

THE PSYCHOLOGY OF MONEY AND POSSESSIONS: UNDERSTANDING
RELATIONSHIPS AMONG ADULT ATTACHMENT, STATES OF MIND AND
DISCREPANCIES IN MATERIALISTIC VALUES AND CHOICES

By

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Abstract

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The investigation of the psychological origins and consequences of materialism is vital. The present study sought to add to a small body of research examining materialism from a psychological perspective by looking at the relationship between adult attachment style and materialism. The current study sought to replicate and extend previous research indicating that attachment style is predictive of both materialistic traits and values (Kosmicki, 2002). Individual differences on an attachment measure were correlated with ratings of materialism and of life satisfaction. Attachment was measured with the Experiences in Close Relationships Inventory (ECR). Materialism was measured using the Aspirations Index, the Richins-Dawson Materialism scale and the Ger Belk Materialism Scale. Satisfaction with Life was assessed with the Satisfaction With Life Scale (SWLS). Further, an important feature of this study that differentiated it from previous research was the use of a Q-sort measure developed for the parent project. To better understand the states of mind that lead people to choose materialistic values, subjects' responses on a Q-sort measure gauging a broad range of items and things people can value across the areas of materialism, relationships, health and time were examined. The top five and least five Q-sort items for various groups were examined and tested for significance. In addition, to examine the discrepancies hypothesis, a “Good Life” and “Actual Life”

administration of the Q-sort was compared. Items with the largest Discrepancy between these two administrations were reported and relationships between Discrepancy and the variables Materialism, Life Satisfaction and Attachment (separately and in combination) were described. Independent samples T-tests, multiple regression, multivariate analyses of variance, and zero order correlations were run to test relationships.

Results only partially replicated previous findings (Kosmicki, 2002). The Insecure attachment category was significantly associated with lower scores on the trait measure of materialism, but not the value measures. Also, the dimensions of attachment Avoidance and attachment Anxiety did not significantly predict materialism. In terms of states of mind related to materialism, despite some notable variations, Q-sort items showed that the groups were remarkably similar. The high degree of items related to doing “the right thing” in life suggested that social desirability factors might have affected these results. Examining discrepancies between the Good Life Q-sort and the Actual Life Q-sort revealed that higher discrepancy scores correlated with higher levels of materialism and higher dissatisfaction with life, and that the Securely attached categorical group had lower Discrepancy scores. The complex relationships found between attachment style, materialism, and discrepancies suggest further research is necessary to determine how individual differences factors, such as adult attachment style, personality style and psychopathology (independently and in combination with contextual, socio-cultural variables) relate to materialism and life satisfaction.

Acknowledgements

With all the words to look forward to in this dissertation, I will keep this brief. First, and foremost, I would like to thank my wonderful, loving husband Jason who endured this journey with me and supported me all the way. I would also like to give special thanks to Paul Wachtel, my mentor and my rock throughout the dissertation development, writing, defense and beyond. Finally, I would like to thank my committee, Peter Fraenkel, Diana Diamond, Steve Tuber and Elliot Jurist for their participation and mentorship.

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CHAPTER 1

Introduction

Making decisions about the material aspects of life and deciding how to prioritize goals related to money and possessions constitutes a significant aspect of daily living experiences (Kasser & Kanner, 2004; Tatzel, 2003). At the same time, materialism has not been studied extensively by psychologists, leaving a gap in available information that could contribute to guiding individuals, health practitioners and public policy makers towards making decisions that are psychologically informed and thus, more conducive to maximizing psychological well-being (Belk, 1985; Kasser, 2002; Kasser & Kanner, 2004). In terms of the research that has been conducted thus far, there is a substantial body of data showing a relationship between being highly materialistic and increased levels of unhappiness, as well as decreased levels of well-being (Kashdan & Breen, 2007; Kasser, 2002; Solberg, Diener, & Robinson, 2004; Tatzel, 2003).

The potential negative consequences of adopting materialistic values and choices are believed to extend beyond individual unhappiness, including the possibility that overconsumption is impacting the environment to such a degree that habitability of the earth and human survival at a basic level are at risk (Csikszentmihalyi, 2004; Kasser, 2002; Kasser, Ryan, Couchman, & Sheldon, 2004; Solomon, Greenberg, & Pyszczynski, 2004). Yet, despite the risks, and increasing evidence to the contrary, many people continue to believe that pursuing more and more materialistic goods is necessary and important and will guide them toward making beneficial choices. Further, materialistic attitudes (including the belief that having more wealth is essential to having a good life) have become prevalent in cultures and societies worldwide and are increasing exponentially (Belk, 1985; Csikszentmihalyi, 2004; Kasser, 2002; Kasser, et al.,

2004). Given this context, the investigation of the psychological origins and consequences of materialism is especially important.

In general, the body of psychological research on materialism is relatively scant. However, the 1990s saw growth in both interest in the subject and empirical and theoretical work on the topic of materialism from the areas of consumer research, sociology and psychology (Kasser, 2002; Flouri, 1999). Thus far, the most extensive research done on the topic has been in the area of psychological correlates of well-being. Overwhelmingly, these studies have found materialism to be negatively related to personal well-being on indicators such as happiness, life satisfaction, and health (including decreased psychological health and increased risk for psychopathology) (Ahuvia & Wong, 1995; Kasser, 2002; Tatzel, 2003). This has been replicated across gender, age groups, and cultural groups. Authors believe this information counters cultural ideologies that exalt materialism (Flouri, 1999), as well as previous psychological research that viewed materialism simply as adaptive, and goal-directed (Kasser, 2002; Kottler, Montgomery, & Shepard, 2004). However, why this relationship exists is only now beginning to be examined and understood (Flouri, 1999; Kashdan & Breen, 2007; Solberg et al., 2004).

A number of explanations have been proposed for the findings linking materialism to poor well-being, but research on this remains fragmented. Reasons for the fragmentation include difficulties defining and operationalizing the term (Flouri, 1999); whether to study materialism at the individual level or cultural level (Belk, 1985; Kasser et al., 2004; Richins & Dawson, 1992); difficulties in determining causality (Kasser, 2002; Solberg et al., 2004; Flouri, 1999); and the slow evolution of standard, empirically validated measures of materialism (Belk, 1985).

The most frequent explanations accounting for the link between materialism and low levels of well-being point to materialism as a compensation for personal insecurity, whether

arising from broader socio-cultural factors, characterized as “macro-level” explanations, or from internal factors, characterized as “micro-level” explanations (Flouri, 1999). From the micro-level point of view the most common theories describing how and why materialism develops include: 1) that discrepancies between what people desire versus what they actually have explain decreased levels of subjective well-being, 2) that materialism is a goal/value that by nature tends to be unsatisfying, as opposed to goals and values related to relationships, 3) that materialistic values are incompatible with other, more satisfying goals, 4) that materialistic values produce unhappiness or, 5) that unhappiness leads to materialism. More empirical work is needed to determine the accuracy of these models and to shed further light on the mechanisms behind materialistic values (Flouri, 1999; Kashdan & Breen, 2007; Solberg et al., 2004).

The present study builds upon previous work, extending it in a number of ways. This study proposes using attachment theory as a framework for better understanding data collected from studies of materialism and for examining how a unified explanatory mechanism might be arrived at. Since it is believed that family relationships are significant in shaping children's orientations toward materialistic values (as opposed to prosocial and relationally oriented values), it is thought that it will be beneficial to examine whether materialism is an orientation embedded within motivational structures governed by attachment. Furthermore, it is thought that attachment theory is a useful framework for understanding the personal insecurities believed to underlie materialistic attitudes, expanding on the concept that differences in preexisting levels of intrinsic need satisfaction (linked with insecurity, an unstable self-identity and negative affective states) cause some people to internalize the material values of the broader culture more so than others (Flouri, 1999; Kasser, 2002, Tatzel, 2003).

Placing a high priority on materialistic values is frequently linked to difficulties with

close relationships (Kasser, 2002). To the degree that attachment style reflects and shapes one's relationships, attention to attachment may shed further light on the relationship between materialism and unhappiness. Proponents of adult attachment theory believe it provides "a unified framework for explaining the development, maintenance, and dissolution of close relationships," while at the same time offering a viewpoint on "personality development, emotion regulation, and psychopathology" (Fraley & Shaver, 2000, p. 132). It is also frequently noted that attachment theory has implications for understanding the entire lifespan, in that early attachment patterns may lay the foundation for personality and self-definition, affect regulation and coping strategies, and emotional difficulties (Blatt & Levy, 2003; Bowlby, 1969; Fraley & Shaver, 2000). Thus, adult attachment styles may describe some of the personal insecurities (trait aspects of materialism) that play a role in determining whether an individual places materialistic goals at the top of his or her value system and pursues happiness via acquisition. An additional advantage of attachment theory is that it is rooted in a cross-disciplinary approach, pulling data and insights from areas that include ethology, and evolutionary biology.

Only one study has been found to date specifically relating attachment measures to measures of materialism. Data analyses from this study support a link between the two, showing that anxiety and avoidance in attachment style were predictive of both materialistic traits and values (Kosmicki, 2002). The current study will attempt to replicate and extend these findings. This study is drawn from a larger project conducted by Paul Wachtel, principal investigator, examining how people think about the economic dimension of their lives, including making money, spending it, and deciding what consumer items or services are wanted and needed.

The current study will assess individual differences in attachment style and correlate these differences with ratings of materialism, as well as ratings of life satisfaction. The primary

hypothesis of the current study is that materialistic values will be negatively correlated with adult attachment security, with a closer relationship seen with the trait measure of materialism than the value measures. Additionally, it is hypothesized that adult attachment style will mediate the associations between materialism and life satisfaction.

Attachment will be measured with the Experiences in Close Relationships Inventory (ECR). This well validated and widely used measure assesses individual differences with respect to attachment-related anxiety (or how secure or insecure people are in regards to partner availability and responsiveness) and attachment-related avoidance (or how uncomfortable people are with being close to others versus how secure people feel in depending on others). Materialism will be measured using the Aspirations Index (Kasser & Ryan, 1996 as cited in Kasser, 2002) (which assesses how important materialistic values are in the context of a person's entire system of values); the Richins-Dawson (1992) Materialism scale (which assesses how central materialism is to a person's desires, how much a person believes wealth and possessions yield happiness, and if a person desires owning things that impress others or elicit social recognition); and the Ger/Belk (1996) materialism scale (which measures a materialistic outlook by assessing four personality traits thought to comprise materialism: possessiveness, non-generosity, envy and preservation). Subjective well-being will be assessed with The Satisfaction With Life Scale (SWLS), which asks individuals to judge how satisfied they feel with their life on the whole (Diener, et al., 1985).

An important feature of this study that differentiates it from previous research is the use of a Q-sort measure developed for this project. The Q-sort requires people to make choices and tradeoffs as they rank order cards with a very broad range of items and things people can value. In order to better understand of the states of mind that lead people to choose materialistic values,

the items from the Q-sorts of the materialistic group versus the non-materialistic group of subjects will be compared, and the items for those groups in relation to security of attachment will be compared. Also, to examine the discrepancies hypothesis, two administrations of the Q-sort will be compared: one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived.

CHAPTER 2

Literature Review

The present study examines the relationship between materialism, adult attachment style, and subjective well-being in the context of a larger study directed toward better understanding the ways people think about money and material possessions and the ways people try to negotiate between the wish to gain material advantages that are important in our society, and the wish to be present and available in important relationships. This literature review is presented in three sections. First, an overview of the literature and research on materialism will be presented. Within this review, particular attention will be given to the history of the concept of materialism; the limitations of the current research; the overlaps between cultural and individual factors related to materialism; and aspects of attachment theory relevant to the research on materialism. Second, an attachment framework will be discussed in more detail in relation to the empirical and theoretical work. Some basic premises of attachment theory will be described, with special attention given to how it may serve as a framework for understanding materialism. Third, the aims and research questions of the current study will be described.

Materialism: Review of the Literature and Empirical Research

A review of materialism as a construct.

Materialism: Historical background. The material aspects of life form a central part of people's daily experiences in today's world (Kasser & Kanner, 2004; Tatzel, 2003), yet they have been only recently considered from a scientific point of view (Christopher, Marek, & Carroll, 2004), and even more recently from a psychological point of view (Kasser, 2002; Kasser & Kanner, 2004). Concepts and definitions of materialism first emerged informally, in the context of popular culture (Christopher, et al., 2004). As a cultural concept, materialism has been

viewed dichotomously, making for a confusing picture (Flouri, 1999; Kasser, 2002; Tatzel, 2003). Often it has been viewed as a negative trait, where interest in, and the desire for material goods and wealth were thought to come at the expense of the spiritual life or to be as a sin from a religious standpoint (Belk, 1983, Csikszentmihalyi, 2004; Richins & Dawson, 1992).

Alternately, popular culture has exalted materialism and material success as a road to happiness, or as a sign of great character, religious grace or fitness in the context of social Darwinism (Belk, 1983; Solomon et al., 2004). Thus, historically people have had to deal both with the feeling (stemming from a socio-cultural frame) that it is immoral and unhealthy to be overly concerned with money and materialism and with an ever increasing impetus to consume and to view consumption as an important goal to strive for (Belk, 1983; Tatzel, 2003).

As researchers in various fields such as history, political science, and sociology began to examine the consumption-based orientation, known as materialism, the dichotomous points of view noted above remained open to debate. However, two points did consistently emerge across a number of fields. One is that materialism has grown exponentially and reached a mass scale only in the last few centuries, increasing in priority level in industrial and post-industrial societies (Belk, 1985; Kasser et al., 2004). Another is that as materialism has proliferated, so have problems related to overconsumption (acquiring and using money and materials for reasons outside of meeting survival needs) (Brown & Kasser 2005; Csikszentmihalyi, 2004; Du Nann Winter, 2004; Kasser, 2002; Solomon et al., 2004).

There is widespread agreement that, whereas previously materialism was not a prominent feature of societies, today most people live in materialistic cultures, or at the least, cultures affected by materialism due to globalization (Belk, 1984a; Kasser, 2002; Kasser et al., 2004; Richins & Dawson, 1992; Solomon et al., 2004). Kasser, et al., (2004) describe the

circumstances of today in stating:

Never before in humankind's history has our drive toward materialism and consumption been afforded such opportunity for expression and satisfaction . . . remarkable is the extent to which high levels of consumption are within reach of even the average person living in a Western society. Almost everyone in the United States owns a telephone, television set, and an automobile, and the homes in which the lower middle class live have comforts like plumbing, heat, and air conditioning that far exceed those enjoyed by royalty 1,000 years ago . . . And, wherever we go, our ears and eyes are bombarded with material messages encouraging us to purchase more and more. (p. 11)

In short, most people today live in countries where governments support profit driven capitalism and economies that are both philosophically and practically founded on ever-increasing consumption and consumer debt for the purpose of acquiring products. Also, at the societal level most individuals are pressured to consume and to define success in material terms and are inundated with advertising promoting upward social comparisons and materialism as a means to happiness (Kasser, 2002; Kasser et al., 2004; Richins, 2004; Solomon et al., 2004).

In contrast to the current state of affairs, anthropological data show that this type of societal focus on materialism was not the norm in the past, and that modern forms of materialism, which may seem to have always been a part of human society are, in fact, relatively recent (Solomon et al., 2004). Briefly, it is understood that modern humans developed in societies supported by nomadic, non-storing, hunting and gathering of sustenance, and that this way of life accounts for approximately 90 percent of the history of the modern human species. In these pre-agricultural societies, it was potentially life-threatening to carry or accumulate material

possessions, given that items would slow down the itinerant individuals searching the land for food (Lee & DeVore, 1968; Maryanski & Turner, 1992; Sahlins, 1972 as cited in Martin, 1999b; Csikszentmihalyi, 2004; Solomon et al., 2004). This is not to say that possessions were devoid of value in hunter-gatherer cultures. In fact, there is ample evidence that implements, weapons, and tools were valued for aiding the hunting and gathering, and that special objects lacking functional value, but having symbolic value, existed in these societies (for example, spearheads and axes not used as tools, clothes and bodily ornaments, etc.) (Wallendorf & Arnould, 1988). Nonetheless, it appears that the conditions of the hunter-gatherer way of life created significant limitations as to how many possessions could be collected and how important possessions could become to the society (Bender, 1978; Csikszentmihalyi, 2004; Diamond, 2002; Martin, 1999b, 1999).

This changed radically approximately 10,000 years ago, when humans began to implement agricultural techniques and began to be able to store food. Having stores of food obviated the need to constantly scour the land for sustenance; meaning heavy and cumbersome goods could be accumulated without limit. This meant that people were able to establish sedentary settlements in which heavyweight technologies could bloom. This also meant that those with access to surplus could be viewed as "rich" within hierarchies in which certain "special" individuals, such as Kings, could have leisure time. Previously, individuals could not devote themselves exclusively to tasks, and leisure activities that were, unrelated to the daily search for food (Diamond, 2002). Thus, after the advent of agriculture, materialism surged, and then began to increase exponentially, as ancient civilizations formed and developed over time (Solomon et al., 2004).

Historical analyses conducted in recent times have yielded different conclusions as to

where (in Europe or America?), and when (the fifteenth, sixteenth, eighteenth, nineteenth or even twentieth centuries?) contemporary patterns of happiness-seeking via consumption first emerged (Braudel 1973; Mukerji 1983; McKendrick, Brewer, and Plumb 1982; Williams 1981; Boorstin 1973; Harris 1981; Lears 1983 as cited in Belk, 1985). However, there is widespread agreement that since the development of modern forms of materialism, the negative impacts to people and the environment have markedly increased due to overconsumption. This is often attributed to the concept that, although human attempts to control the material world can be traced far back in time, in the past negative impacts were held in check by limits in technology and scientific understanding (Belk, 1985; Csikszentmihalyi, 2004; Kanner & Soule, 2004; Kasser, 2002; Solomon et al., 2004). Csikszentmihalyi (2004) characterizes the situation in saying:

...in the past [the] impact on the nonhuman environment [of the need to control material objects] has been slight because people could own at best a few livestock and a few tools. As the anthropologist Marshall Sahlins (1972) has argued, possessions were seen as life-threatening hindrances by hunter-gatherers who needed to move lightly over the landscape in search of nutrition. Even in the relatively prosperous France of the Middle Ages, most people lacked manufactured products such as furniture (LeRoy & Ladurie, 1979), and not even kings had access to petroleum or electricity. The human “footprint” on the ecology was therefore light, and the desire for material goods was an understandable and almost benign motivation. (p. 93)

In contrast, regarding current times Csikszentmihalyi (2004) notes:

As technology has made the mass production of innumerable artifacts possible, and as people learned how to extract energy from everything from water turbines to nuclear

reactors, the unbridled need for material possessions is posing a severe threat to our physical survival, as well as to our psychological well-being. (p. 93)

The aspects of materialism that are thought to be negative and to be implicated in individual and societal problems are too many to enumerate, but a brief listing would include the following. One, there is a distinct possibility that overconsumption is impacting the environment to such a degree that the habitability of the earth and human survival at a basic level are at risk (Kasser, 2002; Solomon et al., 2004). Two, extremely unequal distributions of wealth are linked with subjective distress, economic turmoil and political instability, and are out of tune with the fact that there are ample resources available to provide for the entire global population (Kasser, 2002; Csikszentmihalyi, 2004; Solomon et al., 2004). Three, recently accumulating evidence is suggesting that quality of life diminishes, or at least is no better, where the focus on materialism has increased, and that individuals with wealth are more prone to suffer from psychopathology (Belk, 1983; Kasser & Ryan, 1993; Kasser, 2002; Richins & Dawson, 1992).

In the face of these negative implications, individuals may face a substantial dilemma and considerable ambiguity. Most cultures today exalt the idea that having materialistic goals will guide individuals towards making beneficial choices and will bring them a freer, more comfortable and happier life (Kanner & Soule, 2004; Kasser, 2002). These countervailing considerations mean that for many people there is considerable ambiguity and few steadfast rules for managing the material realm of life. Should one focus on material goals to achieve happiness, or is that very focus on these goals what actually interferes with happiness; is it that, “greed is good” or that “money is the root of all evil” (Belk, 1984b; Kasser, 2002; Tatzel, 2003)? Tatzel (2003) aptly describes the subjective quality of the general predicament in saying:

Our ongoing experience tells us (some or much of the time) that we need and want this or that ...to enhance our well-being. These desires are further stoked by the cultural milieu that defines success by material achievement and holds out images of a consumer paradise. This brings us to the consumer's dilemma:

- It is psychologically unhealthy and morally wrong to be pre-occupied with money and materialism.
- Consuming is nonetheless attractive. It certainly *seems* as if more money and more of what money can buy would make life better.
- In order to be part of society, we simply must have commerce with money and possessions (p. 406).

The first two points regarding the consumer's dilemma will be discussed more extensively in the section regarding psychological viewpoints on materialism. To expand on the last point, it can be argued that for the average person today, aspects of materialism imposed from without are virtually inescapable. Where once every individual had the option to "live off the land", few today would be able to successfully opt out of larger systems in which ownership, money and possessions are woven into the fabric of the society. For example, legally one is not allowed to roam freely across land to hunt and gather subsistence needs. Also, because few natural habitats remain intact, finding an area in which one could live off the land would be a formidable task, even if legality were not an issue. In addition, psychologically, extricating oneself from the material world would likely involve becoming a social outcast and perhaps losing key social relationships.

Thus, addressing the realm of materialism can be framed as a necessary component of

each individual life that is not easy to deal with psychologically, and can be understood to constitute a series of developmental tasks where the “pushes and pulls of money and possessions” (Tatzel, 2003, p.406) must be resolved in order to achieve good psychological health (Tatzel, 2003). Although still in an early phase, the hope is that further research on materialism from a psychological perspective will clarify the contradictory notions associated with this aspect of living, and provide a basis for developing guidelines for healthy management of money and possessions (Flouri, 1999; Kottler, et al., 2004; Tatzel, 2003). Further, psychological research may explain how it is that, although everyone is exposed to cultural environments that pressure individuals to internalize materialistic values, individuals vary in the degree to which they adopt material values (Belk, 1985; Kasser, 2002; Kasser et al., 2004)

Materialism: A psychological concept. Psychological research and theory has only recently taken on the task of attempting to understand materialism from a psychological point of view. In the 1990’s consumer researchers and psychologists noticed there was a surprising lack of empirical research on the subject of materialism, given the opposite sets of theories about it and the psychological and societal problems associated with it. This created a demand for scientific work on the subject and generated a number of studies that continue to be built upon today (Belk, 1984b; Kasser & Kanner, 2004; Kasser, 2002).

The most extensive research done on the topic of materialism from a psychological point of view has looked into the relationship between materialism and levels of subjective well-being by studying psychological correlates of materialism (Flouri, 1999). Overwhelmingly, the empirical studies gathered over the past decade and a half have found materialism to be negatively related to personal well-being on indicators such as happiness, life satisfaction, and health (including increased experiences of negative affect, decreased psychological health and

increased risk for psychopathology), regardless of whether one is simply striving towards material goals or actually achieving the goals. This has been replicated across gender, age groups, and cultural and national groups (Belk, 1983; Christopher & Schlenker, 2004; Kasser & Ryan, 1993; and Richins & Dawson, 1992; Wright & Larsen, 1993 as cited in Ahuvia & Wong, 1995; Flouri, 1999; Kasser, 2002; Tatzel, 2003).

For instance, Kasser and Ryan (1993; 1996) have repeatedly found in studies that making progress towards material goals does not correlate positively with increased levels of well-being. Kasser and Ryan (1996) define material goals as extrinsic goals that include financial success, social recognition and appealing image. Taken together, extrinsic goals are those that hinge on obtaining approval and rewards from outside sources and do not provide satisfaction in and of themselves. In contrast, intrinsic goals are characterized as satisfying inherent psychological needs and wants. These include “affiliation (relatedness), community feeling (helpfulness), physical fitness (health), and self-acceptance (growth)” (Kasser & Ryan, 1996, pp. 280-281). Research and theory support the idea that intrinsic goals, because they are linked with “self-actualization tendencies,” are conducive to mental health, whereas a focus on extrinsic goals is accompanied by lowered well-being (Maslow, 1954, 1956; Rogers, 1961, 1963; Fromm; 1976; Deci & Ryan, 1985b, 1991; Ryan, Sheldon, Kasser, & Deci, in press as cited in Kasser and Ryan 1996).

Kasser and Ryan (1993, 1996) conducted numerous studies comparing extrinsic goals with intrinsic life goals, primarily finding reduced psychological adjustment where levels of financial aspirations (the desire for money) were higher. More specifically they found that financial aspirations, particularly when those aspirations predominated over and above the values of self-acceptance, affiliation, and community feeling in a person’s life, were negatively

associated with “self-actualization and vitality” (Kasser and Ryan, 1993, p. 413); positively associated with “depression and anxiety” (Kasser and Ryan, 1993, p. 416); and positively correlated with a “control orientation,” which they describe as “a personality style characterized by a focus on external sources of regulation for behavior and attitude adoption” (Deci & Ryan, 1985a, 1987 as cited in Kasser and Ryan, 1993, p. 410) . When including the extrinsic aspirations of fame and image, in addition to money aspirations, the findings were expanded to include the idea that extrinsic motivations in general, and not just the desire for money, were associated with lowered well-being. In contrast, placing aspirations for self-acceptance, affiliation, and community feeling at the center of one’s value system was more generally associated with greater well-being and less distress (Kasser, 2002; Kasser & Ryan, 1996; Wasser, 2010).

