Intending To Be Ethical: An Examination of Consumer Choice in Sweatshop Avoidance

While much research in ethical consumption has focused on contexts such as food, this research explores ethical consumer decision-making in the context of intention to avoid sweatshop apparel. This research seeks to deepen the Theory of Planned Behavior with respect to the motivation and volitional stages underlying behavior. The findings of the research, based on 794 consumers, are novel and support an enriched framework which reveals that the role of attitude, subjective norm and perceived behavioral control are mediated by desire, intention and plan. The findings have implications for research seeking to address the ‘intention-behavior’ gap.
The increase in concern for ethical issues among consumers has been well-documented in literature (Kim 2005; Williams, Taylor, and Howard 2005). The context of apparel, however, remains less developed (Dickson 2001; Shaw and Duff 2002; Tomollilo and Shaw 2004). Research and the media have highlighted sweatshop labor concerns in apparel as pertinent issues impacting consumer decision-making, however, this market remains under-developed restricting choice in this area. Thus, although a consumer may hold an intention to avoid sweatshop produced apparel they often find barriers to behavior, such as lack of availability and information, which make it difficult to take any action (Shaw and Duff 2002; Tomollilo and Shaw 2004). While this ‘intention-behavior’ gap has been highlighted in many behavioral contexts it remains the subject of much research debate (Newholm 2005).

Much of this debate is found within the Theory of Planned Behavior which has intention at its core (Armitage and Conner 2001). The lack of attention given to the motivational and volitional aspects of enacting an intention has been a central criticism of this model (Bagozzi 1992; 1993; Perugini and Conner 2000). Although previous research has highlighted different aspects of volition as distinct from intention this research remains limited (Perugini and Conner 2000; Jones et al. 2001; Sniehotta, Scholz, and Schwarzer 2005). In order to understand the motivational stages underlying decisions to avoid sweatshop apparel, the previously identified constructs of desire and plan are proposed as conceptually distinct from intention and pertinent to our understanding of the motivation and action aspects of intention. Previous research has argued that desire is distinct from intention (Bagozzi 1992) and plan has been found to play a role separate from intention within the Theory of Planned Behavior (Jones et al. 2001; Sniehotta, Scholz, and Schwarzer 2005). Such research suggests the pertinence of these motivation and volition stages in addressing the intention-behavior gap often found in ethical consumption (and other) contexts.

The current research deepens the Theory of Planned Behavior framework by developing and empirically testing a model that examines the role of desire, intention and plan to avoid sweatshop apparel. Subscribers to the UK Ethical Consumer magazine were selected in a purposive sampling approach. The questionnaire was developed to measure the components of the Theory of Planned Behavior (attitude, subjective norm and perceived behavioral control) (Ajzen 1985) along with desire (Perugini and Bagozzi 2001) and plan (Perugini and Conner 2000; Sniehotta et al. 2005). Within a specified four week period 794 useable questionnaires were returned, representing a response rate of 20%. Gender was represented in the sample by 33% male and 67% female. Average respondent age was 43 years and 84% of respondents were educated to degree level or higher. Analysis was conducted in SPSS and via structural equation modeling using AMOS 6.0.

Desire was found to be pertinent in fully mediating the effect of attitude and partially mediating the effect of subjective norm on intention. Desire was found to be distinct from intention and revealed that attitude did not directly impact intention but rather required the motivational stage of desire; reflective of a personal motivation to act. In the context of avoiding sweatshop apparel this personal motivation is important and can be energized by emotive feelings surrounding the issue, resulting in a strong desire to act. Thus, a desire to avoid sweatshop apparel informed by an attitude that sweatshop apparel is negatively valued is desired before forming into an intention. The concept of temporal framing suggests that desire resides at a mental level where practical consideration of behavioral enactment has not yet been considered (Perugini and Bagozzi 2004). Thus, the positive attitudinal aspects of avoiding sweatshop apparel must be desired before they move to an intention to act. This highlights a time oriented distinction between desire and intention. Similarly, the role of important others can serve to impact personal motivation to act in terms of desire by positively supporting personal motivation or through negatively influencing desire to avoid sweatshop apparel. In terms of perceived behavioral control, which is not mediated through desire, we argue that
consideration of perceived difficulties occur closer to the temporal framing of the behavior at the point of intention. The explanatory ability of this enriched framework increases significantly from $R^2 = .33$ to $R^2 = .48$ with the addition of the mediating construct of desire.

