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The academic conceptualisation of ethical clothing: Could it account for the attitude behaviour gap?

Abstract

Purpose – Despite supposed widespread consumer support for ethical clothing, it still often fails to translate into actual purchase. This study seeks to determine whether the way in which academics have defined and measured ethical clothing could account for this.

Design / methodology / approach – An over reliance on convenience sampling and the use of student samples has also been touted as a possible reason for this attitude-behaviour gap. To address this, this study employed a consumer household sample. It also used a quantitative survey approach to collect its data and structural equation modelling to analyse it

Findings – In contrast to the way in which academics have conceptualised the construct, consumer perceptions of ethical clothing were found to be influenced by four dimensions: environmental responsibility, employee welfare, animal welfare and slow fashion attributes.

Originality / value – Ethical clothing has typically been operationalised using just two of these four dimensions. Ironically, one of the two dimensions often overlooked by academics - animal welfare – had the strongest influence on consumer perceptions. Previous academic efforts had never employed more than three dimensions, and yet the results of this study suggest that all four must be present if an item of clothing is to be regarded as 'ethical'.

Key words Clothing industry, Clothing, Ethics, Fashion, Social responsibility. **Paper type** Research paper

Introduction

While the clothing industry makes a major contribution to the world economy via the trade, employment and income it generates (MacCarthy & Jayarathne, 2011), these benefits can come at the expense of the environment (Raciniewska, 2014), employee welfare (Hale, 2005; Wills & Hurley, 2005) and animal welfare (Rollin, 2006). In response, several measures have been devised to address this. For example, organic clothing has been developed as an environmentally responsible alternative to conventional clothing (Hustvedt, 2006). In the case of employee welfare, codes of practice relating to wages, working hours and employee safety have been created to protect clothing workers in developing countries (Albareda, 2013). As for animal welfare, some fashion brands now offer vegan materials as an alternative to fur or leather.

This study refers to clothing that seeks to minimise its negative impact on the environment, animals and/or clothing workers as ethical clothing. Despite apparent high levels of consumer support for ethical products (Webb et al., 2008), such sentiment often fails to translate into actual purchase (Chan & Wong, 2012). This discrepancy between consumer sentiment and actual purchase is referred to as the attitude-behaviour gap (Kozar & Hiller, 2013). While this gap has been attributed to such factors as social desirability bias (Carrington et al., 2010), deficiencies in consumer knowledge (Carrigan & Attalla, 2001) and the sampling methods used (Antil, 1984), an oft overlooked explanation is the way in which ethical clothing has been conceptualised and operationalised (Roberts, 1996).

Three decades ago Antil (1984) observed that such has been the inconsistent way in which academics have defined ethical consumption that it was unlikely that the various studies on the topic had actually isolated and measured the same dependent variable. A key purpose of

this study is to examine the current validity of this claim in the context of ethical clothing. Adding to the significance of this research goal is the notion that the dynamic nature of ethics necessitates the continual refinement of the construct (Webb et al., 2008). As part of this process, existing conceptualisations will be evaluated, and from this, a consumer-based definition of ethical clothing will be developed and empirically tested.

A review of existing definitions

An examination of existing definitions reveals three key conceptual problems. These relate to:

- 1. The inconsistent use of terminology.
- 2. A mismatch between the way in which ethical clothing has been conceptualised and the way it has been operationalised.
- Confusion over whether to treat ethical clothing as a unidimensional or multidimensional construct, and in the case of the latter, how many dimensions it comprises and what these specific dimensions are.

Inconsistent use of terminology

In their content analysis of 67 journal articles on ethical clothing, Johnson and colleagues (2013) concluded that such was the lack of consistent terminology that it had compromised the task of constructing an integrated body of knowledge. As evidence of this, academics have referred to ethical clothing by such terms as socially responsible (Gam et al., 2014), sustainable (Balderjahn et al., 2013) and eco-fashion (Niinimaki, 2010). To further complicate matters, terms such as sustainability, ethical consumption and socially responsible are often used interchangeably within the same study (Balderjahn et al., 2013; Joy et al., 2012). Of the various terms used by academics, the two most frequently employed are socially responsible clothing and ethical clothing.

Based on the meaning of social responsibility (Antil, 1984), socially responsible clothing can be defined as clothing that not only satisfies personal needs, but also minimises or eliminates any harmful effect it may cause. It is therefore conceptually very similar to ethical clothing, which also seeks to minimise any negative impact it may have (Raciniewska, 2014). Of these two alternatives, this study uses the term 'ethical clothing' because it is better suited to its objective of developing a consumer-based definition. In a layman's context, 'socially' is commonly used in reference to human-oriented terms such as society, companionship and/or the lives and welfare of humans (Dictionary.com, 2015a). Hence, in a consumer-based study, it risks emphasising employee welfare at the expense of other ethical dimensions such as environmental responsibility and animal welfare. To avoid this very risk, previous studies employing the term have sometimes provided preambles in order to clarify its meaning to respondents. For example, Gam et al. (2014) informed their consumer participants that the term 'socially responsible' refers to sustainable practices such as environmental friendliness and fair labour conditions. However the use of such preambles for the purpose of this study would create bias by effectively defining the construct for respondents.

