



The benefits of being less fixated on self and stuff: Nonattachment, reduced insecurity, and reduced materialism

Brad Elphinstone*, Richard Whitehead

Swinburne University of Technology, Australia

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ABSTRACT

Materialism has often been considered as a means of attaining a more positive sense of self within a consumer culture. In two undergraduate samples ($N = 248, 183$), the current study assessed the extent to which various forms of insecurity (i.e., low self-esteem, public self-consciousness, relative deprivation, anxious attachment, fear of death) mediate the relationship between the Buddhist construct of nonattachment and materialism. In line with expectations, greater nonattachment was directly associated with reduced materialism in both samples. Nonattachment was also found to be indirectly associated with reduced materialism via reduced public self-consciousness and relative deprivation. Self-esteem, anxious attachment, and fear of death did not mediate the relationship between nonattachment and materialism. The findings therefore indicate that the acceptance and non-contingent sense of self typical of nonattachment may play an important role in minimising the experience or impact of insecurity that can contribute to materialism, as well as minimising the importance placed on material goals.

1. Introduction

Materialism (i.e., the pursuit of material possessions or wealth for reasons associated with status and image; Dittmar, Bond, Hurst, & Kasser, 2014) has been frequently associated with reduced wellbeing (Dittmar et al., 2014; see also Kasser, Ryan, Couchman, & Sheldon, 2004) and environmentally destructive behaviours and cognitions (Hurst, Dittmar, Bond, & Kasser, 2013). An apparent generational increase in psychopathology also appears to coincide with an increase in materialism (Twenge et al., 2010). It is therefore important to identify the underlying reasons why people may place importance on materialistic goals.

Recent research has provided the first indication that higher scores on the Buddhist concept of nonattachment are associated with reduced materialism (Sahdra, Shaver, & Brown, 2010). Nonattachment is about having a reduced tendency to ‘cling to’ or ‘push away’ ideas, objects, relationships, or experiences on the basis that they are considered to be desirable or undesirable (Sahdra et al., 2010; Whitehead, Bates, Elphinstone, Yang, & Murray, 2018). A growing body of literature has shown that nonattachment is associated with greater wellbeing (Ju & Lee, 2015; Sahdra et al., 2010; Sahdra, Ciarrochi, & Parker, 2016; Whitehead, Bates, & Elphinstone, 2018), reduced symptoms of anxiety and depression (Feliu-Soler et al., 2016), increased self-esteem,

empathy, and prosociality (Sahdra, Ciarrochi, Parker, Marshall, & Heaven, 2015), relational harmony (Wang, Wong, & Yeh, 2016), and wisdom, self-actualization, and self-transcendence (Whitehead, Bates, & Elphinstone, 2019). Nonattachment therefore appears to have a range of personal and interpersonal benefits and is worthy of additional research, including in relation to materialism.

To date, the literature has generally focussed on materialism as the culturally-approved means of attempting to boost one's self-worth to escape from negative thoughts or feelings about oneself, or to avoid forms of insecurity (see Donnelly, Ksendzova, Howell, Vohs, & Baumeister, 2016; Kasser et al., 2004; Kasser et al., 2014 for reviews). Materialistic individuals tend to believe that purchasing the ‘right’ items can improve important facets of their lives (e.g., appearance, relationships, life satisfaction; Richins, 2011). Accordingly, greater materialism has been associated with feelings of inadequacy (Christopher, Drummond, Jones, Marek, & Therriault, 2006; Dittmar, Long, & Bond, 2007; Rindfleisch, Burroughs, & Wong, 2009; Zhang & Kim, 2013), feeling deprived in comparison to others (Kim, Callan, Gheorghiu, & Matthews, 2017; Zhang, Tian, Lei, Yu, & Liu, 2015), unhappiness with physical appearance (Guðnadóttir & Garðarsdóttir, 2014), higher levels of public self-consciousness (e.g., Chang & Arkin, 2002; Schroeder & Dugal, 1995; Wong, 1997; Xu, 2008) and low self-esteem (e.g., Chaplin, Hill, & John, 2014; Chaplin & John, 2007;

* Corresponding author at: Faculty of Health, Arts, and Design, Swinburne University of Technology, Mail H80, PO Box 218, Hawthorn, VIC 3122, Australia.
E-mail address: belfhinstone@swin.edu.au (B. Elphinstone).

