillén, 2014). In moral identity research, identities have been shown to suppress goals as goals are defined in this report, although these examples seem to be related to just one identity and one goal. Here, multiple goals will be tested.

The subject of identity suppression in choice has been explored in identity literature. The choices, however, are typically between two actions that are dichotomous and linked with two incompatible identities, exclusively and respectively, that the chooser considers important to his or her self-concepts (Karelaia & Guillén, 2014). When the choice scenario is presented and the incompatible identities are made salient, the chooser must do what it is referred to as “identity work,” reconcile identity dissonance through identity suppression, or identity choice, in order to choose a course of action (Newark, 2014). Identity work is thought to influence the self-concept of a person going forward. In cases where it leads to identity suppression, identity work is thought to lead to identity compromise, or to lessen the importance of the suppressed identity to one’s self-concept, at least in respect to the identity chosen over the suppressed identity (Karelaia & Guillén, 2014).

If ethical self-accountability is considered to be an identity, then other important identities should not be activated to avoid confounding the results. Goals have a hierarchical structure, but they do not necessarily have a stable hierarchy. Most goals can be primed and a goal’s position or inclusion in a hierarchy depends heavily on priming. Important identities are higher-ordered within a person’s self-concept, suggesting that the hierarchical order of identities isn’t as flexible. Given that identities hold an additional property, and a goal of this study is to evaluate whether ethical self-standards are identities, then a significant competing identity trigger could confound results. For this reason, only values that would be classified as tangible and measurable as an attribute, which are not typically directly associated with social abstractions such as identity, should be used to test the behavior of ethical self-standards.

Condition 2: Prompts	
Difficult Reconciliation	Easy Reconciliation
<p>Please read the following shopping scenario carefully and answer the following questions as honestly as possible.</p> <p>Imagine that you walk into a store and see a sign advertising a new environmentally friendly laundry detergent. Since you were planning to buy laundry detergent at the store that day you stop to look over the advertisement. You notice that the environmentally friendly detergent is better for the environment than the detergent that you typically buy. Additionally, you notice that compared to your usual laundry detergent, the cleaning effectiveness, amount of detergent, and estimated number of laundry loads per purchase are the same. However, the environmentally friendly detergent is priced slightly higher than the laundry detergent that you typically buy.</p> <p>Additionally, the environmentally friendly detergent is in a section of the store that is not as conveniently located as the section where you would pick up your typical laundry detergent.</p> <p>Assume that for all other important attributes that are not mentioned (such as scent, brand, or sensitivity to skin), the environmentally friendly detergent and your typical detergent are the same.</p>	<p>Please read the following shopping scenario carefully and answer the following questions as honestly as possible.</p> <p>Imagine that you are shopping at a store. While walking down the laundry detergent aisle, you notice a new environmentally friendly laundry detergent on display and a sign advertising that detergent. Since you are shopping for laundry detergent, you stop to look over the advertisement. You notice that the environmentally friendly detergent is better for the environment than the detergent that you typically buy. Additionally, you notice that compared to your usual laundry detergent, the cleaning effectiveness, amount of detergent, and estimated number of laundry loads per purchase are the same. However, the environmentally friendly detergent is priced slightly higher than the laundry detergent that you typically buy.</p> <p>Assume that for all other important attributes that are not mentioned (such as scent, brand, location, or sensitivity to skin), the environmentally friendly detergent and your typical detergent are the same.</p>

Table 3

(4) *Post Conditions Likelihood of Purchase Measurement*

In both moral identity research and the authors' work, the likelihood or preference of being more consistent with the self-standard is measured. In moral identity research, this is often done by measuring the likelihood of choosing an action or the preference between moral or non-moral actions. In the authors' work, similar to that of goal research, this is done by measuring purchase likelihood, or the preference between an ethical product and a product marketed for "self-benefit" attributes. The self-benefit attributes appear to be tangible attributes, which is consistent with non-ethical goal-competition and the description in this report of methods that are commonly applied in goal research. The following likelihood of purchase question will be included with a 7-point Likert scale after the conditions but before the ranking:

How likely would you be to purchase the environmentally friendly detergent over your typical detergent?

