Differences between Black and White South Africans in product failure attributions, anger and complaint behaviour

Short title: Product failure attributions, anger and complaint behaviour

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Abstract

The purpose of this research is to extend an understanding of how Black and White South African consumers' causal attributions for major household appliance performance failures impact on their anger and subsequent complaint behaviour. A survey was administered to Black and White South African consumers who were dissatisfied with the performance of a major household appliance item. Respondents resided in a major metropolitan area. The findings showed that, compared to Whites, the Black South Africans felt a low but significantly higher external locus of causality and lower control, and experienced a higher level of anger regarding product failure. The level of anger determined the decision to take complaint action, but racial group determined the type of action taken. Blacks complained more actively to retailers and engaged more in private complaint action than Whites. These findings may show that Black South Africans are developing a more individualistic orientation as consumers. Therefore, researchers should consider the effect of cultural swapping when researching consumer behaviour in multi-cultural countries. Implications for retailers in terms of complaint handling are indicated.

Keywords: product failure attributions, anger, race, consumer complaint behaviour, emerging markets, South Africa

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Introduction

It is argued that economic development within a nation is dependent upon a strong middle class, which most often provides the majority of the customers for organisations (Ettinger, 2012; Palley, 2015). So what happens when an emerging nation is multi-cultural and a previously less dominant culture becomes increasingly representative of this middle class in terms of spending power and types of products purchased? In extending this question, what implications does this cultural change have for consumer product failure attributions and the sensitive area of consumer complaint behaviour? This issue is important since most of the research on consumer product failure attributions and consumer complaint behaviour has a strong Western orientation that may limit the generalisability of findings to different cultural contexts, such as countries from a non-Western origin (Laufer, 2002; Leigh and Choi, 2007; Lui and McLure, 2001).

The focus of the study reported here is to extend an understanding of how Black and White South African consumers' causal attributions for major household appliance performance failures impact on their anger and subsequent complaint behaviour. We apply Weiner's (1986) attribution theory to study consumers' post-consumption reactions to product failures. This theory links emotional responses to outcomes and attributions, and posits that these emotions determine behaviour – in this case, consumer complaint behaviour (CCB) (Laufer *et al.*, 2005). With South Africa being a multicultural nation, and the increasing importance of the Black African middle class, the purpose of this study is to compare Black and White South African consumers' experiences of product failure in relation to their attributions and consumer complaint behaviours. Such research can improve researchers' and retailers' understanding of the factors underlying CCB in multi-racial emerging markets. Moreover, it can facilitate effective methods of complaint handling in countries where sensitivity is needed concerning cultural issues and a general approach to dealing with such differences in CCB may be less than adequate.

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Conceptual background and hypotheses

The Black middle class in South Africa, estimated to be over four million in 2012, with a collective spending power of some 400 billion Rands (US\$37,5 billion) per annum, are optimistic, self-confident, aspiring and future-focused, with a drive for education (Olivier, 2007; UCT Unilever Institute of Strategic Marketing, 2007; 2012). They are conspicuous consumers with smart cars, clothes, television sets, sound systems and household appliances topping their list of desired and necessary products. The increased spending power of the Black middle class and the types of products they purchase undoubtedly coincide with the likelihood of experiencing product dissatisfaction, especially when products fail to perform according to expectations.

As far as letters of complaint in the consumer columns of major South African newspapers as well as online letters to consumer complaint websites and consumer bodies are concerned, it is clear that South African consumers experience a considerable number of problems with the performance of major household appliances (i.e. kitchen and laundry appliances). These problems are likely to multiply as the demand for appliances escalates owing to the availability of both domestic electricity and credit to the expanding middle class (Donoghue and De Klerk, 2013). Such changes to the South African middle class' purchasing patterns make it imperative that consumer product failure attributions and consumer complaint behaviour in a multi-cultural context be investigated, so that retailers can better serve these important markets.

Hedonic and utilitarian value in purchasing decisions

Perceptions of value can be separated into hedonic and utilitarian dimensions as consumers evaluate and make their decisions when purchasing (e.g. Batra and Ahtola, 1991; Voss *et al.*, 2003). Hedonic

value arises from purchases that are more fun or self-indulgent, while utilitarian dimensions arise from purchases perceived as more purposeful (Pentecost and Andrews, 2013). Utilitarian value may also become more prominent under conditions that make it harder to justify hedonic purchases, such as during economic downturns (Pentecost and Andrews, 2013). Thus, in terms of hedonic or utilitarian values underlying purchase decisions, these may change with changes in purchasing power and greater opportunities. Given the rise in conspicuous consumption of the Black middle class, it can be inferred that they would perceive greater hedonic value in these decisions owing to greater affluence and purchase opportunities. In extending hedonic value perceptions to product failure, it is likely that this group would therefore, more readily identify reasons for lost hedonic value than lost utilitarian value. It is proposed that in terms of household appliance product failure, this group will perceive greater loss of hedonic value than White South Africans when considering reasons for product failure, leading to the following hypothesis:

H1: Blacks will perceive greater loss of hedonic value than Whites when considering reasons for product failure.