The existence of a gap between attitude and behavior has been the subject of academic debate both within the Theory of Planned Behavior literature and elsewhere. The current research findings highlight the significance of plan as a volitional stage toward behavior, with results revealing the impact of attitude, subjective norm, perceived behavioral control and desire on plan as fully mediated through intention. In the context of the current research where there are difficulties in avoiding the purchase of sweatshop apparel the need to take steps towards enacting the behavior beyond the formation of an intention is reasonable. For example, outlets and brands may need to be researched and their accessibility assessed. This further enrichment of the Theory of Planned Behavior framework through the addition of plan resulted in $R^2 = .49$ for intention, a large improvement on the traditional Theory of Planned Behavior model, and $R^2 = .53$ for plan.

While previous research has criticized the Theory of Planned Behavior for the lack of attention given to understanding the motivational aspects of intention, the current research has deepened the Theory of Planned Behavior framework through empirically testing the links between theoretical constructs desire, intention and plan, and results reveal significant improvements in the model.

The significant contribution of this enriched framework is particularly apparent in contexts where there may be barriers to behavior, such as found in addictive behaviors (e.g., smoking) and in behaviors where conflict may exist (e.g., lifestyle changes, sustainable behaviors). We would recommend that future research test the applicability of the derived model in different behavioral contexts and fully assess the impact of desire and plan as explanatory motivational and volitional constructs to actual behavior.

REFERENCES


Jones, Fiona, Charles Abraham, Peter Harris, Jörg Schulz and Catherine Chrispin (2001), “From Knowledge to Action Regulations: Modelling the Cognitive Prerequisites of Sun Screen Use in Australian and UK Samples,” Psychology and Health, 16, 191-206.


INTRODUCTION

Research across many Western nations has confirmed the existence and continued growth of a group of consumers for whom ethical issues drive consumption behavior. US sales of fair trade products increased by 44% between 2001 and 2002 (Kim 2005) and UK consumers spent $44.9 billion in line with their ethical values in 2004, an increase of 15% from 2003 (Williams, Taylor, and Howard 2005). While much of this development has been in the food sector, research reveals that other product sectors, notably apparel, is exerting pressure for similar action. The US company No Sweat Apparel achieved sales worth $150,000 in 2003 (Strasburg 2004) and sales of ethical apparel in the UK have increased 30% from $57 million in 2003 to $75 million in 2004 (Williams et al. 2005). While this increase includes concerns regarding labor conditions, positive purchasing in this direction remains problematic for consumers. Although many companies have responded to concerns with codes of conduct on production practices, many campaigners and consumers are demanding that these are improved to further ensure ethical practices. Given the accusations that many codes of conduct are mere public relations exercises, they remain unreliable as a guide to ethical decision-making (Shaw and Duff 2002). As yet, therefore, consumer decision-making cues such as labeling are not readily available in this sector. Consumers are further restrained by a lack of availability and choice, and where ethical alternatives are available they have been considered unfashionable and expensive (Shaw and Duff 2002). Thus, concerned consumers find themselves confronted by uncertainty in terms of information available to aid decision-making and the consequences of their decisions. It is hardly surprising that an intention-behavior gap has been reported in terms of a weak relationship between what consumers say, and what they do (Newholm 2005). Thus,
while an individual may state that they intend to avoid sweatshop labor when purchasing apparel, difficulties at decision-making may result in apparent behavioral inconsistency.

Research exploring ethical issues in apparel choice is limited (Dickson 2001; Shaw and Duff 2002). Tomolillo and Shaw (2004) revealed that sweatshop labor was the most important ethical concern among consumers in apparel choice. A sweatshop can be defined as a factory where workers are employed for long hours at low wages and under poor conditions (Merriam-Webster 2006).