At a national level, David Myers (2000) found that although gross domestic product has increased in the United States, levels of happiness have stayed approximately the same over time (as cited in Kasser, 2002). His research, along with similar findings (Ahuvia & Friedman, 1998; Csikszentmihalyi, 1999; Diener, 2000; Oishi et al., 1999; Oropesa, 1995; Richins and Rudmin, 1994; Schyns, 1998, 2000 as cited in Tatzel, 2003) does not contest the role of poverty in decreased well-being, rather it provides refinements that show a more complex picture beyond this. This research indicates that both in terms of striving for wealth and actual attainment of wealth, although increases in wealth do increase levels of well-being in the very poor, once basic needs are met, a model of diminishing returns better depicts the situation. A prime example is that in assessments of whether the rich are generally happier than the poor, evidence shows that, once the poverty level has been surpassed, increases in income bring only small increases in levels of well being, as measured on a scale of Subjective Well-Being (SWB). More specifically,

increases in income raise SWB initially, but then SWB decreases over time (Kasser, 2002; Tatzel, 2003).

Overall, in highlighting the negative repercussions of materialism on subjective well-being, this type of research has been characterized as countering the dominant cultural ideology that says money and possessions bring happiness, ought to be strived for as a primary goal in life, and should organize many decisions made by individuals (Ahuvia & Wong, 1995; Kasser, 2002). Although this constitutes a boon to research on materialism, Kasser (2002) points out this work does not yet clarify the confusion surrounding materialism as a dichotomous concept, but has actually adds to it in certain ways.

Kasser (2002) states that like popular culture, psychology presents two opposite points of view on the subject:

On the one hand, much of the work conducted by evolutionary and behavioral psychologists is quite compatible with the notion that attainment of wealth and status is of great importance. Evolution-based theories ... suggest that the desire to be perceived as wealthy, attractive, and of high status may be built into our genes, as these characteristics (like an opposable thumb or a large forebrain) enabled our ancestors to survive. Similarly, behavioral theories...hold that the successful attainment of external rewards is a motivator of all behavior, and indeed fundamental to individuals' adaptation to society (p.2)

Furthermore, psychological viewpoints on materialism from 1950s until the 1990s have been characterized as advocating the idea that pursuing possessions is simply an ordinary, goal-directed behavior (Csikszentmihalyi, 1999, 2000 as cited in Kottler et al., 2004) and primarily

examining how wealth was associated with happiness and psychological adjustment (Kasser, 2002).

There is a significant amount of research that substantiates this point of view (Kasser & Kanner, 2004; Kottler et al., 2004). As Myers (2000) discussed from a humanistic point of view, a minimum of basic material needs must be met to achieve a sense of well-being (as cited in Kasser, 2002). Further, the area of psychology known as consumer psychology (investigating the purchasing behaviors and experiences of individuals) provides evidence for the idea that people purchase objects due to variations in a self-definitional motive called “need for uniqueness” (Kottler et al., 2004). Related research, looking at ownership, indicates that it is normal and universal to view possessions as extensions of the self (e.g. James, 1890; Allport, 1937; McClelland, 1951; Prelinger, 1959; Dixon and Street, 1975, Csikszentmihalyi & Rochberg-Halton, 1981), so that people become attached to objects as: (1) symbols of security (2) a means of expressing self-concept/individuality or (3) to signal connection to other members of society (Wallendorf & Arnould, 1988).

On the other hand, research generated beginning in the 1990’s has upheld ideas put forth by humanistic and existential psychologies that “a strong focus on materialistic pursuits not only distracts people from experiences conducive to psychological growth and health, but signals a fundamental alienation from what is truly meaningful” (Kasser, 2002, p. 2). Overwhelmingly this research suggests that happiness is not founded on income and material possessions; rather it is strongly based in healthy relationships and meaningful work, in which there is also enough leisure time available to enjoy both (Du Nann Winter, 2004). In other words, happiness and well-being seem to derive from the satisfaction of intrinsic psychological needs for “security, competence, connection to others, and autonomy” (Kasser et al., 2004, p. 20), not extrinsic,

outside-focused, materialistic goals (Kasser, 2002; Kasser et al., 2004; Kasser and Ryan 1996).

As will be reviewed, various psychologically-based theories have been proposed recently to account for the increased levels of unhappiness observed for individuals who rate high on measures of materialism. Most of these explain the observations in terms of a personality deficit model, understanding that materialistic behaviors are engaged in as a means of compensating for insecurities and for escaping anxiety. Further, it is understood that this strategy is ultimately ineffective because it stems from self-doubt, is not addressing an actual lack of money or possessions, and only provides short term relief for negative affects associated with insecurity (Csikszentmihalyi, 2004; Flouri, 1999; Kasser, 2002).

For example, according to Locke, McClellan, and Knight (1996), individuals with psychological insecurities may use money defensively, covering up feelings of inadequacy by obtaining a sense of superiority to others or gaining power over them via the accumulation of wealth. Another example of a deficit model is the use of escape from self-theory (Baumeister, 1990). This theory suggests people experience a negative state of self-awareness (psychological pain) when they believe their current life situation falls below personal and social expectations and desires. This is because as the discrepancy between the expectation and the current life situation is noticed, attention becomes focused on personal weaknesses, deficiencies, and failures. As a result, individuals become motivated to escape unwanted, negative self-directed thoughts and feelings and often move towards dampening self-awareness to reduce psychological pain. One way to attempt to do this is to focus attention onto things in the immediate environment, such as material possessions (Srivastava, Locke, & Bartol, 2001). Similarly, Braun & Wicklund (1989) offer a theory of self-completion that holds that individuals take on consumer symbols to make up for their deficiencies. Claxton & Murray (1994) expanded

on this theory to posit that people rely on objects as an important means of defining themselves when “functional human relationships are lacking” (Flouri, 1999, p. 708). Furthermore, Kasser and Ryan (1993) posit that one explanation for the link between high material aspirations and low levels of happiness is that: “individuals dispositionally high on broad factors such as neuroticism, or those with low security and sense of well-being, may be more prone to view money as a means of self-enhancement” (p. 420).

Of particular interest in this study is the concept that differences in preexisting levels of individual security, or the degree of satisfaction of intrinsic psychological needs, may explain why it is that in a culture of materialism, where everyone is exposed to the pressures and problems of materialism, some people are more prone to taking on the materialistic values than others (Kasser, 2002). Here it is suggested that early attachment patterns may serve as a foundation for determining how important material values become to an individual later in life, in other words to what degree an individual structures his or her life around extrinsic values as opposed to intrinsic values. This suggestion is based on the finding that family relationships are significant in shaping children's orientations toward materialistic values (as opposed to prosocial and relationally oriented values), and the strong link that has been found between materialism and poor relationships, insecurity, and increased psychopathology/negative affect (Wright & Larsen, 1993 as cited in Ahuvia & Wong, 1995; Belk, 1983; Christopher and Schlenker, 2004; Flouri, 1999; Kasser, 2002; Kasser & Ryan, 1993; Richins & Dawson, 1992). Attachment theory presents a model of relationships that partially accounts for the development of adult relationship quality and adult personality, affect regulation/coping strategies for negative affects, and psychopathology, (Fraley & Shaver, 2000), so that it may provide a framework for better understanding the adoption of materialistic values.

Materialism: Challenges to research. Although a high priority is now being placed on understanding materialism from an empirical/psychological point of view, there have been, and continue to be, many challenges to the ongoing research (Flouri, 1999). One difficulty that has been encountered in studying materialism has already been alluded to, how to define and operationalize it. What is materialism exactly? We have already seen a dichotomous set of definitions regarding materialism in popular culture and empirical work. Researchers have noted similar challenges in pinning the construct down (Flouri, 1999).

At this point, various researchers and theorists (Belk, 1984b; Csikszentmihalyi, 2004) (Kasser, 2002; Richins & Dawson, 1992) agree that materialism has to do with the relative importance of money and things in a person's life and that it is often seen as a means of achieving happiness. But beyond this preliminary understanding many things remain unclear. Quickly surveying some of the constructs that have been investigated in relation to materialism gives an idea of the complexity of the task at hand. These constructs include: envy, possessiveness, non-generosity, preservation (Belk, 1984b); acquisition (as a pursuit of happiness and as a highly important value), using possessions to mark success (Richins & Dawson, 1992); financial success, social recognition (or status), appearance focus, relationships and self-concept (Kasser, 2002); ownership and greed; (Belk, 1983), attachment to objects (Belk, 1988; Wallendorf & Arnould, 1988), basic needs, wants, and desires (Belk, Ger, and Askegaard, 2003), fairness, reciprocity, sharing, ambition, exploitation and power (Martin, 1999a, 1999b; Kasser, 2002), consumption and compulsive consumption (Rindfleisch, Burroughs, & Denton, 1997); accumulation and hoarding (Frost, Kyrios, McCarthy, and Matthews, 2007), addiction (Tatzel, 2003; Kottler et al., 2004) and symbolic/affective needs (Christopher & Schlenker, 2004).

Flouri (1999), who has looked into developing an integrated model of consumer materialism, asks a common question regarding the definition, “Is materialism an orientation towards spending (and so close to hedonism, perhaps), an orientation toward conspicuous spending (and so close to status seeking), or an orientation towards possessions?” (Flouri, 1999, p. 708). Flouri states that all of these orientations have been attributed to materialists (Flouri, 1999). Questions related to this kind of quandary that continue to be explored for clarification include the following. Is materialism a unitary construct? What motivations and behaviors constitute materialism? Does one need to distinguish between the desire for money and the desire for things when researching materialism? What do we need to know about the different phases of materialism, meaning is the getting/fantasizing process significantly different from the holding and accumulating process? If so, how exactly do they relate to each other?

Furthermore, much of the extant research on materialism and subjective well-being uses a definition of materialism that has a negative connotation, often describing the creation of problems in other areas of life, particularly in human relationships (Ahuvia & Wong, 1995; Belk, 1985). For example, Holt (1995) conceptualizes materialism as “the consumption style that results when consumers perceive that value inheres in consumption objects rather than experiences and people” (p. 13, as cited in Tatzel, 2003). The negative, or narrow, focus of the term materialism has left open the question of how to locate or describe the normal, goal directed behaviors that were attributed to materialistic goals prior to the 1990s (such as aspiring to be successful, focusing on acquisition as a means of being creative, individuating or pursuing freedom etc.) and instances where materialistic behaviors that do not sacrifice relational aspects of life (saving money to provide for family members, collecting objects that hold memories of personal relationships etc.).

Csikszentmihalyi and Rochberg-Halton (1978) have made an attempt to resolve this by distinguishing between positive and negative forms of materialism. They argue there is nothing inherently wrong with seeking pleasure in material goals, but that when this becomes the main reason for living, significant problems arise. They argue that when objects act "as essential means for discovering and furthering personal values and goals of life," materialism is a potentially harmless form called "instrumental materialism" (Csikszentmihalyi and Rochberg-Halton 1978, p. 8 as cited in Richins & Dawson, 1992), but that when consumption furthers no goal beyond possession itself, materialism takes on a more dangerous form labeled "terminal." "Instrumental materialism" is thought to be healthy and positive, whereas "terminal materialism" is thought to be destructive to both the individual and the natural environment. This differentiation, while useful, is still being investigated due to criticisms that: (a) it rests on a value judgment; that is, the idea that self-actualization is the only positive motivation is thought to be biased, (b) it contains contradictions; in other words there is no such thing as materialism in which the only goal is possession, because other motives inevitably will be involved, and (c) it is difficult to operationalize; does it refer to an individual difference variable where one could be classified as terminal or instrumental, or does it simply describe specific behaviors or motives (Ahuvia and Wong, 1995; Richins & Dawson, 1992)?

The issue of how to define materialism has yet to be resolved (Flouri, 1999), but it is hoped that continued work in the area of empirical operationalization and measurement will help answer questions such as these and illuminate a framework for how materialism develops, how it changes across the life-span and how it varies from culture to culture (Belk, 1984b).

A second issue has been the level of analysis to be used in studying materialism. Prior to the 1990s, materialism was mainly examined from the position of social criticism from areas

such as history, economics, sociology and political science, focusing on how broader social contexts (such as advertising and marketing) increase or create materialistic values (Belk, 1984b, 1985; Kasser & Kanner, 2004). In the 1990s researchers and theorists began to formulate materialism in psychological terms (Kasser, 2002). Theorists acknowledged that “it is useful to treat materialism as a structural variable to do such research as comparing cultures and examining the influences of particular institutions within a culture of consumption” (Richins & Dawson, 1992, p. 303) and that “important cultural and historical differences” (Belk, 1985, pg. 265) in the tendency toward materialism had already been described at that point. However, Belk and other researchers felt that a wide range of individual differences existed in materialism and consumption practices that needed be examined (Belk, 1985; Kasser et al., 2004; Richins & Dawson, 1992).

Kasser and colleagues (2004) acknowledged that cultural, economic, historical and socio-political antecedents of cultures of consumption are extremely relevant to the study of materialism, but argued that the lack of a psychological perspective on materialism was unsatisfying in that it has neglected how individuals “simultaneously create and are created by culture” (Kasser et al., 2004, p. 12). These researchers, as well as Richins and Dawson, proposed that understanding individual differences is key to discovering the origins of materialism, understanding the interactions between materialism and marketing/culture and informing public policy. Also, they stated that studying materialism at an individual rather than a cultural level has the advantage of being more easily tested. For example, looking at materialism through a cultural lens may obscure its relationship to individual daily concerns, choices and actions, and may not directly measure the complex nature of materialism, whereas examining it at the level of individual differences can provide clearer data (Kasser et al., 2004; Richins & Dawson, 1992).

While recent focus has been on studying materialism at the individual level, researchers of materialism point out there is no clear dividing line between culture and the individual because of the circular nature of culture and individual psychologies. That is, people have psychologies that inform social rules, and social rules help to shape individual psychologies, which again inform the cultural trends, in a continuous circle (Kasser et al., 2004). Also, differences in personality may combine with external sources of values, affecting the degree to which individuals take on cultural norms regarding materialism (Kasser, 2002).

More specifically, Kasser believes two main pathways account for development of Materialistic Value Orientations (MVOs), where each makes an independent contribution, but they also interact. He states that one pathway consists of experiences an individual has that induce feelings of personal insecurity, leading to compensatory materialistic strategies. A second pathway is exposure to social models that encourage materialistic values via the processes of socialization, internalization, and modeling of materialistic frameworks and values. Here, the thought is that one way people integrate materialism into their way of life is through the natural human tendency to take on surrounding cultural-familial values and behavioral rules, including the various implicit and explicit messages regarding the importance of money and possessions. (Kasser, 2002; Kasser, et al., 2004). Similarly, Tatzel (2003) proposes that both social and psychological processes are involved in stimulating consumer behaviors. She states that influences:

from within, [are] the subjective attitudes that one brings to life situations; these are referred to as internal, "top down", or dispositional factors. From without, [are] the objective circumstances that affect us, including one's particular circumstances (e.g., personal income) along with more general societal factors (national wealth, culture, and

political freedom); these are referred to as external, "bottom up", or situational factors. In the buying situation, the internal and external influences converge (p. 407).”

Thus, there is reason to believe that both levels of study are useful and that integration, particularly in empirical work, may be explored fruitfully.

A third issue is that of determining causality in studies of materialism in relation to factors such as measures of happiness and individual differences. Because most studies have been correlational thus far, it is not yet possible to comment on whether increased levels of materialism cause certain psychological conditions, or if higher materialism is the result of certain conditions. For example, it could not yet be said if dissatisfaction with life causes higher levels of materialism, or if higher levels of materialism cause dissatisfaction (Ahuvia & Wong, 1995; Flouri, 1999). Additionally, it is thought that materialism does not lend itself easily to experimental designs in which tests of causality can be carried out (Solberg et al., 2004), so that creating these studies may be difficult. It is also possible that once experimental studies are conducted, causality may be found to run in both directions, or that there are interaction effects that need to be described (Ahuvia & Wong, 1995; Flouri, 1999; Kasser, 2002; Solberg et al., 2004).

Finally, a fourth issue, somewhat related to the issue of defining/operationalizing materialism, has been establishing standard measurements for materialism. Prior to the 1990s, some measures of materialism existed but were not tested rigorously according to established empirical standards for scale development. Thus, they were found to be inadequate in terms of reliability, and construct validity was not established. These measures typically either inferred materialism by measuring related constructs (such as wishes, social goals, and personality traits)

or attempted to measure materialism more directly, via Likert-type scales assessing attitudes (Richins & Dawson, 1992). Subsequently, Belk, and Richins and Dawson, separately developed two of the most widely used and accepted measures of materialism. These are regarded as theoretically sound, useful perspectives on materialism as an individual differences variable (Tatzel, 2003). However some measurement issues remain with these also (Fitzmaurice & Comegys, 2006).

Belk developed his scale by looking at other constructs (the personality traits of envy, possessiveness, and non-generosity), and inferring materialism from them. Belk put forth that, together, the traits constitute materialism (Belk, 1985; Fitzmaurice & Comegys, 2006; Richins & Dawson, 1992). This was recognized as advancing earlier approaches because the perspective examined the theoretical connections between the personality traits and materialism, and, for the first time, the measures were developed using psychometric principles (Richins & Dawson, 1992). The other widely used scale of materialism, developed by Richins and Dawson (1992), is considered by some to be the most effective definition of materialism so far (Tatzel, 2003). Richins and Dawson conceptualize materialism as a personal value where acquisition is a focal point and high priority, where possessions are viewed as essential to satisfaction and well-being, and where success (in terms of both the self and other people) is judged by the standard of how many and of what kind of possessions are amassed. In this view, how highly an individual ranks these values allows researchers to distinguish more materialistic people from less materialistic people. In short, Richins and Dawson conceive of materialism as a value, or a belief system that influences people's understanding of the environment, choices and behaviors, whereas Belk treats it as a personality trait, linking enduring and generalized qualities to materialism (Richins & Dawson, 1992).

Belk's scale has received criticism because it is viewed as a broader, more indirect measure of materialism, and because it has had inconsistent or low reports of scale reliability, comparatively weaker than that of the Richins and Dawson scale (Fitzmaurice & Comegys, 2006; Richins & Dawson, 1992; Tatzel, 2003). For example, Richins & Dawson (1992) state that after reviewing "12 separate data collections in which reliability was reported in the literature" the "coefficient alpha for the individual personality scales [on Belk's scale] ranged from .09 to .81 with a median reliability of .54; [and] a measure summed across the three scales, frequently used as an indicator of materialism, had a median reliability of .62" (Richins & Dawson, 1992, p. 305). Further, Richins and Dawson (1992) argue that Belk's measure of materialism, because it infers the construct from scores on other variables, may be inappropriate because the construct validity of a measure is determined, by definition, by the fact that it measures only what it sets out to measure and is not contaminated by elements of other constructs. Thus, they believe that using measures of personality traits to infer materialism is misleading. Additionally, Solberg et al. (2004) question the measure because a positive correlation between Belk's measure and neuroticism has been found. They believe this represents a potential confound in research examining the relationship between materialism and other factors.

Related to these criticisms, some researchers have opted to exclude certain subscales when employing the Belk materialism measure. For example, Ahuvia and Wong (2002) excluded the preservation subscale after conducting confirmatory factor analysis which "yielded a negative factor loading (-.28)" for this subscale, whereas the "Coefficient alpha α for nongenerosity, envy, and possessiveness dimensions were .71, .57, and .44, respectively" (p. 393). Similarly, Kosmicki (2002), using Belk's original 1985 measure (which did not include preservation), opted to exclude the possessiveness subscale in his study. This decision was based

on Sharpe's (2000) study, showing the possessiveness measure correlated with aspects of materialism that appeared positive or non-materialistic in nature (specifically generosity, gift-giving, extraversion, openness, assertiveness, dutifulness, altruism, warmth, positive emotions, and adoption of pro-social values). This was in contrast to the negative associations between non-generosity and envy, deemed to represent greater construct validity.

On the other hand, although materialism research has indicated that the Richins and Dawson scale is more reliable than the Belk scale (Cole et al. 1992; Othman 1989), validity tests (typically correlations between the materialism scales and measures such as happiness and life satisfaction) have been inconclusive, so that it is difficult to assess the "relative merits of the two scales" (e.g., Belk 1985; Cole et al. 1992; Dawson and Bamossy 1990; Hunt et al. 1990; Richins and Dawson 1992 as cited in Micklen, 1995).

Further, there is evidence that both are in fact valid measures, but that each measure taps different aspects of a larger, multifaceted construct and so are not interchangeable (Ahuvia & Wong, 1995, 2002; Kosmicki, 2002; Richins & Dawson, 1992; Tatzel 2003). Richins and Dawson (1992) acknowledge with regard to Belk's scale that, "To the extent behavior patterns associated with materialism are fixed and pervasive, there may be personality traits associated with materialism" (p. 307).

Ahuvia and Wong (1995) compared Belk's material personality scale to Richins & Dawson's Material values scale in relation to life satisfaction, concluding that Richins & Dawson's Material values scale captures a subset of people who experienced specific material unhappiness, whereas Belk's material personality scale captures people who were more globally dissatisfied with life. Specifically, they found more unhappiness on the values measure in the economic areas of life compared to other areas of life. On the other hand, on the personality

measure, individuals were equally dissatisfied with the economic dimension life, friendships, general sense of fun and enjoyment. They argue that this finding is consistent with the idea that the material values scale “measures a tightly focused group of beliefs about material consumption” whereas Belk’s material personality scale “taps into broader personality traits”.

In a later study, Ahuvia and Wong (2002) added that the subjective perception of material deprivation in childhood was associated with Belk's view of materialism as a personality trait, whereas the values within an individual’s socializing milieu were associated with Richins and Dawson's view of materialism as a value (in Tatzel, 2003). Similar to this, Tatzel (2003) put forth the idea that Richins and Dawson's scale taps cognition via values and beliefs, whereas Belk's scale taps affect (or emotions, particularly negative ones).

How materialism is understood and defined in this study. For the purposes of this study, both the work of Richins and Dawson (1992) and of Belk (1984b, 1985) will be described and used to operationalize the construct of materialism. Further, the measure developed by Kasser and Ryan (1993, 1996) will be employed. Briefly, these theorists have conceptualized materialism in the following manner. Belk views materialism as a consumer orientation and defines it as "the importance a consumer attaches to worldly possessions (Belk, 1984b, p. 291)." Embedded in his definition is a link between this orientation and beliefs people have regarding potential sources of life satisfaction. He believes that those at the high end of the materialistic spectrum will regard possessions as having a central place in a person's life and will see them as providing one of the greatest sources of satisfaction in life either directly or indirectly (Belk, 1984b; Kasser, 2002).

As mentioned already, Belk’s original scale used three subscales to capture materialism, possessiveness (the degree to which an individual holds onto his or her possessions), non-

generosity (the degree to which a person dislikes sharing his or her possessions with others) and envy (the degree to which a person feels negatively when others have more wealth and possessions) (Belk, 1984b, 1985). In the late 1980's and early 1990's Guliz Ger worked with Belk to develop a cross-cultural version of the original materialism scale for use internationally. Factor analysis revealed a fourth dimension: "tangibility", defined as the "conversion of experience into material form". Behaviors such as taking pictures on a vacation and collecting souvenirs were examples of tangibility (Ger & Belk, 1990, p. 186). In 1996 Ger and Belk made additional changes and renamed the fourth dimension "preservation", defined as "the conservation of events, experiences, and memories in material form" (Ger and Belk, 1996, p. 64). The later Ger Belk version of the materialism scale is used in this study.

Richins and Dawson (1992) define materialism as "a set of centrally held beliefs about the importance of possessions in one's life" (p.308) or as "the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states" (Richins, 2004, p. 210). This definition includes the desire to make money and have possessions, as well as the desire to win things that impress others or elicit social recognition (Kasser, 2002). This definition combines popular and theoretical views, but does not purport to cover all beliefs relevant to material values, rather those that emerged repeatedly from various analyses (Fournier & Richins, 1991 as cited in Richins & Dawson, 1992). They view materialism as "a value that guides people's choices and conduct in a variety of situations, including, but not limited to, consumption arenas (Richins & Dawson, 1992, p.307). More generally, they define "consumer culture" as "when large portions of a society eagerly wish to consume goods for non-utilitarian reasons" (Richins & Dawson, 1992, p. 304).

Kasser and Ryan (1993, 1996; Kasser, 2002) are prominent researchers who, like Richins

and Dawson, define materialism as a value. They assess materialism by examining how important materialistic goals are relative to a variety of other goals in the context of the individual's entire value system. They consider "financial striving" (strivings for money and possessions) to be the most representative of materialistic values, being one that is encouraged by the capitalistic and consumer cultures most people in our society live in. They also include the goals of having the "right" image and being well known socially as materialistic values. They posit that the latter two goals are entwined with money/possession values given that the media links money/possessions, image, and fame by having good looking, famous people selling products. Also, all three share a focus on looking for a sense of worth outside of oneself and striving for external rewards and praise. Given this, they subsume financial success, social recognition, and image, under the umbrella of what are called "extrinsic goals" and use all three to measure the construct of materialism (Kasser & Ryan, 1996; Kasser, 2002).

