

Materialistic values and well-being in business students

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Abstract

We explored whether values focused on money, image, and popularity are associated with lowered well-being, even in environmental circumstances supportive of such values. To this end, we administered three widely used measures of a materialistic value orientation to 92 business students in Singapore. As expected, those students who had strongly internalized materialistic values also reported lowered self-actualization, vitality and happiness, as well as increased anxiety, physical symptomatology, and unhappiness. Results are consistent with past research suggesting that some types of values may be unhealthy. Copyright © 2002 John Wiley & Sons, Ltd.

Based on self-determination theory (Deci & Ryan, 1985, 1991), as well as humanistic and existential theorizing (Fromm, 1976; Maslow, 1954; Rogers, 1961), Kasser and Ryan (1996) suggested that goals and values include two types: intrinsic and extrinsic. *Intrinsic* values for self-acceptance, affiliation, and community feeling are proposed to lead people to engage in experiences which are likely to satisfy their psychological needs and thus benefit their well-being. In contrast, individuals primarily concerned with other-based, *extrinsic* values for material success, fame, and image experience decrements in their quality of life as a result of frequent experiences which detract from their need satisfaction (see Kasser, in press). Substantial research has thus far supported the claim about the differential worth of intrinsic and extrinsic values. For example, extrinsically oriented teenagers, college students, and adults report lower self-actualization and vitality, fewer experiences of positive affect, and more depression, anxiety, narcissism and substance problems (Kasser & Ryan, 1993, 1996, 2001; Sheldon & Kasser, 1995, 1998; Williams, Cox, Hedberg, & Deci, 2000), while the opposite is the case for individuals strongly focused on intrinsic concerns. Further, these results have been replicated in Russia (Ryan, Chirkov, Little, Sheldon, Timoshina, & Deci, 1999), Germany (Schmuck, Kasser, & Ryan, 2000), and South Korea (Kim, Kasser, & Lee, 'self-concept, aspirations, and well-being in South Korea and the United States', submitted, 2001). In addition, other psychologists (Cohen & Cohen, 1996) and consumer researchers (Belk, 1984; Richins & Dawson, 1992; Sirgy, 1998) have also demonstrated that individuals highly focused on materialistic aims have lower life satisfaction and happiness.

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While Kasser (in press) argues that the negative associations between materialistic values and well-being are primarily due to poor satisfaction of inherent psychological needs for security, esteem, connectedness, and authenticity, others (e.g., Oishi *et al.*, 1999) have suggested that the results may be due to low goal attainment. That is, perhaps people with strong materialistic values have low well-being because they have failed to be successful in their pursuits. Although one study does suggest that materialism is particularly painful for the poor and less educated (La Barbera & Gurhan, 1997), several pieces of evidence argue that successful pursuit of materialistic goals brings little in the way of well-being enhancement. Past research shows that: (a) strong materialistic values remain negatively related to well-being in samples of adults with greater financial resources (Kasser & Ryan, 1996); (b) relatively high expectations of success for materialistic values are associated with lower well-being (Kasser & Ryan, 1993, 1996); (c) relatively high reported attainment of materialistic aspirations is not associated with higher well-being (Kasser & Ryan, 2001; Ryan *et al.*, 1999; Sheldon & Kasser, 1998); and (d) people's well-being does not improve as their wealth increases (Brickman, Coates, & Janoff-Bulman, 1978; Diener, Sandvik, Seidlitz, & Diener, 1993). All these results thus suggest that materialistic ambitions, even when successfully pursued, are relatively empty in terms of potential well-being benefits.

Sagiv and Schwartz (2000) recently offered another alternative explanation of the negative associations between materialism and well-being, namely that the relationship of values to well-being depends upon the match between values and environmental supports. That is, if an environment provides opportunities to meet the goals embodied in one's values, and provides support and reinforcement for the importance of such values, then holding environmentally congruent values should be positively associated with well-being, regardless of the content of the value or goal. To test this idea, Sagiv and Schwartz compared 40 business students to 42 psychology students, reasoning that these collegiate subcultures each supported opposing sets of values. Specifically, power and achievement values were predicted to be congruent with the environments encountered by individuals while pursuing a business degree, and thus could improve well-being for business students. However, benevolence and universalism values, which are less supported in a business school environment, should be negatively related to SWB among those students. In contrast, psychology departments attempt to socialize students into being care givers while respecting the autonomy of their clients. As such, these environments support values of benevolence and universalism while rejecting values of achievement and power, and thus the former set of values should relate positively to well-being in such majors.