(5) *Ranking*

Research supports three possible mechanisms by which future choices can be influenced by previous choices. The first, and better known is post-choice preference inference. A person may infer his or her own preferences from past actions, which implies that future choices would be more line with past choices going forward (Newark, 2014). However, these inferred preferences do not necessarily influence or change the self-concept of a person or the identities he or she holds to be important. In fact, in ethical choice research, highlighting a contrast between a person's past choices and an ethical self-standard that the person regards as important, a component of his or her self-concept, has been shown to increase the likelihood that he or she purchases a product advertised by an attribute associated with that self-standard (Peloza, White, & Shang, 2013). If the person were inferring the importance of a self-standard, or identity, from expressed preferences in past choices, one would expect the opposite outcome.

The second, as previously mentioned, is identity work prompted by choice. A person may reconstruct his or her self-concept in order to make a choice; the reconstruction would often involve reprioritization of competing identities that are important to one's self-concept, thereby lowering the relative importance of the suppressed identity to other identities within one's self-concept. Choosing a non-ethical identity over an ethical identity could lower the importance of the ethical identity, thus reducing the likelihood that one would be motivated to behave consistently with that ethical identity in the future. It's unclear whether an identity and its relative importance could be lowered by a tangible goal, but the third method that changes preferences in the future is goal exclusive and similar to identity work. Although salience is used rather than relative importance, goal-goal suppression would affect cognitive choice processes including those goals in the future. The goal suppression will be more accessible in future choice processes, which means future preferences are more likely to be influenced by that process. The possibility that ethical self-standards, whether a goal or an identity, could be suppressed in decision processes implies that prosocial choices could be lowered by self-standard accessibility marketing approaches. For this reason, a

ranking of the relative importance of various attributes will be included at the end of the study. The questionnaire at the beginning of the study will also include questions about the importance of each attribute that is listed below, so the pre-condition ranking and post-condition ranking can be compared between the high competition and low competition conditions to check this possibility.

Prompt	Answers
Below, five product qualities are listed with associated questions. Using the buttons below, please rank each quality by its importance or priority to you when deciding whether to purchase a product. 1 would be the most important, or highest priority, and 5 would be the least important, or lowest priority. The responses are ordered, so 2, 3, and 4 correspond to the second, third, and fourth most important. You must select a response for each quality and you cannot select any number more than once.	<p>_____ Price - Is this product the least expensive, or the best value?</p> <p>_____ Environmental Sustainability - Is this product friendly to the environment?</p> <p>_____ Quality - Is this product the best, the most effective, or most reputable?</p> <p>_____ Time - Is this product easy to obtain in a timely manner?</p> <p>_____ Familiarity - Is this a product you have used before, have knowledge of, or are comfortable using?</p>
If you find yourself uncertain about which qualities are more important to you, consider the answers to the accompanying questions and imagine a product that would be a "yes" to the questions related to one quality, and a "no" to those related to the other qualities. If you find yourself more persuaded when the answer is yes to a particular set of questions related to a quality, then that quality is likely more important to you than the other qualities are.	

Table 4

### **Chapter 3: Analysis, Possible Results, and Implications**

In this section, I will split the objective questions into five smaller sub-questions that can be used in various combinations to answer the objectives. The five smaller sub-questions will be referred to as, “the diagnostics,” or “the diagnostic questions.” I will then proceed through the diagnostic questions in order and identify the measurements and results needed to answer those questions. Some diagnostics may not have unequivocal answers. I will discuss techniques that may be helpful in these cases. Once the analysis plan and implications of potential results is completed, this report will conclude.

#### Diagnostics:

1. Can the self-accountability effect be moderated by competing values?
2. If suppression does not occur, is ethical behavior triggered because of an ethical identity?
3. If suppression does occur, does it have long-term impact on choice?
4. Can importance measures, as they were used in the authors’ paper, be used in a way to compare relative value of goals, morals, and ethics?
5. If suppression does occur, is ethical identity being suppressed by a goal?