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Reeves, Baker, & Truluck, 2012). Materialistic individuals also often report a fear of negative evaluation or social disapproval (Christopher & Schlenker, 2004), rejection from peers (Banerjee & Dittmar, 2008), interpersonal insecurity (Clark et al., 2011) and anxious attachment styles (Norris, Lambert, DeWall, & Fincham, 2012; Zhou & Gao, 2008). Being primed to think about one's death (Kasser & Sheldon, 2000; see also Ferraro, Shiv, & Bettman, 2005; Rindfleisch et al., 2009), or graduating during an economic recession (Sheldon & Kasser, 2008) have also been associated with higher levels of materialism. Despite these findings, it is clear that not all people are materialistic or engage in materialistic pursuits in times of insecurity. Indeed, in a sample of Icelandic adults during the global financial crisis, Kasser et al. (2014) found that while some people became more materialistic others became less materialistic.

On the basis of theory and findings reported by Sahdra et al. (2010), nonattachment is expected to not only be associated with reduced materialism, but also with the forms of insecurity that contribute to materialism. According to Buddhist thought, suffering (e.g., negative thoughts, feelings, and emotions) can emerge as a result of our fixation on mental representations, or attachments, of how ourselves or how life should be. This is because one's static fixations may fail to align with the ever-changing nature of reality (Hanh, 1999). For example, imagine a person who defines themselves as being a 'success' or 'attractive' on the basis of a new car they have recently purchased. In this case, one may be attached to the car itself, but also to the idea of what constitutes a successful life and appealing image, with the car being a means of attaining those perceived ideals. However, this individual may also find it difficult to reconcile their self-view in light of the ongoing change that the car will inevitably display, such as faded paint, or if a neighbour buys a more expensive car. Fromm (1976) similarly argued that people who define themselves by what they have (e.g., their job or possessions) may be easily threatened and become defensive in situations where those defining elements of life are at risk of being changed or removed. In other words, as reality changes and deviates from one's ideas about how things are or should be, negative thoughts and feeling can arise.

At a deeper level however, Sahdra et al. (2010) and Whitehead, Bates, and Elphinstone (2018) further explain that the realisations typical of nonattachment – to view life as largely consisting of various, ever-changing mental representations – also apply to one's notion of self. That is, even the notion of 'I' or 'me' is a series of impermanent ideas that change over time in an ongoing interaction with the world. Through this realisation there may be a reduced need to build up or defend one's self or ego, which is simply viewed as a series of changing ideas. As a result, there is a reduced need to fixate on and define oneself by the socially-constructed mental representations of what constitutes an appealing image or a successful life, which in a consumer culture is attained by purchasing certain goods or acquiring a certain level of wealth (Dittmar, 2007; Kasser et al., 2004). Therefore, if nonattachment aids in letting go of the mental representations that correspond with materialism (e.g., wealth, success), and also facilitates the development of a non-contingent sense of self (Sahdra et al., 2010), one may not fixate on the need to look or be a certain way, especially if it accords with the socially-constructed beliefs typical of a consumer culture. In addition, objects may be viewed as mere things that will change over time rather than as immutable, self-defining parts of life.

In addition to reducing the fixation on wealth and material goods as external signifiers of how well one is travelling in life, nonattachment is also expected to potentially reduce the extent to which individuals experience or are affected by the forms of insecurity that contribute to increased materialism (see Donnelly et al., 2016 for a review). For example, if one's sense of self is not contingent on buying goods which infer 'success' or 'attractiveness', this may extend to being less likely to compare oneself to others and feeling inferior. One may also experience fewer positive or negative thoughts or feelings associated with the extent to which socially-constructed goals or images have been obtained. Accordingly, nonattachment has been associated with greater self-

compassion, self-acceptance, non-contingent happiness (Sahdra et al., 2010), and increased self-esteem (Sahdra et al., 2015).