Thus, Kasser and colleagues define materialism as "the relative centrality of extrinsic goals in a person's value system"(Kasser & Ahuvia, 2002, p.140), with the higher the focus on extrinsic values indicating higher levels of materialism (Kasser & Ahuvia, 2002). More broadly, they define a materialistic value orientation (MVO), which is a set of "aims, beliefs, goals, and behaviors" stemming from the culture of consumption that involve:

the belief that it is important to pursue the culturally sanctioned goals of attaining financial success, having nice possessions, having the right image (produced, in large part, through consumer goods), and having a high status (defined mostly by the size of one's pocketbook and the scope of one's possessions). (Kasser et al., 2004, p.13)

Although no consensus has been reached as to whether materialism is best viewed as a

trait or a value, both types of scales are widely used and accepted. What will be proposed here is that there is reason to believe that materialism is a multifaceted construct, best defined as a set of values related to money and possessions, where certain traits contribute to shaping how these values become organized. In other words, several traits (located within a broader motivational system and closely linked with attachment status and affect regulation), and several values (linked with cognitive beliefs and social learning) interact to produce a variety of behaviors related to money and possessions. In this vein, traits and values are viewed in terms of a biopsychosocial model, where contributions from biology, development/upbringing and socio-cultural contexts are all thought to play important roles in determining materialism. Belk's measure is understood to represent trait aspects of materialism, and both Richin's Material Values Scale and Kasser & Ryan's Aspirations Scale are understood to represent value aspects. Trait aspects of materialism are hypothesized to be more closely linked than value aspects to the development of personal insecurities (personality traits) that are implicated in the adoption of compensatory materialistic goals.

Materialism: The extant research. How have researchers examined materialism thus far? Although the empirical research remains relatively scant, studies have been growing in number and progressing towards providing a model for the development and sequelae of materialism (Flouri, 1999; Kasser, 2002; Richins & Dawson, 1992).

A significant portion of the psychological research on materialism approaches it from a "macro level" (Flouri, 1999, p. 709) point of view, with social and cultural structures as the unit of study, from areas such as sociology, political science, consumer research and economic psychology. The macro-level approaches propose that socialization, influenced by broader factors such as culture, gender and social class, may influence or determine materialistic points

of view. The “micro level” approaches correlate individual differences with measures of materialism (Flouri, 1999). The following is a brief summary of the extant research, first from the “macro-level” point of view, and then from the “micro-level”, or individual differences point of view. Because in many cases individual differences theories overlap with macro-level approaches in drawing from evolutionary psychology and sociological models, these influences will also be described briefly.

Macro-level approaches to materialism. Broadly speaking, “macro-level” research on materialism has shown that external aspects of culture and society can indeed affect the extent to which people embrace materialistic values (Kasser et al., 2004). A prominent example of this kind of work is from political scientist Ronald Inglehart (1977, 1994). He developed a socio-political theory of materialism out of cross cultural research, in which he differentiated between “materialistic” and “post-materialistic” cultural milieus, or “value orientations”. Inglehart defined the materialistic milieu as being concerned with maintaining a “strong economy, national security and social stability” (Kasser, 2002, p.34). He defined the post-materialistic milieu as one related to “freedom, environmental beauty and civility” (Kasser, 2002, p.34). His data showed that Western Europeans who experienced economic scarcity and turmoil during the Great Depression and World War II were more materialistic than younger cohorts who did not have this experience. He also found short-term increases in materialism during European recessions in the 1970s, 80s, and 90s, and that people in poorer nations were typically more materialistic than those in wealthier nations. His observations of the relationship between difficult social circumstances and increased materialism led him to conclude that a cultural focus on materialism stems from unmet needs for safety and security (as conceptualized by Maslow) at a national level. Further, he proposed that a postmaterialistic focus can arise only when these lower order

needs are met, allowing “higher-level needs for esteem, belongingness, knowledge, and aesthetics” to be pursued (Kasser, 2002, p.34).

These ideas contradicted previous findings indicating that materialism levels tend to stay relatively the same over time. This research indicated instead that levels of materialism can in fact change, and more specifically, that the insecurities created by difficult conditions that compromise safety and security needs may account for the changes by providing an impetus for materialistic compensation at a national level (Tatzel, 2003; Kasser, 2002).

Similarly, Kasser and colleagues looked at socio-economic factors in relation to materialism. They found that adolescents who strongly valued materialism were more likely to come from poorer backgrounds than were children who valued self-acceptance, community contribution and relationships. This replicated Cohen and Cohen’s (1996) research that found that families with low socio-economic status tended to place a greater priority on materialism and on being wealthy (as cited in Kasser 2002). These findings are explained by the idea that unsafe, insecure environments related to socio-cultural factors (in this case of poverty) cause children to orient towards materialism as a means of compensation. Kasser et al. (1995) believe that children who grow up in poverty are preoccupied with the question of how basic needs for sustenance and security will be met. This concern is believed to stay with the individual even when economic circumstances improve (as cited in Kasser, 2002). More specifically, these individuals are thought to be more susceptible to cultural messages that glorify image, fame and wealth and buying items as a means to feeling happy (Kasser et. al. 1995 in Kasser, 2002; Flouri, 1999; Tatzel, 2003).

Churchill and Moschis (1979) examined other cultural aspects of materialism by looking at socialization factors. Specifically, they looked at how social structural constraints (social

variables such as class, sex, and birth order) and socialization agents (television, family and peers) affect motivations for consumption and materialistic values in adolescents. They found a relationship between higher rates of materialism/higher social consumption motivations and higher amounts of television viewing/peer communications. Similar results were found by other researchers who have shown that materialism is positively associated with peer influence, positive attitudes towards advertising, decreased religiosity, and greater involvement of television in the socialization of children (Flouri, 1999). This again points to the idea that outside influences, like television and group affiliations, do affect materialistic attitudes.

Richins (1995; Solberg et al., 2004) specifically looked at the relationships between advertising promoting materialistic values and levels of personal insecurity. He found evidence that the almost constant presentation in advertising of consumer items raises individual standards for material aspects of life. For example, Richins (1991) found women who were exposed to advertising featuring attractive models reported decreased satisfaction with their own appearance (Richins 1991, as cited in Kasser et al., 2004).

Theoretically, Kasser and colleagues (2004) attribute this to the activation of social comparison tendencies that heighten feelings of insecurity and feelings of inferiority, which in turn activate materialistic mechanisms designed to assuage related negative feelings. These authors posit that materialistic activities seem to provide a good method for dealing with negative feelings because they give the individual a clear and straightforward option for relief; that is, if you buy something, it will improve your deficiencies and it will make you feel better. These forces are thought to affect the individuals of various nations collectively, explaining to some degree the spread of capitalism to previously communist/socialist nations and to less developed nations (Kasser et al., 2004).

Overall, the work looking at socio-cultural aspects of materialism, suggests that cultural environments do shape materialistic values in a significant way. At the same time, as was discussed in the section on the difficulties in studying materialism, the dividing line between cultural and individual differences variables in materialism is somewhat fuzzy. In fact, many of the theories explaining the correlational data on individual differences in materialism discuss independent contributions of personality, as well as interaction effects between personality and cultural messages and pressures. One idea is that people who experience higher levels of insecurity are more susceptible to the influence of environmental messages concerning the benefits of acquisitiveness. Further, it is understood that once adopted, the focus on these messages can lead to even more feelings of insecurity, creating a vicious cycle of unhappiness (Kasser, 2002; Kasser et al., 2004; Wachtel, 1983). As will be discussed, micro-level research points to the idea that people who prioritize material values are also typically tend to compare themselves to images of wealthy people, feel that money is a means to proving to an audience that they are worthwhile in comparison to others, and are more affected by the wish to have others to approve of their purchases, so that socio-cultural factors may impact highly materialistic people more so than less materialistic people (Tatzel, 2003).

Overlaps between micro and macro-level approaches to materialism. Two concepts that cross the domains of biology, sociology and psychology are frequently referred to in individual difference theories of materialism. One concept is that the normal workings of the human mind predispose humans towards having difficulties achieving optimal levels of happiness in all areas of life (including the material domain) (Buss, 2000; Csikszentmihalyi, 2004; Kasser, 2002; Cummins, 2000; Twenge & Campbell, 2002 as cited in Tatzel, 2003). This premise is founded on the work of evolutionary psychologists and biologists who describe a variety of behavioral

adaptations that are functional in terms of solving evolutionary or adaptive problems, but require the experience of subjective psychological distress. For example, jealousy is a psychological mechanism that decreases the likelihood of a cheating mate, deters rivals, and signals commitment, making it more likely that the individual will reproduce. However, jealousy is a difficult emotion that creates subjective distress by eliciting negative emotions (anger, possessiveness, envy, fear, paranoia, etc.) (Buss, 1994, 2000). Specifically related to materialism, Buss (2000) notes that the affective experiences following gains and losses that are comparable, favor negative over positive emotions. That is, if a person loses a sum of money, say \$100, he/she will experience pain and discomfort that is more intense than the pleasure he/she might experience in winning \$100.

The idea that human happiness is challenging to achieve in a variety of domains is the basis of a frequent explanation for the stagnation in national levels of happiness as wealth has increased (Myers, 2000 as cited in Kasser, 2002). Known as the “habituation effect,” the ‘preference drift,’ or the “hedonic treadmill” several authors (Brickman & Campbell, 1971; Lykken & Tellegen, Baumeister, 1991; Schwartz, 1994; Ahuvia and Friedman, 1998; Diener, 2000) describe this concept as a universal human tendency towards becoming acclimated to new and improved levels of achievement. This partially explains the widespread experience of unhappiness in the material domain in that, as individuals quickly habituate to the achievement of more money and possessions, they shift over to increased expectations for income and acquisition. This shift produces a decrease in feelings of pleasure and satisfaction, which in turn triggers a return to the pursuit of money and materials (Baumeister, 1991; Schwartz, 1994 as cited in Chang & Arkin, 2002; Csikszentmihalyi, 1999; Kasser, 2002; Brickman & Campbell, 1971; Lykken & Tellegen, 1996 as cited in Kashdan & Breen, 2007; Ahuvia and Friedman,

1998; Diener, 2000 as cited in Tatzel, 2003; Wachtel, 1983). For example, Csikszentmihalyi's theory of materialism is founded on the idea that humans have a universal need to "keep consciousness focused on some activity that requires attention" (Csikszentmihalyi, 2004, p. 101). He believes when people are not engaged in this manner, attention turns inwards to deficits (such as being ugly, fat, old, etc.), triggering rumination and depression, so that individuals attempt to offset this discomfort by focusing attention back onto a materialistic goal, such as going shopping (Csikszentmihalyi, 2004).

A second idea in which overlaps between micro-level and macro-level research are evident is that current environments of abundance further complicate the human tendency toward experiences of negative affect, in this case in the material domain. There is convincing evidence (Hasegawa, diRienzo, Kocher & Wilson, 1993; Horai, Hayasaka, Kondo, Tsugane, & Takahata, 1995 as cited in Martin, 1999a) that general social motives, to the degree that they are determined by genetics, were present in our species at least as far back as 100,000 years ago, and remain the same today as they were when we lived as hunter-gatherers (Martin, 1999a). This means that the current environments of abundance are interacting with psychological motives geared towards environments of scarcity. As Csikszentmihalyi (2004) states, "The genetic instructions we [humans] carry are still set to a survival mode in an environment of material scarcity..." (p. 104).

This concept is related to biological notions differentiating proximate versus ultimate causes, or motives, of behavior. Proximate causes link pleasurable reactions to certain behaviors. For example, the proximate cause of liking sugar is the feeling of enjoyment you get when eating it, or the proximate cause of liking objects is the good feeling associated with acquiring or displaying it. These pleasurable feelings tend to be brief (you eat but you are soon hungry)

presumably because one needs to be continuously motivated to meet basic needs (namely food and shelter). This is different from the ultimate cause, which may be survival and/or reproductive motives. The brevity of the pleasurable feelings that come with subsistence consumption is thought to have been less problematic in earlier environments in which the experience of negative feelings was in tune with the pressing need to stay motivated to continually search for survival needs (De Fraja, 2006). Thus, with materialism, modern day abundance may heighten problems associated with the desire to accumulate possessions and wealth, given that there is no real limit as to how much can be accumulated (Csikszentmihalyi, 2004; Solomon et al. 2004).

As, Kasser says:

Although needs provide a basic motivation to do something, they do not tell us exactly how to satisfy them... For example, if I am hungry my need for sustenance motivates me to eat. The way that I satisfy this need will vary depending on my personal tastes and on my environment... Personality and societal context provide frameworks for need expression and satisfaction by suggesting particular pathways and behaviors we might follow. In many cases these frameworks do a reasonably good job of satisfying our needs, and thus supporting psychological health and well-being. Consider what would happen, however, if every time I was hungry I ate a chocolate cake; many of my body's physical needs for certain nutrients would remain unfulfilled, and my health would surely suffer: In a similar manner, it is not necessarily the case that our personalities and culture provide healthy pathways that adequately satisfy psychological needs". (Kasser, 2002, pg. 25-26)

What can be gleaned from notions such as this is that in many ways the struggle with widespread materialism may be analogous to the obesity epidemic that is occurring in the United

States. Increasingly people are struggling with morbid obesity where individuals are often suffering malnourishment, despite ingesting many more calories than is required for sustenance. At the same time many have been able to avoid the pitfalls of obesity, but still may struggle in making daily decisions about food. For example, many people will encounter frustrations and difficulties sorting through contradictory messages promoting unhealthy food on the one hand, and exalting being thin on the other. They may also feel generally confused as to which foods are actually healthy. With food, underlying survival benefits link pleasurable feelings to once scarcely available sweet and fatty foods because those who craved scarce nutrients like fats and sugars were more likely to survive and pass on genes. Thus, in the context of scarcity, the motive is more easily understood to be beneficial. On the other hand, it is easy to see how in the context of highly available food sources, or limitless, non-nutritious, sweet and fatty tastes, things become complicated. People continue to crave “bad foods,” as per pre-existing dispositions, and so carry the extra burden of “going against” strong inclinations in order to maintain health. Thus, anyone who is already psychologically inclined to use food as a means of regulating emotions is faced with a “double whammy” of challenges.

Similarly, with highly available material resources, where one could collect and display items and amass wealth without ever reaching a limit, everyone is subject to the trap of opting for “cake” (superfluous possessions and wealth) instead of “vegetables” (what one really needs in the material domain to survive and fulfill self-esteem needs). Everyone may find it difficult to decipher how much is “enough” in the material realm and what material choices serve intrinsic motivations. Therefore, those who are insecure and perhaps inclined to regulate emotions via acquiring goods and wealth may similarly face a “double whammy”. They may be more profoundly affected than less vulnerable people by the widespread pressure to adopt extrinsic,

material goals, and may fixate on material solutions that are ultimately unsatisfying and even counterproductive. This is a particularly complex issue, because unlike with food issues, problems with materialism may never be framed as a medical or mental health difficulty. Where obesity or anorexia is typically a clear sign of ill health (at least to other people) and has been identified as a psychological issue, it is more difficult to “see” when the relationship to money and things becomes detrimental to quality of life. It will be apparent that these conceptions, and the findings on which they are based are very relevant to the specific focus of this study on materialism and security of attachment.

Theories of individual differences in materialism. A crucial question in the study of materialism is what is it that makes certain individuals susceptible to making materialistic choices that frequently appear to make them unhappy? It seems, given the macro-level research, that socio-cultural inputs play a role in determining individual attitudes towards materialism. In addition, individual personality differences are thought to be fundamentally important. Prominent theories that attempt to explain the linkage between materialism and low levels of subjective well-being include: that large discrepancies between what is desired in the material realm (what people believe they should have) and what people actually have explains decreased levels of subjective well-being; that adopting materialistic values is incompatible with adopting other goals that are more satisfying; that some goals and values are more satisfying for their own sake than others; that materialistic values produce unhappiness, or conversely; that unhappiness leads to materialism (Solberg et al., 2004). As I shall discuss below, these five perspectives are not necessarily incompatible. In important respects they are complementary.

One way to account for the link between low levels of well-being and materialism is the discrepancies theory (Michalos, 1985). According to this theory, because there is an unreachable

aspect to material goals, in that there is no limit as to how much money and goods one can accumulate, people are generally going to be further from material goals than other kinds of goals. That is, by nature, there will be a large discrepancy between what is potentially acquirable and what one has in the material domain (Solberg et al., 2004; Tatzel, 2003). This conceptualization is closely related to the concept of the “hedonic treadmill” discussed above.

Further development of the discrepancies model has led to the formulation that the subjective perception of the amount of wealth and material possessions a person believes he/she should have, rather than the actual amount itself seems to matter most in accounting for low levels of well-being (in Tatzel, 2003; Solberg et al., 2004), and that subjective perceptions are largely emotionally-based (Sirgy, 1998).

Thus, Sirgy’s theory of materialism explains the negative relationship between materialism and life satisfaction through the mediation effect of self-evaluations of standard of living. Sirgy proposes that emotional (affectively based) expectations determine material goals more than “reasoned” (cognitively-based) expectations. Sirgy theorizes that those who are highly materialistic have inflated, affectively determined expectations for: (1) ideal goals, (2) deserved goals, and (3) need-based goals. More specifically, he describes that (1) materialists tend to make social comparisons based on remote, outside referents (rather than close, situational referents), inflating the ideal standard of living goal; (2) tend to compare themselves with others who seem to have more income without working any harder, inspiring feelings of “inequity, injustice, anger, or envy” (Sirgy, 1998, p. 229) and inflating their idea of deserved goals; and (3) tend to spend more money than they generate, inflating the perception of minimum needs. Sirgy argues that these tendencies mean that materialists experience more dissatisfaction with standard of living than non-materialists, which in turn spills over to other areas of life, causing global

dissatisfaction (Sirgy, 1998). Overall, this type of work suggests that materialists have an outlook on life that makes them more prone to getting on, and staying on, the “hedonic treadmill”.

A second possibility for understanding the negative correlation between materialism and subjective well-being is that working towards materialistic goals simply has a less enjoyable quality than working towards relational goals. Solberg and colleagues (2004) found the pursuit of financial goals to be associated with reports of lower positive affect, while higher levels of positive affect were reported when pursuing intimacy related goals. It appears that relational experiences, such as socializing with friends, are more pleasurable than activities related to materialistic goals, such as working hard to make money. Further, they note that this conclusion could be explained by the fact that materialistic goals are relatively recent within our evolutionary history, again referencing the bio-psychological and sociological models described earlier (Solberg et al., 2004).

Although this explanation makes no attempt to account for the more positive aspects of materialism, such as the enjoyment that can come from the process of working hard to meet a goal, or overcoming challenges to meeting goals (or even the pleasures that material possessions can bring), these findings lend support to the idea that the toxicity of materialism stems in part from unsatisfied needs in the relational domain, needs which are vital to individual well-being (Kasser, 2002; Wachtel, 1983).

A third way to account for the link between dissatisfaction and materialism comes from the idea that prioritizing materialistic values gets in the way of pursuing other goals that are more satisfying in and of themselves. This theory expands on the second theory presented above, in that it may be the sacrifice of the nonmaterial, relationally oriented goals that accounts for low subjective well-being, rather than just the fact that material goals are unsatisfying by nature.

Psychologists overwhelmingly agree that goals that revolve around having good interpersonal relationships and being involved in one's community are satisfying and are conducive to well-being (Kasser, 2002). Theory (Kasser, 2002; Wachtel 1983), and research (Belk; 1985; Cohen & Cohen, 1996; Kasser, 2002; Kasser & Ryan, 2001, Khanna & Kasser, 2001; McHoskey, 1999; Richins & Dawson, 1992; Schwartz, 1992, 1994, 1996; Schwartz & Sagiv, 1995; Sheldon and Flanagan, 2001) suggest that materialism operates at the expense of these relational goals, or in other words that there is a widely prevalent tradeoff between pursuing materialistic goals and pursuing non-materialistic goals (Kasser, 2002; Solberg et al., 2004). This sacrifice of vital human needs in the relational realm is understood to account for low levels of well-being. The following data are among the findings that support this notion.

Schwartz (1992, 1994, 1996) and Schwartz and Sagiv (1995) provide some of the most compelling data that something about materialism conflicts with valuing strong relationships and community. They collected data on values in various parts of the world and analyzed it with a "circumplex" technique. In this method, values are located in a circular space, so that those that are close together are thought to be subjectively experienced as compatible, and those on opposite sides of the circle are subjectively experienced as contradictory, or in conflict with each other. It was found that values for wealth, social recognition, preserving public image, ambition and being successful are compatible. Kasser (2002) characterizes this clustering as "a grouping quite similar to what other researchers consider to be materialistic tendencies" (p.65).

Furthermore, it was found that these values are in direct opposition to benevolence (which involves concern for the welfare of close others, and valuing true friendship, mature love, loyalty, responsibility, honesty, forgiveness, helpfulness) and universalism (concern with the welfare of all others and nature) (Kasser, 2002).

Elaborating further on the idea that people who highly value wealth, possessions, status and image do so at the expense of interpersonal relationships and community, there is evidence to suggest that highly materialistic individuals have specific difficulties relating to others that interferes with establishing and maintaining good relationships. The primary difficulties include: typically viewing people as objects and being less concerned with understanding the subjective experience, feelings and desires of other people. Various studies link materialistic values to selfish, non-generous behaviors, such as being more self-centered and preferring to use resources for themselves than share with other people, even close relations (Fitzmaurice & Comegys, 2006; McHoskey, as cited in Richins & Dawson; Kasser, 2002). Further, Kasser and Sheldon (1995) found that students who were highly focused on materialistic values were relatively less empathic or unwilling to see the point of view of another. They were also found to have more “instrumental friendships”, where people are thought to exist to reflect well on the materialistic person and to serve as a means of getting what is wanted.

More specifically, studies conducted across three nations showed materialism to be associated with the tendency to manipulate and use others in order to inflate status and image or for personal gain (Khanna and Kasser 2001; Shwartz, 1994 as cited in Kasser, 2002). Similarly, McHoskey (1999, as cited in Kasser, 2002) found that people who score high on “Machiavellianism,” which involves approving of manipulation in relationships, believing people are lazy and deceptive, not caring about honesty, being interpersonally cold, having relationship problems, and displaying narcissistic and psychopathic behaviors, also score high on the aspiration for financial success.

In addition, Sheldon, et al. (2000) examined what materialistic individuals might do in a situation where they have the opportunity and motive to either cooperate with friends or get

ahead of them in the context of a “Prisoner’s Dilemma” game. They found materialistic values were associated with more frequent decisions to get ahead rather than cooperate. They also found that more materialistic individuals tended to gain fewer points in the game in part because they surrounded themselves with peers who were like them who could not be trusted to cooperate and also felt that there was no one available to exploit (in Kasser, 2002).

Further, Kasser and Ryan (2001) found that materialistic values are related to problems in connecting interpersonally. In one study they measured the relationship quality of materialistic college students and found that those who were focused on the goals of wealth, fame and image reported worse relationship quality with friends and lovers. They also compared materialistic people to people who were rated non-materialistic in their values, and found a link between having materialistic values and having shorter, more negative relationships. Similarly, Sheldon and Flanagan (2001) studied aggression in dating and found that prioritizing materialistic values was associated with having more conflictual and more aggressive behaviors within relationships. In addition, Kasser and Kasser (2001, as cited in Kasser, 2002) attempted to measure relationship quality at the unconscious level and found that in the dreams of people who place material values at the center of life, there is a tendency to move away from intimate connections with others (Kasser, 2002). Finally, Khanna and Kasser (2001) found that materialistic people feel somewhat alienated, disconnected, and separate in social relationships.

Other lines of research point to the idea that the self-esteem of materialists is externally focused and based heavily on outside opinions, resulting in a tradeoff of relational goals in favor of material goals (implicated in dissatisfaction with life). Broadly speaking, materialism has been linked to susceptibility to peer influence in children (Achenreiner, 1997) and to social anxiety, self-consciousness, and need to conform in adults (Schroeder and Dugal, 1995). More

specifically, Khanna and Kasser (2001) found that materialistic individuals often feel like they need to put on a performance for an audience or mold themselves to the opinions of others in order to gain acceptance. Other studies (Browne and Kaldenberg, 1997; Chatterjee and Hunt, 1996) correlate high levels of materialism to high levels of self-monitoring (or awareness of how one appears to an audience accompanied by changes to the self-presentation based on what the situation is calling for). Similarly, Richins (1994) found that materialists are frequently drawn to possessions out of a concern for appearance, or due to a desire to display high status to others, whereas those who rated as less materialistic placed greater value on items that had experiential or personal meaning or held memories of relationships. Richins concluded from this that insecurity in materialists drives their attachment to objects and leads them to focus more on external, material goals than relational goals (Fitzmaurice & Comegys, 2006; Svrivasta, et al., 2001; Tatzel, 2003). In addition, Christopher and Schlenker (2004) investigated whether externally focused self-presentational concerns in materialists could account for their lower well-being. In examining the relationships between materialism, affect and degrees of self-presentational concern, they found that personal identity, aspects life only discernable by the individual, (analogous to intrinsic aspirations) was positively correlated with positive affect, whereas social identity, aspects of life observable by other people, (analogous to extrinsic aspirations) was positively correlated with negative affect. As will be discussed later, one way to further understand these findings is to examine if the focus on extrinsic/external goals relates to insecure sense of self and insecure attachment styles.

Building on the idea of specific difficulties in sense of self and relationships in those who are materialistic, Cohen and Cohen's (1996) research provides evidence for a link between materialistic values and personality disorders characterized by interpersonal difficulties.

Schizoid, schizotypal, and avoidant personality disorders (regarded as involving trouble with forming relationships); borderline and narcissistic personality disorders (regarded as involving self-centeredness in relating); and paranoid personality disorders (regarded as involving a mistrust of people), were associated with highly prioritizing materialistic values (Kasser, 2002). More broadly, those with a strong orientation to materialistic values were more likely to have difficulties with emotion expression and impulse control, and to attempt to overcontrol aspects of their environment. Furthermore, they found that those who rated highly on materialism were also rated as more socially isolated and less adapted to society; as exhibiting more antisocial behaviors; as believing that others have malevolent intentions; as avoidant of or overly dependent on other people and as tending to relate to people in a passive-aggressive manner (Cohen and Cohen 1996). As will be discussed later, these depictions of people who rate high on materialism may be explained by, or linked to, attachment difficulties believed to encumber the development of empathy, good relationships, trust of people, and positive outlook on life.