Sagiv and Schwartz's (2000) results showed that indeed, power values were generally associated with higher SWB among business students, but lower SWB among psychology students, and achievement values were positively related to SWB among the business students, but neutral among the psychology students (Sagiv and Schwartz, 2000, Table 4). Results for benevolence and universalism were generally non-significant, however universalism did have a significant negative correlation ($r = -0.35$) with the Trier Personality Inventory among business students. Sagiv and Schwartz (2000) suggested that their results with the business students are inconsistent with Kasser and Ryan's (1996) claims that materialistic values are unhealthy.

THE PRESENT STUDY

The current study investigates the relationships between extrinsic, materialistic values and well-being in a sample of business students in Singapore. Studying Singaporean business students not only allowed us to examine whether previous results are due to sampling primarily Western individuals, as suggested by Sagiv and Schwartz (though see Kim *et al.*, 2001), but also presented an excellent test of

the environmental congruence hypothesis. That is, not only were our subjects in a business school environment which should encourage materialistic values, they also exist in a national culture which emphasizes public face (Wong & Ahuvia, 1998) and bestows that social honor almost exclusively for material success (Clammer, 1985; David, 1994; Lau & Kuan, 1988; Murray & Perera, 1996; Quah, 1991). Lee Kuan Yew's People's Action Party (PAP) has maintained a highly restrictive state and conformist culture (Clammer, 1985; David, 1994; Lee, 1990) which channels most social differentiations into status differences based on wealth. The Singaporean government even goes so far as to commonly refer to the country as '*Singapore Inc.*' using this as a term of praise. Thus, if the relationship of values to well-being depends on values' congruence with one's social environment, materialistic values should relate to higher well-being in Singaporean business students.

We also tried to improve on Sagiv and Schwartz's (2000) study in three ways. First, we conducted our analyses on a somewhat larger sample of business students (92 versus 40). Second, we examined a somewhat larger array of measures of well-being. Finally, and we believe most crucially, we used questionnaires which more accurately measure the types of values we think are generally unhealthy. One weakness of Sagiv and Schwartz's study is that they did not specifically measure extrinsic, materialistic values, at least as we have conceptualized them. Instead, they measured 'power' values, which they see as roughly comparable to extrinsic, materialistic values. But their measure of power values fails to capture the whole range of what Kasser and Ryan (1996) and others have conceptualized as extrinsic, materialistic values. That is, Sagiv and Schwartz include only one item relevant to making money (i.e. Wealth), and did not measure issues of image, possessions, popularity, etc. We corrected for this in the present study by administering Kasser and Ryan's (2001) Aspiration Index, as well as two widely used measures of materialism (Ger & Belk, 1996; Richins & Dawson, 1992) from the consumer research literature. We believe that such a measurement strategy provides the most accurate test of the hypotheses about values that we have been developing. Our hypotheses followed in line with our previous work, such that we expected that business students strongly focused on extrinsic, materialistic aims would also report lower levels of subjective well-being.

Although the primary focus of the study was to investigate relationships of well-being with materialistic values, we also explored two other predictors of well-being in these business students. First, we investigated the relationships of intrinsic values for self-acceptance, affiliation, and community feeling to well-being. Sagiv and Schwartz's (2000) results suggest a negative relationship should occur in business students, but our past work and theorizing would predict a positive correlation between the importance placed on such goals and measures of well-being. Second, we examined how ratings of the relative likelihood of attainment of materialistic values would relate to well-being. A standard goal attainment perspective would suggest that relatively high expectations for the attainment of materialistic values would be associated with greater well-being; the environmental congruence hypothesis propounded by Sagiv and Schwartz would seemingly agree with the goal attainment perspective on this point. Our past results, however, suggest that when individuals' expectations of material success are relatively high in comparison to other goals, lower well-being is generally reported.

METHODS

Subjects

One hundred and eight students taking a marketing class at the National University of Singapore Business School completed the survey packet. Of these, 16 either failed to report their major or

reported majors that were clearly not business, leaving our total sample at 92. The most frequent majors mentioned were marketing ($n = 39$) and finance ($n = 25$). Twenty six of the subjects were male and 66 were female. Regarding ethnicity, 86 of the subjects were Chinese, and three each were Malay and Indian. The mean age of the sample was 21.1 years ($SD = 1.53$), with a range of 19 to 30 years. Because instruction at the University of Singapore is in English, all of the following surveys were administered in this language.