Materialism has also been associated with other forms of insecurity, such as insecurity in relationships (e.g., Banerjee & Dittmar, 2008; Christopher & Schlenker, 2004; Clark et al., 2011; Norris et al., 2012; Zhou & Gao, 2008). Nonattachment may also play a positive role in this area. For example, as described by Sahdra et al. (2010), nonattachment may contribute to a realisation that all things in life will change and the development of self-worth that is not contingent on the continuation of a certain relationship. In line with this, a qualitative study by Whitehead, Bates, and Elphinstone (2018) found that individuals who scored low on nonattachment (i.e., were highly attached) had concerns about relationships changing or ending. Thus, nonattachment may aid in reducing the concerns associated with the possibility of a relationship ending, or the negative feelings that can occur if a relationship does end. It should be noted that nonattachment is not about indifference or a lack of care or concern about others (e.g., Sahdra et al., 2015; Wang et al., 2016; Whitehead, Bates, & Elphinstone, 2018). Rather, people in one's life can be loved and cherished, but with the inherent understanding that these relationships, as with all things, will inevitably end (Sahdra et al., 2010). Supporting this, Sahdra et al. reported that higher levels of nonattachment were associated with lower levels of anxious and avoidant attachment. Sahdra and Shaver (2013) have also highlighted similarities between nonattachment and secure attachment.

Finally, nonattachment may also have a role to play in mitigating other forms of insecurity that have been associated with materialism, such as the fear of death (Kasser & Sheldon, 2000; Rindfleisch et al., 2009). Due to the radical acceptance typical of nonattachment (Sahdra et al., 2010), nonattached individuals may be more capable of accepting the impermanence of life and reality of death, and thus be less likely to experience, or at least be deeply affected by, such forms of existential insecurity. To the authors' knowledge, no study has examined nonattachment and the fear of death. A longitudinal study by Van Gordon et al. (2018) with a sample of experienced Buddhist meditators found that meditation-induced near-death experiences contributed to a greater increase in nonattachment than regular meditative practices. Thus, there are some grounds to expect that nonattachment should be associated with thoughts about death.

The current study therefore aims to extend on the findings of Sahdra et al. (2010) and to add to the literature on the causes of materialism by exploring the unique contribution of nonattachment in conjunction with different forms of insecurity highlighted in the review by Donnelly et al. (2016). In particular, it is hypothesised that nonattachment will be directly associated with reduced materialism. Additionally, due to the compassionate, accepting, non-contingent sense of self typical of nonattachment (Sahdra et al., 2010; Whitehead, Bates, & Elphinstone, 2018), it is expected that higher levels of nonattachment will be associated with greater self-esteem and lower levels of self-consciousness and the tendency to compare oneself to others. Nonattachment is also anticipated to be associated with reduced anxious attachment and fear of death. Thus, it is also expected that nonattachment may also be indirectly associated with reduced materialism via lower levels of these forms of insecurity. The unique contribution of nonattachment and each of these variables in predicting materialism will be explored.

2. Method

2.1. Participants and procedure

Two samples of undergraduate students were obtained. This was due to practical limitations regarding the length of the surveys, and to also provide some evidence of the replicability of findings. The first sample was used to examine forms of personal insecurity whereas the second sample investigated forms of relational and existential insecurity. All respondents were first year undergraduate psychology students at a metropolitan university in Australia who completed an

online survey in exchange for course credit. Students completed the survey at a time and place of their choosing.

The first sample included 42 males and 206 females aged from 18 to 68 ($M = 35.65$, $SD = 9.78$). The majority of the sample identified as Anglo-Australian (84%), followed by Asian-Australian (4%) and a wide range of other ethnic and cultural backgrounds. The second sample comprised 53 males and 130 females aged from 18 to 63 ($M = 31.73$, $SD = 11.19$). The majority of the sample (76%) identified as Anglo-Australian, with the remainder of the sample identifying with a wide range of ethnic and cultural backgrounds.