Attributional reasoning and product failure appraisals

While the difference between expectant value and realisation of that value can be a motivational factor underlying decision making and post-purchase behaviour, it does not in itself explain complaint behaviour. Weiner's (1986, 2000) attributional theory of achievement motivation does. The theory describes the basic dimensions of attributional experience that people use to understand their success and failure, such as locus of causality, stability, and controllability. Locus of causality refers to the location of a cause, internal or external, to the person. Stability refers to the temporal nature of a cause, varying from stable (permanent) to unstable (temporary). Controllability refers to the degree of volitional influence (controllable/uncontrollable) that can be exerted over a cause. Weiner's (1986)

three-dimensional schema of attributional experience suggests that different outcomes, attributions and emotions lead to different behavioural consequences, implying a cognition-emotion-action process. Attributional reasoning is more likely after an unexpected, negative or important event/outcome, rather than after success (Weiner, 2000).

Product failure is the kind of negative and unexpected event that has been shown to bring about causal search influencing consumers' emotions and behaviours (Poon *et al.*, 2004; Weiner, 2000). Here, the locus dimension refers to whether the consumer believes that the cause for the product failure can be attributed either to the consumer (internal), or to the manufacturer, retailer or some outside agent in the environment or situation, or to the product itself (external) (Laufer, 2002; Weiner, 2000). When a product failure is attributed internally, consumers may be more likely to do nothing when dissatisfied (Laufer, 2002). When a product failure is attributed externally, consumers may feel that they deserve a refund and apology, and may be more inclined to complain to the retailer about the product than when the reason is attributed internally (Folkes, 1990; Laufer, 2002). Consumers may also experience anger toward retailers and engage in negative word-of-mouth (Folkes, 1988).

When product failure is perceived as being due to stable factors, consumers would expect future product dissatisfaction or product failure. Conversely, when product failure is perceived as being due to unstable factors, consumers would be less certain of future product failure (Folkes, 1984). Therefore, failure attributed to stable factors implies the anticipation that it will recur in future, whereas attribution of failure to unstable or variable causes could give rise to "hope" for the future (Försterling, 2001). The stability dimension also influences the type of redress preferred when a product fails (Folkes, 1988). Compared with unstable reasons, stable attributions lead consumers to more strongly prefer refunds, rather than replacement of the failed product (Folkes, 1984). Preference for refunds as opposed to replacement increases when products are perceived to fail for company-related reasons, as opposed to consumer-related reasons. Consumers are thought to be more likely to

warn their friends against purchasing a product when they expect future product failure, than when they are uncertain about future product performance (Curren and Folkes, 1987). Curren and Folkes (1987) demonstrated that stability caused a significantly increased desire to warn friends, but had little influence on desire to complain to companies. Thus for consumers, inferring a stable cause leads to less desire to repurchase a product than does inferring an unstable cause. Additionally, consumers will probably vow to never again patronise that retailer and might even warn their friends about the retailer so that they may not experience the same type of problem (Crié, 2003; Curren and Folkes, 1987).

If consumers attribute the cause of the problem to an external, uncontrollable cause, they will probably assign less blame to other entities such as the manufacturer or retailer. However, when failures are viewed as controllable, blame may be targeted at the entity perceived as having had control (Laufer, 2002). When retailers are thought to have control over the cause of product failure, consumers feel angry and desire revenge more than when retailers are believed to lack control (Curren and Folkes, 1987; Folkes, 1990). Anger intensifies as outcome importance increases, and hence consumers will be more likely to complain to the company and/or public/private third parties, distance themselves from the company, refuse to repurchase the company's product and warn others against the product, as opposed to uncontrollable, external product failures (Curren and Folkes, 1987; Swanson and Kelley, 2001). Telling others about product failure may enable consumers to vent their anger, to gain social support for the validity of negative feelings, and may allow them some means of retaliation by discouraging others from purchasing the product (Folkes, 1990).

As noted earlier, much of the research in CCB has taken place in Western countries. When considering CCB in a multi-cultural country such as South Africa, the question arises as to what differences might be evident between culturally diverse consumer groups. Much of the discussion around such differences tends to focus on comparisons of consumer behaviour in predominantly individualistic versus collectivist cultures. In general, the predominant cultures of Western Europe,

North America, Australia and New Zealand are considered individualistic, whereas African, Middle Eastern and East Asian countries are characterised primarily by collectivism (Triandis, 2001). People in individualistic cultures exhibit a tendency to be more concerned with their personal needs, goals, interests, achievements, rights and success. Therefore, individualistic cultures stress the uniqueness of the individual (i.e. think in terms of "T") and attribute success to individual effort rather than to group efforts (Chelminski, 2001). In contrast, people in collectivistic cultures tend to emphasise sharing ideas for the good of the group, feelings of involvement in others' lives, fitting in with the group, and behaving according to the social norms that are designed to maintain social harmony among the members of the in-group (Chelminski and Coulture, 2007; De Mooij, 2011; Leigh and Choi, 2007). Cultural extremes of individualism and collectivism are strong moderators affecting consumer attributions about the causes of life events. Different cultures therefore, have unique ways of understanding and interpreting life events and also less severe, mundane events such as product failures (Leigh and Choi, 2007).