Measures

Materialistic Values

Three measures of the importance of materialistic values were assessed in the sample. First, all subjects filled out a 57-item version of the Aspiration Index (Kasser & Ryan, 2001). Subjects were presented with a variety of goals they may have for the future and asked to rate 'how important each goal is to you' on a 1 (Extremely important) to 5 (No importance at all) scale. Aspiration items were drawn from 11 domains of life: self-acceptance, affiliation, community feeling, physical fitness, hedonism, security/safety, spirituality, conformity, financial success, popularity, and image. Sample items from the three extrinsic domains of financial success, image, and popularity are 'I will have many expensive possessions', 'My image will be one others find appealing', and 'I will be admired by many people', respectively. We obtained an extrinsic value orientation score by computing individual subscale scores for the 11 domains and then subtracting the importance a subject placed on all aspirations, regardless of content, from the importance that individual placed on the three extrinsic domains. This provides a measure of the relative centrality (Rokeach, 1973) of extrinsic values to each person's value system, with high scores reflecting increased materialism.

Participants also completed two widely used measures of materialism developed by consumer researchers. First, participants responded on a 5-point, Likert-type scale to the 18 items composing Richins and Dawson's (1992) materialism scale. Two sample items include 'The things I own say a lot about how well I'm doing in life' and 'I like a lot of luxury in my life'. Second, participants completed 21 items of Ger and Belk's (1996) measure of materialism, which is a more trait-like measure of materialistic attitudes and beliefs. They again used a 5-point, Likert scale. Two sample items from this scale include 'When friends have things I cannot afford, it bothers me' and 'I get very upset if something is stolen from me, even if it has little monetary value'. Although both of these scales provide subscale measures, in the present study we focused only on the summary scores resulting from these indices. Both scales have demonstrated substantial past validity and reliability in a variety of studies, and high scores indicate greater materialism.

In order to examine the associations of these three materialism measures, we ran zero-order correlations between them. Extrinsic values from the Aspiration Index were significantly associated with both Ger and Belk's ($r = 0.44$, $p < 0.01$) and Richins and Dawson's measures of materialism ($r = 0.52$, $p < 0.01$), and the latter two measures were also significantly correlated with each other ($r = 0.26$, $p < 0.02$). The differences in the sizes of these correlations may be due to the fact that both the Aspiration Index and Richins and Dawson's scale emphasize the cognitive values associated with materialism, whereas Ger and Belk's scale places more emphasis on materialistic emotional reactions (Ahuvia and Wong, 'cognitive and affective antecedents of materialism: Implications for the development of materialism as a political orientation', in preparation, 2000). Despite this difference in emphasis, we can be confident that the three measures each tap some element of an extrinsic, materialistic value orientation, as a higher-order factor analysis of the three scores yielded one factor (Eigenvalue = 1.82) accounting for 60.7% of the variance. All three materialism variables loaded

above 0.70 on this factor. In addition to using scores from each of the three scales, we therefore also computed a summary *Materialism* score by standardizing and then averaging scores from the Aspiration Index, Ger and Belk's, and Richins and Dawson's measures.

Materialistic Expectations

When completing the Aspiration Index, all participants were also asked to rate 'what you believe the chances are that you will attain' each goal on a 1 (very high chance) to 5 (very low chance) scale. As above, we computed subscale likelihood scores for the 11 domains. To obtain a measure of the relative expected likelihood of success for materialistic values, we averaged the three relevant domains (e.g. financial success, image, and popularity) and subtracted the average expectations of success from all 11 domains (i.e. how much a participant expected to attain his or her goals, regardless of content). No parallel expectation measures could be derived from the Ger and Belk (1996) or Richins and Dawson (1992) scales.

Intrinsic Values

We also computed three scores reflecting the relative importance participants placed on the three intrinsic values we have identified in past research, namely self-acceptance/personal growth (e.g. 'I will follow my interests and curiosity were they take me'), affiliation (e.g. 'I will express my love for special people') and community feeling (e.g. 'I will help the world become a better place'). As with extrinsic values, we computed subscale scores for each of these three values, then subtracted the importance placed on all values (regardless of content) from the importance placed on these three particular values.

Well-being

In order to assess participants' quality of life, we administered several measures of both positive well-being and psychological distress. Subjects completed the widely used Jones and Crandall (1986) 15-item measure of self-actualization, the Ryan and Frederick (1997) 7-item measure of vitality, a 6-item measure of anxiety taken from the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), and a 9-item measure of physical health problems adapted from Emmons (1991). Additionally, subjects completed the Fordyce (1988) happiness measure, on which they report on an 11-point scale their general feelings of happiness, as well as estimate the percentage of their daily lives they are happy, unhappy, and neutral. We used the first three measures of well-being from Fordyce, having made no predictions about materialistic values and feelings of neutrality.