Given the constraints that impact purchasing behavior in this context, the Theory of Planned Behavior (TPB) is used as a framework to examine consumers’ intention to avoid purchasing sweatshop produced apparel. The research will develop and test a conceptual model that explains the motivational aspects of intention, currently neglected within the TPB, that convert intentions into behavior. This is critical to explore the intention-behavior gap found in TPB research and elsewhere (Armitage and Conner 2001) and to consolidate and advance existing research that has identified volitional constructs but in the main neglected to examine their role in converting intentions into behavior. Specifically, we aim to develop a conceptual model that examines the role of desire, intention and plan to avoid sweatshop apparel within a TPB framework using a sample of 794 UK consumers to test its explanatory power.

**THEORY OF PLANNED BEHAVIOR AND MODIFICATIONS**

The Theory of Reasoned Action (TRA) is a theory of attitude-behavior relationships which links attitudes, subjective norms, behavioral intentions and behavior in a fixed causal sequence (Ajzen and Fishbein 1980). The TRA can be criticized on the basis that it applies only to behaviors that are totally under volitional control. To address this concern Ajzen (1985) introduced the TPB that added a measure of perceived behavioral control to the existing TRA
structure. This extended model has been widely applied in many behavioral domains often with a significantly improved predictive ability (Dabholkar 1994; Penz and Stottinger 2005).

Although generally neglected in ethical contexts, the TPB has been found to be pertinent in the ethical context of purchasing fair trade products, where barriers to behavior, such as availability, have been found to be significant (Shaw, Shiu, and Clarke 2000; Shaw and Shiu 2003).

However, the behavioral intention construct within the TPB needs further attention. Nuttin (1987) argues that the meaning of intention relates to motivational functioning and volition. Events are intended in so far as an individual’s will impacts their occurrence, and volition refers to motivational and cognitive processes that follow an overall plan to pursue an action (i.e., the processes that succeed intention). Nuttin’s arguments have clearly been developed within a volitional framework for goal-directed behaviors (Bagozzi 1992; 1993). Indeed, it has been argued that the broader construct of volition rather than intention should be used in the prediction and understanding of behavior; intention as used within the TPB framework is viewed not to concede enough importance to what having an intention actually means (Perugini and Conner 2000), and as too narrow to encompass both an action plan and the channeling of motivation to act (Bagozzi 1992; 1993; Perugini and Conner 2000). Although these latter studies have used a goal-directed approach, the current research is eschewing a goal orientation for the following reasons. First, the definition of goals is inextricably complex and involves the identification of intermediate and terminal or higher-order goals (Bagozzi and Warshaw 1990; Perugini and Conner 2000). This may be operationally feasible in contexts where goals are initiated, successfully or unsuccessfully attempted and terminated; dieting or studying, the remit of previous studies, are two such examples. In the context of ethical consumption, however, an attempt to define intermediate and higher order goals (and the level of abstraction of these higher order goals) would be problematic at best. Previous research has shown that concerns with ethical issues in the context of consumption are inextricably interrelated (Shaw and Clarke
and while ethical consumers may strive to achieve a particular goal through the performance of several behaviors, they may also aim to achieve several goals through the performance of a single behavior. For example, by purchasing fair trade coffee one may aim to help developing world producers to get a better deal for their produce. Alternatively, one may aim to support more equitable trading initiatives, or both. Further, ethical consumption issues are central to an individual’s sense of identity as an ethical consumer. In this way ethical consumption behaviors are more connected to the individual’s sense of self than to goals with beginnings and ends. Finally, the newer models of goal-directed behavior (MGB) have been subject to limited empirical testing while the TPB has been the subject of research application for several decades. We recognize the contribution of new frameworks as helping to improve both our understanding of the links between the model’s theoretical constructs and the explanatory ability of the models, and as highlighting the TPB’s lack of attention to the processes that take place between the formation of an intention to act and actual behavior. As such, we seek to deepen the theoretical framework of the TPB through a modified framework that will improve understanding of how intentions are translated into behaviors.