2.2. Measures

2.2.1. Materialism

Based on the recommendations of Dittmar et al. (2014) and the procedure of Kasser et al. (2014), the Aspiration Index (Grouzet et al., 2005) was used to assess materialism. Both samples responded to 15 items assessing the importance of intrinsic aspirations, such as affiliation with others (e.g., “I will assist people who need it, asking nothing in return”), community, and self-acceptance. Twelve items addressed the perceived importance of extrinsic aspirations regarding one's image (e.g., “My image will be one others find appealing”), popularity, and wealth. Each item was assessed on a nine-point scale (1 = Not at all important, 9 = Extremely important). In accordance with the procedure of Sheldon and McGregor (2000) an overall score was created by subtracting the mean of the intrinsic aspirations items from the mean extrinsic aspirations score. Higher scores indicate a greater relative importance of extrinsic than intrinsic aspirations.

2.2.2. Nonattachment

In both samples nonattachment was assessed using a seven-item short-form (Elphinstone, Sahdra, & Ciarrochi, 2015; see also Sahdra et al., 2016) of the original 30-item nonattachment scale (Sahdra et al., 2010). Each item (e.g., “I can enjoy pleasant experiences without needing them to last forever”) is measured on a six-point scale (1 = Disagree Strongly; 6 = Agree Strongly). The unidimensional factor structure of the seven-item measure has been supported, as well as being shown to be valid and reliable, and that it performs similarly to the original 30-item measure developed by Sahdra et al. (2010) (see Feliu-Soler et al., 2016). Further studies have also shown the seven-item measure to be unidimensional, reliable, valid, and distinct to mindfulness (Sahdra et al., 2016; see also (Whitehead, Bates, & Elphinstone, 2018; Whitehead et al., 2019).

2.2.3. Self-esteem

As low self-esteem has frequently been associated with increased materialism (Donnelly et al., 2016), the Rosenberg (1989) self-esteem scale was used in both samples. The measure includes 10 items (e.g., “I take a positive attitude towards myself”) measured on a four-point scale (1 = Strongly Disagree, 4 = Strongly Agree).

2.3. Measures of insecurity in each sample

2.3.1. Sample 1

The review by Donnelly et al. (2016) indicated that negative social comparisons, feelings of inadequacy, and aversive self-awareness contribute to greater materialism. While a range of measures could be included to investigate these areas, increased materialism has been robustly associated with relative deprivation (Kim et al., 2017; Zhang et al., 2015) and public self-consciousness (e.g., Chang & Arkin, 2002; Schroeder & Dugal, 1995; Wong, 1997; Xu, 2008). To assess these constructs the five-item (e.g., “I feel deprived when I think about what I have compared to what other people like me have”) Personal Relative Deprivation Scale (Callan, Shead, & Olson, 2011) was used. Each item is measured on a six-point scale (1 = Strongly Disagree, 6 = Strongly Agree). A seven-item measure developed by Fenigstein, Scheier, and

Buss (1975) that assesses public self-consciousness (e.g., “I usually worry about making a good impression”) on a five-point scale (1 = Extremely uncharacteristic, 5 = Extremely characteristic) was also included.

2.3.2. Sample 2

Measures were included to examine the fear of death (e.g., Kasser & Sheldon, 2000; Rindfleisch et al., 2009) and also interpersonal insecurity (e.g., Clark et al., 2011; Norris et al., 2012; Zhou & Gao, 2008) which have also been associated with increased materialism. To assess one's fear of death, a six-item measure (e.g., “Thinking about my death makes me feel afraid”; Wittkowski, 2001) was included. Each item is assessed on a four-point scale (1 = Strongly Disagree, 4 = Strongly Agree). A measure of anxious attachment developed by Wei, Russell, Mallinckrodt, and Vogel (2007) which comprises six items (e.g., I worry that romantic partners won't care about me as much as I care about them; 1 = Strongly Disagree, 7 = Strongly Agree) was also used.