Studies have shown that consumers with differing cultural backgrounds appraise product failures differently and attribute causes for product failures differently in terms of the locus, stability and controllability of the event (Au *et al.*, 2001; Donoghue and De Klerk, 2009; Laufer, 2002; Poon *et al.*, 2004). Consumers in Asian cultures may have a stronger sense of external locus of control versus a weaker internal locus of control, because they tend to attribute success to good luck, and stress to bad luck. Asian consumers are more likely to consider situational versus company-related factors when attributing blame for product failure, than those in more individualist oriented societies (Laufer, 2002). They might therefore believe that product/service failures are actually uncontrollable by companies and might blame companies less for failures (Zourrig *et al.*, 2009). In contrast, Canadian consumers are more likely to believe that service failures are actually controllable by the service provider or employees compared to Chinese consumers (Poon *et al.* 2004).

While White South Africans could be categorised as more individualistic and Black South Africans as more collectivistic in their cultural orientations, it is acknowledged that great variation exists within these contexts on an individual level (Wissing *et al.*, 2006). Owing to urbanisation and acculturation, urban Black South Africans tend to subscribe to a mixture of African and Western values, while most of the White South Africans still subscribe to Western values (Rousseau, 2003). Differing value orientations may influence the extent to which cultural differences are expressed or even in fact exist (Eaten and Louw, 2000; Vogt and Laher, 2009). While it is not the intention to specifically measure cultural orientation in this study, the preceding discussion does provide an underpinning rational for hypothesising that Black and White South African consumers' experiences of product failure may lead to differences in their attributions and locus of control. Therefore, the following hypotheses state that:

H2a: Whites differ from Blacks in their attribution of product failures concerning locus.

H2b: Whites differ from Blacks in their attribution of product failures concerning stability.

H2c: Whites differ from Blacks in their attribution of product failures concerning controllability.

Emotions and consumer complaint behaviours

Experienced and expressed emotions may vary across cultures in terms of intensity and situation in which they occur (Stephan *et al.*, 1996). For experienced emotions, anger is a recognised trigger for individuals with interdependent self-construal as well as those with independent self-construal (Zourrig *et al.*, 2009). For expressed emotions, in cultures such as those in countries like Tahiti, China and Japan, expressions of anger are considered to be inappropriate and rarely occur (Stephan *et al.*, 1996). Regarding the emotional responses to events, consumers are unwilling to outwardly express their negative emotions because they are sensitive to the issue of saving face (Zourrig *et al.*, 2009). In other cultures, such as the United States, expressions of anger are considered to be acceptable and

may be actively encouraged (Stephan *et al.*, 1996). Individualistic consumers are socially encouraged to outwardly express their negative emotion, as self-expression is seen as an important value within their societies (Zourrig *et al.*, 2009). Overall, the literature suggests that there are cultural differences that may influence how Black and White South Africans express their anger when they experience product failures, therefore, it is hypothesised that:

H3: Whites experience more anger than Blacks, following product failure appraisals.

Consumers in different cultures have different types of complaint behaviours and complaint intentions (Patterson *et al.*, 2006). Under Day and Landon's (1977) taxonomy of CCB, consumers may engage in private action and/or public action, or no action. As such, consumers may engage in private actions by switching brands or retailers, or warning family and friends. They may also engage in public action such as seeking redress (e.g. a refund, an exchange or free repairs and replacement of defective parts) directly from the retailer or manufacturer, or contacting a third party including consumer protection organisations, the media and legal representatives. Alternatively, consumers may refrain from taking any action, by rationalising and forgetting about the product failure (Crié, 2003).

Complaining customers need to "break the harmony of the situation" when confronting companies with their product dissatisfactions (Patterson *et al.*, 2006). Since more collectivist-oriented cultures value harmony and avoid confrontation at all costs, such customers would find it disturbing to voice their complaints directly to companies and so risk confrontation (Ngai *et al.*, 2007; Patterson *et al.*, 2006). Instead, they may be more inclined to engage in negative word-of-mouth to in-group members; that is private complaint action which is less confrontational. Individualists tend to complain formally to companies or third parties and take more legal action, implying the use of confrontational strategies (De Mooij, 2011; Zourrig *et al.*, 2009). Taking into account the foregoing discussion, it is proposed

that there will be differences between Black and White South African consumers' complaint behaviour when experiencing product failures, hypothesised as follows:

H4: Whites engage more actively in complaint behaviour than Blacks.

Previous research suggests that attributions (perceptions of locus of causality, stability and controllability) may provoke emotions that lead to different behavioural consequences, implying a cognition-emotion-action process (Folkes, 1988; Laufer, 2002; Weiner, 2000). But evidence relating to these three attributions and consumer anger is somewhat limited (Laufer, 2002). However, there are indications that when locus is external to the consumer and when the consumer feels that a firm is responsible for the product failure, that is, the controllability is external to the consumer (Rotter, 1966), this may result in anger being experienced (Folkes, 1984, 1988). In terms of stability and its influence on anger: essentially, if the consumer perceives that the failure is attributed to the firm, the failure may be perceived as being more stable, i.e. likely to continue occurring. This outcome is likely to lead to more dissatisfaction, which by inference may result in anger. To further elaborate on the degree of influence that these three dimensions may have on anger arising from product failure, the following hypotheses are stated:

- H5a: Locus will influence anger.
- H5b: Stability will influence anger.
- H5c: Controllability will influence anger.