The fourth theory to explain the relationship between materialism and subjective well-being is a causal theory, postulating that higher levels of materialism cause unhappiness (Solberg et al., 2004). According to this theory, the correlational studies reviewed above indicate that the increased focus on materialistic values, whether stemming from cultural, individual or other factors, creates a focus on aspects of life that bring unhappiness and “spills over” into other domains. Solberg and colleagues (2004) specifically tested this hypothesis in two studies by manipulating the accessibility of materialistic goals (having subjects think about financial goals in one, and in another having subjects become aware of material goods desired but not owned), to see if mood states also changed. They did not find support for the hypothesis that thinking about materialistic values leads to unhappy feelings. However, because they only examined

thoughts and did not test actions involved in “living materialistic values,” they suggested that it is still possible to find evidence for the proposed directionality by using stronger manipulations of material values.

The fifth theory relates to the deficit models described earlier. It describes the direction of causality in the reverse manner, stating that unhappy people become materialistic. Here the idea is that deficits in a person’s life or in one’s personality cause individuals to adopt materialistic values, thereby accounting for feelings of dissatisfaction (Flouri, 1999; Kasser, 2002). Of note, if this were proven to be the case, the criticism that Belk’s measure of materialism confounds with neuroticism might be seen in a different light. As Solberg et al., (2004) state, “If unhappiness does in fact lead to materialistic values, then perhaps it would not be so detrimental to use items that include components of neuroticism when measuring materialism” (p.39).

Support for the idea that personal insecurity causes people to focus on materialistic goals, comes from a few studies examining internal, unconscious motivational underpinnings. In one study, Kasser and Kasser (2001) examined the dreams of a group of undergraduate subjects who either had the highest scores of materialism (the top ten percent on the aspirations index) or had the lowest scores of materialism (the bottom ten percent on the aspirations index). Dreams were understood to represent unconscious conflicts, concerns and motivations. In looking for themes related to insecurity, they found that those who were highly materialistic had dreams in which death played a large role in their dreams; and had falling as a frequent theme (both indicative of insecurity). In addition, compared to less materialistic dreamers who reported confronting frightening objects in a way that diminished fear, no one in the highly materialistic group reported confronting the feared object (as cited in Kasser, 2002).

Further, two studies by Kasser and Sheldon (2000) also examined unconscious

motivational underpinnings of materialistic behaviors by attempting to activate feelings of insecurity via inducing thoughts of death or “the insecurity par excellence” (Kasser, 2002, p.39). These were the first studies on the topic of insecurity and materialism to be experimental. They assumed that if materialistic pursuits constitute an attempt to compensate for insecurity, activating insecurity by having subjects think about death should result in an increase in the level of materialism. In one study, a mortality salience condition and a control condition were created. Those in the experimental group, where insecurity was activated, reported increased expectations for future salary and spending on pleasure items. In the second study, involving a social dilemma game, again those in the experimental group were more motivated by greed and profit than the control group, that is, they became more materialistic (Kasser and Sheldon, 2000). These studies provide the strongest evidence so far for the idea that insecurity causes materialistic tendencies (Kasser & Sheldon, 2000; Kasser, 2002; Kasser et al., 2004).

Taken together, the macro-level and micro-level approaches discussed suggest that both socio-cultural factors and individual differences should be taken into account in the study of materialism, particularly because they appear to interface. It seems likely that influences from within and without, not only come together to produce materialistic behaviors, but operate in a circular manner both at the individual and societal level. At the individual level, people who are prone to higher levels of insecurity or dissatisfaction (because of factors such as upbringing and temperament) may be more susceptible to socio-cultural influences touting the benefits of materialism, which may in turn make individuals feel increasingly insecure, and so on. At the cultural level, social milieus that promote materialism lead to individual internalization of materialistic values, which in turn perpetuate the social milieu promoting materialism, and so on. This would indicate that materialism is a complex, multi-faceted construct in which a spectrum

of behaviors and motivations factor to produce a variety of outcomes. Both at the individual and cultural levels, it cannot be said with certainty what the “beginning point” of the circle is and in what direction it tends to run (Wachtel, 1983, 2003), but further research can continue to provide clues and answers.

The current study will focus on expanding the micro-level research indicating that individual differences variables play an important role in the development and sequelae of materialism by looking at the possible relationship between adult attachment style, materialism and life satisfaction.

Attachment Theory: Framework for Understanding Materialism

The previous review of the literature suggests that personality variables, such as early experiences with parents, ability to carry on quality relationships, security and self-definition, can affect materialism. Before considering this possible relationship further, the literature on the development of early childhood attachment relationships and adult attachment will be reviewed.

A review of attachment theory. Attachment theory has its origins in Bowlby’s wish to understand and explain the extreme distress he had observed in children who were separated from caregivers (Bowlby, 1969; Fraley, Brumbaugh & Marks, 2005). He observed that these children often exhibited behaviors aimed at regaining the caregiver’s attention (such as crying, clinging, and searching) (Bowlby, Robertson, & Rosenbluth, 1952; Heinicke & Westheimer, 1966 as cited in Fraley, Brumbaugh, & Marks, 2005). Bowlby drew on biology, ethology and cognitive science in developing attachment theory; employing concepts of feedback, control systems and homeostasis to build a theory that could explain the biological bases of attachment behavior (Bretherton, 1995; Fraley, Brumbaugh, & Marks, 2005; Schore, 2003). Because humans are extremely vulnerable at birth to predation if caregivers and the social group do not

support him/her, Bowlby proposed that attachment is a primary instinctual behavioral system that is essential to human survival, and thus an essential motivator of behavior. Activated by danger, stress, and novelty, the observable aspects of the system (including behaviors such as crying, calling out, searching and clinging) trigger proximity seeking. This helps to protect the young from mortal danger via the relationship with a stronger attachment figure who can protect the child (Bowlby, 1969; Belsky & Cassidy, 1994).

The attachment behavioral system is intertwined with the exploratory behavioral system, where the two systems are thought to be complementary yet mutually inhibiting (Belsky & Cassidy, 1994; Blatt & Levy, 2003). The exploratory system insures that while the child is protected by proximity to caregivers, he will explore the environment in order to learn about the world in which he lives. When the child perceives the attachment figure to be nearby and responsive, he or she feels secure, and behaviorally, is likely to be playful and sociable. On the other hand, when he or she perceives a threat to the relationship or his or her well-being, the child feels insecure and seeks the protection, attention and comfort of the primary caregiver (Fraley & Shaver, 2000)

One of the premises of attachment theory is that optimal personality development involves achieving a balance between attachment and exploration. Bowlby believed that if mother, and later father, interacts with the infant in a supportive and co-operative manner, he/she will be instilled with a sense of worth and a faith in the helpfulness of others, promoting competence and resilience so that the adverse conditions inherent in life can be successfully negotiated. In contrast, he believed insecure attachment relates to increased susceptibility to developing psychopathology (Bowlby, 1969; Schore, 2003).

Bowlby proposed that a template is laid down in the early years of life, organized by the

attachment system, which accounts for various behaviors later in life. He described latent cognitive-affective “maps”, or representations, of the self in close relations, called internal working models, which are presumed to be a relatively enduring aspect of a person's self-system. More specifically, insecure working models are believed to form the basis for many of the emotional and behavioral difficulties exhibited by adolescents and adults (Belsky & Nezworski, 1988; Bowlby, 1988; Guidano, 1987; Kobak & Sceery, 1988; Sroufe, 1983, 1988; Weiss, 1982). Bowlby believed insecure attachment to be a key aspect of the emergence of disordered personality traits. For example, he proposed that anxious-ambivalent attachment could be linked to the development of dependent and hysterical personalities; and that avoidant attachment could be linked to affectionless and psychopathic personalities, and narcissistic personalities (Bowlby, 1969; Blatt & Levy, 2003; Lyddon, Bradford, & Nelson, 1993).

Infant attachment. Ainsworth built on Bowlby’s work in her ground-breaking research aimed at evaluating the quality of a child’s attachment to caregivers. Generally speaking, she categorized attachment as either secure or insecure, finding two kinds of insecure attachment: avoidant and anxious-resistant. All three categories were found to be consistently linked to parent-infant interaction, and predictive of favorable versus unfavorable sequelae in middle childhood. The following is a brief description of these categories and the concomitant caregiver descriptions.

A secure infant is described as having had repeated, coordinated positive interactions with his caregiver which allow him to develop an understanding that the caregiver is available and responsive to his needs. The mother of a securely attached infant is characterized as responding quickly and appropriately to the child’s emotional expressions, tending to be in touch with both positive and negative aspects of her own attachment experiences, and overall, is

attuned to her child's expressions of affect. She allows her child to seek proximity at times of reunion. She also actively participates in arousal amplifying, and containing interactions and interactive repair transactions, so that optimal levels of affective regulation are reached frequently. Thus, typically when the secure infant is over-aroused, the caregiver is soothing, or during occasional lapses is able to re-stabilize with relative ease. Secure children are likely to explore confidently in the caregiver's presence, seek the caregiver and feel reassured by her at times of distress, respond quickly to their interventions and express emotions directly. Emotions, especially negative emotions, are not experienced as threatening and are understood to serve a communicative function (Slade & Cohen 1996; Schore, 2003; Carlson & Sroufe, 1995).

With insecure infants, the child is described as having the expectation that relating to the caregiver will be unsatisfying, rejecting, overstimulating, dampening, stressful or even disorganizing. An insecure infant of the anxious-resistant type has experienced intermittent caregiver responsiveness to signals of distress. Mothers of these infants have had a tendency to insensitively and/or inappropriately interfere with cycling patterns of high and low arousal. These children do not view their caregiver as helping them to manage high levels of tension and often experience relatively constant states of arousal. They come to view a range of situations as threatening and tend to have exaggerated emotional displays. They express distress and anger openly, but the expression does not lead to a feeling of security. They become preoccupied with having contact with the caregiver and show that they are frustrated about the contact when distressed. An avoidant infant is depicted as insecure in a different way. This child has experienced an overly rigid style of emotion regulation. Typically, the caregiver repeatedly ignores the infant or actively rejects expressions of distress and attempts to gain reassurance. Thus the expression of these emotions is viewed as unacceptable and ineffective in eliciting care.

As a result, avoidant children often fail to seek contact or initiate interaction in response to perceived threats. They may redirect distress or anger to the environment and withhold the desire for closeness. For them heightened arousal is experienced as disorganizing (Slade & Cohen 1996; Schore 2003; Carlson & Sroufe, 1995).

Adult attachment. Adult attachment researchers built on Bowlby's work and Main's initial categories of infant attachment, expanding into the area of adult relationships. These researchers posit that attachment theory has implications for the entire lifespan in that infant attachment styles have social and emotional health repercussions that extend to middle childhood and beyond (Crowell, Fraley, & Shaver, 1999; Sperling, Berman, & Fagan, 1992). Adult attachment theory took the hypothesis that "early parent-child relationships are prototypes of later love relationships" (Waters et al., 1991 as cited in Crowell & Treboux, 1995, p. 296) as a basis for extending the infant research on attachment into the adult domain, and for broadening the earlier focus on behavioral patterns to include cognitive-affective patterns. Early mental representations of the self in relation to attachment figures, initially reflecting expectations about the parent's behavior, are thought to form the basis of a set of assumptions about how close relationships work in general. This cognitive-affective system is believed to predispose the individual toward interpreting experiences in ways that are consistent with the early models. In other words, working models are often thought of as self-perpetuating and as becoming more firmly established as an individual matures into adolescence and adulthood. The persistence of internal working models is thought to explain the continuing effects of early experiences with caregivers into adulthood, providing an understanding of how early attachment responses emerge in various new situations (Bartholomew, 1990; Shaver, Collins, and Clark, 1996 in Bartholomew & Shaver, 1998; Crowell & Treboux, 1995).

Elaborating on Bowlby's ideas, and similar to Ainsworth's model of infant attachment, adult attachment theory links secure attachment to robust psychological health, and insecure attachment to various psychological difficulties. Shaver and Hazan state that underlying the secure attachment style are "optimistic beliefs about distress management, trusting beliefs about the goodwill of others, and a sense of self-efficacy about dealing with threats" (Shaver & Hazan, 1993 as cited in Mikulincer & Shaver, 2005, p. 151). Also, the secure strategies involve acknowledgment and display of distress without personal disorganization; support seeking; and instrumental problem solving. In terms of affect regulation, strategies are aimed at relieving distress; maintaining comfortable, supportive intimate relationships; and increasing personal adjustment (Mikulincer & Shaver, 2005). In contrast, attachment insecurity, based on the sense that the attachment figure is unavailable, or unreliable, and the feeling that proximity seeking is not going to provide protection, leads to less than optimal affect regulation styles.

Those who are characterized as Anxiously attached are believed to use "hyperactivating strategies", involving constant concern and tremendous efforts to establish a connection with the attachment figure and to gain a sense of security. Hyperactivating strategies are thought to extend beyond the initial attachment relationship with parents to behaviors with partners in adult relationships and beyond. Hyperactivating strategies in relationships are characterized as frequent, frantic attempts to elicit the partner's involvement and support through clinging and controlling responses, overdependence on relationship partners as a source of protection (Cassidy & Kobak, 1988).

In the realm of adult self-perception and affective responses, Hyperactivation is linked to a view of oneself as relatively helpless and incompetent and with a reduced threshold for detecting threat-related cues and unavailability in relationships. This means minor threat-related

cues are easily detected; the attachment system is chronically activated; and psychological pain related to the unavailability of attachment figures is exacerbated via intensified negative emotional responses to threatening events and increased rumination on threat-related concerns. This hyperactivation of the attachment system is believed to account for many of the psychological correlates of attachment anxiety (Mikulincer & Florian, 1998).

Avoidant insecurity is understood to revolve around the sense that proximity seeking is unlikely to alleviate distress. In terms of affect regulation, those who are avoidantly attached are characterized as employing Deactivating strategies, which involve denial of attachment needs and avoidance of emotional involvement, intimacy, and dependence in close relationships. Because the primary goal is to keep the attachment system deactivated in order to avoid frustration and further distress caused by attachment-figure unavailability, this results in an inhibited support seeking system where the individual attempts to handle distress alone (Cassidy & Kobak, 1988). Deactivating strategies are also thought to extend beyond the initial attachment relationship with parents to behaviors with partners in adult relationships and beyond. These strategies involve the dismissal of threat- and attachment-related cues and the suppression of threat- and attachment-related thoughts that decreases dependence on others and discourages acknowledgment of personal faults. In terms of adult self-perception and affective responses, these tendencies are linked with a view of the self as self-reliant (Mikulincer & Shaver, 2003) and defensive self-enhancement where negative feelings towards others in relationships are frequently experienced (Mikulincer & Shaver, 2005).

Rationale: Attachment theory in relation to materialism. The current study proposes linking the information provided by attachment theory with the information provided by extant research on materialism, in order to better understand the development and sequelae of

materialism. To review, the micro-level research on materialism presented earlier finds repeated correlations between high levels of materialism and problems with interpersonal connections; relationships characterized by conflict, a tendency to view people as objects, a tendency to be more selfish and less generous, to rely on outside sources for approval, to exhibit certain relational psychopathologies; and to have overall lower levels of subjective well-being (Kasser, 2002; Tatzel, 2003). One way to explain this is to suggest that pre-existing personality differences account for a portion of these qualities, and that personality differences, in turn, account for the degree to which one exhibits materialistic traits and takes on broader socio-cultural materialistic values. As, Kasser et al., (1995) state, it may be that individuals sometimes focus on external, material success goals as a means of “compensating for feelings of insecurity engendered earlier in life” (Kasser & Ryan, 1996, p. 287).

To the degree that personality differences are rooted in early life attachments to caregivers, and to the degree that these experiences carry forward and extend to other areas of life, an understanding of adult attachment style in relation to the adoption of material values may help to clarify the links between materialism and unhappiness. In a similar manner to ideas suggesting an extrinsic value focus derives from personal insecurity, stimulating escape from the self type strategies, the poor relationship quality, personal insecurity, poor self-definition, and low subjective well-being observed in those who rate high on levels of materialism may derive in part from insecure attachment.

In line with this thinking, Mikulincer & Shaver (2005), based on an extensive review of adult attachment studies (Mikulincer, Gillath, & Shaver, 2002; Mikulincer & Shaver, 2003), posit that specific combinations of anxiety and avoidance can shape emotional reactions within relationships to a partner, and potentially beyond. In three studies testing their model, they found

specific patterns of emotional reactions that are similar to descriptions of differences between materialistic and non-materialistic individuals. They noted securely attached individuals displayed the most “differentiated pattern of emotions” (Mikulincer & Shaver, 2005, p. 165), and tended to reflect in relationships a wish to maintain/enhance relationship quality and partner welfare; to overcome relational obstacles; to restore emotional equanimity and relationship stability in times of need; and encourage a partner's personal development. Within relationships they frequently displayed the emotions of: functional anger, happiness, joy, love, gratitude, guilt, reparation, empathic compassion, pride, empathic happiness, respect, and admiration (as cited in Mikulincer & Shaver, 2005). This is similar to the proposition that non-materialistic people are more empathic, intrinsically oriented, have more healthy relationships and a more positive outlook on life.

On the other hand, insecurely attached individuals exhibited a narrower range of emotions. Avoidantly-attached individuals displayed “different kinds of defensive self-enhancement and negative feelings towards a partner... regardless of the nature of the relational event” (Mikulincer & Shaver, 2005, p. 165). These individuals most frequently displayed the emotions of: suppressed anger, resentment, hostility, indifference, detachment, pity, hostility, contempt, gloating, hubris, and hostile envy. The Anxiously attached were described as “emotionally overwhelmed by distress-related feelings during negative relational episodes and to express ambivalent blends of positive and negative emotions during what were expected to be positive relational episodes” (Mikulincer & Shaver, 2005, p. 165). These individuals most frequently displayed the emotions of resentment; hostility; dysfunctional anger; despair; sadness; shame; personal distress; ambivalent feelings of happiness, anxiety, and fear of success; and an ambivalent mixture of happiness, fear of separation, and jealousy (Mikulincer & Shaver, 2005).

These descriptions of the emotional world of the insecure bear striking similarities to descriptions of extrinsically oriented people who rate high on materialism as having difficulties with empathy and handling relationships, a mistrust of people, and a negative outlook on life.

Similarly, Blatt and Levy's model of attachment theory (2003) presents the idea that secure adult attachment and a secure self-definition is built on the foundation of good early life relationships that instill a sense of worth and a faith in the goodwill of others in adulthood (Blatt & Levy, 2003). This is one way to explain the links between a reduced focus on extrinsic (materialistic) goals and increased positive affect and overall well-being. Also, this is a way to better understand the concept that values related to benevolence appear generally to oppose values related to wealth and materialism on the circumplex model (Schwartz 1992, 1994, 1996; Schwartz and Sagiv, 1995).

More specifically, Blatt and Levy (2003) posit that two fundamental developmental processes underlie the formation of personality, both secure and insecure. One is the anaclitic or the "interpersonal relatedness" developmental line, and the other an introjective or self-definitional/self-interest line. Because it is more descriptive, anaclitic will be referred to as "interpersonal relatedness" and introjective as "self-interest" from this point forward. The proposition is based on the idea that optimal psychological health derives from a balance between safety needs (tied to relatedness in that these needs are initially met by attaching to a parental figure) and needs for exploration (the need to distinguish oneself and make one's own way in the world).

Interpersonal relatedness is characterized as the capacity to "establish increasingly mature and mutually satisfying interpersonal relationships," whereas "self-interest" involves the development of "a consolidated, realistic, essentially positive, differentiated, and integrated self-

identity” (Blatt & Levy, 2003, p.114). The two processes are thought of as interdependent, where one feeds and builds on the development of the other in a spiraling, or cyclical manner. Blatt and Levy (2003) argue that a secure attachment style represents a balanced integration of interpersonal-relatedness and self-interest, and that an insecure attachment style represents a warping of these motives, where either Interpersonal-relatedness or self-interest is overemphasized. An overemphasis on Interpersonal-relatedness is likened to the dimension of insecurity known as Anxiety (or the extent to which people are insecure about their partner's availability and responsiveness) and an overemphasis on self-interest with the dimension of insecurity known as Avoidance (or the extent to which people feel uncomfortable depending on others).

Interpersonal-relatedness/Anxious-attachment is thought to represent a preoccupation with maintaining contact with a need-gratifying figure, which is accompanied by considerable anxiety in relation to separation and loss. The other type of insecurity, self-interest/Avoidant-attachment, is thought to involve an exaggeration of self-definition tendencies, where a great deal of energy is invested in staying detached from people in order to defensively display independence, cope with loss, and attempt to reestablish and protect the self-concept. The authors understand that in this case the defense comes at the cost of quality interpersonal relations that foster “trust, warmth, and affection” (Blatt & Levy, 2003, p.116).

In sum, to the degree that the dimensions of Anxiety and Avoidance are tied to later difficulties in life, it may be that Anxiety and Avoidance relate to problems often associated with high levels of materialism. For example, the overreliance on the approval of others, and the callous, narcissistic, greedy, or antisocial behaviors materialists are thought to typically display, may derive in part from insecure attachment styles. In this sense, it may be that distinguishing

securely attached individuals from insecurely attached individuals will help to clarify when materialism becomes detrimental to the subjective quality of life.

How adult attachment is measured and defined in this study. Various measures of adult attachment exist, although generally speaking there is a lack of commonly agreed upon measures of adult attachment orientations. Broadly speaking, these differ in terms of domain (family; peer, or romantic relationships), method (interview, Q-sort, or self-report), dimensionality (categories, prototype ratings, or dimensions), and categorization systems. Also, across the measures controversies exist regarding: whether adult attachment patterns are best conceptualized and measured as types or dimensions; whether attachment patterns are best assessed through self-report or interview methods; and whether measurement should be focused on assessing variation in the content of working models or variation in the functional operation of the attachment system (Crowell, et al., 1999).

Hazan and Shaver (1987) were the first to show that self-report measures can be used to distinguish adolescent and adult attachment styles. They identified three patterns that were consistent with Ainsworth's infant attachment categories (secure, anxious and avoidant). A large number of variations and extensions ensued from there, creating ambiguity as to how to reliably measure adult attachment styles (Brennan, Clark, & Shaver, 1998).

The development of the Experiences in Close Relationships (ECR) scale (Brennan, et al., 1998) stemmed from the effort to standardize and increase the accuracy of adult attachment self-report measures. Brennan et al. factor analyzed a pool of 323 items collected from virtually all the self-report measures of adult romantic attachment available at the time. The ECR was constructed from the 36 items with the highest correlations from the total pool of items, based on the size of their correlations. Eighteen items were found to tap each of two higher-order

constructs: Avoidance and Anxiety. For the dimension of Avoidance, the top three subscales representing this concept were Avoidance of intimacy, Discomfort with Closeness, and Self-Reliance. For the dimension of Anxiety, the most representative subscales were Preoccupation, Jealousy/Fear of Abandonment, and Fear of Rejection.

Thus, the ECR depicts two major factors: Avoidance, or discomfort with closeness and with depending on others, and Anxiety, or fear of rejection and abandonment. The ECR consists of two 18-item subscales, one to measure Avoidance and the other to measure Anxiety. The authors argue that Avoidance and Anxiety underlie nearly all self-report measures of adult attachment and that the two dimensions are virtually unrelated to one another (Brennan, et al., 1998; Fraley, Waller, & Brennan, 2000).

The dimensions of Avoidance and Anxiety are comparable to the horizontal and vertical axes of Bartholomew's four-factor typology of attachment styles, which is similar to Ainsworth's infant attachment typology. Bartholomew's four factors are as follows. Secure adult attachment is characterized by the combination of a positive self-model and a positive model of others, where secure individuals have an internalized sense of self-worth and are comfortable with intimacy in close relationships. Preoccupied attachment (similar to Ainsworth's anxious-resistant category) consists of a negative self-model and a positive model of others, where individuals anxiously seek to gain acceptance and validation from others. Finally, there are two subcategories of the Avoidant category that do not appear in Ainsworth's model: Fearful and Dismissing. Fearful attachment is described as a negative self and other model, where individuals are highly dependent on others for acceptance and affirmation, but due to negative expectations and fear of rejection, avoid intimacy. Dismissing attachment is characterized by a positive self-model and a negative model of others, where individuals also avoid closeness, but

maintain a sense of self-worth by denying the value of close relationships. Avoidance is thought to be comparable to Bartholomew's other-model dimension, and Anxiety to the self-model dimension (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998).

Fraley and colleagues offer an approach that allows for analyzing the ECR according to Bartholomew's four-type model attachment categories, and in a continuous, dimensional manner in which “other regions of the two-dimensional space [are] accurately represented” (Fraley, 2010). Cluster analyses of the ECR reveals four distinct groups that are significantly correlated with and comparable to Bartholomew's four categories: those who were described as secure scored low on both Avoidance and Anxiety; those who were described as fearful scored high on Avoidance and Anxiety; those described as preoccupied scored low on Avoidance and high on Anxiety; and those described as dismissive scored high on Avoidance and low on Anxiety (Brennan, et al., 1998). Recently, researchers (Brennan et al., 1998; Fraley et al., 2000) have begun to favor a dimensional approach over a categorical approach, arguing that power and precision are lost unnecessarily when categorical rather than continuous scales are used. However, it is still a subject of debate as to whether categorical models or dimensional models of adult attachment are more accurate in depicting adult attachment (Fraley et al., 2000).

Overall, the ECR is a widely used measure with potential advantages that include: high internal consistency; greater precision than previous scales due to being based on a large comprehensive pool of items; and effectiveness that is believed to be comparable to interview measures (Brennan et al., 1998).