While previous research has highlighted the existence of different aspects of volition as distinct from intention, research examining the role of these volitional stages in decision-making is limited. Perugini and Conner (2000) measure volitional stages but present them as one construct of volition. In order to understand the motivational stages underlying decisions to avoid sweatshop apparel, the previously identified constructs of desire and plan (Perugini and Conner 2000), are postulated as conceptually distinct and pertinent to our understanding of the motivation and action aspects of intention. Previous research has argued that desire is distinct from intention within the MGB (Bagozzi 1992) and plan has been found to play a separate role from intention within the TPB (Jones et al. 2001; Sniehotta, Scholz, and Schwarzer 2005). Such
research suggests the pertinence of these motivation and volition stages in addressing the intention-behavior gap often found in ethical consumption contexts. Thus, we hypothesize:

**H1a:** The constructs of desire and plan are conceptually different from each other and from intention.

**H1b:** The TPB constructs of attitude, subjective norm, perceived behavior control, intention and the additional constructs of desire and plan are conceptually different from each other.

The TPB has been successfully utilized in similar behavioral contexts, thus it is expected that the components of the model will operate according to the theory within this study. These relationships are specified in the following three hypotheses:

**H2a:** The more positive the attitude of the consumer toward avoiding the purchase of sweatshop apparel, the stronger the intention to avoid the purchase of sweatshop apparel.

**H2b:** The more the consumer perceives a normative pressure from important others with regard to the decision to avoid the purchase of sweatshop apparel, the stronger the intention will be to actually avoid the purchase of sweatshop apparel.

**H2c:** The more control over avoiding the purchase of sweatshop apparel the consumer perceives, the stronger the intention to avoid the purchase of sweatshop apparel.

Desire

In the MGB, Perugini and Bagozzi (2001, 80) state that “desires provide the direct impetus for intentions and transform the motivational content to act.” Desire has been conceptualized by Perugini and Bagozzi (2004, 71) as “a state of mind whereby an agent has a personal motivation to perform an action or to achieve a goal.” Although a goal-directed approach is not adopted
here, we adopt measures of desire which are distinct from those of intention, and we hypothesize that desire will partially mediate the effect of attitude, subjective norm and perceived behavioral control on intention. We hypothesize this effect as partial, as the antecedents to intention specified within the TPB are well established. As such, we support the role of desire as an addition to the TPB relationships outlined in hypotheses 2a, 2b and 2c.

**H3a:** The stronger the attitude of the consumer to avoid the purchase of sweatshop apparel, the stronger the desire to avoid the purchase of sweatshop apparel.

**H3b:** The more consumers perceive a normative pressure from important others with regard to the decision to avoid the purchase of sweatshop apparel, the stronger the desire will be to actually avoid the purchase of sweatshop apparel.

**H3c:** The stronger the level of perceived behavioral control towards avoiding the purchase of sweatshop apparel, the stronger the desire to avoid the purchase of sweatshop apparel.

**H3d:** The stronger the desire of the consumer to avoid the purchase of sweatshop apparel, the stronger the intention avoid the purchase of sweatshop apparel.

**H3e:** The effect of attitude, subjective norm and perceived behavioral control on intention is reduced when the mediating role of desire is included in the model.

**Plan**

Research has argued that in addition to an individual’s direct statement of his/her intention, which refers to the directive function of volition, there are also action orientated aspects of volition following the formation of an intention that are important motivators to behavior (Perugini and Conner 2000; Jones et al. 2001; Sniehotta et al. 2005). This volitional stage following intention is plan. The above authors conceptualize plan as cognitive effort and
argue that intentions are more likely to convert into behaviors when they are operationalized through a plan to act. This is to be differentiated from intention to act, as plan is reflective of actual effort/steps expended to undertake the behavior. Thus, once an intention is formed to avoid the purchase of sweatshop apparel the next volitional stage for an individual is the performance of steps (plans) orientated towards the behavior. At the plan stage of volition we argue that attitude is already formed and, thus, a commitment with respect to the behavior has been produced. Further, the influence of others is reduced as one’s motivation towards the behavior moves closer to action, and all reasoning with regards to perceived barriers has taken place and been resolved. We, therefore, hypothesize that attitude, subjective norm and perceived behavioral control will not directly impact plan, but together with desire, their relationships with plan are fully mediated through intention.