However, the expression of emotions in public has been found to differ between cultures (Laufer, 2002; Tombs *et al.*, 2014). For example, Anglo-culture consumers are more likely to engage in confrontational behaviours and to express negative emotions (such as anger) after service failures, whereas consumers from Asian cultures are less likely to do so (Tombs *et al.*, 2014). In this study we

were interested to investigate whether there are differences between Blacks and Whites in terms of anger and complaint behaviour; therefore it is hypothesised that:

H6: There will be differences in anger and race and their influence on complaint behaviour.

Methodology

Sampling and data collection

Data was collected using a self-administered survey. To ensure that only dissatisfied respondents were included in the study, trained fieldworkers pre-screened potential respondents. Respondents had to recall and report on dissatisfaction with a product experienced within the last four years. While four years may appear a long period for recall, the actual performance of household appliances may not appear until the product has been used for a period of time (Broadbridge and Marshall, 1995). Even though memory decay may be a potential source of bias in respondents' responses, retrospective measurements are regularly used in CCB studies (Weiner, 2000). Additionally, dissatisfied respondents had to be older than 25 years of age and had to reside in middle- to upper-income suburbs across Tshwane, a major metropolitan area in South Africa. It was assumed that by age 25 the average person would be earning enough income to purchase and subsequently operate his/her household appliance.

Collected questionnaires were checked for completeness of data and valid question responses – an important aspect of data screening (Wilson *et. al.*, 2010). This screening process resulted in 196 usable responses but with unequal sample sizes (Black respondents: n = 61 = 31%; White respondents: n = 135 = 69%) (Table 1). Whilst problems created by unequal sample sizes may be relatively minor this can become a problem if variance in the small sample is greater than the larger

sample, as the F-test becomes too liberal for the smaller sample leading to increased type 1 error (Tabachnick and Fidell, 1996). A simple strategy to overcome this potential problem would be to equalise the sample sizes; however, for non-experimental work this can be unrepresentative of the population of interest (Tabachnick and Fidell, 1996; Wilson *et al.*, 2010).

Table 1 shows the distribution statistics, with the mean and the standard deviation similar between groups; however, differences were found in the levels of variance with Whites showing greater variance than Blacks (137.534 > 77.151). As such, this result meets the requirement regarding over-liberalisation of the F-test (Tabachnick and Fidell, 1996). However, further analysis was conducted by assessing the normal distribution of each group where any significant deviation from a normal distribution for either group would justify equalising the sample size, thereby decreasing the potential power of the tests (Pedhazur and Schmelkin, 1991) and lessening the representativeness of the findings. Using kurtosis (a measure of the shape of a distribution) as the technique for evaluation of deviation from a normal distribution, z scores were calculated (Kurtosis/S.E. Kurtosis) for each group, where z scores greater than 1.96 indicate a significant deviation from a normal distribution at p < 0.05 (Field, 2005). Results in Table 1 show no significant deviation from a normal distribution for either group sizes were left as is. All further analyses were conducted using these group numbers.

Measurement instrument

The questionnaire was divided into multiple sections. After providing their demographic information in the first section (e.g. age, and racial grouping), respondents were asked in the following section first to recall an appliance they were dissatisfied with in the past 4 years, and then to indicate their reasons for the product failure based on their perception of hedonic or utilitarian value lost. Items

Respondent grouping	Ν	%	Mean age	Std. Dev.	Variance	Kurtosis	S.E. Kurtosis	Z score
Black	61	31	35.5	8.78	77.15	0.103	0.604	0.170
White	135	69	39.5	11.73	137.53	0.139	0.414	0.355
Total	196	100	38.3	11.03	121.65	0.405	0.346	N/A

 Table 1 Statistical checks for sampled groups

measuring hedonic reasons were "no longer reflected my image identity", "no longer made me feel good about myself", "did not enjoy using the appliance", "no longer impressed me", and "no longer impressed other people". Items measuring utilitarian reasons for replacement were "broke down", "did not operate properly", "was a dud", "inconvenient", and "required more maintenance". All items were self-developed and measured using a 5-point Likert scale anchored with 1 (definitely agree) and 5 (definitely disagree).

Attributions and causal dimensions were measured using an adapted version of Russell's (1982) Causal Dimension Scale (see Weiner, 1986). Respondents had to rate their own attributions on three dimensions: locus, stability and control. Using a 9-point semantic differential scale, respondents had to indicate whether causes (1) reflected on the manufacturer, retailer, some outside agent in the environment or the situation, or on the consumer, (2) were unstable or stable, and (3) were uncontrollable or controllable, with 3 items used for each dimension (Russell *et al.*, 1987; Swanson and Kelley, 2001). Previous psychological research has validated the use of these scales (see Russell, 1982; Russell *et al.*, 1987), with the scales also modified by researchers in the marketing discipline) to suit the context of their specific studies (see Folkes, 1984; Swanson and Kelley 2001. Scale modification was also applied in this research.

In the final section, respondents' complaint behaviour was measured by using the taxonomy of consumer complaint behaviour proposed by Day and Landon (1977). Respondents had to consider a list of actual actions taken in response to their dissatisfaction, and indicate what actions, if any, were taken (e.g. did they partake in any actions? Who did they take action with?). A nominal scale (yes/no) was used to classify the answer to each type of action taken. All measures and item wordings are reported in the Appendix.