Adult attachment style and materialism: Extant research and current study.

Although research specifically relating adult attachment style and materialism has not been extensively conducted, other strands of research support the idea that early caregiver

environments and adult attachment styles play a role in materialistic orientations (Kasser, 2002). A variety of correlational studies link high levels of materialism to poor quality family relationships. Studies by Kasser, Ryan, Zax & Sameroff, (1995) and Williams, Cox, Hedberg, & Deci (2000) indicate that, after controlling for demographic variables including age, gender, race, and socio-economic status, there is a link between “controlling, uninvolved parenting” and a predominance of extrinsic (materialistic) aspirations, and that oppositely, “autonomy-supportive, involved parenting” is linked to a more central focus on intrinsic aspirations (Kasser, 2002). More specifically, Kasser et al. (1995), Williams et al. (2000) and Cohen and Cohen (1996), over the course of several studies, found that teenagers who strongly valued financial success had mothers who were rated as less nurturing on a measure of maternal nurturance. Additionally, Cohen and Cohen (1996), after controlling for other life values including neighborhood, school and peer characteristics, found that materialistic teens typically viewed parents as relatively unlikely to listen to their perspectives, acknowledge their feelings, or provide them with choices and described their parents as highly enmeshed/possessive of children, harsh and punitive, and unlikely to provide structure and rules for children (Kasser 2002). Finally, Flouri (1999) found a mother’s rating on a scale of materialism, and self-report of “family communication style” (p.722) reliably predicted her adolescent’s rating on a scale of materialistic values. Further, in studying compulsive buyers, Faber has found that these individuals often have a history in which they felt they failed to meet up to parental expectations, leading to perfectionism in adult life.

Illustrative of these kinds of issues is an anecdote from Fiona Murray (2000), a self-proclaimed shopping addict, who describes how her mother’s emotional neglect stimulated her addictive behavior in adulthood. She notes that her mother’s repeated pattern of leaving home for several days at a time followed by giving presents upon return, laid the groundwork for seeking

relief through acquisition. She states, “Throughout my adult life I would seek reparation for myself in the form of alcohol or shopping whenever I felt hurt, isolated or abandoned...I experienced the euphoria of shopping at the early age of eight or nine, for it represented one of the few occasions where I was the recipient of some meaningful female attention, even if it was only the sales assistant fussing over me” (Murray, 2000, p. 160).

Only one study (Kosmicki, 2002) has been conducted thus far specifically relating attachment measures to measures of materialism. Kosmicki investigated how relational models from attachment theory, as well as from relational ethics theory might correlate with materialism. Relational Ethics is based on the idea that individuals are “entitled to care, nurturing, and love from birth simply by virtue of being brought into the world” (p. 8) and that, “early experiences of injustice and inequity” can predispose people towards developing feelings of mistrust and “destructive entitlement” (p. 8).

Multiple regression analyses from this study supported a link between materialism and attachment style, showing that anxiety and avoidance were predictive of both materialistic traits and values. More specifically, a positive relationship between the Anxiety dimension of the ECR and the materialistic trait envy was found that was partially mediated by Negative affect; and Avoidance was found to positively correlate with non-generosity. Unexpectedly, Avoidance was also found to predict envy, though to a lesser degree. Furthermore, investigating the relationship between Bartholomew's attachment types (as calculated from the ECR measure) and Belk's subscales, Secure individuals scored significantly lower on non-generosity; Avoidant individual scored higher on non-generosity, and those labeled Preoccupied scored higher on envy. In addition, violations of relational ethics were broadly associated with anxious attachment, avoidant attachment, materialism and negative affect.

Further, Kosmicki found, as predicted, that the relationship between materialistic values and attachment style was mediated by materialistic traits (envy and non-generosity), supporting the hypothesis that Belk's trait scale of materialism and value measures of materialism are measuring different aspects of the construct. Finally, contrary to the initial hypothesis, Kosmicki did not find that the trait of possessiveness negatively correlated with non-generosity, nor did he find a significant association with secure attachment. This can be interpreted as support for Belk's inclusion of the possessiveness subscale in the overall materialism scale.

The present study includes a number of the measures employed by Kosmicki, but it includes as well a Q-sort measure developed for this project, which forces a trade off in ranking items and provides different information about subjective states of mind than paper and pencil measures do. Q methodology is a widely adopted method of investigation developed by William Stephenson in 1935 that allows for a systematic study of subjectivity. The Q sort technique involves a participant evaluating a set of statements (items) relevant to a particular topic and rank-ordering (sorting) the items along a continuum (e.g. from most important to least important). Some of the advantages of the Q-sort method include the following. The Q-sort involves a forced choice method where trade-offs must be made as items are ranked from high to low, meaning that, unlike Likert-type scales, not all of the items can be ranked highly. This stimulates participants to be more thoughtful as they consider their attitudes towards the topic of study, so that the Q-sort may uncover the true feelings of participants more readily. The Q-sort technique also allows for parametric and non-parametric tests and combines strengths from both qualitative and quantitative research methods. In addition, the Q-sort can also be used on small and non-random samples, and on the same person, multiple times, with short time periods between administrations (Block, 1961; Cross, 2005).

The use of the Q-sort is an important feature of the current study that differentiates it from previous research. In addition to investigating the relationship between adult attachment style, materialism and ratings of life satisfaction via self report measures, the current study will examine data from the Q-sort measure in order to gain a better understanding of the subjective states of mind that lead people to choose materialistic values. The current study will compare the Q-sort items of subjects rating as materialistic and non-materialistic in relation to security of attachment. Also, another aspect of the Q-Sort technique is that two administrations of a sort (based on differing instructions) can be administered to the same subject in order to find discrepancies between the two sorts. Generally congruence between two Q-sorts is thought to indicate psychological health, whereas discrepancy indicates some degree of psychological discomfort. For example, Carl Rogers (1951) used two administrations of the Q-Sort, a self-sort and a self-ideal sort (pre-therapy and post-therapy) to measure improvement after psychotherapy. Roger's assumed that if the discrepancy between the evaluation of the self and self-ideal decreased from the time of the first administration to the second, the client was showing improvement. In the current study, two administrations of the Q-sort will be compared to examine the discrepancies hypothesis: one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived (Phillips, Raiford, & El-Batrawi, 1965).

Summary, Aims and Research Questions

This study will investigate the relationship between adult attachment style and materialism by assessing individual differences in attachment style and correlating these differences with ratings of materialism as well as ratings of life satisfaction. A web of connections between personality attributes and development and contemporary experiences on the one hand, and materialistic traits and values on the other, has been observed. The individual's attachment style seems a natural addition to this line of investigation, but to date, just one study has been conducted that relates materialism and attachment. Since it is believed that family relationships are significant in shaping children's orientations toward materialistic values (as opposed to prosocial and relationally oriented values) and that attachment theory is a useful framework for understanding the personal insecurities believed to underlie materialistic attitudes it is thought that it will be beneficial to examine whether materialism is an orientation embedded within motivational structures governed by attachment. Adult attachment styles may describe some of the personal insecurities (trait aspects of materialism) that play a role in determining whether an individual places materialistic goals at the top of his or her value system and pursues happiness via acquisition.

The current hypothesis is that materialistic values, as measured by established self-report questionnaires, will be negatively correlated with adult attachment security. Further, an important feature of this study that differentiates it from previous research is the use of a Q-sort measure developed for this project. The Q-sort requires people to make choices and tradeoffs as they rank order cards with a very broad range of items and things people can value. In order to better understand of the states of mind that lead people to choose materialistic values, the Q-sort items of materialistic and non-materialistic subjects will be compared, and examined in relation

to security of attachment. Also, to examine the discrepancies hypothesis, two administrations of the Q-sort will be compared: one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived.

Aims of the study and research questions.

Aim 1:

To examine the relationship between adult attachment style and levels of materialism.

Research Questions:

1. What is the relationship between adult attachment style and ratings of materialism? Is Insecure attachment associated with higher levels of materialism, both as a trait and as a value, than secure attachment?
2. If a relationship is found between adult attachment style and ratings of materialism, is the strength of the relationship between materialistic traits and attachment style different from that of materialistic values and attachment style?
3. If a relationship is found between adult attachment style and ratings of materialism, are there differences in the relationship between materialism and attachment for the specific subscales of the Ger/Belk trait materialism measure?

Aim 2:

To explore the Q-sort responses as they relate to materialism and attachment. To describe the Q-sort items endorsed by materialists and non-materialists in order to better understand the states of mind that lead people to choose materialistic values.

Research Questions:

1. What are the top five items endorsed by high materialists and low materialists on the Q-sort?
2. What are the top five items endorsed by secure and insecure groups on the Q-sort?
3. What are the top five items endorsed by Secure-Materialistic, Secure-Non-Materialistic, Insecure-Materialistic, and Insecure-Non-Materialistic groups?
4. What are the five lowest ranked items endorsed by high materialists and low materialists on the Q-sort?
5. What are the five lowest ranked items endorsed by secure and insecure groups on the Q-sort?
6. What are five lowest ranked items endorsed by Secure-Materialistic, Secure-Non-Materialistic, Insecure-Materialistic, and Insecure-Non-Materialistic groups?

Aim 3:

To explore the relationships between discrepancies in ratings of the “Good Life” and the “Actual Life” (Good/Actual Discrepancy) and materialism, life satisfaction, and attachment security.

Research Questions:

1. What is the relationship between materialism and the size of the discrepancy between the two administrations of the Q-sort (one instructing subjects to rank items according to their vision of the good life and the other according to how their life is actually lived)?
2. What is the relationship between attachment style and the size of the discrepancy

between the two administrations of the Q-sort (one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived)?

3. What is the relationship between life satisfaction and the size of the discrepancy between the two administrations of the Q-sort (one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived)?
4. What is the relationship of all three variables (attachment security, life satisfaction, and materialism) taken together to the Good/Actual discrepancy?

CHAPTER 3

Methods

This study will examine data collected as part of a larger study carried out by Dr. Paul Wachtel, Principal Investigator. Dr. Wachtel's project is directed toward better understanding the way people think about money and material possessions and the ways people try to negotiate between their wish to obtain the material advantages that are so important in our society and the wish to be available to spend time with friends and family. The project is also designed to help parents better understand these choices in relation to raising children. All data was collected at City University of New York Offices, home and work locations of subjects, and public venues between 2004 and 2007.

Sample

The current sample is derived from the larger parent study conducted by Dr. Paul Wachtel. Convenience and snowball sampling was used to recruit a pool of subjects. The selection criteria for recruitment of subjects were having an interest in participating. Subjects volunteered to join the study if partaking in the research appealed to them and they had the time to participate. No subjects were eliminated from the study or were excluded from participating. Subjects were not paid to participate.

Subjects. All subjects signed written, informed consent. 71 subjects entered the study. Participants had a mean age of 48.72 (S.D = 10.99) years (missing data of 2 participants). Subjects were 25.4 percent male and 74.6 percent female. Ethnicity of subjects was: 77.5 percent Caucasian-Non-Hispanic, 9.9 percent African Descent, 4.2 percent Hispanic, 1.4 percent Asian Descent, and 5.6 percent Unknown (2.8% missing data, 2.8% self-identified "American").

Annual Income of subjects were: 12.7 percent less than 15,000, 4.2 percent 15,001 to 25,000, 15.5 percent 25,001 to 40,000, 14.1 percent 40,001 to 60,000, 19.7 percent 60,001 to 85,000, 8.5 percent 85,001 to 125,000, 8.5 percent 125,001 to 250,000, 1.4 percent 250,001 to 500,000, and 15.5 unidentified.

Setting

The study was carried out in the following locations:

1. Private offices of interviewers at The Graduate Center of The City University of New York- 365 Fifth Avenue, New York, NY 10016
2. Private offices of interviewers at The City College of The City University of New York- 160 Convent Avenue at 138th Street, New York, NY 10031
3. Private homes and offices of subjects, and public meeting areas located throughout New York City and New Jersey.

Procedures

Subjects were recruited via advertisements left in public places in New York and New Jersey, including College campuses of the City University of New York, libraries, malls and churches, and in response to recruitment letters sent out to Principals of public and private schools in New York City and New Jersey advertising the project to parents of the children attending those schools. The representative of the study in charge recruitment contacted subjects who expressed interest in participating. Subjects were informed that the research would involve two separate meetings, and those who agreed to participate were assigned to meet with a student interviewer. The student researcher assigned to conduct the interview, arranged a first meeting, to take place either at one of the offices of the student interviewer, the subject's home or

workplace, or a public venue.

At the beginning of the first meeting, the informed consent procedure was carried out and the participant signed a consent form. The subject was then read a brief description of the project. After this, the first task the participant was asked to do was a Q-sort in which cards with items related to values of interest to the study were sorted from most important to least important. Items included values related to money and possessions, relationships, time, health and well-being. Subjects were asked to sort items according to one of two possible instructions: one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived. The decision as to which instruction would be used at the first meeting was random.

After doing the Q-sort tasks, participants were asked a brief set of standard interview questions. After this, subjects were asked to fill out a set of paper and pencil self-report questionnaires: the Demographics questionnaire, the Satisfaction with Life Scale (SWLS), the Aspirations Index, the Rosenberg Self-Esteem Scale (RSE), the Richins-Dawson materialism scale (the M scale) and the Belk Scale. This concluded the activities for the first meeting, and the interviewer scheduled a second (and last) meeting.

In the second meeting, subjects were asked to do the same Q-sort task according to the other set of instructions (the instruction not used in the first meeting). Then they were asked the standard follow-up interview questions given in the first meeting. After this, they were asked to fill out another set of paper and pencil self-report questionnaires: the True-False Greed Scale (TFGS), Experiences in Close Relationships Inventory (ECR), the Life Satisfaction Questionnaire (LSQ) and the Life Evaluation Questionnaire (LEQ). This completed the battery of questionnaires used in the parent study. At the end of the second meeting subjects were asked

to refer people to the study if they could think of someone who would be interested in participating. Each data set was assigned a number and no identifying information was collected.

Training of interviewers. Clinical Psychology graduate students collected the data under the supervision of the Principal Investigator, Dr. Wachtel. Dr. Wachtel is a trained psychotherapist with almost 40 years of experience. Student interviewers were trained in administering the Q-sort, the paper and pencil questionnaires and interview questions, and were involved with the research prior to data collection.

Interviewers were trained to collect data in a supportive manner, in a way that would encourage subjects to feel comfortable exploring the complexities of the questions posed by the larger protocol. Additional psychological assistance was available should the unlikely situation arise that a subject became moderately distressed as a result of participating in the study. This proved unnecessary in the data collection process.

Measures

The Aspirations Index. The Aspirations Index (AI) (Kasser & Ryan, 1993, 1996, 2001) assesses materialism in terms of its relative importance as a value within an individual's overarching hierarchy of values. All subjects completed a revised version of the questionnaire originally developed by Kasser and Ryan in 1996 (Kasser & Ryan, 2001). The revised AI presents a total of 35 aspiration items in seven life-goal categories: wealth, image, fame, health, personal growth, affiliation, and community feeling. For each of the seven life-goal categories, there are five items/goals representing the category. Participants were asked to rate items according to the importance of the goal; the chance of attaining it; and the degree to which it has already been attained, using a 7-point rating scale. The three categories of wealth, image, and fame are used to measure materialism, with higher scores indicating higher levels of materialism

(“Aspirations Index Scale Description,” 2008; Kasser & Ryan, 1996, 2001).

To score the Aspirations Index, first raw subscale scores (one for each of the seven aspiration categories) are calculated by averaging the item responses in that category (i.e., wealth, image, fame, health, personal growth, affiliation, and community feeling). Raw subscale scores are computed for each of the 7 subscales by taking the average ratings for the items that comprise each domain. Also, a total importance score for the aspirations (all the aspirations regardless of content) is calculated by averaging all the 7 subscale scores together. Kasser and Ryan stress that when analyzing data from the Aspirations Index, it is crucial to compute relative centrality measures. To find the relative centrality score for each type of aspiration, the total importance score is subtracted from each of the 7 raw subscale scores. This yields 7 different (mean-corrected) relative centrality scores, one for each type of aspiration. A summary intrinsic score can be obtained by averaging the 4 intrinsic relative centrality scores (Personal Growth, Affiliation, Community Feeling, and Health) and a summary extrinsic score by averaging the 3 extrinsic relative centrality scores (Wealth, Image, and Fame). Because in many studies, the health aspiration category is dropped from the summary intrinsic score, the current study views health as neither intrinsic nor extrinsic and does not include this aspiration in the summary intrinsic score (Aspirations Index Scale Description, 2008; Kasser, n.d.; Kasser & Ryan, 1996, 2001).

Of note, each item in the revised Aspirations Index (Kasser & Ryan, 1996) is assessed according to three dimensions: the importance of the goal; the likelihood of attaining it; and the degree to which it has already been attained. Thus, raw subscale scores, total importance scores and relative centrality scores are calculated for each of the three dimensions (importance, likelihood and attainment).

Support for the reliability and validity of the AI comes from a number of studies (Kasser & Ryan, 1993; Kasser & Ryan, 1996). Kasser, Ryan, and colleagues conducted studies where they examined similar constructs and employed other measures, including guiding principles (Kasser & Ryan, 1993, 1996); personal strivings (Sheldon & Kasser, 1995, 1998, 2001); reaction time methods (Schmuck, 2001; Solberg et al., 2004); and self-reports measures of Materialistic values (Richins & Dawson, 1992). They were able to replicate the results obtained using the AI instrument. Another indication of the validity of the measure is presented by Kasser & Ahuvia (2002) in a study finding a positive correlation between extrinsic values (financial success, image, and popularity) and other measures of materialism (Kasser & Ahuvia, 2002; Kasser & Ryan, 1993, 1996).

The Material Values Scale. The Material Values Scale (MVS) was developed in 1992 by Richins and Dawson as a value measure from the point of view of consumer research. It assesses materialism by tapping three areas (1) acquisition centrality, or how central materialism is amongst other desires in the life of an individual (2) acquisition as the pursuit of happiness, or how much wealth and possessions and their acquisition are seen as a means to happiness and (3) possession defined success, or how much people believe having possessions reflects success (both for self and others). The MVS contains 18 items measuring the three domains, using a five-point Likert scale, ranging from strongly agree to strongly disagree (Richins, 2004; Richins & Dawson, 1992). Several items are reversed scored. Item scores are summed within each domain to provide a score for each, or can be summed together to provide an overall measure of materialism.

This measure attempted to address some of the weaknesses of the rank measures of materialistic values that existed at the time. Richins and Dawson (1992) proposed that unlike

rank measures, their multiple-item scale could be used to assess “the intensity of a variable using a metric scale” and to “establish reliability, compare individuals or groups, and assess associations with other variables” (p. 314).

Richins and Dawson (1992) reported on validation tests that indicated construct validity where high scorers (compared with low scorers) desired a higher level of income, placed greater emphasis on financial security and less on interpersonal relationships, preferred to spend more on themselves and less on others, engaged in fewer voluntary simplicity behaviors, and were less satisfied with their lives” (p. 303). Richins and Dawson (1992) also calculated the Reliability Coefficient alpha for the items making up each of the three factors individually as well as for the 18 items together as an overall scale. In reporting on three consumer samples, they found: alpha coefficients from .71 and .75 for the items measuring acquisition centrality; from .74 to .78 for the possession defined success subscale; and between .73 and .83 for the acquisition as pursuit of happiness subscale. The alpha for the combined scale (all 18 items) varied between .80 to .88. In addition, the “Test-retest reliability (three-week interval) was calculated on data from a sample of 58 university students. The reliability correlations were .82, .86, and .82 for the centrality, happiness, and success subscales, respectively, and .87 for the combined scale” (Richins & Dawson, 1992, p. 310). Rindfleisch and colleagues (1997) also found a strong reliability for the overall scale, reporting a coefficient alpha of .87. According to Richins (2004) the MVS “has been used in numerous studies in the United States and elsewhere, and there now exists a substantial base of information about the psychometric properties of this scale and about its relationship to other consumer constructs” (p 209).

Ger/Belk Materialism Scale. Belk (1984, 1985) developed his scale with the idea that one can infer the presence of materialism by looking at personality traits related to it. He

measured a materialistic outlook by assessing the personality traits of envy, possessiveness, and non-generosity. Envy is regarded as involving “a desire for others' possessions, be they objects, experiences, or persons” where “the envious person resents those who own desired possessions ... and feels personally demeaned by this fact of ownership, especially if these others are seen by the envious person as less worthy of the objects” (Belk, 1985, p. 268). Possessiveness is defined as “the inclination and tendency to retain control or ownership of one's possessions” (Belk, 1985, p. 267). Non-generosity is defined as “an unwillingness to give possessions to or share possessions with others” (Belk, 1985, p. 268).

In testing the three measures Belk found support for the measure reporting, “good reliability, good convergent validity, marginal discriminant validity, and very good criterion validity”. Belk (1984) reported coefficient alphas of .68 for the possessiveness subscale, .72 for non-generosity, and .80 for envy. Also, envy and non-generosity, and to a lesser extent possessiveness, were found to be negatively related to happiness with life. Belk noted these results were “encouraging” in terms of indicating the reliability of the measure (p. 293). Later, Belk (1985) suggested that subscales could be combined into a single-factor measure of materialism. He reported alphas of .66 to .73 for the overall scale. Belk conducted three tests of validity for the single factor measure. In the first test, he found a significant, negative correlation between materialism and happiness/life satisfaction. In the second test, in comparing blue-collar workers with students from a religious institution, he found a higher mean materialism score for the blue-collar workers. Finally, in the third test, examining various attitudes and behaviors over three generations yielded no consistent patterns between materialism and other measures.

Ellis (1992) examined this scale and concluded that a single factor model should not be applied because the subscales did not positively correlate with the overall scale. However, Ellis

felt that the three factor model indicated that there were "enough positively correlated factors that might be capturing some aspects of this higher-order materialism construct" (p. 691).

Belk and Ger assessed how the measure could be made appropriate for cross-cultural research (Ger & Belk 1990, 1996). Qualitative and quantitative research carried out in more than thirteen countries indicated that the scale should be revised to include a new subscale. Initially this new subscale was called "tangibility"; but later the name was changed to "preservation." Preservation is defined as "the conservation of events, experiences, and memories in material form" (Ger & Belk, 1996, p.64). These changes addressed many of Ellis' concerns.

The revised Belk scale was administered to subjects. The scale consists of 23 items designed to measure four domains using a five-point Likert scale, ranging from strongly agree to strongly disagree. Subscale scores for envy, non-generosity, possessiveness and preservation can be calculated by summing the items comprising each subscales. In addition, an overall materialism score can be obtained by summing all the items, with higher scores indicated higher levels of materialism. A number of items are reverse scored.

Ger and Belk (1993) used Cronbach's alpha to assess reliability, reporting "moderately satisfactory" levels that were an improvement on the alphas for the original materialism scale for cross-cultural research ($\alpha = .58$ for a combined Turkish, French and U.S. sample). Validity was evaluated by correlating the overall scale and the individual subscales with "the proportions of items seen as necessities and the proportions of wish list mentions involving materialistic products". The pattern of correlations supported the scale's overall validity in that: "the materialism scale is related to the proportion of items seen as necessities and the proportions of materialistic items wanted and missed, but it is not associated with the proportion of materialistic important products already owned" (Ger & Belk, 1996, p. 67; Micken, 1995). They pointed out

that, “there is a trade-off between reliability and cross-cultural adaptability” and that the “reliabilities of the scales are a constraint on their validity, since theoretically a scale cannot correlate more highly with an external measure than it does with itself” (p.67).

The Experiences in Close Relationships Scale. The Experiences in Close Relationships Scale (ECR) is a 36-item self-report measure assessing the dimensions of attachment anxiety and avoidance. Participants are asked to rate the extent to which each item is descriptive of how they feel in close relationships, on a 7-point Likert scale, from disagree strongly, to agree strongly. Eighteen items are used to measure the attachment anxiety dimension and 18 items measure the attachment avoidance dimension. The even numbered questions represent the anxiety dimension and the odd numbered questions represent the avoidance dimension.

A score for attachment-related anxiety can be calculated by averaging the subject’s responses to the even numbered items, making sure to reverse key item 22. A score for attachment-related avoidance can be calculated by averaging a person’s responses to odd numbered items, making sure to reverse key items 3, 15, 19, 25, 27, 29, 31, 33 and 35. Higher mean scores indicate greater anxiety and avoidance (greater Insecurity). Low scores on both dimensions of avoidance and anxiety indicates Security. Fraley (2010) suggests using multiple regression to analyze attachment data in a continuous manner. He offers that results can be interpreted in terms of Bartholomew’s four attachment style categories (Secure, Fearful, Preoccupied, Dismissing), by examining different patterns of regression coefficients, allowing other regions of the two-dimensional space to be accurately represented. In addition, following the criteria described by Brennan et al. (1998), the Avoidance and Anxiety scores can be used to place subjects into one of four attachment categories (i.e., secure, preoccupied, fearful, or dismissing), so that Secure and (combined) Insecure groups can be distinguished.

The reliability and construct validity of the two subscales have been demonstrated (Brennan et al., 1998). These subscales have been reported to be “internally consistent (avoidance $\alpha = .94$; anxiety $\alpha = .91$) and largely orthogonal ($r = .12$). Construct validity has been demonstrated, with the avoidance subscale strongly correlated with independently constructed measures of avoidance of intimacy ($r = .89$) and discomfort with closeness ($r = .86$) and the anxiety subscale strongly correlated with independently constructed measures of fear of rejection ($r = .88$), jealousy and fear of abandonment ($r = .82$), and preoccupation with close relationships ($r = .88$) (Brennan et al., 1998).