**H4**: The effect of attitude, subjective norm, perceived behavioral control and desire on plan is fully mediated through intention.

**METHODODOLOGY**

To satisfy the aim of this research it was necessary to access a group of consumers with a strong ethical stance holding views on avoiding sweatshop apparel. This was achieved by conducting research with subscribers to the UK Ethical Consumer magazine, who were selected by purposive sampling. The main questionnaire was developed to measure the components of the TPB and motivation and volitional stages using 7-point Likert-scales. Direct measures of the TPB components (attitude, subjective norm and perceived behavioral control) were captured in accordance to Ajzen (1985). Measures of desire are similar to Perugini and Bagozzi (2001). Measures of plan were based on Perugini and Conner (2000) and Sniehotta et al. (2005) reflecting actual moves taken to enact the behavior. Questionnaire measures are detailed in table
1. Questionnaires detailing the purpose of the study with a prepaid envelope were inserted into the April/May 2003 issue of the Ethical Consumer magazine and mailed to 4,500 UK subscribers. Seven hundred and ninety four useable questionnaires were returned within the specified four week period, representing a response rate of 20%. In the sample 33% of respondents were male and 67% female; the average age was 43 years; and 84% were educated to degree level or higher. SPSS was used to generate descriptive statistics and to conduct reliability analyses of measurement scales via Cronbach’s alpha. Examinations of hypotheses and models were undertaken via structural equation modeling (SEM) using AMOS 6.0.

RESULTS

Scale Reliability and Validity. In order to assess the reliability and validity of the volitional constructs (desire, intention, and plan), a measurement model was assessed via confirmatory factor analysis. This model revealed an excellent fit ($\chi^2(6) = 17.24, p < .01$, goodness of fit index or GFI = .99, Adjusted GFI or AGFI = .98, CFI = 1.00, TLI = .99, IFI = 1.00, RMSEA = .049 and AIC = 47.244) according to the usual conventions (Hair et al. 1998; Hu and Bentler 1999). All standardized regression paths are above .7 (range .75-.96) and are significant at $p<.001$. Given the general absence of cross-loadings, convergent validity is supported. In terms of construct reliability, the average variance extracted (AVE) for each of the constructs is above the recommended level of .5 with construct reliability above .7. Discriminant validity was assessed following Fornell and Larcker’s (1981) procedure by determining if the squared correlation between each pair of constructs was less than the average of the AVE for each of the constructs. This is true for all pairs of constructs in the model. These results fully support hypothesis 1a.
To address hypothesis 1b, a measurement model comprising the TPB and the additional motivational and volitional constructs (desire and plan) was assessed via confirmatory factor analysis. This model also provided an excellent fit ($\chi^2(161) = 414.735$, $p < .001$, GFI = .95, AGFI = .93, CFI = .98, TLI = .97, IFI = .98, RMSEA = .045 and AIC = 554.735). All standardized regression paths are above .7 (with the exception of one subjective norm item with .613) and are all significant at $p < .001$. Given the absence of cross-loadings, convergent validity was supported. In terms of construct reliability, the AVE for each of the constructs (except subjective norm) is above 0.5 with construct reliability above 0.7 (see table 1). The subjective norm construct yielded an AVE value of .28 and construct reliability value of .44. Discriminant validity was fully supported for all pairs of constructs in the model. Thus, hypothesis 1b is fully supported.

### TABLE 1

**SCALE MEANS, STANDARD DEVIATIONS, AND RELIABILITY OF CONSTRUCTS IN THE 8-ITEM MEASUREMENT MODEL FOR THE TPB AND VOLITIONAL CONSTRUCTS (N=794)**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean (SD)</th>
<th>Alpha (correlation)</th>
<th>Construct reliability</th>
<th>A.V.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire</td>
<td>11.29 (1.56)</td>
<td>.81 (.72*** )</td>
<td>.89</td>
<td>.80</td>
</tr>
<tr>
<td>I want to avoid purchasing sweatshop clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a strong desire to avoid purchasing sweatshop clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>8.42 (2.96)</td>
<td>.86 (.76*** )</td>
<td>.72</td>
<td>.56</td>
</tr>
<tr>
<td>How likely are you to avoid purchasing an item of sweatshop clothing the next time you shop for clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will avoid purchasing an item of sweatshop clothing the next time I shop for clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan</td>
<td>7.56 (3.69)</td>
<td>.93 (.87*** )</td>
<td>.78</td>
<td>.64</td>
</tr>
<tr>
<td>I have made plans to avoid sweatshop clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have taken steps to enable me to avoid sweatshop clothing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATT</td>
<td>10.56 (2.87)</td>
<td>.92</td>
<td>.94</td>
<td>.81</td>
</tr>
<tr>
<td>Good – Bad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive – Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Beneficial – Harmful
Favorable - Unfavorable