### *Mapping Diagnostics to Objectives:*

Diagnostics 1 will lead to the creation of the majority of the survey and be sufficient to answer Diagnostics 2. One additional point of measurement must be added to address Diagnostics 3. Diagnostics 1 & 2 are sufficient to answer Diagnostics 4 if suppression does not occur, which is sufficient to answer Objective 1. Diagnostics 1, 2, and 3 are sufficient to answer Objective 2. Diagnostics 5 addresses whether there is evidence to say ethical self-standards is an identity when suppression does not occur, which must be answered using more sophisticated data techniques, such as hierarchical linear modeling. If no answers are yielded, the answer to Diagnostics 4 would be no, at least as they were used in this study, and the answer to Objective 1 would be no.

### *Evaluating Diagnostics 1*

<u>Required:</u>	Ethical Self-Standards Importance Measure
	Self-Accountability Condition (2)
	Value-Competition Condition (2)
	Post Conditions Likelihood of Purchase Measurement

The self-accountability effect increases the likelihood of a product purchase advertised by an ethical attribute among those who consider ethical self-standards important. If this effect were moderated by value competition, a difference in the Post Conditions Likelihood of Purchase Measurement between subjects who hold ethical self-standard important who are assigned the High-Value Competition by Self-Accountability condition and those who are assigned the Low-Value Competition by Self-Accountability would be expected. The Low-Value Competition by Self-Accountability group should show a higher likelihood of purchase, because goal competition is expected to be less likely to occur.



## *Evaluating Diagnostics 2*

Required:                      Ethical Self-Standards Importance Measure  
                                        Self-Accountability Condition (2)  
                                        Value-Competition Condition (2)  
                                        Post Conditions Likelihood of Purchase Measurement

The self-accountability effect increases the likelihood of a product purchase advertised by an ethical attribute among those who consider ethical self-standards important. If this effect were not moderated by value competition, in the Post Conditions Likelihood of Purchase Measurement between subjects who hold ethical self-standard important who are assigned the High-Value Competition by Self-Accountability condition and those who are assigned the Low-Value Competition by Self-Accountability would be expected. Both groups would be expected to show a higher likelihood of purchase than the low importance and high importance groups in other conditions. This would suggest ethical self-standards behave more like moral identities than goals, since those who show high moral identity importance are the most likely to behave morally in any given situation, regardless of priming, and they show increased chances of doing so when an inconsistency between their behavior and past actions is brought to their attention.

### *Evaluating Diagnostics 3*

<u>Required:</u>	Ethical Self-Standards Importance Measure
	Self-Accountability Condition (2)
	Value-Competition Condition (2)
	Post Conditions Attribute Ranking

In suppression cases, future preferences could be affected by a reprioritization of goals or a reprioritization of an identity relative to goals. In either circumstance, an observable relative change in prioritization should occur. The High-Value Competition by Self-Accountability group, the suppressed ethical self-standards group, would be expected to rank environmental sustainability lower post-conditions than the Low-Value Competition by Self-Accountability, the group that did not experience suppression, would.

### *Evaluating Diagnostics 4*

<u>Measured Required:</u>	Ethical Self-Standards Importance Measure
	Self-Accountability Condition (2)
	Value-Competition Condition (2)
	Post Conditions Likelihood of Purchase Measurement

In cases where suppression does not occur, the answer to this question would be a definitive yes. An identity that can be represented and compared to goals as an attribute would have been identified. Therefore, goals could be compared to identities in product choices. In cases where suppression occurs, then more evaluation would be required to identify whether goals could suppress identities.

Measured Required: All Value Importance Measures (Questionnaire)  
Self-Accountability Condition (2)  
Value-Competition Condition (2)  
Post Conditions Likelihood of Purchase Measurement  
Post Conditions Attribute Ranking

In cases of suppression, the importance measures of the other attributes in the questionnaire could be taken into account. The questionnaire includes all attributes that are included in the ranking at the end of the study. Importance measures tend to be criticized because importance is a relatively vague term and it's not unusual for participants to choose more positive responses than are representative of their true underlying values. To address the issue with ambiguity, participants were asked questions that would indicate importance levels, but are not explicit measures of importance. This choice may lead to different results than those that are presented by the authors. ANOVAs can be used to test whether the questions behave similarly. Data transformations may be required in order to achieve normality.