2.4. Data analysis plan

In addition to the aforementioned measures, age was included as a covariate in the following mediation analyses. Materialism appears to decline with age in Western samples (Elphinstone & Critchley, 2016; Kasser & Ryan, 1993, 1996; Unanue, Dittmar, Vignoles, & Vansteenkiste, 2014; see also Dittmar et al., 2014) whereas non-attachment appears to increase with age (Sahdra et al., 2010, 2016; Whitehead et al., 2019).

Gender was also considered as a possible covariate. The meta-analysis by Dittmar et al. (2014) found that relationships between materialism and reduced wellbeing were stronger in samples with a greater proportion of females. A meta-analysis by Maraz, Griffiths, and Demetrovics (2016) also found that compulsive buying tends to be more prevalent in females than males. In contrast, Sahdra et al. (2010) reported no gender difference on nonattachment. In preliminary analyses in both samples using a dummy variable for gender (i.e., 1 = male, 2 = female), gender was not significantly correlated with any variable. *t*-tests to compare males and females also indicated that there were no significant differences. Gender was therefore excluded from further analyses.

Prior to running the analyses, each sample was examined for outliers. In Sample 1 one univariate outlier on relative deprivation ($z = 3.52$) and two outliers on each of nonattachment ($z = -3.68$) and age ($z = 3.31$) were identified and removed. In Sample 2, only one univariate outlier on materialism ($z = 4.90$) was identified and removed. No multivariate outliers were detected in either sample. Scores on each variable were converted to *z*-scores prior to the regression analyses in order to generate standardised regression coefficients.

3. Results

3.1. Sample 1

As shown in Table 1, each measure was adequately reliable in the current study. Correlations between all items indicated that higher scores on materialism were associated with lower scores on non-attachment and self-esteem, and higher scores on relative deprivation and public self-consciousness. Higher scores on nonattachment were associated with higher self-esteem and lower levels of public self-consciousness and relative deprivation. Increased age was associated with reduced materialism and public self-consciousness, and higher scores on nonattachment and self-esteem.

The results of a mediation analysis are shown in Fig. 1. Based on 10,000 bootstrapped resamples, higher levels of nonattachment were found to be directly associated with reduced materialism, anxious attachment, and fear of death, and increased self-esteem. Public self-consciousness and relative deprivation, but not self-esteem, were

Table 1
Descriptive statistics, Cronbach's alpha coefficients, and correlations for all variables in Sample 1.

	M(SD)	α	1	2	3	4	6	7
1. Materialism	-2.58 (1.35)	0.90	-					
2. Nonattachment	5.34 (0.87)	0.80	-0.28***	-				
3. Public self-consciousness	3.28 (0.77)	0.77	0.28***	-0.37***	-			
4. Relative deprivation	2.95 (1.10)	0.82	0.23**	-0.37***	0.27***	-		
6. Self-esteem	2.97 (0.54)	0.89	-0.18**	0.60***	-0.44***	-0.40***	-	
7. Age	35.40 (9.38)	-	-0.18**	0.27***	-0.20**	-0.03	0.28***	-

Note.
 ** $p < .01$.
 *** $p < .001$.

directly associated with greater materialism. The significance of the indirect effects is determined if the upper and lower bound of the 95% Confidence Interval (CI) does not include zero ($p < .05$). Nonattachment was therefore indirectly associated with reduced materialism due to the mediating influence of reduced public self-consciousness (CI = -0.12, -0.02) and relative deprivation (CI = -0.11, -0.01). Increased age, which was entered as a covariate, was only significantly associated with greater self-esteem, $\beta = 0.12, p = .02$.

3.2. Sample 2

As shown in Table 2, higher scores on materialism were associated with lower levels of nonattachment and self-esteem, and increased anxious attachment and fear of death. Higher scores on nonattachment were associated with greater self-esteem and lower scores on both forms of insecurity. Older respondents reported lower scores on materialism, increased nonattachment and self-esteem, as well as reduced anxious attachment and fear of death. Each measure was highly reliable.