<table>
<thead>
<tr>
<th>SN</th>
<th>People who are important to me would think I should /should not avoid purchasing sweatshop clothing.</th>
<th>2.11</th>
<th>.61</th>
<th>.44</th>
<th>.28</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>If I wanted to I could easily avoid purchasing sweatshop clothing from now on.</td>
<td>-2.50</td>
<td>.92</td>
<td>.77</td>
<td>.52</td>
</tr>
</tbody>
</table>

People who are important to me would approve/disapprove of my avoiding purchasing sweatshop clothing.

<table>
<thead>
<tr>
<th>2.11</th>
<th>(2.39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.61</td>
<td>(.44***)</td>
</tr>
<tr>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>.28</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>365x707</th>
<th>.92</th>
</tr>
</thead>
<tbody>
<tr>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>.52</td>
<td></td>
</tr>
</tbody>
</table>

**TPB Hypothesis Tests via SEM.** To assess the TPB model, a SEM analysis was conducted. Table 2 outlines the path loadings and p-values. All paths are significant ($p<.001$).

The model possesses good fit with $\chi^2(38) = 129.634, p<.001$, GFI = .97, AGFI = .95, CFI = .98, TLI = .98, IFI = .98, RMSEA = .055 and AIC = 185.634. The explanatory power ($R^2$) of the TPB in this behavioral context is adequate ($R^2 = .331$). These results fully support hypotheses 2a, 2b and 2c, thus, we can conclude that although the TPB is acceptable in this behavioral context the explanatory power is limited.

**TABLE 2**

PATH LOADINGS FOR TPB MODEL

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
</table>
| ATT $\rightarrow$ BI | .36     | 5.15 | ***
| SN $\rightarrow$ BI | .24     | 3.52 | ***
| PBC $\rightarrow$ BI | .35     | 12.08 | ***

*** $p<0.001$, ** $p<0.01$, * $p<0.05$  

*The Mediating Role of Desire.* To determine mediating relationships within the model, Baron and Kenny (1986) and Holmbeck (1997) outline that four conditions must hold. Thus, to establish if the construct desire mediates the relationship between the TPB antecedents (attitude,
subjective norm and perceived behavioral control) and intention the following must be satisfied: 1) the predictor variables (attitude, subjective norm and perceived behavioral control) significantly impact the mediator (desire) in the expected direction; 2) the mediator (desire) significantly impacts the dependent construct (intention) in the expected direction; 3) the predictor variables (attitude, subjective norm and perceived behavioral control) significantly impact the dependent construct (intention) in the expected direction; and 4) after controlling for the effects of the mediator (desire), the impact of the predictor variables (attitude, subjective norm and perceived behavioral control) on the dependent construct (intention) is not significantly different from zero (for full mediation) or significantly reduced (for partial mediation). This is examined via three models (see table 3).

An examination of the fully mediated model (see table 3 model 1) shows that attitude, subjective norm and perceived behavioral control significantly impact desire, and that desire significantly impacts intention. Furthermore, the regression weights for these three antecedents are all significantly positive as expected, thus, conditions 1 and 2 are satisfied and hypotheses 3a, 3b, 3c and 3d are supported. The amount of variance in intention captured is 28%. The fit of this model is adequate.