Method of data analysis

For hypotheses 1 to 4, t-tests were used to determine statistically significant differences between the racial groups. For hypotheses 5 and 6, regressions (both linear and logit) were used to model the influence of (1) the causal dimensions on level of anger (hypothesis 5), and (2) level of anger and racial group on action taken (hypothesis 6). Logistic regression was used, due to having a non-metric dependent variable with two groups and several metric and non-metric independent variables. This statistical approach provides a suitable alternative to other multivariate analyses since it does not necessitate strict assumptions of multivariate normality and equal variance-covariance matrices across groups (Akinci *et al.*, 2005).

Results

Testing hypotheses 1 to 4

The results from the T-tests on value underpinning reasons for product failure, support H1 (Table 2). Blacks were found to have a greater hedonic reasoning underlying product failure than Whites (p < 0.05) on four of the five hedonic reasons for product failure. Reflecting conspicuous consumption as a justification for purchase for the Blacks (Olivier, 2007), significant differences were found for "image reflection" ($\bar{x} = 2.25$; std. dev. = 1.11) and "no longer impressed other people" ($\bar{x} = 2.57$; std. dev. = 1.01). More intrinsic hedonic justifications were found in "makes me feel good" ($\bar{x} = 2.21$; std. dev. = 1.28) and "did not enjoy using" ($\bar{x} = 2.40$; std. dev. = 1.24). Only one of the utilitarian reasons were found to have a significant difference for Blacks, blaming the product manufacturer significantly more than Whites ("dud from the start": $\bar{x} = 3.29$; std. dev. = 1.35; p < 0.01).

Value offering	Variable	Group	Ν	Mean	Std. Dev.
Utilitarian	"broke down"	Black	61	2.26	1.37
		White	135	2.88	1.49
	"did not operate properly"	Black	61	2.11	1.10
	did not operate property	White	135	2.09	1.28
	"dud from the start"**	Black	61	2.72	1.33
		White	135	3.29	1.35
	"inconvenient"	Black	61	2.28	1.07
	Inconvenient	White	135	2.64	1.29
	"more maintenance"	Black	61	2.57	0.96
	more maintenance	White	135	2.84	1.24
Hedonic	"did not reflect my image"**	Black	61	2.25	1.11
		White	135	3.10	1.39
	"did not make me feel good"**	Black	61	2.21	1.28
	did not make me reel good	White	135	3.66	1.30
	"did not enjoy using the product"**	Black	61	1.77	0.96
	and not enjoy asing the product	White	135	2.40	1.24
	"no longer impressed me"	Black	61	1.84	0.95
	no longer impressed me	White	135	2.13	1.15
	"no longer impressed other people"*	Black	61	2.57	1.01
	no longer impressed other people	White	135	3.05	1.38

Table 2 T-tests for Hedonic and Utilitarian value offering

* = significant at the 0.05 level ** = significant at the 0.01 level

Reliability checks were run for Russell's (1982) Causal Dimension Scale. Results on each of the dimensions show low reliability ($\alpha < 0.7$) (see Nunnally and Bernstein, 1994), which might also indicate potential issues with face or content validity if respondents could not differentiate between the locus, control and stability dimensions. While this result contradicts previous research (see Folkes, 1984; Swanson and Kelley, 2001; Wirtz and Mattila, 2004), it does not render the data unusable. Items were assessed individually for differences between racial groups to look for any specific pattern in the results.

The results show that for locus, although falling within the lower range of the 9-point semantic differential scale, Blacks tended to attribute the product failure to something internal to themselves ($\bar{x} = 4.03$; std. dev. = 2.65; p < 0.01), more so than Whites ($\bar{x} = 1.89$; std. dev. = 1.49), and a significantly different low level of perceptions that the product failure could be attributed to something to do with themselves (Blacks: $\bar{x} = 2.87$; std. dev. = 2.24; Whites: $\bar{x} = 2.25$; std. dev. = 1.69: p < 0.01) – partially supporting H2a. For stability, none of the items were significant; therefore there was no support for H2b. For control, they also felt a low but still greater level of attribution that the product failure was most likely intended ($\bar{x} = 3.44$; std. dev. = 2.42; p < 0.01) compared to Whites ($\bar{x} = 2.52$; std. dev. = 2.16) – partially supporting H2c (see Table 3).

The t-test results for anger do not support H3, namely that Whites would be more likely to experience anger compared to Blacks. Blacks were found to report experiencing a slightly higher level of anger (p < 0.01) regarding the product failure ($\bar{x} = 2.95$; std. dev. = 0.740) than Whites ($\bar{x} = 2.44$; std. dev. = 0.911), see Table 4. Again, this result may reflect the individualisation of the burgeoning Black middle class in South Africa and their anger at forces external to themselves having some level of control over their lives.

