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Empirical research

An examination of generalised implicit biases towards 'wanting more' as a proxy measure of materialistic behaviour: A Relational Frame Theory (RFT) perspective

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ABSTRACT

The research investigated the contextual effects of mood on implicit measures of 'wanting more' as a proxy of materialism and investigated the basic verbal processes underpinning this behaviour. Sixty university students were recruited to participate. Participants were exposed to either a positive (n = 21), negative (n = 20) or neutral (n = 19) mood induction procedure; an Implicit Relational Assessment Procedure (IRAP) examining biases towards wanting more or less; and questionnaires assessing life satisfaction (Satisfaction with Life Scale; SWLS), materialism (Material Values Scale; MVS), and positive and negative affect (Positive and Negative Affect Schedule; PANAS). On the IRAP, shorter mean response latencies across consistent (more-good/less-bad) compared to inconsistent (more-bad/less-good) trial-blocks were interpreted as an implicit bias towards 'wanting more'. Compared to the neutral mood condition, participants in the positive mood condition demonstrated an increased bias towards 'wanting less' (p = .028). Several predicted associations were also observed. Measures of negative affect and reduced life satisfaction were significantly associated with an implicit bias towards 'wanting more' (r_s's ranging from − .455 to − .565, p's ranging from .01 to .038), while reduced levels of materialism were significantly correlated with an implicit bias towards wanting less (r_s = .579, p = .006). The findings provide preliminary support for the IRAP as a generalised implicit measure of 'wanting more' as a proxy of materialism; and suggest that changes in mood may influence this effect. Findings are discussed from a Relational Frame Theory (RFT) perspective.

1. Introduction

Materialism is typically defined as a set of values, goals, or expectations concerning the acquisition of wealth and material goods (Kasser & Ryan, 1996). A defining feature of materialistic beliefs is that happiness can be enhanced through an individual's relationship with material objects. As a result of such value systems, a striking trend over the last century has seen the evolution of consumption as a culturally accepted means towards the pursuit of happiness, success, and general well-being (Burroughs & Rindfleisch, 2002). In contrast to such beliefs, the research suggests that a materialistic lifestyle leads to long-term negative consequences for both the individual and society in general (Hurst, Dittmar, Bond, & Kasser, 2013). For instance, materialism is often associated with adverse environmental attitudes and behaviours such as wasting valuable resources (Zhou, Ye, Geng, & Xu, 2015). From an individual perspective, researchers have found that people who are motivated towards the acquisition of material objects demonstrate reduced levels of happiness (Wang, Liu, Jiang, & Song, 2017) and life satisfaction (Roberts, Tsang, & Manolis, 2015), as well as increased levels of depression, anxiety, and substance abuse (Kasser & Ryan, 1993; Muller et al., 2014; Otero-López & Villardefrancos, 2013).

Throughout the literature, a diverse range of influences have been associated with materialism. For example, Larsen, Sirgy, and Wright (1999) propose that acquired materialistic values may originate through a broad range of factors such as social structure, politics, religion, socio-economic status, insecurity, locus of control, and advertising. Of note, advertising has received the most attention and has long been criticized for the progression of materialistic actions (Sirgy et al., 2012). While empirical research does not always support these claims, most researchers agree that advertising increases materialistic behaviour (Belk & Pollay, 1985; Pollay & Mittal, 1993; Yoon, 1995). Of particular interest, Norris and Larsen (2011) examined the more basic concept of 'wanting more'. That is, even when individuals have a certain item (e.g. car), they tend to want another one. Wanting more

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negatively predicted well-being, with materialism identified as a mediator in this relationship. In addition, wanting *more than one has*, and wanting *what one has* were found to be separate behaviours; with wanting *what one has* functioning as a moderator between wanting more and well-being. Consequently, individuals who wanted more tended to be unhappy but only if they also did not want what they had.

Research indicates that contextual factors such as mood and situational cuing can activate a more materialistic outlook with undesirable social and personal consequences (Sirgy et al., 2012). For example, Roberts et al. (2015) observed how the negative association between life satisfaction and materialism was mediated, in part, by increased negative affect. Moreover, the relationship between materialism and negative affect was weaker in individual's high on gratitude, while highly materialistic individuals exhibited reduced life satisfaction when either positive affect or gratitude were low. In this sense, positive affect, negative affect, and gratitude appear to be important factors in the relationship between materialism and life satisfaction. In terms of situational cuing, research has shown that merely observing desirable objects might increase materialistic behaviour, thus leading to increased negative affect and diminished social involvement (Bauer, Wilkie, Kim, and Bodenhausen, 2012). These studies suggest that materialistic attitudes are not only localised in particular individuals, but can also be found in people who are exposed to environmental cues that can trigger such behaviour.