The results of the mediation analysis (see Fig. 2) indicated that higher scores on nonattachment were significantly and directly associated with greater self-esteem and reduced fear of death and anxious attachment. Importantly, nonattachment was again directly associated with lower scores on materialism. However, despite the initial significant correlations (see Table 2), with the inclusion of nonattachment and the other variables in the model, anxious attachment, fear of death, and self-esteem were not significantly associated with materialism. Thus, there were no significant indirect effects from nonattachment to materialism. Results for the covariate of age indicated that older respondents reported lower levels of anxious attachment ($\beta = -0.15, p = .04$), fear of death ($\beta = -0.19, p = .02$), and materialism ($\beta = -0.18, p = .01$).

4. Discussion

The current study provided the first investigation of nonattachment in relation to materialism after accounting for various forms of insecurity. In both samples higher levels of nonattachment were directly associated with reduced materialism, in accordance with the findings of Sahdra et al. (2010). The relationship between greater nonattachment and increased self-esteem in both samples also supports the findings of Sahdra et al. (2015). The results in the second sample also provided additional evidence that nonattachment is associated with lower levels of anxious attachment (Sahdra et al., 2010; see also Sahdra & Shaver, 2013). The current study was also the first to show that nonattachment appears to be associated with reduced public self-consciousness, relative deprivation, and fear of death. The findings of the current study therefore add to the extant literature on nonattachment by further showing the apparent wide-ranging benefits of nonattachment. As explained next, the findings also add to the literature on the potential causes of materialism through suggesting that nonattachment, rather than self-esteem, insecurity, or age may play a large role in predicting levels of materialism.

The results in Sample 1 indicated that while nonattachment was directly associated with reduced materialism, greater public self-consciousness was the largest predictor of increased materialism. This supports previous findings that have implicated self-consciousness in the development of materialism (Chang & Arkin, 2002; Schroeder & Dugal, 1995; Wong, 1997; Xu, 2008). In accordance with the findings of Kim et al. (2017) and Zhang et al. (2015), perceptions of relative deprivation were also associated with greater materialism in Sample 1. Both forms of insecurity partially mediated the relationship between nonattachment and reduced materialism. The results therefore suggest that nonattachment may mitigate the experience or the impact of these forms of insecurity which indirectly contributes to reduced materialism. This is in addition to the direct relationship between nonattachment and reduced materialism. The results for self-esteem in both samples,

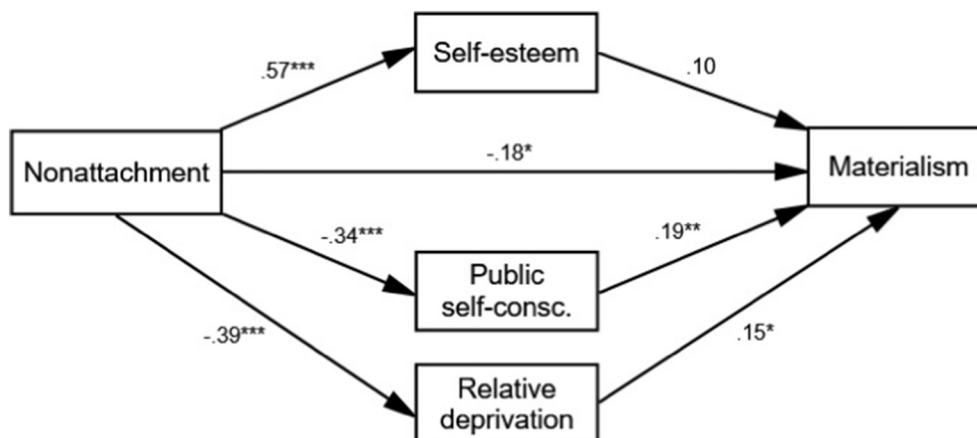


Fig. 1. Mediation model in Sample 1. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2
Descriptive statistics, Cronbach's alpha coefficients, and correlations for all variables in Sample 2.