Satisfaction with Life Scale. The Satisfaction With Life Scale (SWLS) (Diener, et al., 1985) is a five-item scale that, "is designed around the idea that one must ask subjects for an overall judgment of their life in order to measure the concept of life satisfaction" (Diener et al., 1985, pp. 71-72). A pool of 48 items was factor analyzed, yielding the 5 items that comprise the scale. Subjects rate items on a 7-point Likert-type scale, ranging from strongly disagree to strongly agree. To obtain a summary score the five items are added together. Scores range from 5 to 35, with higher scores indicating greater life satisfaction. Diener et al. (1985) reported a 2-month test-retest correlation coefficient of .82 and an alpha coefficient of .87 for a sample of 176 University undergraduates. In a sample of 39 elderly individuals, Pavot, Diener, Colvin, and Sandvik (1991) obtained an alpha coefficient of .83. The SWLS has been found to be positively associated at statistically significant levels with other measures of subjective well-being and negatively associated with measures of psychopathology (Diener et al., 1985).

The Q-sort measure. The Q-sort method involves a subject evaluating a set of statements on a certain topic and rank-ordering the items. The Q-sort method is believed to allow for a systematic study of subjectivity. Dr. Wachtel and colleagues developed a Q-sort measure

for the parent project, where items tap the areas of materialism, relationships, health and time. Subjects were asked to rank the statements according to how important they seemed and how much the items characterized them. Seven categories were used, with the number of items distributed into each category being respectively, 3, 5, 9, 12, 9, 5, and 3. Subjects placed the 3 most important items in the column on the left, and the 3 least important ones in the column at the far right. Appendix A displays the 46 items included in the Q-sort, as well as the frequencies and scale values for the seven categories.

The Q-sort may be depicted with descriptive statistics. Another way to examine the Q-sort data is to compare the Q-sorts of one group to the Q-sorts of another group of participants, item by item (where the groups are established independently from the q-item placements). To evaluate the significance of difference between the placements of a Q-item in two groups, if scores for items have a normal distribution then parametric tests may be used. When scores do not have a normal distribution, then nonparametric statistical tests can be employed (Block, 1961, p. 73). In addition, to examine discrepancies between two different sorts administered to the same subject (for example, an ideal sort versus a real sort), a discrepancy score can be calculated. Higher degrees of congruence between two sorts are believed to indicate higher degrees of well-being and adjustment in subjects, whereas higher degrees of discrepancy between sorts are indicative of lower well-being and lack of adjustment (Phillips et al., 1965).

Discrepancy scores will be calculated as a measure of the difference between what subjects desire for themselves in the material realm (the Good Life sort) and what they are currently doing and achieving in the material real (the Actual Life sort). A difference score will be calculated for each of the 46 Q-Sort items by taking the absolute values of the differences between the Good Life item X score and the Actual Life Item X Score. Then a Total Absolute

Difference score (“Discrepancy Score”) will be computed by averaging the difference scores for each subject (the absolute differences between the rankings on each administration for each item within subject) (Garrett, 1958, p. 226-230).

Data Analysis Plan

To test the relationship between attachment security and materialism, independent samples t-tests comparing materialism scores (from each of the three materialism scales) for Secure versus Insecure subjects will be used. Secure and Insecure groups will be distinguished using the criteria described by Brennan et al. (1998). Also, to test this relationship multiple regression will be employed to examine the relationship between the continuous ECR Anxiety score and materialism measures, and the ECR Avoidance and materialism measures. If significant relationships are found, the relationship between materialistic traits and attachment style versus the one for materialistic values and attachment style will be compared and tested for being significantly different from each other. Also, if a significant relationship is found between trait materialism and attachment, the specific subscales of the Ger/Belk trait materialism measure will be compared for secure and insecure subjects using independent samples t-tests.

To explore the Q-sort responses as they relate to materialism and attachment the following analyses will be carried out. Frequency tables of the averages for each Q-sort item (separately for the Good Life and for the Actual Life administrations) will be calculated and the top five and bottom five items will be selected for the following groups of subjects:

- 1) Low materialists (LM) and high materialists (HM) separately
- 2) Securely attached (SA) and insecurely attached (IA) participants separately
- 3) LM-SA, LM-IA, HM-SA, and HM-IA participants separately

Also, where Q-sort items rank in the top five or least five of one group but not the other, independent samples t-tests will be conducted to test if differences in mean rank between two groups (for all the above groups) are statistically significant.

To explore the relationships between the discrepancy between ratings of the “Good Life” and the “Actual Life” (Good/Actual Discrepancy) and materialism, life satisfaction, and attachment security, the following statistics will be employed. Firstly, difference scores will be calculated for each q-sort item by using the following formula:

$$\text{Discrepancy Item X} = |(\text{Good Life item X score}) - (\text{Actual Life Item X Score})|.$$

The discrepancy item scores (the absolute values of the differences) will be averaged for each individual to arrive at a (mean) Discrepancy Score.

Frequency tables of the average discrepancy for each Q-sort item (separately for the Good Life and for the Actual Life administrations) will be calculated and the top ten Q-Sort Items with the highest Discrepancy will be presented. Pearson correlations will be run between discrepancy scores and materialism scales to examine if materialism is associated with the Good/Actual discrepancy. A Pearson correlation will also be run between discrepancy scores and life satisfaction scores to examine if life satisfaction is associated with the Good/Actual discrepancy. Further, two Pearson correlations will be run between discrepancy scores and the ECR Avoidance scores and ECR Anxiety scores to see if attachment anxiety or avoidance are associated with the Good/Actual discrepancy. In addition, an independent samples t-test will be computed to compare the mean discrepancy score for Secure versus Insecure subjects.

CHAPTER 4

Results

Sample Characteristics

Although the full protocol from the parent research project was administered to all 71 subjects, some participants omitted some of the measures given. In terms of background variables 2 participants did not provide age information, 2 participants did not fill in ethnicity information, and 3 participants omitted current annual household income. In terms of the measures used in this study, 1 subject did not complete the attachment measure, as many as 5 did not complete at least one materialism scale (3 did not complete the Ger Belk Materialism Scale, 5 did not complete the Richins Dawson Materialism Scale, and 3 did not complete the Aspirations Index), and 4 subjects did not complete the well-being measure.

The sample obtained for this study was 25.4% male and 74.6% female. The mean age of participants ($N = 69$) was 48.72 ($S.D = 10.99$) years. Ethnicity of subjects ($N = 69$) was: 77.5 % Caucasian-Non-Hispanic, 9.9 % African Descent, 4.2 % Hispanic, 1.4 % Asian Descent, and 5.6% Unknown (2.8% missing data, 2.8% self-identified “American”). In terms of annual household income ($N = 68$), 2.8% of subjects earned between \$25,001 and \$40,000; 2.8% between \$40,001 and \$60,000; 14.1% between \$60,001 and \$85,000; 23.9% between \$85,001 and \$125,001; 22.5% between \$125,001 and \$250,000; 18.3% \$250,001 and \$500,000; 11.3% over \$500,000 and 4.2% was unknown. In terms of level of education ($N = 71$), 7.0% completed 12 years of school, 25.4% completed 16 years, 52.1% completed 18 years (of these 3 subjects completed an additional masters degree), 7.0% completed 19 years, 7.0% completed 20 years, and 1.4% self-identified as “graduate”.

Data Characteristics

All the variables were normally distributed except for the following. The Avoidance scale on the Experiences in Close Relationships (ECR) adult attachment measure had a slightly high kurtosis (4.192). More specifically, the Avoidance scores were skewed to the left, with most people scoring low on Avoidance and very few scoring in the top half of the range (see Appendix D). With the Q-sort discrepancy scores, the discrepancy score for item 33 had a moderately high kurtosis (7.681) and the discrepancy for item 42 had a mildly high kurtosis (4.567). Parametric statistics are robust in the face of this level of kurtosis and were used in statistical analyses of the Q-sort data.

Descriptive Analyses and Reliability

Table 1 presents the means, standard deviations, N's and alphas for measures used in the current study. With the exception of the Ger Belk Materialism Scale and the personal acceptance subscale of the Aspirations Index, which have alphas below .7, the alphas were high, ranging between .7 and .9, indicating good internal reliability.

Table 1
Means, Standard Deviations and Cronbach's Alphas for Study Measures

| Scale | Mean | SD | N | Number of Items | Cronbach's Alpha |
|---|-------|-------|----|-----------------|------------------|
| Experiences In Close Relationships (ECR) Attachment Measure | | | | | |
| Avoidance | 2.24 | .95 | 70 | 18 | .903 |
| Anxiety | 3.21 | 1.02 | 70 | 18 | .875 |
| Secure Category (Coefficient) | 13.39 | 7.21 | 70 | | |
| Insecure Category (Coefficient) | | | | | |
| Fearful/Avoidant | 10.09 | 12.37 | 70 | | |
| Dismissing/Avoidant | 10.13 | 9.83 | 70 | | |
| Preoccupied | 11.48 | 11.64 | 70 | | |
| Satisfaction with Life Scale (SWLS) | 25.96 | 6.11 | 67 | 5 | .875 |
| Ger/Belk Materialism Scales (GBM-Scale) | | | | | |
| Nongenerosity | 11.29 | 2.83 | 70 | 6 | .426 |
| Envy | 12.17 | 3.41 | 70 | 5 | .487 |
| Possessiveness | 31.40 | 5.04 | 70 | 7 | .418 |
| Preservation | 15.80 | 3.97 | 70 | 5 | .624 |
| Richins/Dawson Material Scales (RDM-Scale) | | | | | |
| Success | 13.59 | 3.98 | 70 | 6 | .714 |
| Centrality | 19.64 | 4.24 | 67 | 7 | .718 |
| Happiness | 10.71 | 4.05 | 68 | 5 | .793 |
| Aspirations Index Scales | | | | | |
| Importance | | | | | |
| Overall Relative Extrinsic | -1.78 | .62 | 71 | 15 | .873 |
| Wealth | -1.60 | .90 | 71 | 5 | .825 |
| Image | | | | | |
| Fame | -1.60 | 1.00 | 71 | 5 | .808 |
| | -2.2 | 1.2 | 71 | 5 | .896 |
| Overall Relative Intrinsic | | | | | |
| Personal Acceptance | 1.30 | .47 | 71 | 15 | .816 |
| Affiliation | 1.40 | .60 | 71 | 5 | .651 |
| Community Feeling | 1.7 | .57 | 71 | 5 | .813 |
| | .97 | .76 | 71 | 5 | .822 |

Table 1 (continued)

| | | | | | |
|----------------------------|-------|------|----|----|------|
| Aspirations Index Scales | | | | | |
| Likelihood | | | | | |
| Overall Relative Extrinsic | -1.4 | .49 | 71 | 15 | .813 |
| Wealth | -1.20 | 1.30 | 70 | 5 | .835 |
| Image | -1.5 | .90 | 71 | 5 | .723 |
| Fame | -2.00 | 1.00 | 70 | 5 | .842 |
| Overall Relative Intrinsic | | | | | |
| Personal Acceptance | 1.2 | .48 | 71 | 15 | .805 |
| Affiliation | .93 | .71 | 71 | 5 | .550 |
| Community Feeling | 1.4 | .76 | 70 | 5 | .783 |
| | .69 | .85 | 71 | 5 | .740 |
| Aspirations Index Scales | | | | | |
| Attainment | | | | | |
| Overall Relative Extrinsic | -1.13 | .49 | 70 | 15 | .824 |
| Wealth | 3.62 | 1.29 | 71 | 5 | .828 |
| Image | 3.62 | 1.25 | 71 | 5 | .805 |
| Fame | 2.87 | 1.15 | 70 | 5 | .805 |
| Overall Relative Intrinsic | | | | | |
| Personal Acceptance | .96 | .48 | 70 | 15 | .875 |
| Affiliation | 5.27 | .90 | 71 | 5 | .761 |
| Community Feeling | 6.13 | .84 | 71 | 5 | .769 |
| | 4.95 | 1.07 | 71 | 5 | .836 |

Intercorrelations Among Materialism Measures

Zero-order correlations were run in order to examine the associations across the three materialism measures used in the current study. Because the Aspirations Index has three dimensions (importance, likelihood and attainment) three separate correlations were calculated for this measure. Intercorrelations among all three measures are reported in Table 2. There was a significant, weak correlation between the Ger Belk measure of materialism and the Richins Dawson measure of materialism. The Ger Belk scale was not significantly associated with the Relative Extrinsic orientation on Aspirations Index on any of its dimensions. Significant associations (moderate to weak) were found between the Relative Extrinsic value orientation on

the Aspiration Index (on all three of the importance, likelihood and attainment conditions) and the Richins and Dawson measure of materialism. In terms of the importance, likelihood and attainment dimensions of the Relative Extrinsic Value orientation: significant, strong, positive correlations were found between Extrinsic Importance and Extrinsic Likelihood, as well as between Extrinsic Likelihood and Extrinsic Attainment. A significant, moderate, positive correlation was found between the Extrinsic Importance and the Extrinsic Attainment Score.

Table 2
Intercorrelations for Ger Belk Materialism Scales

| Variable | GBM | RDM | AI Relative Extrinsic Importance | AI Relative Extrinsic Likelihood | AI Relative Extrinsic Attainment |
|----------------------------------|------|-------|---|---|---|
| GBM | - | | | | |
| RDM | .27* | - | | | |
| AI Relative Extrinsic Importance | .15 | .48** | - | | |
| AI Relative Extrinsic Likelihood | .14 | .42** | .74** | - | |
| AI Relative Extrinsic Attainment | .18 | .36** | .46** | .77** | - |

Note: GBM = Ger Belk Materialism Scale; RDM = Richins Dawson Materialism Scale; AI = Aspirations Index.

* $p < .05$. ** $p < .01$.

Intercorrelations Within Materialism Measures

Pearson product-moment correlation coefficients were calculated for each materialism measure – Ger Belk Materialism Scale, Richins Dawson Materialism Scale, and the Aspirations Index (importance, likelihood and attainment) – to examine how the subscales of each materialism scale relate to the overall scale.

A number of the correlations between the Ger Belk Materialism subscales (Non-generosity, Envy, Possessiveness and Preservation) and the Ger Belk Materialism overall scale

were significant, ranging from weak to moderately strong. Inconsistent with previous research (Ahuvia and Wong, 2002; Kosmicki, 2002; Sharpe, 2000), the possessiveness and preservation subscales had the strongest significant correlations with the overall Ger Belk scale: $r = .78$, ($p = .01$) for Possessiveness, $r = .67$, ($p = .01$) for Preservation. In the prior studies, Non-generosity and Envy have the strongest correlations to the overall scale. Results for the Ger Belk Materialism Scale are reported in Table 3.

A number of the intercorrelations between the Richins Dawson Materialism subscales (Success, Centrality, and Happiness) and the Richins Dawson Materialism overall scale were significant, and ranged from moderate to strong. Results for the Richins Dawson Materialism Scale are reported in Table 4. Consistent with previous research (Ahuvia and Wong, 2002; Kosmicki, 2002; Sharpe, 2000), intercorrelations between the Richins Dawson overall materialism scale and its subscales were generally higher than intercorrelations within the Ger Belk Materialism scale.

Many of the intercorrelations between the Aspirations Index Relative Extrinsic Centrality subscales (Wealth, Fame and Image) and the Aspirations Index Overall Relative Extrinsic Centrality Measure were significant, and ranged from moderate to strong. The same was true of the intercorrelations between the Aspirations Index Relative Intrinsic Centrality subscales (Personal Growth, Relationships, and Community) and the Aspirations Index Overall Relative Intrinsic Centrality Measure. Results for the Aspirations Index intercorrelations for each of the importance, likelihood and attainment dimensions are reported in Table 5, Table 6 and Table 7. The intercorrelations between the Aspirations Index Overall Intrinsic and Overall Extrinsic measures and each of its respective subscales were generally higher than intercorrelations for the Ger Belk Materialism overall scale and its subscales. As expected,

Intrinsic and Extrinsic scales have a strong negative association with each other.

Table 3
Intercorrelations for GBM Overall Scale and Subscales

| | Non-generosity | Envy | Possessiveness | Preservation |
|----------------------|----------------|--------|----------------|--------------|
| Non-generosity | 1 | | | |
| Envy | .097 | 1 | | |
| Possessiveness | .339** | .015 | 1 | |
| Preservation | .025 | -.016 | .482** | 1 |
| GBM-Scale Overall | .538** | .426** | .780** | .672** |

Note: GBM=Ger Belk Materialism

* $p < .05$. ** $p < .01$.

Table 4
Intercorrelations for RDM Overall Scale and Subscales

| | Success | Centrality | Happiness |
|-------------------|---------|------------|-----------|
| Success | 1 | | |
| Centrality | .392** | 1 | |
| Happiness | .632** | .242 | 1 |
| RDM-Scale Overall | .857** | .704** | .792** |

Note: RDM= Richins Dawson Materialism
 *p<.05.**p<.01.

Table 5
Intercorrelations for AI Extrinsic Scale, Intrinsic Scale and Subscales (Importance Dimension)

| | Overall Extrinsic | Overall Intrinsic | Wealth | Fame | Image | Personal Growth | Affiliation |
|-------------------|-------------------|-------------------|---------|---------|---------|-----------------|-------------|
| Extrinsic | 1 | | | | | | |
| Intrinsic | -.923** | 1 | | | | | |
| Wealth | .555** | -.514** | 1 | | | | |
| Fame | .681** | -.557** | .076 | 1 | | | |
| Image | .570** | -.611** | .032 | .038 | 1 | | |
| Personal Growth | -.688** | .769** | -.260* | -.456** | -.523** | 1 | |
| Affiliation | -.619** | .694** | -.192 | -.466** | -.444** | .490** | 1 |
| Community Feeling | -.690** | .711** | -.596** | -.314** | -.377** | .258* | .138 |

Note: AI = Aspirations Index.

Note: All scores are Relative Centrality Scores.

*p<.05.**p<.01.

Table 6
Intercorrelations for AI Extrinsic Scale, Intrinsic Scale and Subscales (Likelihood Dimension)

| | Extrinsic | Intrinsic | Wealth | Fame | Image | Personal Growth | Affiliation |
|-------------------|-----------|-----------|--------|------|-------|-----------------|-------------|
| Extrinsic | 1 | | | | | | |
| Intrinsic | -.793** | 1 | | | | | |
| Wealth | .522** | -.367** | 1 | | | | |
| Fame | .399** | -.256* | .054 | 1 | | | |
| Image | .476** | -.561** | .103 | .148 | 1 | | |
| Personal Growth | -.516** | .535** | .024 | .098 | -.101 | 1 | |
| Affiliation | -.449** | .618** | .097 | .031 | -.122 | .545** | 1 |
| Community Feeling | -.459** | .578** | .050 | .190 | -.201 | .474** | .467** |

Note: AI = Aspirations Index.

Note: All scores are Relative Centrality Scores.

* $p < .05$. ** $p < .01$.

Table 7
Intercorrelations for AI Extrinsic Scale, Intrinsic Scale and Subscales (Attainment Dimension)

| | Extrinsic | Intrinsic | Wealth | Fame | Image | Personal Growth | Affiliation |
|-------------------|-----------|-----------|--------|--------|-------|-----------------|-------------|
| Extrinsic | 1 | | | | | | |
| Intrinsic | -.812** | 1 | | | | | |
| Wealth | .387** | -.184 | 1 | | | | |
| Fame | .367** | -.165 | .202 | 1 | | | |
| Image | .422** | -.459** | .133 | .315** | 1 | | |
| Personal Growth | -.452** | .511** | .277* | .298* | .129 | 1 | |
| Affiliation | -.392** | .546** | .327** | .260* | .031 | .584** | 1 |
| Community Feeling | -.431** | .650** | .222 | .300* | .018 | .582** | .527** |

Note: AI = Aspirations Index.

Note: All scores are Relative Centrality Scores.

* $p < .05$. ** $p < .01$.

Intercorrelation Within the ECR Attachment Scale

A Pearson product-moment correlation coefficient was calculated for the Avoidance and Anxiety subscales of the Experiences in Close Relationships (ECR) adult attachment measure in

order to examine the relationship between these dimensions. There was a significant, moderate, positive association between the scales, $r = .315$, ($p = .01$). This finding is unexpected in that Brennan et al. (1998) found the two scales to be virtually unrelated $r = .11$.

Adult Attachment and Materialism

Regression analyses: Adult attachment and materialism. Multiple regression was used to examine the question, is adult attachment associated with materialism? To test if adult attachment predicts materialism, five multiple regressions were run with Avoidance and Anxiety dimensions together as the independent variable and Ger Belk Materialism Scale, Richins Dawson Materialism Scale, Aspirations Index Extrinsic Relative Centrality or Aspirations Index Intrinsic Relative Centrality (for importance, likelihood and attainment) as the dependent variable (taken one at a time). Also, six multiple regressions were run where Ger Belk Materialism Scale, Richins Dawson Materialism Scale and Aspirations Index Extrinsic Centrality (for importance, likelihood and attainment) together were the independent variable and attachment Anxiety or Avoidance dimensions (separately) were the dependent variables. None of the results of these analyses were significant. Attachment Anxiety and Attachment Avoidance dimensions together did not significantly predict materialism on any of the measures used in the study. Also, the three Materialism measures together did not significantly predict Attachment Anxiety or Attachment Avoidance.

Multivariate analyses: Adult attachment and materialism. Multivariate analysis of variance was conducted in order to look for differences between attachment groups on means of the materialism scales. The independent variable was two-group attachment category (Secure group and combined Insecure group—made up of the Fearful, Dismissing and Preoccupied categories together) and the dependent variables were: Ger Belk Materialism Scale Overall

score, Richins Dawson Materialism Scale Overall score, and Aspirations Index Extrinsic Relative Centrality scores (importance, likelihood and attainment).

In the analysis where Aspirations Index Extrinsic Relative Centrality importance dimension was entered, there was a significant multivariate effect of attachment (secure or insecure) on the combined dependent variable of Materialism, $F [3,60] = 2.8, p < .05$; Wilks' Lambda = .88; partial $\eta^2 = .12$. Analysis of each individual dependent variable showed that the two groups differed significantly in terms of Ger Belk Materialism overall score, with Secure scoring significantly lower on the Ger Belk Materialism Scale ($M = 61.65, SD = 9.28$) than Insecure ($M = 66.78, SD = 6.34$). There was no contribution of the Aspirations Index Relative Centrality Extrinsic importance scores or of the Richins Dawson Materialism Overall score (see Table 8 for these results).

Table 8
Multivariate Analyses of Variance for Attachment and Materialism (with AI Importance)

| | Type III Sum of squares | DF | Mean Square | F | Sig | Partial Eta Squared |
|-------------------------|-------------------------|----|-------------|------|------|---------------------|
| AI Extrinsic importance | .23 | 1 | .23 | .57 | .452 | .009 |
| RDM | 78.06 | 1 | 78.06 | .81 | .372 | .013 |
| GBM | 410.65 | 1 | 410.65 | 6.15 | .016 | .090 |

Note: GBM = Ger Belk Materialism Scale; RDM = Richins Dawson Materialism Scale; AI = Aspirations Index.

In the analysis where Aspirations Index Extrinsic Relative Centrality attainment dimension was entered, there was a multivariate effect of attachment (Secure or Insecure) on the combined dependent variable of Materialism that approached significance, $F [3,60] = 2.4, p < .1$; Wilks' Lambda = .89; partial $\eta^2 = .11$. Analysis of each individual dependent variable showed that the two groups differed significantly in terms of Ger Belk Materialism Scale overall score, with Secure scoring significantly lower on the Ger Belk Materialism Scale ($M = 61.65, SD =$

9.28) than Insecure ($M = 66.78$, $SD = 6.34$). There was no contribution of the Aspirations Index Relative Centrality Extrinsic attainment scores or of the Richins Dawson Materialism Scale overall score (see Table 9 for these results).

Table 9
Multivariate Analyses of Variance for Attachment and Materialism (with AI Attainment)

| | Type III Sum of squares | DF | Mean Square | F | Sig | Partial Eta Squared |
|-------------------------|-------------------------|----|-------------|-------|------|---------------------|
| AI Extrinsic attainment | .048 | 1 | .048 | .186 | .668 | .003 |
| RDM | 78.059 | 1 | 78.059 | .809 | .372 | .013 |
| GBM | 410.651 | 1 | 410.651 | 6.145 | .016 | .090 |

Note: GBM = Ger Belk Materialism Scale; RDM = Richins Dawson Materialism Scale; AI = Aspirations Index.

In the analysis where Aspirations Index Extrinsic Relative Centrality likelihood dimension was entered, there was a multivariate effect of attachment (Secure or Insecure) on the combined dependent variable of Materialism that approached significance, $F [3,60] = 2.21$, $p < .1$; Wilks' Lambda = .90; partial $\eta^2 = .10$. Analysis of each individual dependent variable showed that the two groups differed significantly in terms of Ger Belk Materialism Scale overall score, with Secure scoring significantly lower on the Ger Belk Materialism Scale ($M = 61.65$, $SD = 9.28$) than Insecure ($M = 66.78$, $SD = 6.34$). There was no contribution of the Aspirations Index Relative Centrality Extrinsic likelihood scores or of the Richins Dawson Materialism Scale overall score (see Table 10 for these results).

Table 10
Multivariate Analyses of Variance for Attachment and Materialism (with AI Likelihood)

| | Type III Sum of squares | DF | Mean Square | F | Sig | Partial Eta Squared |
|----------------------------|----------------------------|----|-------------|-------|------|------------------------|
| AI Extrinsic importance | .020 | 1 | .020 | .083 | .775 | .001 |
| RDM | 78.059 | 1 | 78.059 | .809 | .372 | .013 |
| GBM | 410.651 | 1 | 410.651 | 6.145 | .016 | .090 |

Note: GBM = Ger Belk Materialism Scale; RDM = Richins Dawson Materialism Scale; AI = Aspirations Index.