In contrast, the way in which academics and consumers define the term 'ethical' should be far more closely aligned. This is an important consideration because when these two meanings diverge, it compromises the validity of the resulting academic findings. Ethics refer to the rules of conduct that a particular class or group of humans recognise and is therefore well suited to the consumer context of this study. Furthermore, in contrast to the potential for a term such as 'socially' to create bias in favour of employee welfare, the term 'ethical', in describing moral behaviour and right and wrong conduct in general (Dictionary.com, 2015b), creates no such problem.

Conceptualising and operationalising ethical clothing

Ethical clothing has typically been conceptualised as clothing that seeks to minimise any negative impact it may have (Raciniewska, 2014), and then operationalised in terms of the factors that minimise such impacts (i.e. environmental responsibility, employee welfare etc.). However, there is an important distinction between these two actions, because rather than develop measures that reflect what the construct actually means, academics have instead operationalised ethical clothing in terms of the factors that influence it.

There are three problems with such an approach. Firstly, research has yet to empirically confirm that consumers define ethical clothing in terms of clothing that minimises any negative impact it may have. Dictionaries serve as an important source of meaning for consumers, and 'ethical' is not usually defined in this way. Instead, it is typically defined in terms of morals, right and wrong conduct, and being in accordance with the standards of a profession (Dictionary.com, 2015b). Secondly, such an approach has not actually defined ethical clothing per se, but rather, simply identified the factors that influence consumer perceptions of it. Thirdly, research has yet to empirically identify the factors that influence consumer perceptions of ethical clothing. This study conceptualises ethical clothing as a higher order construct that describes how consumers' perceive the ethical qualities of an item of clothing. These perceptions are determined by the factors that influence such qualities. This study refers to these factors as the dimensions of ethical clothing.

Ethical clothing: a unidimensional or multidimensional construct?

The third key conceptual problem relates to whether to treat ethical clothing as a unidimensional or multidimensional construct. The unidimensional approach can take one of two forms. The first is to limit the meaning of ethical clothing to just one of the several issues it was designed to remedy (e.g. employee welfare). The second approach is to incorporate the various issues (e.g. environmental responsibility, employee welfare and animal welfare) into a single construct (Balderjahn et al., 2013). Conversely, under the multi-dimensional approach, each of these issues serves as a separate influence over consumer attitudes and behaviour.

Empirical research has consistently found that the multi-dimensional approach serves as the correct method of conceptualisation. This is due to the fact that different dimensions influence attitude and behaviour in different ways (Carrigan & Attalla, 2001) with some dimensions being more important than others (Jegethesan et al., 2012). Yet in spite of this, previous research has often focused on a single dimension (Auger et al., 2003; Jagel et al., 2012; Jegethesan et al., 2012) thereby operationalising a multidimensional construct in a unidimensional way.

What specific dimensions does ethical clothing comprise?

There is also significant variation and confusion in terms of the specific dimensions associated with ethical clothing. As noted previously, it has been defined as a unidimensional construct, thereby typically limiting its application to either environmental (i.e. Antil, 1984) or ethical issues (Dickson, 2000). Some scholars note that its original meaning was limited to environmental issues, but that it has since evolved to incorporate employee welfare as well (Freestone & McGoldrick, 2008; Jagel et al., 2012). This is reflected in the fact that several definitions of the construct include both these dimensions (i.e. Bray et al., 2011; Joergens, 2006; Pookulangara & Shephard, 2013; Kozar & Hiller, 2013; Shen et al., 2012). Others have assigned it a broader meaning by either conceptualising or operationalising it as comprising three dimensions. Symbolic of the academic confusion that reigns however, some academics have identified these as environmental responsibility, employee welfare and animal welfare (Carrington et al., 2010; Jegethesan et al., 2012; Raciniewska, 2014; Sneddon et al., 2014) while others have used environmental

responsibility, ethical welfare *and* slow fashion instead (Gam et al., 2014; Goworek, 2011; Koszewska et al., 2013).

Towards a definition

A defining characteristic of ethical clothing is its focus on minimising any negative impact it may have. The strategies by which these negative impacts can be addressed take multiple forms and it is the lack of academic consensus in this area in particular that has complicated efforts to develop a universal definition of the construct. Therefore a key step in properly conceptualising ethical clothing is to identify and incorporate these strategies within its definition. A review of literature reveals that, in contrast to any existing definition, these strategies fall into four major areas – environmental responsibility, employee welfare, slow fashion and animal welfare.