Dimension	Item	Group	Ν	Mean	Std. Dev.
Locus	Others' actions/my actions	Black	61	3.34	2.41
		White	135	2.76	2.04
	Outside me/inside me**	Black	61	4.03	2.65
	Outside me/inside me	White	135	1.89	1.49
	Something about others/something about me**	Black	61	2.87	2.24
	Something about others/something about me	White	135	2.25	1.69
Control	Uncontrollable/controllable	Black	61	4.79	2.93
		White	135	5.27	3.08
	Unintended/intended**	Black	61	3.44	2.42
Offintended/Intende	ommended/intended	White	135	2.52	2.16
No-one's responsibili	No-one's responsibility/someone's responsibility	Black	61	7.38	1.97
	No-one s responsibility/someone s responsibility	White	135	6.76	2.56
Stability	Temporary/permanent	Black	61	5.31	2.81
		White	135	5.54	3.11
	Variable over time/stable over time	Black	61	4.98	2.70
	Variable over time/stable over time	White	135	4.46	2.82
	Changeable/unchanging	Black	61	4.07	2.55
		White	135	3.41	2.82

 Table 3 T-test results for attributions and causal dimension

** = significant at the 0.01 level

 Table 4 T-tests for anger between groups

Variable	Group	Ν	Mean	Std.Dev.
Anger**	Black	61	2.95	0.74
	White	135	2.44	0.91

** = significant at the 0.01 level

Blacks did differ from Whites in their complaint behaviour, supporting H4. While both groups showed a similarly high propensity to take some action (Blacks: 80.3%; Whites: 80.7%), Blacks (77%) were more likely to contact the retailer for redress than Whites (55%) after a product failure. What is of further interest is the fact that Blacks were more than twice as likely to change their behaviour towards a retailer, for example, to stop supporting the retailer (59.2% versus 22.0%) and switching to another brand (69.4% versus 34.9%) (Table 5). These results support the notion that Blacks are becoming more assertive, and to some degree more punitive, in their complaint behaviour towards retailers and failed brands.

Testing hypotheses 5 and 6

To test hypotheses 5a to 5c, the extent to which items underpinning the attribution dimensions of locus, stability and control drive anger, each of the items measuring the attribution dimensions were regressed on anger. The model was significant (F = 3.77; sig < 0.001; R² = 11.2%), with two items having a significant influence on anger (p < 0.05) (Table 6). H5a was partially supported as the locus item "outside me/inside me" was shown to have the greatest influence (β = 0.26; t = 3.2; p < 0.01), indicating that the more they felt that the failure was due to themselves, the stronger the anger felt. One item for control was also found to have a significant influence on anger. The more they felt the failure should be someone else's responsibility, the stronger the anger felt (β = 0.16; t = 2.1; p < 0.05), supporting H5c. These results are understandable in the light of the t-test results for these items, as discussed earlier. They also support the lack of influence from attributions of stability, as H5b was not supported.

Behaviour		Group		
	Response	Black	White	
		%	%	
Take any action	Yes	80.3	80.7	
	No	19.7	19.3	
	Total	100	100	
Use other brand name**	Yes	69.4	34.9	
Use other brand hame	No	30.6	65.1	
	Total	100	100	
Contact retailer for redress**	Yes	77.6	55.0	
contact retailer for redress	No	22.4	45.0	
	Total	100	100	
Stop supporting retailer**	Yes	59.2	22.0	
Stop supporting retailer	No	40.8	78.0	
	Total	100	100	

Table 5 Cross tabulations for complaint behaviours

** = significant at the 0.01 level

Table 6 Regression analysis on anger

Item	Std β	t	Sig
Others' actions/my actions	-0.033	-0.385	0.701
Outside me/inside me**	0.264	3.221	0.002
Something about others/something about me	-0.133	-1.470	0.143
Uncontrollable/controllable	-0.134	-1.842	0.067
Unintended/intended	0.120	1.512	0.132
No-one's responsibility/someone's responsibility**	0.157	2.139	0.034
Temporary/permanent	0.042	0.541	0.589
Variable over time/stable over time	-0.009	-0.129	0.898
Changeable/unchanging	-0.062	-0.772	0.441

* = significant at the 0.05 level ** = significant at the 0.01 level F = 3.77; sig < 0.001; R² = 11.2%

Hypothesis 6 was tested using logistic regressions. Regressions were run to evaluate the binary (Yes/No) coded behavioural items (take action, contact the retailer, stop supporting the retailer, use another brand) and the degree of influence felt by anger and racial grouping. This technique was chosen over cross-tabulation because it allows for a non-metric predictor (racial grouping was dummy-coded into 1 = Blacks, 0 = others, thus providing Whites as the comparison group) as well as the metric anger item to be included in the analysis (Hair *et al.*, 2010; Wilson et al., 2010). Results show a good fit for all of the logistic models (see Table 7), with the initial log likelihood values (LLV_{initial}) of all models found to significantly increase ($\chi^2 < 0.05$) with the inclusion of the predictor variables (LLV_{post}). Confirmation of this result was found with the fit between the actual and the predicted models, as indicated by the Hosmer and Lemeshow value, being insignificant ($\chi^2 > 0.05$), an indication that the model is predicting the data well (Field, 2005; Hair *et al.*, 2010).