Additionally, outliers and questionable data should be removed. This will be evaluated by each participants' consistency between question types should be evaluated as well as their means between question types, means within attributes measured, and means for all questions. If there is inconsistency within a question type, one of the questions may be bad or the person may not be reading questions carefully. Attention-based questions are present in the survey to test the possibility that participants aren't reading or responding carefully. If a participant shows a high degree of consistency between question types, the participant may not be responding genuinely, but rather choosing roughly the same answer choice for each question type. This should also be testable using attention-based questions. Timers are also included to calculate the speed at which each participant answers questions. High or low consistency participants may also be tested for not answering carefully or genuinely using their relative speed on questions. Another option is to evaluate whether the

self-standard inconsistency prime worked or whether participants are suspicious of the intent of the survey.

The manipulations also need to be tested. All participants are asked to answer the same general shopping preference questions in writing. They include no primes. In the threat group, half of the participants see one of these questions immediately after the threat condition is presented. If participants discuss environmental sustainability frequently before the threat is presented, environmental sustainability may already be primed from the questionnaire or participants may be aware of the intent of the study. If participants who are presented the question after the prime show a higher likelihood of mentioning environmental sustainability than do those who were not, then the prime had an effect. If they do not, then the prime probably did not work.

## Appendix

In the Questionnaire, there are 20 attribute importance questions and 5 attention based questions. All questions are organized into 5 blocks of 5 questions. Each question is randomized within block, so the order is not the same for every participant. Additionally, every block is randomized, so the participants are presented with varying orders of blocks of randomly presented questions. This randomization is done to compensate for the lack of complete randomization. Since there are 4 question types and 5 attributes being tested, too many question types or too many attributes being presented close together could lead to a greater chance that participants catch on to the purpose of the study. The block randomization ensures that there is no more than one of any question type and no more than one of any attribute type in any given block. To prevent participants from knowing when the attention-based questions would be presented, they are also randomized within each block. Organized with pseudo-randomization, the questionnaire can present neither a question type more than twice in a row nor an attribute type more than twice in a row. In the most extreme cases, consecutive presentation of a question type or attribute can only happen at most twice for any given attribute or question type, so, the maximum number of twice in-a-row presentations for any attribute or question type is two, implying that only one other question or attribute type could be presented consecutively once at most.

Attribute Questions Types within Each Block					
	Block 1	Block 2	Block 3	Block 4	Block 5
<b>Environmental</b>	Agree/Disagree	Importance	-	Likelihood	Prefer/Avoid
<b>Price</b>	-	Agree/Disagree	Likelihood	Prefer/Avoid	Importance
<b>Quality</b>	Likelihood	Prefer/Avoid	Importance	-	Agree/Disagree
<b>Time</b>	Importance	Likelihood	Prefer/Avoid	Agree/Disagree	-
<b>Familiarity</b>	Prefer/Avoid	-	Agree/Disagree	Importance	Likelihood