Environmental damage caused by the clothing industry can take the form of resource depletion, pollution and the overuse of pesticides (Raciniewska, 2014). Organic clothing serves as a measure by which to address this. Made from natural materials such as cotton, hemp, silk and bamboo, organic clothing differs from conventional clothing in that it is produced via methods that are free of the pesticides, herbicides and chemical fertilizers that can be so harmful to the environment (Hustvedt, 2006). Moreover, organic cotton is made without pollutant by-products such as solvents, bleach, heavy metals and formaldehyde. Just as significantly, the production of organic clothing requires less water (Global Organic Textile Standard, 2011).

Exploitative work practices have also become an unfortunate characteristic of the global clothing industry. Clothing production now often occurs in developing nations due to their lower labour costs (Hurley & Miller, 2005). However the labour practices of many of these countries are characterised by extreme work pressures, gender discrimination, low wages and long work days (Hale, 2005). These production facilities can operate in such a manner because laws relating to workers' rights are either inadequate or go unenforced in many developing nations (Albareda, 2013). Often referred to as sweatshops, these facilities typically operate in violation of labour, workers' compensation, occupational health & safety, and industry regulations (Adams, 2002). This in turn results in a variety of issues that threaten the welfare of employees. For example, the physical work environment of sweatshops is often characterised by their excessively high temperatures, inadequate ventilation and lighting, excessive noise and poor sanitation. This in turn can lead to a variety of illnesses and injuries (Hurley & Miller, 2005).

In response, Fair Trade and Ethical Trading initiatives have been launched. Under the Fair Trade initiative, third world producers are paid a minimum price for their goods plus a premium that contributes towards development projects in their local region (Goworek, 2011). Under the Ethical Trading Initiative, clothing producers must follow a code of labour practice relating to such issues as wages, working hours, and employee health and safety.

Closely linked to the environmental and employee welfare problems caused by the clothing industry is fast fashion. Fast-fashion is a form of low-cost clothing that mimics current luxury fashion trends (Joy et al., 2012). It is characterised by an efficient supply chain that produces fashionable clothing in quick response to consumer demand (Watson & Yan, 2013). Whereas the clothing industry typically released new fashion lines with each new season (e.g. summer, winter etc.), under fast fashion, fashions change every two to three weeks, thereby creating 20 or more new collections every year (Ertekin & Atik, 2014). So while change has always been a defining characteristic of fashion, it is the frequency and speed of change that serves to differentiate fast fashion from more conventional forms of fashion (Watson & Yan, 2013).

Even before the introduction of fast fashion, the clothing industry was already regarded as environmentally irresponsible (Kim & Damhorst, 1998). The ever-changing nature of fashion means it inevitably conflicts with the notion of sustainable consumption, because change results in a constant cycle of replacement and obsolescence (Niinimaki, 2010). Fast fashion only serves to exacerbate this because clothing lines go out of fashion quicker than ever before, so that with each new fashion cycle, the previous one is often discarded (Joy et al., 2012). Rather than this serving as a deterrent for consumers, many now buy it with the express intent of disposal (Watson & Yan, 2013). As such, fast fashion is characterised as much by obsolescence as it is by its quick-to-market, low price, fashionable trends (Ertekin & Atik, 2014). With frequent fashion cycles leading to higher production and disposal rates, fast fashion poses a serious environmental threat in the form of resource depletion, environmental damage and textile waste (Niinimaki, 2010; Pookulangara & Shephard, 2013). Moreover, the need to drastically shorten production times can also negatively impact employee welfare via the work pressures it creates (Ertekin & Atik, 2014).

In order to counter this, some producers and retailers have adopted slow fashion. Slow fashion refers to a socially conscious movement that shifts consumers' mindsets from quantity to quality, thereby reducing production and purchase frequency (Jung & Jin, 2014). It does this by designing seasonless pieces that can be worn year round (Watson & Yan, 2013), adopting production methods that emphasise quality (Pookulangara & Shephard, 2013) and slowing down the production and consumption of clothing by reducing the number of seasons in a year (Ertekin & Atik, 2014). By reducing production, consumption and disposal levels, slow fashion can have positive environmental impacts. Moreover, slowing down the number and speed of production cycles relieves the pressure to meet short production deadlines, thereby also improving employee welfare (Jung & Jin, 2014).

The clothing industry also has a detrimental impact on many animal species. There are growing concerns that industrial productivity has taken priority over animal welfare (Rollin, 2006) to the point where the survival of some species specifically, and many animals in general, is now under real threat (Phillips, 2009). This can take the form of killing animals for their fur/skin, harming or killing animals for the purpose of testing clothing dyes (Ahuja et al., 2010) and damaging the ecosystems they rely on via the discharge of toxic chemicals (Nagurney & Yu, 2011). In response, animal welfare groups have sought to encourage clothing organisations to adopt more animal-friendly processes, such as no animal testing and replacing animal furs with vegan materials.