RESULTS

Table 1 reports the correlations between the four materialism scores and the seven well-being variables. As can be seen, the summary materialism measure was significantly correlated with all but one of the well-being variables, and in each case, in the direction predicted by our theory. Specifically, materialistic business students also reported lower self-actualization, vitality, and general happiness, and higher anxiety, physical symptoms and time spent unhappy.

Similar correlations were detected for the three specific materialism measures. Extrinsic values on the Aspiration Index were negatively correlated with self-actualization and vitality, and were

Table 1. Pearson's correlations between extrinsic, materialistic values and personal well-being in Singaporean business students

	Indexes of well-being						
	Self-actualization	Vitality	Anxiety	Physical symptoms	General happiness	Time happy	Time unhappy
Total mat.	-0.28**	-0.25*	0.27**	0.25*	-0.24*	-0.15	0.22*
Aspiration	-0.26*	-0.23*	0.22*	0.19+	-0.13	-0.08	0.16
Belk	-0.18+	-0.22*	0.22*	0.20+	-0.26*	-0.22*	0.18+
Richins	-0.22*	-0.13	0.19+	0.20+	-0.16	-0.05	0.17

Note: ** = $p < 0.01$; * = $p < 0.05$; + = $p < 0.10$.

positively correlated with anxiety and physical symptoms, the last marginally so. Scores on Belk's measure of materialism were related to significantly more anxiety, and significantly less happiness and vitality, as well as marginally less self-actualization and marginally more physical symptoms and unhappiness. Finally, scores on Richins and Dawson's measure were significantly negatively correlated with self-actualization and marginally positively correlated with anxiety and physical symptoms.

Next, we turned to correlations between the participants' well-being and their relative expected likelihood of success for materialistic aspirations. Consistent with our past findings (Kasser & Ryan, 1993, 1996), relatively high materialistic expectations were associated with lower well-being. Specifically, business students who expected that they would succeed at materialistic ambitions, in comparison to other goals, also reported being unhappy significantly more of the time ($r = 0.22$, $p < 0.05$) and feeling marginally greater anxiety ($r = 0.19$, $p < 0.10$).

Finally, we examined the associations between well-being and the relative importance placed on the three intrinsic values. A strong relative focus on self-acceptance aspirations related to greater vitality ($r = 0.29$, $p < 0.01$). Students who rated affiliation aspirations as relatively important reported more self-actualization ($r = 0.27$, $p < 0.05$) and marginally less physical symptomatology ($r = -0.18$, $p < 0.10$). Finally, high community feeling aspirations related to greater happiness ($r = 0.26$, $p < 0.05$), less time unhappy ($r = -0.27$, $p < 0.01$), and marginally more time happy ($r = 0.18$, $p < 0.10$). In sum, all correlations were consistent with past findings suggesting that a focus on intrinsic values is associated with greater, not lower well-being, even in business students.

DISCUSSION

This analysis of 92 Singaporean business students demonstrated that, even though their educational and cultural environment encourages the worth and value of materialistic pursuits, individuals who strongly internalize such messages suffer from lower well-being and greater distress. Specifically, we found that students who believed that money, possessions, image, and popularity are of large importance also reported lessened self-actualization, vitality and happiness, and more anxiety, physical symptoms, and unhappiness. These results are quite consistent with past work on materialism (e.g. Ahuvia & Wong, 1995; Belk, 1985; Kasser & Ryan, 1993, 1996, 2001; Richins & Dawson, 1992; Sirgy, 1998). However, they are inconsistent with the conclusions drawn by Sagiv and Schwartz (2000) on the basis of their findings that power values for social dominance and control are associated with greater well-being and life satisfaction in business students.

There are obviously several methodological differences between the current study and that of Sagiv and Schwartz (2000) which might account for these results. First, samples were of different relative

sizes and drawn from different nations; we believe, however, that our study is a somewhat stronger test of Sagiv and Schwartz's environmental congruence hypothesis because our sample size was more than double theirs, and because it was drawn from business students in what is considered by many researchers to be a highly materialistic nation. Second, the two studies used somewhat different means of measuring well-being. One critique of the present study is that it did not include a measure of the cognitive component of well-being, namely life satisfaction, which was the weakest correlate of values in the Sagiv and Schwartz study. Concern about this problem may be obviated by the fact that a materialistic value orientation has been shown to relate to lowered life satisfaction in a sample including business students (Belk, 1985) and in adults with a wide-range of incomes (Richins & Dawson, 1992).