Table 5

**Questions organized by Type of Question**

<b>Likelihood</b>	
<b>Environmental Sustainability</b>	When deciding between similar products, how likely are you to choose the product option that is the most environmentally friendly? (4)
<b>Price</b>	When deciding between similar products, how likely are you to choose the product option that is the least expensive? (3)
<b>Quality</b>	When deciding between similar products, how likely are you to choose the highest quality product option? (1)
<b>Time</b>	How likely are you to attempt to minimize the time you spend completing a shopping task? (2)
<b>Familiarity</b>	When deciding between similar products, how likely are you to choose the product (or brand) option that you have used or seen before? (5)
<b>Agree/Disagree</b>	
<b>Environmental Sustainability</b>	How much do you agree or disagree with the following statement: "I always try to choose the most environmentally sustainable products when shopping." (1)
<b>Price</b>	How much do you agree with the following statement: "I always try to choose the least expensive products when shopping." (2)
<b>Quality</b>	How much do you agree or disagree with the following statement: "I always try to choose the highest quality products when shopping." (5)
<b>Time</b>	How much do you agree or disagree with the following statement: "When shopping, I always try to minimize the amount of time I spend getting the products I need." (4)
<b>Familiarity</b>	How much do you agree or disagree with the following statement: "When shopping, I always try to choose the products (or brands) that are familiar to me." (3)
<b>Prefer/Avoid (reverse-coded)</b>	
<b>Environmental Sustainability</b>	When shopping, to what degree do you prefer or avoid purchasing products that do not conserve natural resources? (5)
<b>Price</b>	When shopping, to what degree do you prefer or avoid purchasing expensive products? (4)
<b>Quality</b>	When shopping, to what degree do you prefer or avoid purchasing lower quality products? (2)
<b>Time</b>	To what degree do you prefer or avoid spending time on shopping tasks? (3)
<b>Familiarity</b>	When shopping, to what degree do you prefer or avoid purchasing products from unfamiliar brands? (1)
<b>Importance/Unimportance</b>	
<b>Environmental Sustainability</b>	To what degree do you consider it important to avoid purchasing products that negatively impact the environment? (2)
<b>Price</b>	To what degree do you consider it important to avoid purchasing expensive products? (5)
<b>Quality</b>	To what degree do you consider it important to avoid purchasing low quality products? (3)
<b>Time</b>	To what degree do you consider it important to avoid lengthy shopping experiences? (1)
<b>Familiarity</b>	To what degree do you consider it important to avoid purchasing products (or brands) that you haven't seen or used before? (4)

Table 6

### Questions Organized by Attribute Tested

Environmental Sustainability	
<b>Likelihood</b>	When deciding between similar products, how likely are you to choose the product option that is the most environmentally friendly? (4)
<b>Agree/Disagree</b>	When shopping, to what degree do you prefer or avoid purchasing products that do not conserve natural resources? (5)
<b>Prefer/Avoid (reverse-coded)</b>	When shopping, to what degree do you prefer or avoid purchasing products that do not conserve natural resources? (5)
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid purchasing products that negatively impact the environment? (2)
Price	
<b>Likelihood</b>	When deciding between similar products, how likely are you to choose the product option that is the least expensive? (3)
<b>Agree/Disagree</b>	How much do you agree with the following statement: "I always try to choose the least expensive products when shopping." (2)
<b>Prefer/Avoid (reverse-coded)</b>	When shopping, to what degree do you prefer or avoid purchasing expensive products? (3)
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid purchasing expensive products? (5)
Quality	
<b>Likelihood</b>	When deciding between similar products, how likely are you to choose the highest quality product option? (1)
<b>Agree/Disagree</b>	How much do you agree or disagree with the following statement: "I always try to choose the highest quality products when shopping." (5)
<b>Prefer/Avoid (reverse-coded)</b>	When shopping, to what degree do you prefer or avoid purchasing lower quality products? (2)
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid purchasing low quality products?
Time	
<b>Likelihood</b>	How likely are you to attempt to minimize the time you spend completing a shopping task? (2)
<b>Agree/Disagree</b>	How much do you agree or disagree with the following statement: "When shopping, I always try to minimize the amount of time I spend getting the products I need." (4)
<b>Prefer/Avoid (reverse-coded)</b>	To what degree do you prefer or avoid spending time on shopping tasks? (3)
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid lengthy shopping experiences? (1)
Familiarity	
<b>Likelihood</b>	When deciding between similar products, how likely are you to choose the product (or brand) option that you have used or seen before? (5)
<b>Agree/Disagree</b>	How much do you agree or disagree with the following statement: "I always try to choose the most environmentally sustainable products when shopping." (5)
<b>Prefer/Avoid (reverse-coded)</b>	When shopping, to what degree do you prefer or avoid purchasing products from unfamiliar brands? (1)
<b>Importance/Unimportance</b>	To what degree do you consider it important to avoid purchasing products (or brands) that you haven't seen or used before? (4)

Table 7

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