Summary definition

As such, the clothing industry exerts four major types of negative impact. Three of these are direct in the form of the harm it can cause to animals, employees and the environment, and in the case of the fourth - fast fashion – via the impact it has on the latter two. In turn, strategies have been devised to address each of these areas. These four strategies serve as the means by which the negative impacts of the clothing industry can be minimised, and in doing so, can be regarded as the dimensions of ethical clothing. This study therefore defines ethical clothing as clothing that seeks to minimise its negative impact on the environment, employees and animals via processes that include, but are not limited to, slow fashion.

The fact that this definition conceptualises ethical clothing as comprising four dimensions rather than the typical one, two or three, is not the only factor that differentiates this study from its predecessors. A review of literature also reveals that academics have yet to empirically define ethical clothing based on the actual meaning consumers assign to it. Instead, academics have typically defined the construct *a priori* based on their own interpretation of its meaning, and then measured consumer attitudes and purchase behaviour in that specific context. Moreover, as a review of literature has revealed, there is no academic consensus as to how ethical clothing should be defined, thereby compromising

the generalisability of the findings. This has resulted in studies purporting to measure the same dependent variable but which differ on key aspects such as whether to treat ethical clothing as a unidimensional or multidimensional construct, and in the case of the latter, the dimensions it comprises. This is disconcerting because at least in theory, ethical clothing comprises four dimensions, and yet no existing definition contains more than three. This can lead to the influence of those dimensions that *were* included being overstated while at the same time understating the importance of any dimensions that were overlooked. In support of this, animal welfare is often omitted in academic definitions, and yet it has been found to be more important to consumers than the two dimensions that academics typically *do* include – the environment (Hustvedt et al., 2008) and employee welfare (Joergens, 2006). As such, academics may have conceptualised and operationalised the construct in ways that differ from the way in which consumers define it. This is a key cause for concern in light of the attitude-behaviour gap.

Hypotheses and conceptual framework

This paper proposes that ethical clothing is a higher-order construct comprising four dimensions – environmental responsibility, employee welfare, slow fashion and animal welfare. In spite of a lack of existing research to validate this proposition, there is still sufficient evidence to suggest that consumer perceptions of ethical clothing may be influenced by all four. For example, in the case of the environmental dimension, research utilising open-ended questions to determine consumers' most important ethical clothing attributes has yielded such themes as chemical free, produced in an environmentally friendly way, and made from natural or recycled materials (Jagel et al., 2012; Sneddon et al., 2014). Such environmentally-themed answers suggest that consumers associate environmentally-responsible attributes with ethical clothing, thereby leading to the following hypothesis:

Hypothesis 1: The extent to which consumers' perceive an item of clothing as ethical is influenced by its environmentally-responsible attributes.

There is also a lack of research relating to the influence of employee welfare on consumer attitudes and behaviour (Balderjahn et al., 2013). This is a curious oversight given that employee welfare has become of increasing concern as more and more production shifts from western markets to developing markets where labour conditions are often questionable (Goworek, 2011). Linked to this oversight is the need to determine to what extent consumers associate employee welfare with ethical clothing. While only limited research has been conducted in this regard, the research that does exist indicates that consumers regard fair wages, fair working conditions and employee welfare in general as important features of ethical clothing (Jagel et al., 2012; Sneddon et al., 2014). This therefore leads to the following hypothesis:

Hypothesis 2: The extent to which consumers' perceive an item of clothing as ethical is influenced by its employee-welfare attributes.

Slow fashion, and the problem it was designed to address - fast fashion - have both been largely overlooked from the consumer's perspective (Gabrielli et al., 2013; Kim et al., 2013; Watson & Yan, 2013). Fast fashion succeeded because it better catered to a market being driven by increasingly knowledgeable, fashion conscious, price-sensitive consumers seeking greater speed, value and trendiness. By providing consumers with more 'seasons' it also provided them with more choice, and therefore greater opportunities to express themselves via their fashion choices (Gabrielli et al., 2013).

But fast fashion also has its disadvantages, particularly in relation to the environment and employee welfare (Ertekin & Atik, 2014; Kim et al., 2013). And yet research suggests that consumers may not be aware of the connection between the two (Ertekin & Atik, 2014;

Gabrielli et al., 2013; Pookulangara & Shephard, 2013). For example, Kim and colleagues (2013) analysed fashion blogs over a 3 year period, and identified eight anti-fast fashion themes. However, only one of these related to the environment and employee welfare. Similarly, Jung and Jin (2014) found that only one of the five factors consumers associated with slow fashion related to an ethical aspect of the clothing, with the remaining four factors relating to conventional attributes.