Q-sort Items Endorsed by Materialists and Non-Materialists

To explore the Q-sort responses as they relate to materialism and attachment, frequency tables were calculated of the averages for each Q-sort item (separately for the Good Life and for the Actual Life administrations). The top five, most characteristic items, and the five lowest, least characteristic, items endorsed separately for the Good Life and for the Actual life administrations are presented for the groups: 1) Securely Attached and Insecurely Attached 2) Low Materialism and High Materialism 3) Low Materialism-Securely Attached and Low Materialism-Insecurely Attached 4) High Materialism-Securely Attached and High Materialism-Insecurely Attached. The Secure and Insecure Groups are coefficient-based categorical groups calculated according to the criteria described by Brennan et al. (1998). The High-Low materialism groups were created based on the median split halves of the Ger Belk scores, the Richins Dawson scores, the Aspirations Index (importance) scores (High Extrinsic, Low Intrinsic = Low Materialism, High Intrinsic, Low Extrinsic = High Materialism) and a combined Ger Belk-Richins Dawson score (subjects who scored high or low on both measures). The scores were grouped a second time based on upper and lower quartiles for these same scales. In addition, to test if differences in mean rank between two groups (for all groups presented) were

statistically significant, independent samples t-tests were run on Q-sort items ranked top five/least five in one group but not the other.

The actual charts presenting this information are presented in Appendices B and C and will be discussed in detail in the discussion section. Overall, there were many similarities across all the groups in terms of how items were prioritized both on the Good Life and the Actual Life administrations. The top five items typically appeared to be those with a high degree of social acceptability, in other words items conventionally thought of as “the right things”. However some notable variations were also found.

Relationships Between Good/Actual Discrepancy and Materialism, Life Satisfaction, and Attachment Security

Top ten Q-Sort discrepancy items in order of highest discrepancy. Total Discrepancy scores were calculated for each subject by averaging the discrepancy item scores (the absolute values of the differences between the Good Life Item X score and the Actual Life Item X Score). The top ten Q-Sort Items with the highest Discrepancy (items that changed the most from the Good Life sort to the Actual Life sort) are presented in descending order in Table 11.

Table 11
Q-Sort Items with Highest Discrepancy

| Item Rank | Item | M | SD | Item Number |
|-----------|---|------|------|-------------|
| 1 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.23 | 1.13 | 5 |
| | Never being quite satisfied; always striving for something better | 1.23 | 1.08 | 36 |
| 2 | Being satisfied with what I have | 1.21 | 1.20 | 35 |
| 3 | Having enough money that I can buy what I want without having to worry “can I afford it?” | 1.19 | 1.03 | 3 |
| 4 | Knowing I have people in my life who will take care of me when I need them | 1.17 | .82 | 20 |
| 5 | Owning a country or beach home in beautiful natural surroundings | 1.16 | 1.19 | 25 |
| 6 | Living life with big ambitions | 1.14 | 1.04 | 37 |
| 7 | Having enough time to spend with friends and loved ones | 1.11 | .94 | 41 |
| | Associating with people who are successful and prestigious | 1.11 | 1.11 | 22 |
| 8 | Having a job that leaves me time and energy for other things | 1.10 | 1.07 | 12 |
| 9 | Being able to see the sights and experience the cultures of other parts of the world | 1.09 | 1.02 | 40 |
| | Being respected by other people and viewed as successful | 1.09 | 1.00 | 19 |
| | Having a stable and satisfying home life | 1.09 | .83 | 30 |
| 10 | Being in a position of influence or authority | 1.07 | 1.01 | 6 |

Good/Actual discrepancy and materialism. Pearson correlations, multiple regression and an independent samples t-test were run to examine the question, is there a relationship between Materialism and the Good-Actual Discrepancy?

Pearson product-moment correlation coefficients were computed to test the bivariate associations between each of the three materialism measures and the Good-Actual Discrepancy and to test if there was a relationship between Intrinsic Relative Centrality (where higher scores indicate subjects are less focused on materialistic values relative to all other values measured)

and Good-Actual Discrepancy. Because the Aspirations Index has three dimensions, six correlations were computed for the Aspirations Index Extrinsic and Intrinsic dimensions. A total of eight correlations were computed. There was a significant negative correlation between Aspirations Index Relative Centrality Intrinsic attainment scores and the Good/Actual Discrepancy, $r(69) = -.251, p = .037$, meaning that as Relative Intrinsic scores go up, Discrepancy goes down. Also, there was a significant positive correlation between the Richins Dawson Materialism Scale total materialism and the Good/Actual Discrepancy, $r(65) = .354, p = .004$, meaning that as materialism goes up, so does discrepancy. The Aspirations Index Relative Centrality Intrinsic (importance and likelihood), the Aspirations Index Relative Centrality Extrinsic (importance, attainment and likelihood), and the Ger Belk Materialism Scale scores were not significantly associated with Discrepancy.

Good/Actual discrepancy and life satisfaction. A Pearson product-moment correlation coefficient was computed to examine the question, is there a relationship between Good-Actual Discrepancy and Life Satisfaction? There was a significant negative correlation between the Good/Actual Discrepancy and Life Satisfaction $r(68) = -.309, p = .010$, meaning that as Discrepancy increases, Life Satisfaction decreases.

Good/Actual discrepancy and attachment. Pearson product-moment correlations, multiple regression and an Individual Samples t-test were calculated to examine the question, is there a relationship between Good/Actual Discrepancy and attachment (Anxiety and Avoidance dimensions and Secure-Insecure Categories)?

The Pearson product-moment correlation coefficient for Anxiety and Discrepancy was not significant $r(69) = .193, p = .111$. The Pearson product-moment correlation coefficient for Avoidance and Discrepancy also was not significant $r(69) = .160, p = .190$.

Multiple Regression was used to test the combined relationship of Anxiety and Avoidance on Discrepancy. Together these variables also did not significantly explain the variability in the Discrepancy, $F [2,66] = 1.678, p = 0.195, R \text{ square} = .048$.

An independent-samples t-test was conducted to compare Good/Actual Discrepancy in Secure and Insecure attachment conditions. There was a significant difference in the scores for Secure and Insecure conditions; with the Secure group scoring significantly lower than Insecure on Discrepancy (see Table 12 for these results).

Table 12
Difference in Dependent Variables Based on Attachment Category

| | Secure | | Insecure | | <i>t</i> | <i>df</i> | <i>p</i> |
|-------------------------|----------|-----------|----------|-----------|----------|-----------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | |
| Good/Actual Discrepancy | 42.14 | 11.96 | 49.67 | 13.44 | -2.429 | 67 | .018* |

* $p < .05$.

Good/Actual discrepancy and combined attachment and materialism. Multiple Regression was used to test the combined relationship between the two variables: Attachment (Anxiety and Avoidance dimensions) and Materialism on the Good/Actual Discrepancy. All variables were entered simultaneously. Because the Aspirations Index has three dimensions (importance, likelihood and attainment) three Multiple Regressions were run, one for each of the different dimensions of the Aspirations Index.

Where Aspirations Index importance was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 18.8% of variability in the Good/Actual Discrepancy, $F [5,57] = 2,65, p = 0.032. R \text{ square} = .188$. Further examining each of the individual variables in this model revealed that only Richins Dawson Materialism was significant in relation Discrepancy (the dependent variable) when all other independent

variables were held constant (see Table 13).

Table 13
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Importance)

| All Scales | Unstandardized Coefficient | | Standardized Coefficient | | |
|-------------------------|----------------------------|------------|--------------------------|--------|-------|
| | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 2.285 | 1.639 | .185 | 1.395 | .168 |
| ECR Avoidance Subscale | .808 | 1.713 | .062 | .472 | .639 |
| AI Extrinsic importance | 1.033 | 2.909 | .050 | .355 | .724 |
| RDM Total | .441 | .186 | .339 | 2.370 | .021* |
| GBM Total | -.193 | .191 | -.127 | -1.014 | .315 |

* $p < .05$.

Where Aspirations Index likelihood was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 18.8% of variability in the Good/Actual Discrepancy, $F [5,57] = 2.658$, $p = 0.032$. $R\ square = .188$. Further examining each of the individual variables in this model revealed that only the effect of Richins Dawson Materialism was significant (see Table 14).

Table 14
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Likelihood)

| All Scales | Unstandardized Coefficient | | Standardized Coefficient | | |
|-------------------------|----------------------------|------------|--------------------------|--------|-------|
| | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 2.332 | 1.638 | .189 | 1.423 | .160 |
| ECR Avoidance Subscale | .659 | 1.675 | .050 | .393 | .695 |
| AI Extrinsic likelihood | 1.220 | 3.425 | .047 | .356 | .723 |
| RDM Total | .447 | .179 | .343 | 2.502 | .015* |
| GBM Total | -.192 | .191 | -.127 | -1.009 | .317 |

* $p < .05$.

Where Aspirations Index attainment was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 21.2% of variability in the Good/Actual Discrepancy, $F [5,57] = 3.08$, $p = 0.002$. $R \text{ square} = .212$. Further examining each of the individual variables in this model revealed that only the effect of Richins Dawson Materialism was significant (see Table 15).

Table 15
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Attainment)

| All Scales | Good/Actual Discrepancy | | | | |
|-------------------------|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 2.583 | 1.625 | .209 | 1.589 | .118 |
| ECR Avoidance Subscale | .604 | 1.650 | .046 | .366 | .716 |
| AI Extrinsic attainment | 4.484 | 3.280 | .174 | 1.367 | .177 |
| RDM Total | .390 | .172 | .300 | 2.276 | .027* |
| GBM Total | -.212 | .188 | -.140 | -1.127 | .264 |

* $p < .05$.

Good/Actual Discrepancy and combined Secure-Insecure (categorical) attachment and materialism. Another set of multiple regression analyses was run to test the combined relationship of Attachment and Materialism on the Good/Actual Discrepancy. To see how results might be different, instead of entering Attachment Anxiety and Attachment Avoidance dimensions, categorical Two Group (Secure-Insecure) Attachment variables were entered. This way instead of distinguishing between Anxious-insecure attachment and Avoidant-insecure attachment dimensions, the distinction between Secure-attachment versus Insecure-attachment (of any variety) is examined. All variables were entered simultaneously. Again, because the Aspirations Index has three dimensions (importance, likelihood and attainment) three Multiple Regressions were run, one for each of the different dimensions of the Aspirations Index.

Where Aspirations Index importance was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 17.7% of variability in the Good/Actual Discrepancy, $F [4,58] = 4.33$, $p = 0.004$. $R \text{ square} = .177$. Further examining

each of the individual variables in this model revealed that only the effect of Richins Dawson Materialism was significant (see Table 16).

Table 16
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Importance)

| All Scales | Good/Actual Discrepancy | | Standardized Coefficient | | |
|--|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | | | |
| | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 8.068 | 3.196 | .311 | 2.525 | .014 |
| AI Extrinsic importance | 2.072 | 2.808 | .100 | .738 | .463 |
| RDM Total | .429 | .179 | .330 | 2.397 | .020* |
| GBM Total | -.264 | .188 | -.174 | -1.406 | .165 |

* $p < .05$.

Where Aspirations Index likelihood was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 22.8% of variability in the Good/Actual Discrepancy, $F [4,58] = 4.274$, $p = 0.004$. $R \text{ square} = .228$. Further examining each of the individual variables in this model revealed that that scores were higher for the Insecure Attachment group and that, with the exception of Ger Belk Materialism, Materialism scores were positively related to Discrepancy. Also, the effects of Two Group Attachment and Richins Dawson Materialism were significant (see Table 17).

Table 17
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Likelihood)

| All Scales | Good/Actual Discrepancy | | | | |
|--|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 7.778 | 3.146 | .300 | 2.472 | .016* |
| AI Extrinsic likelihood | 2.022 | 3.330 | .078 | .607 | .546 |
| RDM Total | .452 | .171 | .347 | 2.638 | .011* |
| GBM Total | -.258 | .188 | -.170 | -1.374 | .175 |

* $p < .05$.

Where Aspirations Index attainment was entered, a significant model emerged where together the Materialism and Attachment variables significantly explain 25.6% of variability in the Good/Actual Discrepancy, $F [4,58] = 4.99$, $p = 0.002$. $R \text{ square} = .256$. Further examining each of the individual variables in this model revealed that the effects of Two Group Attachment and Richins Dawson Materialism were significant (see Table 18).

Table 18
Multiple Regression Analyses Combined Attachment and Materialism on Good Actual Discrepancy (Attainment)

| All Scales | Good/Actual Discrepancy | | | | |
|--|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 8.341 | 3.106 | .322 | 2.686 | .009* |
| AI Extrinsic attainment | 5.127 | 3.174 | .199 | 1.615 | .112 |
| RDM Total | .404 | .163 | .310 | 2.477 | .016* |
| GBM Total | -.285 | .185 | -.188 | -1.538 | .129 |

* $p < .05$.

Good/Actual discrepancy and combined attachment, life Satisfaction and materialism. Multiple Regression was used to test the combined relationship between all three variables: Attachment (Avoidance and Anxiety dimensions), Life Satisfaction and Materialism, on the Good/Actual Discrepancy. All variables were entered simultaneously. Because the Aspirations Index has three dimensions (importance, likelihood and attainment) three Multiple Regressions were run, one for each of the different dimensions of the Aspirations Index. Where Aspirations Index importance was entered, a significant model emerged where all together the Combined Attachment, Life Satisfaction and Materialism variable significantly explain 24.7% of variability in the Good/Actual Discrepancy, $F [6,54] = 2.953$, $p = 0.014$. $R\ square = .247$. Further examining each of the individual variables in this model showed that only the effect Satisfaction with Life was significant (see Table 19).

Table 19
Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Importance)

| All Scales | Good/Actual Discrepancy | | Standardized Coefficient | | |
|-------------------------|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | | | |
| | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 1.978 | 1.575 | .166 | 1.256 | .215 |
| ECR Avoidance Subscale | .249 | 1.651 | .019 | .151 | .881 |
| SWLS Total Average | -3.215 | 1.437 | -.302 | -2.238 | .029* |
| AI Extrinsic importance | 1.561 | 2.935 | .076 | .532 | .597 |
| RDM Total | .261 | .194 | .207 | 1.342 | .185 |
| GBM Total | -.192 | .192 | -.128 | -1.003 | .320 |

* $p < .05$.

Where Aspirations Index likelihood was entered, together the Materialism variables significantly explain 24.3% of variability in the Good/Actual Discrepancy, $F [6,54] = 2.891$, $p = .016$. $R \text{ square} = .243$. Further examining each of the individual variables in this model revealed that only the effect Satisfaction with Life was significant (see Table 20).

Table 20
Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Likelihood)

| | Good/Actual Discrepancy | | | | |
|-------------------------|----------------------------|------------|--------------------------|--------|-------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| All Scales | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 2.026 | 1.578 | .170 | 1.284 | .205 |
| ECR Avoidance Subscale | .099 | 1.634 | .008 | .060 | .952 |
| SWLS Total Average | -3.119 | 1.429 | -.293 | -2.182 | .033* |
| AI Extrinsic likelihood | .003 | 3.407 | .000 | .001 | .999 |
| RDM Total | .314 | .181 | .249 | 1.733 | .089 |
| GBM Total | -.192 | .192 | -.128 | -.999 | .322 |

* $p < .05$.

Where Aspirations Index attainment was entered, together the Materialism variables significantly explain 25.1% of variability in the Good/Actual Discrepancy $F [6,54] = 3.021$, $p = 0.013$. $R \text{ square} = .251$. Further examining each of the individual variables in this model revealed that only the effect Satisfaction with Life was significant (see Table 21).

Table 21
Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Attainment)

| All Scales | Good/Actual Discrepancy | | | | |
|-------------------------|----------------------------|------------|--------------------------|--------|------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| ECR Anxiety Subscale | 2.221 | 1.589 | .187 | 1.398 | .168 |
| ECR Avoidance Subscale | .076 | 1.623 | .006 | .047 | .963 |
| SWLS Total Average | -2.800 | 1.480 | -.263 | -1.891 | .064 |
| AI Extrinsic Attainment | 2.554 | 3.318 | .102 | .770 | .445 |
| RDM Total | .279 | .172 | .221 | 1.616 | .112 |
| GBM Total | -.194 | .191 | -.129 | -1.014 | .315 |

* $p < .05$.

Good/Actual discrepancy and combined Secure-Insecure (Categorical) attachment, life satisfaction and materialism. Another set of multiple regression analyses was run to test the combined relationship of Attachment and Materialism on the Good/Actual Discrepancy. To see how results might be different, instead of entering Attachment Anxiety and Attachment Avoidance dimensions, Two Group categorical Secure-Insecure Attachment variables were entered. This way instead of distinguishing between anxious-insecure attachment and avoidant-insecure attachment, the distinction between secure-attachment versus insecure attachment (combined groups) is examined. All variables were entered simultaneously. Again, because the Aspirations Index has three dimensions (importance, likelihood and attainment) three Multiple Regressions were run, one for each of the different dimensions of the Aspirations Index.

Where Aspirations Index importance was entered, a significant model emerged where all together the Combined Attachment, Life Satisfaction and Materialism variable significantly

explain 28.2% of variability in the Good/Actual Discrepancy, $F [5,55] = 4.311$, $p = 0.002$. R square = .282. Further examining each of the individual variables in this model revealed that the Insecure Attachment group scored higher on Discrepancy, that Materialism (with the exception of Ger Belk Materialism) is positively related to Discrepancy and that Satisfaction with Life is negatively related to Discrepancy. Also, the effects of Two Group Attachment and Satisfaction with Life are significant, and Aspirations Index Extrinsic importance approaches significance ($p < .10$) (see Table 22).

Table 22
Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Importance)

| All Scales | Good/Actual Discrepancy | | | | |
|--|----------------------------|------------|--------------------------|--------|-------------------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 6.789 | 3.119 | .268 | 2.177 | .034* |
| SWLS Total Average | -3.043 | 1.389 | -.286 | -2.191 | .033* |
| AI Extrinsic importance | 2.401 | 2.831 | .116 | .848 | .400 ⁺ |
| RDM Total | .263 | .188 | .208 | 1.401 | .167 |
| GBM Total | -.255 | .189 | -.170 | -1.344 | .185 |

* $p < .05$. ⁺ $p < .10$

Where Aspirations Index likelihood was entered, together the combined variables significantly explain 27.2% of variability in the Good/Actual Discrepancy, $F [5,55] = 2.891$, $p = .003$. R square = .272. Further examining each of the individual variables in this model revealed that the Insecure Attachment group scored higher on Discrepancy, that Materialism (with the exception of Ger Belk Materialism) is positively related to Discrepancy and that Satisfaction

with Life is negatively related to Discrepancy. Also, the effects of Two Group Attachment and Satisfaction with Life are significant, and Aspirations Index Extrinsic likelihood approaches significance ($p < .10$) (see Table 23).

Table 23

Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Likelihood)

| | Good/Actual Discrepancy | | | | |
|--|----------------------------|------------|--------------------------|--------|-------------------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| All Scales | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 6.438 | 3.116 | .255 | 2.066 | .044* |
| SWLS Total Average | -2.899 | 1.389 | -.273 | -2.087 | .042* |
| AI Extrinsic likelihood | .531 | 3.318 | .020 | .160 | .873 |
| RDM Total | .336 | .174 | .266 | 1.925 | .059 ⁺ |
| GBM Total | -.249 | .191 | -.166 | -1.306 | .197 |

* $p < .05$. ⁺ $p < .10$

Where Aspirations Index attainment was entered, together the Materialism variables significantly explain 28.5% of variability in the Good/Actual Discrepancy $F [5,55] = 4.380$, $p = 0.002$. $R \text{ square} = .285$. Further examining each of the individual variables in this model revealed that the Insecure Attachment group scored higher on Discrepancy, that Materialism (with the exception of Ger Belk Materialism) is positively related to Discrepancy and that Satisfaction with Life is negatively related to Discrepancy. Also, the effect of Two Group Attachment is significant and Satisfaction with Life and Richins Dawson Materialism approach significance ($p < .10$) (see Table 24).

Table 24
Multiple Regression Analyses Combined Attachment, Life Satisfaction and Materialism on Good Actual Discrepancy (Attainment)

| All Scales | Good/Actual Discrepancy | | | | |
|--|----------------------------|------------|--------------------------|--------|-------------------|
| | Unstandardized Coefficient | | Standardized Coefficient | | |
| | B | Std. Error | β | t | Sig |
| Two Group Attachment (Secure-Insecure) | 7.011 | 3.140 | .277 | 2.233 | .030* |
| SWLS Total Average | -2.491 | 1.440 | -.234 | -1.730 | .089 ⁺ |
| AI Extrinsic Attainment | 3.189 | 3.236 | .128 | .986 | .329 |
| RDM Total | .306 | .165 | .242 | 1.856 | .069 ⁺ |
| GBM Total | -.255 | .189 | -.170 | -1.351 | .182 |

* $p < .05$. ⁺ $p < .10$

CHAPTER 5

Discussion

A web of connections between personality attributes and development and contemporary experiences and relationships on the one hand, and materialistic traits and values on the other, were discussed. The findings suggest that adult attachment styles may point to some of the personal insecurities that play a role in determining whether an individual places materialistic goals at the top of his or her value system. The current study examined the relationship between adult attachment style and materialism by correlating individual differences on an attachment measure with ratings of materialism and of life satisfaction. The current study attempted to replicate and extend the finding from the only study found to date specifically relating attachment measures to measures of materialism. This study indicated that attachment style is predictive of both materialistic traits and values (Kosmicki, 2002).

In addition to examining attachment style in relation to materialism, the current study sought to better understand the states of mind that lead people to choose materialistic values by examining subjects' responses on a Q-sort measure gauging a broad range of items and things people can value across the areas of materialism, relationships, health and time. The top five and least five Q-sort items (based on mean frequency) of Materialistic and Non-Materialistic groups and of the groups: Secure-Materialistic, Secure-Non-Materialistic, Insecure-Materialistic, and Insecure-Non-Materialistic were compared. The differences in item ranking between groups were then tested for significance. Finally, to examine the discrepancies hypothesis, two administrations of the Q-sort were compared: one instructing subjects to rank items according to their visions of the good life and the other according to how their life is actually lived. Items with the largest Discrepancy were reported and relationships between Discrepancy and the variables

Materialism, Life Satisfaction and Attachment (separately and in combination) were described.

Results show that, inconsistent with previous findings (Kosmicki, 2002), attachment Avoidance and attachment Anxiety did not significantly predict materialism. At the same time, the results indicated that looking just at Secure versus Insecure group — a combined group made up of the Fearful, Dismissing and Preoccupied categories calculated following the criteria described by Brennan et al. (1998), —those who were Insecurely attached scored significantly lower on the trait measure of materialism (the Ger Belk Scale) than those who were Securely attached.

In terms of states of mind that may underlie materialism, examining the top five and bottom five Q-sort items showed that there were many similarities across all the groups both on the Good Life and the Actual Life administrations, where the top five items typically appeared to be those with a high degree of social acceptability. However, some notable variations appear in relation to items that tap the themes of anxiety in relationships and community/societal values. Items with the highest average discrepancy scores on the Q-sort appeared to be those related to feeling one has “enough” in life, having time for relationships and leisure, and being successful/influential according to external judgments.

Examining discrepancies between the Good Life Q-sort and the Actual Life Q-sort revealed that higher discrepancy scores correlate with higher levels of materialism and higher dissatisfaction with life. Also, the current study found that attachment Avoidance and attachment Anxiety dimensions did not predict discrepancy, but again that the Securely Attached categorical group had significantly lower discrepancy scores compared to the combined Insecure group.

The ambiguous relationships found between attachment style and materialism suggest that further research is necessary to determine if adult attachment styles relate to value and trait

materialism and if so, how. Also, the complex relationships found between attachment style, materialism and discrepancies results suggest further research is necessary to determine how individual differences factors, like adult attachment style, personality style and psychopathology, (independently and in combination with contextual, socio-cultural variables) relate to materialism and life satisfaction.

Reliability of Materialism Measures

As noted in the literature review, the Belk scale has received some criticism because its reliability has generally been inconsistent across studies, with various studies reporting relatively weak reliabilities for the original scale and the revised Ger Belk scale used in the current study. Previous research has indicated that the Richins Dawson scale, a value measure of materialism, is more reliable than the Belk scale, a personality measure of materialism (Richins & Dawson, 1992). Not surprisingly, the current study also found a weaker internal reliability (the extent to which items within the same scale correlate with each other) for the Ger Belk scale ($\alpha = .627$) compared to the Richins Dawson scale ($\alpha = .841$) and compared to the Aspirations Index Scale, another value measure of materialism ($\alpha = .873$ for Extrinsic importance, $\alpha = .813$ for Extrinsic likelihood and $\alpha = .824$ for Extrinsic attainment). Given that generally alphas greater than 0.70 are considered acceptable, the reliability of the Ger and Belk scale in this case, although close to this level, could be considered inadequate. However Ger and Belk (1996) point out that the revised materialism measure they created sacrifices reliability to some degree in favor of greater applicability to a cross-cultural sample (i.e., lower alpha's are viewed as acceptable in cross-cultural research).

Relationships Among Materialism Measures and Validity

Although the measures used in the current study are believed to be valid measures that

are analogous in that they all measure the construct of materialism, research has indicated there are differences between the measures, suggesting that materialism is a multi-faceted concept (i.e., the various measures tap different aspects of an overarching concept that is multi-dimensional). One possibility is that the Belk scale (considered to be a “trait measure” of materialism) better captures fixed and pervasive materialistic behavior patterns associated with underlying affective/personality patterns, and that what are referred to as “value measures” (the Richins Dawson and the Aspirations Index), tap behavior patterns related to underlying cognitive beliefs that may derive in part from social context influences (e.g., advertising) (Ahuvia & Wong, 1995, 2002; Kosmicki, 2002; Richins & Dawson, 1992; Ryan & Deci, 2000; Tatzel 2003).