| TABLE 3 |

RESULT OF ANALYSIS OF MEDIATING EFFECTS FOR DESIRE

<table>
<thead>
<tr>
<th>Fit</th>
<th>( \chi^2 )</th>
<th>d.f.</th>
<th>( \chi^2 ) diff</th>
<th>d.f. diff</th>
<th>CFI</th>
<th>GFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>354.16</td>
<td>58</td>
<td></td>
<td></td>
<td>.95</td>
<td>.94</td>
<td>.94</td>
<td>.08</td>
<td>420.163</td>
</tr>
<tr>
<td>Model 2</td>
<td>129.63</td>
<td>38</td>
<td></td>
<td></td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.06</td>
<td>185.634</td>
</tr>
<tr>
<td>Model 3</td>
<td>162.66</td>
<td>55</td>
<td>191.50</td>
<td>***</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.05</td>
<td>234.663</td>
</tr>
</tbody>
</table>

| ATT \( \rightarrow \) Desire | .50 (.40)*** | .51 (.40)*** | .16 (.16)*** | .14 (.15)** | .05 (.11)** | .36 *** (.18) | .00 (.00) |
| SN \( \rightarrow \) Desire  |                |               |                |              |              |               |         |
| PBC \( \rightarrow \) Desire |                |               |                |              |              |               |         |

ATT \( \rightarrow \) BI
Condition 3 is examined via model 2. Table 3 shows that this condition is also satisfied with regression weights in the expected direction, and 33% of the variance in intention captured. Regarding condition 4, results of model 3 show that the effects of attitude on intention are fully mediated by the variable desire. However, desire partially mediates the effects of subjective norm on intention and no mediation effect is observed between perceived behavioral control and intention. Given these results, hypothesis 3e is generally supported.

*Examining the Mediating Role of Intention.* To consider the mediating effect of intention on the relationships between attitude, subjective norm, perceived behavioral control, desire and plan three models are examined. Model 1 (table 4) represents the model fully mediated by intention. Given that model 3 (table 3), the resultant model from previous analysis is valid, and that intention significantly impacts plan in the expected direction, conditions 1 and 2 of the procedure are satisfied.

**TABLE 4**

RESULTS OF ANALYSIS OF MEDIATION EFFECTS FOR DESIRE AND INTENTION

<table>
<thead>
<tr>
<th>Fit</th>
<th>χ²</th>
<th>d.f.</th>
<th>χ²diff</th>
<th>d.f.diff</th>
<th>CFI</th>
<th>GFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>211.11</td>
<td>80</td>
<td>.98</td>
<td>.98</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.05</td>
<td>291.112</td>
</tr>
<tr>
<td>Model 2</td>
<td>168.20</td>
<td>55</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.05</td>
<td>240.203</td>
</tr>
<tr>
<td>Model 3</td>
<td>204.33</td>
<td>76</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.97</td>
<td>.98</td>
<td>.05</td>
<td>292.328</td>
</tr>
</tbody>
</table>
The results of model 2 (table 4) show that, without the mediator (intention), only the TPB antecedent perceived behavioral control significantly impacts plan, and that desire significantly impacts plan in the expected direction. Hence, condition 3 is satisfied.

Examining the model (model 3 table 4) where intention is assumed to have no mediation role, table 4 shows that model 3 when compared to model 1 did not yield significant chi-square difference test, and that the regression path from desire to plan is no longer significant at $p < .05$; further the $R^2$ for plan remains unchanged. It can, therefore, be concluded that intention fully mediates the effects of its antecedents (attitude, subjective norm, perceived behavioral control and desire) on plan. Therefore, model 1 in table 4 is the final and most parsimonious
model for this study. Thus, hypothesis 4 is fully supported. The final model for this behavioral context can be represented in figure 1 and a summary of results is outlined in table 5.