In our mind, the most likely explanation for the difference in results is that Sagiv and Schwartz (2000) measured power values while we measured extrinsic, materialistic values. The two types of values no doubt share important commonalities, including a focus on how others view the person and a general opposition to aims focused on self-development, connections to others, and the betterment of the world (Kasser, *in press*). But power values and extrinsic, materialistic values also have a couple of important differences. To begin, the way Sagiv and Schwartz measured power values only contained one item which explicitly assesses desires for money: wealth. In contrast, the measures we employed were specifically designed to assess people's desires for money, possessions, image, and popularity, as well as their beliefs that such aims provide happiness in life. Second, power values are concerned mostly with having dominance and status over other people. Extrinsic, materialistic values, in contrast, reflect a desire to be wealthy, to have many possessions, to have the right image, to be attractive, and to be popular and well known (Kasser & Ryan, 1996). While relatively similar, the desire to control others seen in power values is distinguishable from the desire to be admired and esteemed by others, reflected in extrinsic, materialistic values. Perhaps the former set of psychological motives is not problematic in business students, while the latter apparently is. Further research is necessary to better untangle the similarities and differences between these types of values, and how they relate to other characteristics beyond well-being.

Although we believe that the main reason for the difference between our results and those of Sagiv and Schwartz (2000) is due to different conceptualizations and measurements of materialism, it may also be the case that the dynamics of environment-value matches differ for power versus materialistic values. That is, perhaps business students' desires for power are well satisfied in business school, as individuals may still act in dominating fashions even before graduating. Thus, such values are associated with greater well-being. Desires for materialistic success may not be well-satisfied however, given that students generally have relatively few financial assets. Thus, such values could be associated with relatively low well-being. While neither study can sufficiently answer this question, the fact that we found relatively high expectations of material success to be associated with more unhappiness and anxiety is inconsistent with such an explanation. High expectations of material success, from Sagiv and Schwartz's viewpoint, should indicate feelings of confidence and support from the environment, and thus should yield greater well-being. From our viewpoint, relatively high expectations of material success signal a fundamental alienation from the important psychological needs (reflected in intrinsic values) that truly provide well-being. The data presented here support this perspective.

Finally, correlations indicated that values found to be healthy in past research were also healthy in this sample of business students. That is, self-acceptance, affiliation, and community feeling values all bore at least one significant association with a measure of well-being, such that greater well-being and less distress were notable if the intrinsic aspiration was relatively highly valued. Again, we believe this is because such values help orient people towards the experiences in life likely to satisfy their psychological needs, which is a pre-requisite for well-being.

Limitations and Future Directions

Naturally, our results are limited in some of the same ways as Sagiv and Schwartz's (2000). They rely solely on self-reports, and as such it is possible that results reflect some sort of response biases (although Kasser & Ryan, 1993 found similar results with interviewers' ratings of well-being and Kasser & Ryan, 1996 showed that negative associations between extrinsic values and well-being held after controlling for socially desirable response sets). Further, the results are based on a relatively small sample of students, limiting their generalizability. We have also certainly not sampled all the different means of assessing well-being which could be examined; it would have been particularly useful to measure life satisfaction.

Clearly more research is necessary to examine the differences between power and materialistic motives, as suggested above. Our results for intrinsic values also suggest that examining the similarities between benevolence/universalism, on the one hand, and affiliation/community feeling, on the other, might yield interesting insights into the differences between the values. Additionally, more work needs to be done to examine the impact of environmental congruence on the values/well-being relationship. We agree with Sagiv and Schwartz (2000) that environmental affordances and frustrations can influence the relationships between well-being and values. For example, Kasser (1996) showed that prisoners in a maximum security correctional facility who strongly pursued self-acceptance and affiliation aspirations actually reported lower well-being. This had been predicted because prison environments do little to support such strivings, which are thus unlikely to be successfully attained. This body of research thus suggests that more theoretical and empirical work should indeed be devoted to understanding how environments interact with people's attempts to pursue the goals and values they desire.

Summary

In conclusion, we believe that the current results support our contention that some values are indeed 'unhealthy'. Business students in Singapore with a strong materialistic value orientation reported lower well-being, despite the fact that their environment supports and encourages such values. Our understanding of why this is the case is that such values lead people to have experiences which undermine their well-being by failing to satisfy important psychological needs (Kasser, in press). Because well-being depends in part on need satisfaction, a strong materialistic value orientation works against well-being and happiness.

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