The notion that consumers do not associate either slow or fast fashion with its environmental and/or employee welfare impacts suggests it does not serve as a dimension by which they define ethical clothing. However there is an important difference between these two points. There is an inherent logic to the notion that designing an item of clothing to be durable in terms of both quality and fashionability is ethical, irrespective of its links to the environment or employee welfare. In line with this, research has found that consumers' desire for longer lasting clothing serves as a key motive behind the purchase of ethical clothing (Jagel et al., 2012). This would suggest that consumers link slow fashion with ethical clothing, thereby leading to the following hypothesis:

Hypothesis 3: The extent to which consumers' perceive an item of clothing as ethical is influenced by its slow-fashion attributes.

Animal welfare is often overlooked as a dimension of ethical clothing, even from the supply side. When Dickson and Eckman (2006) sought to define ethical clothing from the clothing and textile industry's perspective, only one of their 74 responses made any reference to animal welfare. Fulton and Lee (2013) content analysed the websites of 156 ethical online fashion retailers in order to gain insight into their ethical initiatives. Despite including ecosystems as one of the means by which they operationalised the construct, their findings suggested that animal welfare was entirely overlooked by ethical retailers. Perhaps one explanation for this is that some may perceive animal welfare as only being relevant in the context of fur- or leather-based fashion; a perception that overlooks other such negative impacts as animal testing and damage to ecosystems.

However, from a demand side perspective there is evidence to suggest that consumers do in fact regard animal welfare as a dimension of ethical clothing. For example, research seeking to identify consumers' ethical concerns when buying wool clothing found that animal welfare served as a key concern (Sneddon et al., 2014). Moreover, research also suggests that animal welfare not only serves as a means by which consumers define ethical clothing, but that it also serves as one of its more important characteristics (Hustvedt et al., 2008; Joergens, 2006). The following hypothesis is therefore proposed:

Hypothesis 4: The extent to which consumers' perceive an item of clothing as ethical is influenced by its animal welfare attributes.

The influence of ethical clothing perceptions on consumers' overall attitude towards an item of clothing was measured in order to gain insight into the former's influence as an antecedent variable. The hypothesised link between perceptions and overall attitude stems from the Theory of Reasoned Action (Ajzen & Fishbein, 1980). This theory proposes that consumers utilise the information available to them in order to form attitudes towards a product (Ajzen, 1991). A product attitude is a personal evaluation of a product that results in a predisposition to respond towards it in either a favourable or unfavourable manner (Kim et al., 2002). Previous studies have found that ethical attributes do influence consumers' overall attitude towards an item of clothing (i.e. Dickson, 2000; Dickson et al., 2004; Hyllegard et al., 2009; Shen et al., 2012). Overall attitude then in turn serves to shape purchase intention (Ajzen & Fishbein, 1980), a notion that has also been empirically

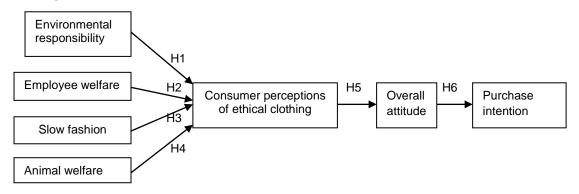
confirmed in an ethical context (Bohlen et al., 1993; Shen et al., 2012). This therefore leads to the following hypotheses:

Hypothesis 5: The extent to which consumers' perceive an item of clothing as ethical influences their overall attitude towards it.

Hypothesis 6: Overall attitude towards an item of clothing influences purchase intention.

The relationship between each of these constructs and the hypotheses to be tested in this study are summarised and visually depicted in Figure 1.

Figure 1 – Conceptual framework for dimensions influencing consumer perceptions of ethical clothing



Methodology

Sample

The attitude-behaviour gap as it applies to ethical products has also been attributed to convenience sampling (Roberts, 1996) and in particular an over reliance on student samples (Antil, 1984). A review of samples utilised since these criticisms were first made indicates that little has improved in this regard with numerous academic studies having employed samples comprised entirely of university students (i.e. Gam, 2011; Hustvedt & Bernard, 2008; Jung & Jin, 2014; Kim & Damhorst, 1998; Kozar & Hiller, 2013; Pookulangara & Shephard, 2013), or samples heavily dominated by students and/or those with a university education (Auger et al., 2003; Balderjahn et al., 2013; Dickson & Eckman, 2006; Domina & Koch, 1998; Joy et al., 2012; Niinimaki, 2010).

Given that the purpose of these studies was to provide insight into consumer attitudes, the extent to which such samples accurately represent the population they were intended to portray must be called into question. Many university degrees include a subject dedicated entirely to ethics or comprise various subjects that include ethical content. Logically, this can be expected to have influenced students' ethical knowledge. The significance of this stems from the consistent empirical finding that such knowledge positively influences attitudes towards ethical products (Antil, 1984; Bohlen et al., 1993; Dickson, 2000; Kim & Damhorst, 1998; Kozar & Hiller, 2013; Roberts & Bacon, 1997; Shen et al., 2012; Sneddon et al., 2014). The notion that university samples could be biased in favour of ethical products serves as a plausible explanation as to why the findings stemming from these studies may not accurately portray consumers' actual behaviour.