TABLE 5
SUMMARY OF HYPOTHESES AND CONCLUSIONS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Decision</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Fully supported</td>
<td>Reliability and discriminant validity of volitional components desire, intention and plan fully supported.</td>
</tr>
<tr>
<td>1b</td>
<td>Fully supported</td>
<td>Reliability and discriminant validity of TPB antecedents and volitional components desire, intention and plan fully supported.</td>
</tr>
<tr>
<td>2a, b, c</td>
<td>Fully supported</td>
<td>TPB antecedents all significantly impact intention in the expected direction. Thus, the TPB is potentially valid in this behavioral context.</td>
</tr>
<tr>
<td>3a, b, c</td>
<td>Fully supported</td>
<td>TPB antecedents all significantly impact desire in the expected direction.</td>
</tr>
<tr>
<td>3d</td>
<td>Fully supported</td>
<td>Desire significantly impacts intention in the expected direction.</td>
</tr>
<tr>
<td>3e</td>
<td>Only Partially supported</td>
<td>Desire fully mediates the effects of attitude on intention, partially mediates the effects of subjective norm on intention, with no evidence of mediating effect on the relationship between perceived behavioral control and intention.</td>
</tr>
<tr>
<td>4</td>
<td>Fully supported</td>
<td>Intention fully mediates the effects of attitude, subjective norm, perceived behavioral control and desire on plan.</td>
</tr>
</tbody>
</table>

FIGURE 1
FINAL EMPIRICALLY VALIDATED MODEL
DISCUSSION

Previous research has criticized the TPB for the lack of attention given to understanding the motivational aspects of intention (Perugini and Conner 2000). While contributions have been made in highlighting the volitional aspects of intention (Perugini and Conner 2000), this research has, with limited exception, failed to explore these volitional constructs as distinct motivational stages. The theoretical contribution of the current research is novel through empirically testing the links between theoretical constructs desire, intention and plan, and results reveal significant findings in terms of enriching the TPB framework.

Desire was found to be pertinent in fully mediating the effect of attitude and partially mediating the effect of subjective norm on intention. Desire was found to be distinct from intention and revealed that attitude did not directly impact intention but rather required the motivational stage of desire; reflective of a personal motivation to act. In the context of avoiding sweatshop apparel this personal motivation is important and can be energized by emotive feelings surrounding the issue, resulting in a strong desire to act. Thus, a desire to avoid sweatshop apparel informed by an attitude that sweatshop apparel is negatively valued is desired before forming into an intention. Perugini and Bagozzi (2004) through the concept of temporal framing suggest that desire resides at a mental level where practical consideration of behavioral enactment has not yet been considered. Therefore, the positive attitudinal aspects of avoiding sweatshop apparel must be desired before they move to an intention to act. This thus highlights a time oriented distinction between desire and intention. Similarly, the role of important others can serve to impact personal motivation to act in terms of desire by positively supporting personal motivation or through negatively influencing desire to avoid sweatshop apparel. In terms of perceived behavioral control, which is not mediated through desire, we argue that consideration of perceived difficulties occur closer to the temporal framing of the behavior at
the point of intention. The explanatory ability of this enriched framework increases greatly from $R^2 = .33$ to $R^2 = .48$ with the addition of the mediating construct of desire.

The existence of a gap between attitude and behavior has been the subject of academic debate both within the TPB literature and elsewhere (Armitage and Conner 2001; Newholm 2005). The current research findings highlight the significance of plan as a volitional stage toward behavior, with results revealing the impact of attitude, subjective norm, perceived behavioral control, and desire on plan as fully mediated through intention. Previous research has highlighted the requirement for some level of effort to be expended to achieve a behavior (Bagozzi 1993). In the context of the current research where there are difficulties in avoiding the purchase of sweatshop apparel the need to take steps towards enacting the behavior beyond the formation of an intention is reasonable. For example, outlets and brands may need to be researched and their accessibility assessed. This further enrichment of the TPB framework through the addition of plan resulted in $R^2 = .49$ for intention, a large improvement on the traditional TPB model, and $R^2 = .53$ for plan.

The significant contribution of this enriched framework is particularly apparent in contexts where there may be barriers to behavior, such as found in addictive behaviors (e.g., smoking) and in behaviors where conflict may exist, either with self or significant others (e.g., lifestyle changes, sustainable behaviors). We would recommend that future research test the applicability of the derived model in different behavioral contexts. Further, the findings of the current research highlight a significant deepening of the TPB framework. Further research is required to fully assess the impact of desire and plan as explanatory motivational and volitional constructs to behavior. It is suggested that such research should include actual behavior so the links between these constructs and actual behavior can be fully assessed.
REFERENCES