	M(SD)	α	1	2	3	4	5	6
1. Materialism	−1.80 (0.82)	0.89	(0.89)					
2. Nonattachment	5.12 (1.00)	0.85	−0.37***	(0.85)				
3. Anxious attachment	3.63 (1.33)	0.83	0.22**	−0.38***	(0.83)			
4. Fear of death	3.04 (0.80)	0.94	0.24**	−0.26***	0.19*	(0.94)		
5. Self-esteem	2.15 (0.62)	0.92	−0.28***	0.62***	−0.50***	0.20**	(0.92)	
6. Age	31.63 (11.14)	–	−0.32**	0.35***	−0.26***	−0.25**	0.30***	–

Note.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

and for anxious attachment and fear of death in Sample 2, further suggested that nonattachment may have an important role in predicting materialism.

In support of previous findings, anxious attachment (Norris et al., 2012; Zhou & Gao, 2008) and fear of death (e.g., Ferraro et al., 2005; Kasser & Sheldon, 2000; Rindfleisch et al., 2009) were initially significantly correlated with greater materialism in Sample 2. However, both forms of insecurity were not significantly associated with materialism when included with nonattachment in the mediation analysis. Thus, nonattachment rather than anxious attachment or the fear of death uniquely accounted for variance in reduced materialism. Similarly, in both samples, while reduced self-esteem was correlated with greater materialism which accords with previous findings (e.g., Chaplin et al., 2014; Chaplin & John, 2007; Reeves et al., 2012), self-esteem did not significantly contribute to materialism with the inclusion of nonattachment and the two other forms of insecurity in both mediation models. Therefore, while further longitudinal or experimental research is required, the results suggest that in contrast to previous findings (see also Donnelly et al., 2016 for a review), it may not be that low self-esteem, anxious attachment, or the fear of death per se contribute to materialism, but that they arise from an approach to life that emphasises a fixation on mental representations of life (i.e., low nonattachment).

Similarly, while increased age was significantly correlated with reduced materialism in both samples (e.g., Kasser & Ryan, 1993, 1996; Unanue et al., 2014), in the mediation analyses age was only significantly associated with reduced materialism in Sample 2. Increased age was also significantly correlated with greater nonattachment in both samples. This aligns with the findings of Sahdra et al. (2010) who suggest that nonattachment may increase throughout the lifespan due to experiences such as the birth of a child or the death of a loved one. Grouzet (2013) correspondingly posits that major life events may act as

a catalyst that reduces one's focus on materialistic goals. Additionally, self-esteem, which was also found to be associated with nonattachment in both samples, tends to increase from late adolescence throughout adulthood, peaking between the ages of 60 and 69 before declining in old age (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Future studies could therefore consider investigating whether changes in materialism and self-esteem over time could be due to changes in levels of nonattachment.

Such research could benefit from also considering the means through which nonattachment may have developed in a person's life. On the basis of findings reported by Feliu-Soler et al. (2016) and Sahdra et al. (2010), meditation appears to be a means through which nonattachment can be developed. A qualitative investigation (Whitehead et al., 2019) suggested that traumatic or difficult life events may be the catalyst for cultivating a more nonattached approach to life, which is more fully realised through engaging in a self-reflective practice (e.g., psychotherapy, engaging with Buddhist texts, meditation). Considering the diversity in life experiences and underlying perspectives that these various paths to nonattachment may involve, future research could consider the extent to which individual-level differences and traits moderate or interact with life experiences and self-reflective practices throughout the process of developing nonattachment.

In addition to observing changes in nonattachment over time, future research could also examine whether interventions that increase levels of nonattachment also lead to subsequent reductions in feelings of insecurity and also materialism. For example, it has been reported that nonattachment has increased over the duration of a month-long meditation retreat (Montero-Marin et al., 2016). An eight-week meditation and mindfulness-based training program has also shown increases in nonattachment that are sustained for weeks after the cessation of the program (Van Gordon, Shonin, Dunn, Garcia-Campayo, & Griffiths, 2017; Van Gordon, Shonin, & Griffiths, 2016). On the basis of the