In order to address this, the sampling frame for this study was defined as adult consumers (i.e. aged 18 and over) residing within a regional city in south-east Australia. A self-administered survey was used for the purposes of data collection. A two-step method of

geographic stratified sampling was used whereby both the neighbourhoods and the household starting point within each of those neighbourhoods were randomly selected. Once the starting point within each of these strata had been selected, every fourth household received a questionnaire. Of the 1500 questionnaires delivered in this way, 338 usable surveys were completed, resulting in an effective response rate of 22.5%.

An analysis of gender, age and education was used to determine the extent to which the sample could be regarded as an accurate representation of its population. For gender, females were slightly over represented, accounting for 59% of respondents, whereas they account for just 51% of the population. For age, the sample closely mirrored the age distribution of its population across all 4 age categories (18-29, 30-44, 45-59 and 60 and over). In terms of education, respondents for whom high school represented their highest level of education were slightly over-represented in the sample (57.5%) when compared to the population (49.9%). Conversely, respondents with a vocational or university education were slightly under-represented, with both categories falling short of the population by approximately 4% (Australian Bureau of Statistics, 2012).

Measures

Responses for all seven constructs employed in this study were measured on a 7-point scale (1=strongly disagree, 7= strongly agree). The scales used to measure the four independent variables — *environmentally responsible* (Gam et al., 2014; Kim & Damhorst, 1998), *employee welfare* (Auger et al., 2003), *slow fashion* (Kim et al., 2013) and *animal welfare* (Auger et al., 2003) - were adapted from existing scales, as were the variables *overall attitude* (Shen et al., 2012) and *purchase intention* (Watchravesringkan et al., 2010).

However, in the case of ethical clothing, it was necessary to develop a new scale because it has yet to be empirically defined from a consumer perspective. Dictionary definitions of 'ethical' (Dictionary.com, 2015b) served as the basis for the scale because they serve as the likely source by which consumers define words and therefore assign meaning. This resulted in a set of descriptors and synonyms, each of which was then translated into two sets of Likert scales. The first of these was used to determine how consumers define ethical clothing and was accompanied by the following preamble: "There are an increasing number of products that claim to be made in ways that are 'ethical'. One such product category is clothing. Based on what the word 'ethical' means to you, can you please indicate to what extent you agree or disagree with the following statements.

- Ethical clothing should seek to minimise any negative impact it may have.
- Ethical clothing is clothing that is made with the right moral intentions.
- When I reflect on what ethical clothing means to me, words such as 'decent' and 'fair' come to mind.
- Ethical clothing sets the ideal standard that all clothing companies should aim for".

Subject to this scale being empirically validated as part of the subsequent analysis, these four items plus an additional over-arching scale item would then be used to operationalise the dependent variable against which the four proposed dimensions of ethical clothing would be correlated. This scale was preceded by the following preamble: "Imagine that you have just come across an item of clothing that contains each of the characteristics* just described. To what extent do you agree or disagree with each of the following statements relating to this item of clothing".

- This item of clothing has been designed to minimise any negative impact it may have.
- It has been made with the right moral intentions.
- When I reflect on this item of clothing, words such as 'decent' and 'fair' come to mind.
- It sets the ideal standard that all clothing companies should aim for.

• The item of clothing just described serves as a good example of what I would consider to be 'ethical' clothing".

Analysis and results

Preliminary analysis: How do consumers define ethical clothing?

Before proceeding to model fit and hypothesis testing, it was first necessary to determine whether the ethical clothing scale employed actually served as a valid measure of the way in which consumers' define ethical clothing. A combination of mean scores and one-sample T-tests were used for this purpose. Analysis revealed that all four scale items recorded significant values above the scale mid-point (p < .001), thereby indicating that the operationalisation of the construct was consistent with the way in which consumers also define it (Table 1). Moreover, with a Cronbach Alpha score of .84, the scale can also be regarded as reliable.

Table 1: Consumer definition of ethical clothing

Ethical clothing scale item	M	<u>SD</u>	Т	DF	Р
Ethical clothing should seek to minimise any negative impact it may have	6.1	1.3	30.9	337	<.001
Ethical clothing is clothing that is made with the right moral intentions	6.0	1.4	25.5	337	<.001
When I reflect on what ethical clothing means to me, words such as 'decent' and 'fair' come to mind	5.8	1.5	22.1	337	<.001
Ethical clothing sets the ideal standard that all clothing companies should aim for.	5.2	1.8	12.7	337	<.001

Reliability and validity

All scales employed in the model were subject to exploratory and confirmatory factor analysis. Exploratory factor analysis suggested that all scales have a unidimensional structure. AMOSv20 was then used to evaluate the final measurement model. The reliability scores for the various factors, in ranging from .80 to .94, reflected good internal consistency (Table 2). Convergent validity was assessed by computing the average variance extracted (AVE) scores. The subsequent results were all greater than .50, thereby indicating acceptable convergent validity. In addition, the average variances extracted for each of the constructs were all greater than their correlations with the other constructs. These results indicate that all the constructs used in this study serve as distinct measures and achieve discriminant validity. To test for the potential problem of common method bias, Harman's single factor test was used. The resulting value of 33.2% suggests that common method bias does not present a significant threat to this study.