All logistic regressions (take any action, contact the retailer, stop supporting the retailer, and use another brand) were found to be significant (p < 0.05), though with low variance explained (Nagelkerke $R^2 = 11.9\%$, 6.4%, 18.0% and 16.6% respectively). Of interest is the significance of anger on willingness to take any action ($\beta = -0.915$; sig < 0.01; Exp(B) = 0.400) versus the lack of significance of racial group (i.e. Black) (p > 0.05) on the same item, and it changed as the level of behaviour changed. In contrast to Whites, Blacks were significantly more likely to contact the retailer ($\beta = 1.019$; sig < 0.05; Exp(B) = 2.796), stop supporting the retailer ($\beta = 1.534$; sig < 0.01; Exp(B) = 4.637), and use another brand ($\beta = 1.290$; sig < 0.01; Exp(B) = 3.634). Anger, on the other hand, was found to be significant only with changing to another brand ($\beta = -0.426$; sig < 0.05; Exp(B) = 0.653). The importance of this result lies in the significant influence of racial grouping on the level of behaviour, but anger felt as the primary influence on taking any action. As such, the result suggests

Table 7 Logistic regressions on complaint behaviour

Behavioural item	Predictor	β	Sig	EXP (<i>B</i>)
Take any action ^a	Anger	-0.915	0.000**	0.400
	Black group	-0.436	0.197	0.570
Contact the retailer ^b	Anger	-0.042	0.831	0.959
	Black group	1.019	0.011*	2.769
Stop supporting the retailer ^c	Anger	-0.270	0.214	0.763
	Black group	1.534	0.000**	4.637
Use other brand name ^d	Anger	-0.426	0.036*	0.653
	Black group	1.290	0.001**	3.634

* = significant at the 0.05 level

** = significant at the 0.01 level

^a LLV_{initial} = 192.78; LLV_{post} = 177.556; χ^2 = 15.228; sig = 0.000;

^c LLV_{initial} = 192.78; LLV_{post} = 177.556; χ^{2} = 15.228; sig = 0.000; Hosmer and Lemeshow Test = χ^{2} = 2.804; sig = 0.730; Nagelkerke R² = 0.119 ^b LLV_{initial} = 209.805; LLV_{post} = 202.137; χ^{2} = 7.668; sig = 0.022; Hosmer and Lemeshow Test = χ^{2} = 6.391; sig = 0.270; Nagelkerke R² = 0.064 ^c LLV_{initial} = 201.597; LLV_{post} = 179.628; χ^{2} = 21.969; sig = 0.000; Hosmer and Lemeshow Test = χ^{2} = 2.608; sig = 0.760; Nagelkerke R² = 0.180 ^d LLV_{initial} = 217.792; LLV_{post} = 196.809; χ^{2} = 20.984; sig = 0.000; Hosmer and Lemeshow Test = χ^{2} = 6.877; sig = 0.230; Nagelkerke R² = 0.166

that for both racial groups, anger in product failure drives action, but it is race grouping that has the greatest influence on the type of action taken. Thus H6 is supported.

Discussion and implications

The findings from this study have implications for researchers interested in CCB in non Western, multi-cultural countries, a point noted in the literature as being under-researched. Findings show Blacks perceived greater loss of hedonic value than Whites concerning their motivation for product failure. Blacks more strongly agreed that their appliances no longer symbolised status nor provided intrinsic hedonic gratification, which confirms that Blacks favour symbols of style and wealth (UCT Unilever Institute of Strategic Marketing, 2007). Blacks also blamed the product manufacturer for utilitarian value failure significantly more than Whites, which contradicts the notion that consumers from a more collectivist cultural orientation are less likely to consider company-related factors as the cause of failure (Laufer, 2002).

Blacks felt a higher external locus of causality and lower control than Whites, which tends to contradict previous research on consumers in more collectivist cultures (e.g. Zourrig *et al.* 2009). However, this finding, may be indicative of the South African middle-class Blacks becoming more individualistic as consumers. Black respondents experienced a significantly higher level of anger regarding product failure than the White respondents, which contradicts the suggestion that individualists are more likely to experience higher intensities of anger following product failures than collectivists (Laufer, 2002). Authors such as Vogt and Laher (2009) also suggest that the process of acculturation and exposure to individualism might cause African Blacks to become trapped in the so-called "modernity trend", causing them to change their traditional cultural orientations to a more

individualistic view of life. One could therefore reason that many South African Blacks who are now integrated in the previously South African "Whites only" economic opportunities are becoming increasingly individualistic, and are therefore experiencing higher levels of ego-focused emotions such as anger following the appraisal and explanation of negative events in their life, for example household appliance failures.

As a result of such appraisals of product failure, we found that contrary to expectations, Black respondents more actively contacted the retailer/manufacture to obtain redress than White respondents. Moreover, Blacks were more likely to boycott the brand name and the retailer, a form of private complaint behaviour probably due to the loss of hedonic value associated with product failure. Therefore, there is evidence that despite their adoption of some individualistic aspects relating to complaint behaviour, Blacks also embraced private complaint actions that are typical of a more collectivist cultural orientation (De Mooij, 2011).

While race had a significant influence on type of action taken, it was not significant in terms of anger. Anger only played a significant role in "deciding to switch to another brand". This finding implies that level of anger determines the decision to take complaint action, but racial group determines the type of action taken. The differences in Black and White respondents' decision to engage in specific types of complaint action can therefore probably be explained in terms of their respective cultural orientations, but with a consideration of the effect of cultural swapping.