Materialism has traditionally been assessed using explicit measures, with self-report assessments being the most dominant method used (Kilbourne & Pickett, 2008). Although research has demonstrated that these measures have good validity in terms of assessing various aspects of materialism, they may not be the most optimal method for assessing the automatic or implicit processes that are often exhibited in materialistic behaviour (Zhou et al., 2015). These implicit processes, often described as attitudes or beliefs in cognitive psychology, are easily hidden when explicit measures such as questionnaires are employed (De Houwer, 2002). The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) was developed as a tool for assessing implicit processes; and two studies to date have explored materialism using such methods. Zhou et al. (2015) explored implicit materialistic values in a Chinese cohort with a specific focus on environmental behaviours. In contrast to research conducted in Western industrialised countries (Hurst et al., 2013; Kilbourne & Pickett, 2008), they found that implicit materialism had a positive association with proenvironmental behaviours. Of particular interest for the current study, Muñiz-Velázquez, Gomez-Baya, and Lopez-Casquete (2017) utilized the IAT to develop an implicit measure of materialism by investigating the relationship between words related to expensive objects versus eudaimonic actions (i.e. actions that lead to well-being), and words describing positive and negative emotions. Self-report measures of materialism such as the short form of the Materialism Values Scale (MVS; Richins, 2004) were also used. Although implicit and explicit measures of materialism were modestly associated, only self-report measures of materialism were associated with explicit measures of happiness and depression.

Although a variety of factors underlying materialistic values have been accounted for (e.g. Bauer et al., 2012; Roberts et al., 2015), no comprehensive theory of materialism yet exists. Relational Frame Theory (RFT) has been offered as a behaviour-analytic account of language and cognition which may provide a basic functional understanding of materialistic behaviour (for a full review of RFT, see Hayes, Barnes-Holmes, & Roche, 2001). At its core, RFT argues that cognitive, linguistic, and rule-governed processes are instances of a type of operant behaviour known as derived relational responding (Dymond & Roche, 2013; Hayes, Barnes-Holmes, & Roche, 2003). According to this perspective, "relating" is a form of behaviour that involves responding to one stimulus or event in terms of another (Barnes-Holmes & Hughes, 2016). The basic idea is that these contextually controlled behaviours are comprised of largely distinct patterns of relational responses, defined as relational frames (Dymond & Roche, 2013). Several of these relational behaviours have been recognised through coordination, distinction, opposition, comparison, hierarchy, and deictic relations, although this list is not exhaustive (for details, see Barnes-Holmes & Hughes, 2016). For example, stimuli can be comparatively (e.g. "a BMW is better than a Mercedes") and deictically (e.g. "that is how I felt then") related.

According to RFT, a key feature of 'relating' involves arbitrarily and applicable relational responding (AARR). This is a form of relational behaviour that allows for stimuli to be related independently of their physical properties in the absence of any direct instruction. In other words, the relationship is applied arbitrarily (Dymond & Roche, 2013). For instance, imagine a scenario in which an individual was shown three parcels that were identical in size, shape, and colour, but was told that "parcel A was worth more than parcel B, and that parcel B was worth more than parcel C". When given a choice to select any three of these parcels their hand would typically gravitate towards the first option. From an RFT perspective, this example reveals an instance of AARR in which stimuli are arbitrarily related along a comparative dimension (worth) (Barnes-Holmes & Hughes, 2016). RFT argues that this form of relating is an overarching type of operant behaviour that begins early in development through an individual's interactions with the verbal community, and through an appropriate history of multiple exemplar training (Hayes et al., 2001; Rehfeldt & Barnes-Holmes, 2009). That is, an individual is given multiple opportunities to respond in a given context and experience the consequences of that behaviour.

Arbitrary relational responding is defined by three core properties: mutual entailment, combinatorial entailment, and the transformation of stimulus function. Mutual entailment refers to bi-directional relational responding that emerges in the absence of explicit instruction. For instance, if stimulus A is related to stimulus B, then B is related to A. Combinatorial entailment refers to the relations that emerge between two or more mutually entailed stimuli. In other words, if A is related to B, and B is related to C, then A is related to C. Typically, establishing such patterns of relational responding consists of reinforcing a set of relational responses (e.g. A *is less than* B and B *is less than* C) and then testing for derived (i.e. untrained) relations (e.g. A *is less than* C and C *is more than* A). Stimuli are then said to participate in a relational network if the predicted relational responses emerge; in this case, the frame of comparison (Hayes et al., 2001). Finally, transformation of stimulus function refers to how the psychological (or behavioural) functions of one member of a relational network can change the function of other members of the network. That is, given that an aversive function (e.g. fear eliciting) is established for stimulus A (e.g. an actual snake), and then A is related to B (e.g. the spoken word snake), then given appropriate contextual cues, stimulus B will acquire the aversive functions of stimulus A despite never having been directly paired with the actual aversive eliciting stimuli (Dymond & Rehfeldt, 2000).

To illustrate these properties more clearly, consider how materialistic thinking might develop from a consumer based perspective. Take, for example, a person who is looking to acquire a new car. They go into a car dealership and are very impressed with a Mercedes they see. However, someone tells them that an Audi *is better than* a Mercedes. They then hear that a BMW *is better than* an Audi. Consequently, without a Mercedes or BMW ever being directly related, they may now want a BMW more than a Mercedes. In terms of transformation of stimulus function, if a Mercedes functioned as a positive emotive stimulus (e.g. excitement), the BMW may now provide even better positive feelings than the Mercedes. Consequently, if an individual could afford it, they might even purchase both cars, or continue to purchase even more expensive items pursuing the good feelings they received from their original acquisition. Crucially, from an RFT perspective, this behaviour (through multiple exemplars) may generalize into elaborate relational networks where terms such as *more* and *extra* are relationally coordinated with terms such as *good* and *better*, whereby more of anything may appear better. As such, a verbal repertoire may develop