Table 2: Internal consistency, square root of average variance extracted and correlation matrix

Measurements	Internal	Validity						
	Consistency	1	2	3	4	5	6	7
1 Environmentally-responsible	.81	.71						
2 Employee-welfare	.94	.64	.86					
3 Slow-fashion	.80	.69	.68	.75				
4 Animal welfare	.80	.39	.38	.44	.75			
5 Ethical clothing	.83	.58	.65	.40	.63	.79		
6 Overall attitude	.87	.62	.58	.49	.58	.72	.83	
7 Purchase intention	.90	.70	.44	.50	.44	.72	.74	.86

^{*} The 'characteristics' in this preamble refer to the various attributes used to operationalise the four dimensions.

The conceptual framework

Structural equation modeling was employed to test the conceptual framework. The resulting analysis revealed that all measures of global fit indicate adequate model fit (Table 3).

Table 3: Goodness of Fit Analysis

Goodness of Fit	Result	Goodness of Fit Measure	Result
Measure Model Fit		Model Comparison	
Chi-squared	628.742	Tucker-Lewis Index (TLI)	.94
Degrees of Freedom	280	Normed Fit Index (NFI)	.91
P-value	.000	Comparative Fit Index (CFI)	.95
Cmin/df	2.246	,	
Goodness of Fit Index	.87		
Adjusted Goodness of Fit	.84		
RMSEA	.06		

Table 4 presents the beta coefficients from the various relationships depicted in the conceptual model. As the results indicate, H1 (β = .20, t = 2.13, p<.05), H2 (β = .21, t = 2.76, p<.01), H3 (β = .11, t = 2.31, p<.05), H4 (β = .39, t = 3.41, p<.001), H5 (β = .55, t = 8.58, p<.001) and H6 (β = .62, t = 10.09, p<.001) were all supported.

Table 4: Direct effect on the conceptual model

Hypothesis	Regression Coefficient (t-value)
H1: Environmentally-responsible → Ethical clothing	.20*(2.13)
H2: Employee-welfare → Ethical clothing	.21**(2.76)
H3: Slow-fashion → Ethical clothing	.11*(2.31)
H4: Animal welfare → Ethical clothing	.39***(3.41)
H5: Ethical clothing → Overall attitude	.55***(8.58)
H6: Overall attitude → Purchase intention	.62***(10.09)

^{*=}p<.05, **=p<.01, ***=p<.001

Conclusion

Theoretical implications

The attitude behaviour gap as it relates to ethical clothing has been attributed to various factors, one of which is the way in which the construct has been conceptualised by academics. More specifically, the disconnect between consumer attitudes and purchase behaviour may be due to academics defining ethical clothing differently to the way that consumers do. In support of this, a review of the literature revealed that previous academic studies have sought to measure consumers' attitude and behaviour towards ethical clothing without first establishing how they actually define it. Moreover, the academic definitions that were used instead varied in terms of terminology, the number of dimensions and what these specific dimensions were.

In order to address this, this study sought to develop and empirically test a consumer-based definition of ethical clothing. Furthermore, in contrast to many preceding studies it did so using a random sample of consumer households rather than a convenience sample of university students. Ethical clothing was conceptualised as a higher order construct comprising four dimensions – environmental responsibility, employee welfare, slow fashion

and animal welfare. Subsequent analysis supported this conceptualisation in its two key aspects. Academics have typically defined ethical clothing in terms of its goal of minimising any negative impact it may have. While this study confirmed that consumers do define it in this way, they also define it as clothing that is fair and decent, that is made with the right moral intentions, and made in accordance with the ideal standards of the industry. The study also found that all four hypothesised dimensions influence consumer perceptions of ethical clothing.

The significance of this latter finding stems from the fact that it provides a plausible explanation for the attitude-behaviour gap. In order for the results of a study to be considered valid, the attitudinal measures used by academics must accurately portray the actual attitudes of the population. And yet the results from this study indicate that no previous academic definition was entirely consistent with the way in which consumers actually define ethical clothing. More specifically, previous definitions were too narrow, having conceptualised the construct as only comprising one, two or three dimensions.