The findings also provide practical implications. Retailers should realise that consumers' anger with appliance failures is influenced by their perceptions of locus and controllability. For example, those consumers who believe that retailers could control product failures are likely to experience more anger, than those who believe that retailers could not control product failures. Although retailers cannot ameliorate consumers' controllability perceptions about product failure, they can control their

"redress environment" and service recovery efforts (Donoghue and De Klerk, 2009; Terblanche and Boshoff, 2001, 2003). Although consumers' cognitions for complaint behaviour are not obvious to retailers and manufacturers, organisational strategies should be in place to convince consumers to engage in overt and direct voicing of their dissatisfaction, rather than in covert actions. Since consumers' complaint action can be spurred by anger, explicit policy processes should be developed for staff to deal with possibly angry customers following product failures. Complaint handling strategies where complainants are simply pacified will no longer suffice. Since the emerging Black middle class contributes significantly to South Africa's total consumer spending power and are becoming more and more sophisticated and self-orientated, retailers need to recognise that Black consumers, along with White consumers, are a force to be reckoned with. Our finding imply that retailers and manufacturers should develop complaint handling strategies that address the multicultural diversity of South African consumers to demonstrate an understanding and appreciation of all consumers.

Limitations and future research

There are several limitations in this study but they can be addressed through further research. First, racial groups were differentiated based on the assumption that race can be related to cultural orientation. While discussed as having implications for hypothesised differences between the two consumer groups being studied, the individualistic/collectivistic dimension of culture was not measured. Future researchers may benefit from directly measuring respondents' orientation in terms of the individualistic/collectivistic dimension of culture. In this way, they can examine the mechanism of cultural influence on consumers' cognitions, emotions and complaint behaviours more specifically. Second, the study required that respondents recall an appliance failure to uncover their real life reactions to product failures. Thus, problems associated with memory loss or enhancement could potentially have impacted the findings (Schoefer, 2008). Respondents were asked to rate their own

attributions (i.e. reasons) for the appliance's failure subjectively on an adapted version of Russell's (1982) Causal Dimension Scale, to facilitate the researchers' assessment of the dimensional quality of respondents' causes (attributions). Although Russell's scale has the properties of an acceptable psychometric instrument, the scale might be difficult to apply in the South African context. In particular, consideration is needed as to whether respondents in a third world research context might find it difficult to interpret some of the fairly abstract concepts such as "controllability" and "stability". This issue might explain why respondents in our study were in general, relatively undecided concerning their perceptions of these constructs. Future studies could develop "home-grown" measures that are more suitable to determine consumers' perceptions of causal dimensions concerning product failure in the South African, or other multi-national contexts. Third, in this study, only the emotion of anger was of interest. Future research could include other negative consumption emotions, such as frustration, irritation, and annoyance, to study the link between cognitions (attributions), emotions and complaint behaviours.

Finally, further research could include CCB comparisons of other consumer or organisational groups within the so-called South African "rainbow nation". This focus could benefit researchers and retailers to better understand and manage complaint handling with their diverse cultural market segmentations. South Africa's heterogeneous, multicultural market provides an excellent opportunity to explore differences between various racial groups. The findings of such studies could have implications for other emerging market contexts in multicultural societies where researchers and marketers can more insightfully examine differences in consumers' behaviour based on race.

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Construct	Items		
	Reasons for appliance performance failure:		
Hedonic	 broke down 		
reasons ^a	 did not operate properly 		
reasons	 dud from the start 		
	 inconvenient 		
	 more maintenance 		
Utilitarian	 did not reflect my image 		
reasons ^a	 did not make me feel good 		
	 did not enjoy using the product 		
	 no longer impressed me 		
	 no longer impressed other people 		
Locus ^b	The cause of the product failure:		
	 was due to circumstances or other peoples' action (reflected on the situation 		
	 was inside of me was outside of me 		
	 was something about others (the retailer, manufacturer or someone else) 		
	was something about me		
	(adapted from Russell, 1982)		
Controllability ^b	The cause of the product failure:		
	 was uncontrollable by myself or other people (the retailer, manufacturer o 		
	someone else) was controllable by myself or other people (the retailer		
	manufacturer or someone else)		
	 was unintended by myself or other people (the retailer, manufacturer o 		
	someone else) was intended by myself or other people (the retailer		
	manufacturer or someone else)		
	 was something for which no one is responsible was something for which 		
	someone is responsible (me, the manufacturer or somebody else)		
	(adapted from Russell, 1982)		
Stability ^b	The cause of the product failure:		
	 is temporary is permanent 		
	 is variable over time is stable over time 		
	 is changeable is changing 		
	(adapted from Russell, 1982)		
Anger ^c	How angry were you, following the appliance's faulty or poor performance?		
CCB ^d	Did you:		
	Take action?		
	Tell your friends, family and/or acquaintances about the bad experience?		
	Decide to use another brand name?		
	Stop supporting the retailer where the product was purchased?		
	Did you contact the retailer/manufacturer to obtain redress?		
	 Contact the retailer/manufacturer to complain for other reasons than seeking redress? 		
	 Contact a repair service other than that supplied by the retailer or 		
	manufacturer?		
	 Contacted a consumer protection organisation/department? 		
	 Write letter to the press (newspaper, magazine etc.) or to a consumer complaint website? 		
	 Contact a legal representative? 		

(Day and Landon, 1977)

^aFive-point rating scale, anchored by 'definitely agree' and 'definitely disagree'

^bNine-point rating scale, anchored by 'definitely agree' and 'definitely disagree'

^cFour-point rating scale, anchored by 'not angry at all' and 'extremely angry'

^dNine-point point semantic differential scale where 1 means that the causes for product failure is viewed as

external, stable or controllable and 9 internal, unstable or uncontrollable