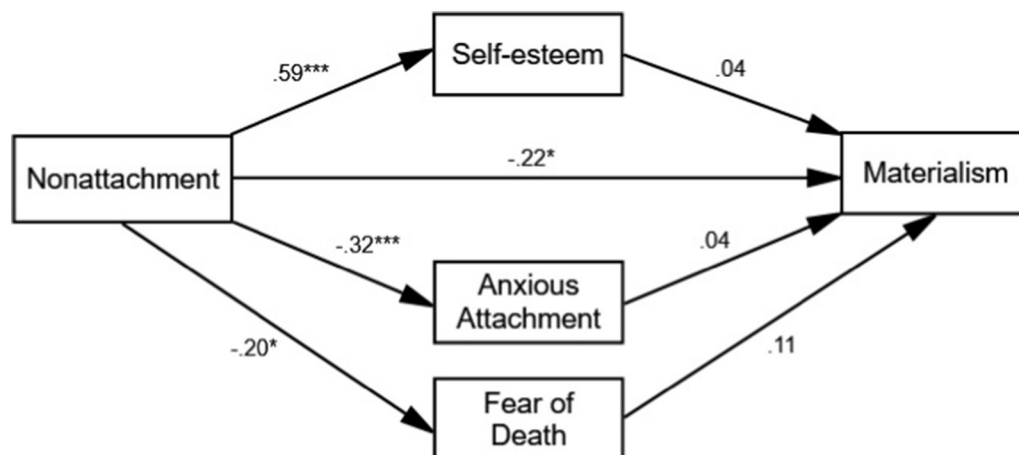


Fig. 2. Mediation model in Sample 2. * $p < .05$, ** $p < .01$, *** $p < .001$.

current findings, by having the ability to ‘let go’ of mental fixations and instead view life and oneself in a way that embraces the impermanence of all things, individuals may have a greater ability to avoid, or at least minimise, the effects of insecurity in life. In accordance with the direct relationships between nonattachment and materialism in the current study, this process may also involve a questioning and letting go of the socially-created ideas and values around the need to attain wealth or an appealing image to show that one is living well.

While the current findings suggest that nonattachment may have an important role to play in reducing insecurity and materialism, the findings are not without limitations. In addition to the cross-sectional nature of the study which limits conclusions regarding causality, the use of predominantly female, Anglo-Australian undergraduate psychology student samples limits the generalisability of the findings. However, a wide variation in levels of nonattachment has been reported within undergraduate samples (e.g., Whitehead, Bates, & Elphinstone, 2018). Additionally, nonattachment has been associated with increased wellbeing in undergraduate samples (Sahdra et al., 2010; Whitehead, Bates, & Elphinstone, 2018) a large, nationally representative US sample (Sahdra et al., 2016), as well as samples in Spain (Feliu-Soler et al., 2016) and China (Wang et al., 2016). Further, the relationship between greater materialism and reduced wellbeing appears to stand across cultures, and the magnitude of this relationship does not appear to differ between university and general community samples (Dittmar et al., 2014).

As a further potential limitation, it may instead be the case that individuals who come from secure backgrounds are more nonattached and encounter less insecurity as a result of their upbringing and position in life. While there is currently little research regarding nonattachment in this area, Sahdra and Shaver (2013) have identified theoretical links between nonattachment and secure attachment. Further research in more diverse samples may help to address this issue. Additionally, the current study did not assess all of the forms of insecurity identified by Donnelly et al. (2016) as potential contributors to increased materialism. Despite these concerns, on the basis of the significant direct relationships between nonattachment and materialism in both studies, nonattachment appears to have a unique role regarding the fixation on socially-created views of what constitutes success, popularity, and having an appealing image in a consumer culture.

In conclusion, the current study provided the first evidence of the relationship between nonattachment and materialism inclusive of the various forms of insecurity that have been argued to contribute towards greater levels of materialism (e.g., Donnelly et al., 2016; Kasser et al., 2004). Greater nonattachment was directly associated with reduced materialism in both samples, and also indirectly associated with reduced materialism via lower levels of relative deprivation and public self-consciousness in Sample 1. The current study also provided the first evidence that nonattachment is associated with a reduced fear of death. Future research which aims to address the causes of materialism, as well as changes over time or ways in which materialism could be reduced, may therefore benefit by considering nonattachment.

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