In such circumstances the influence of those dimensions that *were* included risk being exaggerated. This is highlighted by the results of this study. Consistent with the notion that a hierarchy of ethical issues exists (Carrigan & Attalla, 2001) the dimensions differed in the extent to which they influenced consumer perceptions of ethical clothing. However it was not the two most commonly employed dimensions - environmental responsibility and employee welfare – that exerted the strongest influence. Instead, it was animal welfare. In fact, its influence (β =.39) was almost twice that of environmental responsibility (β =.20) and employee welfare (β =.21). This is a significant finding because it means the dimension that has the strongest impact on consumer perceptions is also one typically overlooked by academics when conceptualizing and operationalizing ethical clothing. Moreover, this result emanated from a study utilising a general clothing context as opposed to one that might have shared a more direct relationship with animal welfare (e.g. wool, fur, leather etc.).

One of the key underlying goals of slow fashion is to address the threat that fast fashion poses to employee welfare and the environment (Ertekin & Atik, 2014; Kim et al., 2013). However there is some doubt as to whether consumers are aware of the connection between the two (Ertekin & Atik, 2014; Gabrielli et al., 2013; Pookulangara & Shephard, 2013). Whilst the focus of this study and the way in which the necessary scales were operationalised did not directly address this issue, it did provide some insight. Consumers do not necessarily need to associate slow fashion with its environmental and employee welfare implications in order to perceive it as a dimension of ethical clothing. Instead, it would appear that the mere durability of an item of clothing in terms of its material and fashionability is sufficient for consumers to perceive it as ethical.

The study also sought to identify how consumers' perceptions of the ethical qualities of an item of clothing influence their overall attitude towards it. This served as an important goal, because to the authors' best knowledge, this was the first time this construct had been empirically developed and employed in an academic study. Subsequent analysis revealed that the more positive consumer perceptions are regarding the ethical nature of an item of clothing, the more positive their overall attitude towards it. A positive overall attitude then in turn leads to higher levels of purchase intention.

Practical implications

It has been suggested that a *hierarchy* of ethical issues exists whereby not all ethical attributes influence consumer purchase decisions to the same extent (Carrigan & Attalla, 2001). Such a notion is interesting in the context of this study for two reasons. Firstly, this study found that there is also a hierarchy when it comes to the factors that influence perceptions towards the ethical qualities of clothing. Animal welfare has the strongest

influence on consumer perceptions, followed by employee welfare and environmental responsibility, and then slow fashion attributes. Secondly, in addition to a hierarchy, an ethical clothing *continuum* may also exist, with the position of any one specific brand of clothing along that continuum determined by how many of the four dimensions it satisfies. The fact that consumer perceptions are influenced by four dimensions creates the very real possibility that clothing that fails to meet all four 'criteria' may be regarded as being less than ethical. This provides an interesting explanation as to why academic research into ethical clothing has not always reflected actual consumer behaviour. Based on previous research, clothing would be regarded as being 'ethical' if it was employee friendly and environmentally responsible. However the results of this study suggest that consumers may regard this same item of clothing as *less than* ethical if it serves as a threat to animal welfare and has been poorly made in terms of quality or fashionable durability.

Further research

This study set out to determine how consumers define ethical clothing and operationalised its scales accordingly. One of its more interesting findings was that slow fashion qualities influence consumer perceptions of ethical quality. The potential significance of this stems from the fact that previous studies had found that consumers were often unaware of the ethical ramifications involved with fast fashion (Ertekin & Atik, 2014). So while in theory, demand for slow fashion should derive from consumers' knowledge of its positive implications for the environment and employees, in reality, consumers often failed to connect the two (Pookulangara & Shephard, 2013). As such, it may not be that consumers are apathetic towards slow fashion; they may simply be unaware of fast fashion's negative impacts. This may explain why sales of fast fashion continue to grow at the same time that consumer concern over ethical issues is also growing (Webb et al., 2008).

With this study having identified that slow fashion serves as a means by which consumers define ethical clothing, it would be a logical next step to explore whether it also influences the extent to which consumers perceive an item of clothing as being 'environmentally responsible' and 'employee friendly'. This would provide greater insight into whether the ethical properties associated with slow fashion simply emanate from more generic considerations (i.e. for any product to be considered ethical it must be of good quality and last as long as possible) or from more specific concerns such as those relating to the environment and employee welfare. Such research would then provide greater insight for practitioners in terms of how to best market slow fashion.

Previous research has consistently found that even when buying clothing specifically marketed and labelled as 'ethical', consumers evaluate both its conventional (e.g. brand name, price, style) and ethical qualities (Jagel et al., 2012; Kim & Damhorst, 1998; Koszewska, 2013, Niinimaki, 2010). In fact, when it comes to the final purchase decision, the former can often outweigh the latter (Dickson, 2000; Meyer, 2001). In light of the findings from this study, further research is necessary to determine whether this still holds true when a more complete range of ethical attributes covering all four dimensions are included.

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