Consistent with this point of view, the current study found a significant, but weak, correlation between the Ger Belk scale and the Richins Dawson scale, suggesting these scales measure a related, but not completely interchangeable, construct. Also, corroborating this line of thinking, the Aspirations Index had weak to moderate significant associations with the Richins Dawson scale on all three of the importance, likelihood and attainment dimensions (presumably because both are value measures and therefore are more closely related).

However, contrary to expectation, the current study did not find a significant positive correlation between the Aspirations Index Extrinsic value measure on any of its dimensions (importance, likelihood, attainment) and the Ger Belk scale. Based on the literature and previous research, the expectation would be that the Aspirations Index and the Ger Belk scale would be significantly associated, at least weakly. It appears that only one study to date has specifically examined the intercorrelations between all three measures used in the current study (Kasser & Ahuvia, 2002). Kasser and Ahuvia (2002) found interrelationships between all of these

measures. Specifically, the Ger Belk and Richins and Dawson scales were weakly, but significantly related ($r = 0.26, p < 0.02$) and the Extrinsic orientation from the Aspiration Index was significantly and moderately associated with both the Richins and Dawson measure ($r = 0.52, p < 0.01$) and the Ger Belk measure ($r = 0.44, p < 0.01$), with a higher correlation to the Richins Dawson value measure. In addition, further supporting the idea of materialism as a unitary construct, higher-order factor analysis of the three scores yielded one factor (Eigen value = 1.82) accounting for 60.7% of the variance. All three materialism variables loaded above 0.70 on this factor” (Kasser & Ahuvia, 2002, p. 140; Wasser, 2010). The findings of the current study differ. One possible implication of this result is that while the value measures are similar to each other (measuring similar aspects of a unitary construct of materialism), the Ger Belk trait measure has less in common with the Aspirations Index than it does with the Richins Dawson measure, and may even measure different constructs. Further research is needed to better understand the interrelationships between the various measures of materialism and to determine if the value measures of materialism are significantly different from the trait measure (Kasser & Ahuvia, 2002; Wasser, 2010).

Relationships Among the Dimensions of the Aspirations Index. The version of the Aspirations Index used in this study allows researchers to examine materialistic values not only in terms of the relative importance placed on these values, but also in terms of a subject’s beliefs about how likely it is that these goals will be attained (a likelihood score) and how much a subject has actually attained these goals (an attainment score). This provides a means of measuring relationships between these different dimensions and other measures (e.g., the relationship between well-being and how important extrinsic values are to a person versus the association between how much someone believes they have attained these goals and well-being).

The current study ran zero order correlations to test the strength of the relationship between the importance, likelihood and attainment dimensions. Previous research specifically comparing the Relative scores of all three dimensions was not discovered. Kasser and Ryan (1996) conducted one study related to this topic. They calculated summary extrinsic scores (the average of the scores for each subscale) for the importance and likelihood dimensions of the Aspirations Index. In that study, extrinsic importance and extrinsic likelihood scores were moderately correlated $r = .69$ ($p < .01$). Thus, the current study and Wasser's (2010) study from the parent project provides the only information specifically on this topic thus far. Significant, strong, positive correlations were found between Extrinsic Importance and Extrinsic Likelihood $r = .74$ ($p < .01$), as well as between Extrinsic Likelihood and Extrinsic Attainment $r = .77$ ($p < .01$), whereas only a moderate, positive correlation was found between Extrinsic Importance and Attainment $r = .46$ ($p < .01$).

These results suggests that the Aspirations Index importance and likelihood dimensions may not be highly distinct, whereas importance and attainment may represent, related, but more distinct dimensions (Wasser, 2010). The reason for this is not clear, but may have something to do with the fact that likelihood and importance scores have to do with beliefs, whereas attainment scores represent realities that may or may not match up with beliefs (i.e., an individual can experience a discrepancy between the amount of wealth and material possessions he believes he should have and how much he has attained this).

Relationships Within Materialism Measures and Validity

Previous research (Richins and Dawson, 1992) has critiqued the Belk trait measure of materialism for violating construct validity because it infers materialism from scores on personality subscales and is therefore contaminated by elements of other constructs. Research

supporting this idea has found the preservation subscale to load negatively when employing confirmatory factor analysis (Ahuvia and Wong, 2002) and the possessiveness subscale to be positively associated with traits widely believed to run opposite to materialism (such as generosity, altruism, and prosocial values) (Sharpe, 2000). These studies suggested the subscales that make up the Ger Belk measure may not be valid in representing the construct of materialism (i.e., may in fact measure a different construct) or that these subscales are valid but tap into other aspects of materialism (e.g., personality aspects, positive aspects of materialism, etc.) that have yet to be clearly distinguished/operationalized (Ahuvia & Wong, 1995, 2002; Kosmicki, 2002; Micken, 1995; Richins & Dawson, 1992; Tatzel, 2003). This question remains open, as thus far validity studies have not yielded conclusive results (Micken, 1995). By comparison, research on the Richins Dawson scale and the Aspirations Index has generally found relatively high internal consistency for the overall measure and high within scale correlations. The current study examines within scale intercorrelations of the materialism measures, adding to previous research by including all three dimensions of the Aspirations Index.

In light of previous research, the current study expected Non-generosity and Envy subscales to have the strongest relationships to the overall scale and for Possessiveness and Preservation to have a weak, non-significant, or negative correlation. Surprisingly, the intercorrelations within the Ger Belk scale were strongest for Possessiveness and Preservation [$r = .780$ ($p < .01$) for Possessiveness, $r = .672$ ($p < .01$) for Preservation]; and moderate to weak for the other two scales [$r = .538$ ($p < .01$) for Non-generosity, and $r = .426$ ($p < .01$) for Envy]. This supports the inclusion of Possessiveness and Preservation in the Ger Belk materialism scale and suggests these subscales do tap the concept of materialism as much as the other subscales do. At the same time, that the relationships were weaker for the other two scales that make up the

measure lends credence to the idea that materialism is a complex, multi-faceted construct.

As expected, interrelationships between the Richins Dawson scale and its subscale were strong, with correlations of $r = .857$ ($p < .01$) for Success, $r = .704$ ($p < .01$) for Centrality, and $r = .792$ ($p < .01$) for Happiness. This corroborates previous research supporting the construct validity of this value measure.

Although all the correlations between the subscales of the Aspirations Index were significant on all three dimensions, surprisingly the interrelationships were not strong, but moderate to weak. If this finding were to be replicated, this could mean that, as theorized with the Ger Belk scale, the subscales of the Aspirations Index may measure differing aspects of the construct Materialism.

Of note, the intercorrelations for the importance dimension were somewhat stronger than for the likelihood and attainment dimensions: Aspirations Index (importance) [Wealth $r = .555$ ($p < .01$), Fame $r = .681$ ($p < .01$), Image $r = .570$ ($p < .01$); Aspirations Index (likelihood) Wealth $r = .522$ ($p < .01$), Fame $r = .399$ ($p < .01$), Image $r = .476$ ($p < .01$); Aspirations Index (attainment) Wealth $r = .387$ ($p < .01$), Fame $r = .387$ ($p < .01$), Image $r = .422$ ($p < .01$)]. Given that Kasser and Ryan (1996) operationalize the construct of materialism as the degree to which material values are held central by an individual compared to other values he/she can hold (beliefs or ideals), it is possible that the likelihood and attainment dimensions (aspects that may differ from the beliefs and ideals given that external constraints may limit the degree to which material values are achieved and inconsistencies between what individuals believe and what they actually do) are more weakly related to the overall scale.

Relationships Within the Adult Attachment Measure

In contrast to earlier findings (Brennan et al., 1998) indicating the Avoidance and

Anxiety subscales of the Experiences in Close Relationships (ECR) adult attachment measure are almost unrelated ($r = .11$), the current study found a significant, moderate, positive relationship between these subscales [$r = .315$, ($p = .01$)]. This finding is very similar to the correlation calculated in Kosmicki's (2002) research ($r = .35$), which contradicted his 1999 pilot study finding a negligible relationship ($r = .05$).

One possible explanation for this unexpected result is that the Avoidance and Anxiety dimensions may overlap to some degree, or are not precisely the dimensions needed to accurately describe adult attachment. While research suggests that adult attachment is dimensional and that the Anxiety and Avoidance are the most representative subscales for measuring these dimensions, it is also true that it is possible other dimensions are most representative. Generally, adult attachment research has indicated that it is not entirely clear specifically what dimensions best describe the structure of adult attachment. A known issue is that the independence of the Anxiety and Avoidance dimensions is influenced by the decision to employ an orthogonal solution in factor analysis, which may not be accurate. In addition, the distinction between the horizontal and vertical axes (High to Low Avoidance and Anxiety) on the one hand, and diagonal dimensions on the other (Secure to Fearful and Preoccupied to Dismissing) on the other, is known to be influenced by factor rotation (chosen on the basis of pre-existing conceptual models) so that a different rotation can yield different results (Gallo, Smith & Ruiz, 2003). For example, Stein et al. (2002) use a 45-degree rotation and propose that instead of the Avoidance-Anxiety dimensions, Insecurity (from Secure to Fearful) and Strategy for coping with insecurity in relationships (from Preoccupied to Dismissing), respectively may better represent horizontal and vertical axes of the two dimensions that underlie attachment measures. This may explain why in some cases Avoidance and Anxiety correlate mildly with

each other.

Adult Attachment and Materialism

On the question of the relationship between adult attachment style and materialism, the results of the present study present an ambiguous picture in that, analyzed one way, adult attachment did not relate to scores on the materialism scales, but analyzed another way it did.

Surprisingly, the results of the multiple regression analyses did not replicate previous research (Kosmicki, 2002). The dimensions of attachment Anxiety and Avoidance as measured by the Experiences in Close Relationships adult attachment inventory together did not predict materialism with the current sample, nor did materialism significantly predict the attachment Anxiety or attachment Avoidance dimensions separately. Previous research found that controlling for demographic variables, both of these dimensions predicted both trait and value measures of materialism (with a stronger correlation to the trait measure), and further that trait materialism (and negative affect) mediated the relationship between the adult attachment dimensions and value measures (Kosmicki, 2002). The current result contradicts this, indicating instead that adult attachment dimensions are unrelated to materialism. If this result is replicated, this may mean that other individual differences are more closely linked with, or better describe the personal insecurities believed to be involved in the development of a materialistic orientation. For example, personality scales or scales that directly measure self and object representations may be a better fit.

On the other hand, using multivariate analyses of variance, a significant difference between Secure and Insecure groups was found on the Ger Belk scale, where those in the Secure group scored lower on materialism. This finding supports a broad connection between adult attachment insecurity and higher levels of trait materialism (specifically, the traits of

Possessiveness, Preservation, Non-Generosity and Envy together). This would suggest that those who have insecure adult attachment styles (i.e., difficulties with close adult relationships, related to specific affect regulation styles and personality attributes) are more likely to exhibit higher levels of trait materialism. This is consistent with the Kosmicki (2002) finding discussed above and with his additional finding indicating the Insecure groups in his sample scored significantly higher on two of the Belk materialism subscales (Non-generosity and Envy). Furthermore, this particular result was expected because the Ger Belk trait measure of materialism has been found to relate more closely to enduring personality characteristics. As Richins and Dawson (1992) note regarding Belk's scale "To the extent behavior patterns associated with materialism are fixed and pervasive, there may be personality traits associated with materialism" (p. 307).

A variety of explanations are possible for this result. Of particular interest to the present study is the following. The literature describes aspects of insecure adult attachment style that mirror the personality traits described by Belk. If, as many adult attachment theorists suggest, adult attachment behaviors represent a trait that is present across most relationships (Fraley & Shaver, 2000; Stein et al., 2002) it may be that materialism is one specific manifestation of a particular style of relating to the world represented by attachment style. As discussed already, the descriptions of the emotional world of insecurely attached adults presented in the literature review bear striking similarities to the Ger Belk descriptions of materialistic traits. Broadly speaking materialists have been described as having difficulties with empathy and handling relationships; being generally mistrustful of people; having a tendency to view people as objects, being more selfish and less generous; being more reliant on the approval of others, being more prone to psychopathology (particularly, personality disorders characterized by interpersonal difficulties), and having a negative outlook on life (Kasser, 2002; Tatzel, 2003). Further, the

specific patterns of insecure adult emotional reactions in the context of relational episodes described by Mikulincer & Shaver (2005) involve aspects of the four materialism traits described by Ger and Belk. Mikulincer & Shaver describe the insecurely attached as exhibiting a narrower range of emotions and defensive displays of self-enhancement; higher levels of negative feelings towards partner (Avoidance); and emotional disintegration in the face of relational distress (Anxiety). Feelings related to these reactions include: suppressed anger, indifference, contempt, gloating, hubris, hostile envy, dysfunctional anger, despair, sadness, shame, fear of separation, and jealousy. Similarly, the materialistic traits that make up the Ger Belk scale are: Possessiveness, a “tendency to retain control or ownership of one's possessions” (Belk, 1984b p. 291); Envy, or the "displeasure and ill will at the superiority of [another person] in happiness, success, reputation or the possession of anything desirable" (Belk, 1984b p. 292); Non-Generosity, "an unwillingness to give possessions to or share possessions with others"; (Belk, 1984b p. 291); and Preservation or “the conservation of events, experiences, and memories in material form” (Ger & Belk, 1996, p.64).

The current study is correlational and thus cannot provide information as to whether the relationship found between adult attachment insecurity and trait materialism is causal (i.e., whether or not insecure attachment styles lead to the development of a materialistic orientation). However, given the proposed continuity of early childhood attachment patterns into adulthood (for a review, see Bartholomew & Horowitz or Fraley & Shaver, 2000), it seems reasonable to suggest that to some degree attachment style may determine materialistic traits. Kosmicki (2002) (whose study is correlational) concluded that this is possible because interpersonal attachment is thought of as a primary motivator that precedes the development of material interests (involving “a tendency to... imbue material objects with emotional valence and soothing properties" (p.93).

Thus, attachment may lay down a basic template for the fulfillment of emotional needs that serves as the basis for materialism.

Elaborating on this idea further, one can speculate that symbolically material objects can sometimes be equivalent to relationship "objects," and that individuals may relate to material and relationship objects in similar ways. In other words, if insecure adult romantic relationships to some degree recapitulate problematic patterns established in early childhood, perhaps problematic relationships to material objects also repeat these patterns. For example, if an individual feels personally insecure he/she may feel the need to control/possess material (and relational) objects, to have concrete reminders of the object to deal with anxiety around separation; may tend towards feelings of envy; and may feel diminished by the idea of sharing with others.

This idea is present in a variety of theories. As mentioned previously, a number of theorists (Braun & Wicklund, 1989; Claxton & Murray, 1994 as cited in Flouri, 1999; Kasser & Ryan, 1993) have suggested that consumer objects and symbols may be relied on as a way to make up for perceived personal deficiencies or problems with self-definition, especially when there is a history of dysfunctional relationships. Some theorists (Belk, 1985, 1988; Kasser, 2002; Kosmicki, 2002; Murray, 2000) have also suggested that giving and withholding consumer objects may symbolize a lack of parental nurturance where there has been harsh, uninvolved or controlling parenting or may serve as a substitute for direct, unconditional types of love. In addition, Belk, Ger, & Askegaard (2003) have observed that the most common metaphors used to describe consumer desires includes sexual lust (in addition to hunger and addiction), giving this type of desire an interpersonal quality.

Similarly, some psychoanalytic theorists propose that not only does the relationship a

child has with primary caretakers have a great impact on the development of the personality, but so does the evolving relationship to the "inanimate surround" (i.e., the material world). Akhtar (2003) summarizes this idea in the statement, "From the very beginning of life until death, physical objects affect the human mind, which in turn utilizes them to express, consolidate, and enhance itself" (p.2). More specifically, Akhtar and others (e.g., Abrams & Neubauer, 1976) posit a gradual evolution of the involvement with inanimate objects across the life-span, where at each phase of life there is development of relationships to people on the one hand, and relationships to things on the other. These are thought of as enhancing one another in healthy personalities, and as coming at the expense of one another in those with personality deficits.

In short, over time individuals develop the ability to distinguish between animate and inanimate objects, develop object-permanence/constancy, and go through developmental phases that involve "the use of transitional objects, the deployment of various props to buttress self-esteem during the Oedipal phase, the attempted mastery of external reality through board games in latency, the proud emblems of autonomy during adolescence, the material acquisitions that go with the assumption of adulthood (i.e., a house, car, furniture, etc.), and the beginning renunciation of material goods during late middle and old age" (Akhtar, 2003, p.1). As objects come to acquire important psychological meanings they can become involved in healthy or psychopathological states (such as the dehumanization of others, phobia of certain objects, pathological collecting, or the narcissistic and hysterical use of physical objects for self-adornment). For example, in mid-life as individuals grapple with issues related to sensing there are limits to achievements, acquisitions, creativity, and mortality, those who have personality deficits (i.e., have "cathected external over internal objects in their lives") (Aktar, 2003, p. 9) may display the unhealthy extremes of greed or asceticism in the way they approach the material

life. In contrast, healthier individuals may find a balance in this area (e.g., paring down in the realm of material objects, buying less but enjoying more of what you have, thinking about what to do with one's possessions upon death).

In a somewhat similar fashion, Kottler et al. (2004) have proposed a cluster of psychological disorders (disorders of materialism, or of "acquisitive desire"), which would include compulsive buying, a subtype of narcissism, and a subtype of obsessive-compulsive disorder. Like substance abuse or eating disorders, these disorders would consist of symptom clusters linked to other symptoms such as anxiety, depression, and impulsivity, and would involve various processes ranging from self-medication for anxiety and depression, to preoccupation with success and status, to displaced anxiety in the form of obsessive-compulsive collecting and acquiring.

All of this is consistent with Belk's theory of trait materialism where "the consumer traits of possessiveness, nongenerosity, and envy ... represent distinct and significant expressions of man's relationship to material objects" (Belk, 1984b, p. 292). Belk focuses mainly on the problematic aspects of these traits based on evidence that materialistic people (who rate high on these traits) tend to be unhappy people. For example, he found evidence that envy is a destructive trait, given that envious people feel demeaned by others and resent or wish to spoil what others have, and that non-generosity involves the loss of significant, non-material, benefits (since generosity is a giving attitude that stems from an acceptance of self and view of the self as worthy to give and receive). He also found possessiveness and preservation to be frequently linked with decreased well-being and greater unhappiness.

Of note, the measurement issue discussed in the literature review regarding potential problems with the validity of the Ger Belk measure emerges here again. That is, inconsistent

with the finding that higher materialism is associated with decreased well-being, the materialistic traits of possessiveness and preservation have also been linked with happiness and well-being in certain cases (Belk, 1984, 1985; Ger & Belk, 1996; Sharpe, 2000). Frequently this issue has been explained by the idea that depending upon the underlying motives of the individual, these traits can be either problematic or beneficial to happiness (e.g., “some very happy adults have very few cherished possessions and do not feel strongly about them, while other equally happy adults have many such possessions and are strongly attached to them”) (Belk, 1984b, p. 295).

Although this issue is problematic for measurement, it is not inconsistent with the attachment and personality theories just discussed. One can speculate that whether possessiveness and preservation have negative consequences relates to the degree of personal security one has, and to what extent a person is securely invested in relationships (linked by a large body of evidence to higher levels of satisfaction, well-being and decreased risk for psychopathology). For example, someone who rates high on preservation may be sentimental and derive healthy comfort, meaning and pleasure from holding onto items that represent relational and personal memories. Bowlby (1969) describes something similar in saying that, “with age...attachment behavior can be terminated by an increasingly large range of conditions, many of which are purely symbolic. Thus, photographs, letters, and telephone conversations can become more or less effective means of keeping contact’ so long as intensity is not too high” (p. 261). On the other hand, someone else may rate high on preservation because they have problematic, unresolved losses, high levels of anxiety or a chaotic internal world that is displaced onto objects.

Likewise with possessiveness there may be a distinction in terms of whether underlying motives are problematic. Whereas some individuals may be possessive out of a need for control,

similar to anxiously attached individuals who use hyperactivating strategies in relationships characterized by overdependence on partners for protection and clinging/controlling responses (Cassidy & Kobak, 1988), others may have a secure sense of self and exhibit possessiveness in the service of important relational values (e.g., a parent who is possessive of property so that it may be shared with and given to offspring). In line with this idea, Belk (1984b) has pointed out that possessiveness is sometimes “instrumental in developing identity” but can also lead to “asocial behaviors” (p. 292).

While these ideas merit further investigation, somewhat inconsistent with this line of reasoning is that the current study found no relationship between the value measures of materialism (the Aspirations Index and the Richins Dawson scale) and attachment, and thus did not replicate Kosmicki’s finding that materialistic traits mediate the relationship between attachment style and materialistic values. This study expected that materialistic traits (located within a broader motivational system and closely linked with attachment status and affect regulation) would contribute to the development of materialistic values (linked with cognitive beliefs and social learning). Surprisingly, the current results suggest instead that materialistic traits do not mediate the relationship to materialistic values and that attachment insecurity may be unrelated to the emergence of materialistic values. It is unclear why attachment insecurity would relate to higher degrees of trait materialism, but not higher degrees of value materialism.

As discussed in the literature review materialism is a complex construct in which a variety of etiological pathways are implicated (both independent and interacting). Thus, although this finding may constitute evidence against the idea that early life experiences and relationship dynamics play an important role in the development of materialistic values, it is also possible the pathways leading to the development of materialistic traits in this sample were independent of

the pathways leading to the development of materialistic values. This is consistent with Kasser's theory that two main pathways, each of which make independent contributions, but also interact, account for development of Materialistic Value Orientations. One pathway consists of personal experiences that induce feelings of insecurity, leading to compensatory materialistic strategies, and the other involves exposure to external social models that encourage materialistic values via the processes of socialization, internalization, and modeling of materialism.

Another way to interpret this result is simply to suggest that the Ger Belk scale is measuring an aspect of materialism that actually is quite different from what is measured by the Richins Dawson measure and Aspirations Index. This fits in with Tatzel's (2003) theory that, different from the Richins and Dawson's scale, the Ger Belk scale taps affects (particularly negative ones) related to materialism rather than cognitions (values and beliefs). Whether Belk's operationalization of materialism constitutes a different construct entirely from the Richins Dawson and Aspiration Index scales would need to be studied further. It may be that what Ger and Belk call trait materialism is actually another construct entirely, such as neuroticism or individualism (Micken, 1995; Solberg et al., 2004).

Overall, this set of results needs to be interpreted with caution given the limitation that a convenience sampling method was employed in this study, which may have yielded a biased/non-representative sample. More specifically, the present sample did not appear to fully represent the entire range of the Avoidance dimension in that it was a primarily low-avoidant sample — with most people scoring low, and very few scoring in the top half (see appendix D). It may be that this obscured a significant relationship between adult attachment dimensions and categories and materialistic traits and values. Further study is needed to determine if these results can be replicated or if they appear to have resulted from limitations of the study. Also, with the

current study, the question of whether personal insecurities cause, or are the result of, materialistic orientations is left open, as is the idea that circular and transactional patterns (rather than a one-directional pattern) better describes the etiology of materialism. Thus, more research is needed to examine the question of pathways for the development of materialistic orientations.

States of Mind and Materialism: Q-Sort Item Themes

Surprisingly, overall, there were many similarities across all the groups examined in terms of which individual Q-sort items were ranked highest and lowest, on both the Good Life and the Actual Life administrations. The groups examined were: 1) Securely Attached and Insecurely Attached 2) Low Materialism and High Materialism 3) Low Materialism-Securely Attached and Low Materialism-Insecurely Attached 4) High Materialism-Securely Attached and High Materialism-Insecurely Attached.

The individual differences that have been found between materialists and non-materialists in previous research would suggest certain patterns of variation in terms of Q-sort items that tap relationships and materialism. A good deal of research provides evidence that focusing on material values is incompatible with focusing on relational values, and that when individuals strive towards materialistic goals this often comes at the expense of non-materialistic goals (for a review, see Kasser 2002; or Solberg et al., 2004). As discussed in the literature review, using the circumplex technique, the values of wealth, social recognition, preserving public image, ambition and being successful are found to generally cluster together and to be in direct opposition to benevolence (which involves concern for the welfare of close others, and valuing true friendship, mature love, loyalty, responsibility, honesty, forgiveness, and helpfulness) and universalism (concern with the welfare of all others and nature) (Kasser, 2002). Further, materialism is generally defined as placing a high value on consumption objects, wealth and

possessions, at the expense of human relationships. This theoretical point of view would suggest that the top five Q-sort items of materialists would include more items related to materialistic values and fewer relational and community values, compared to low-materialists.

Inconsistent with the literature, the top five items of high-materialists and low materialists on both the Good Life and Actual Life administrations (regardless of the materialism measure used) were remarkably similar in terms of consisting largely of items related to low-anxiety aspects of close relationships, family life and having the time for relationships. Sample items include: “having an intimate relationship in which I can really share and be myself”; “having a stable and satisfying home life”; “having enough time to spend with friends and loved ones”; “having close friends and spending time with them”; and “passing on to future generations the values that I hold important”. Also, the least five items were fairly similar and generally were items that can be considered materialistic, meaning that across the two groups materialistic items were a low priority. Sample items include: “associating with people who are successful and prestigious”; “having precious and beautiful things, such as jewelry or works of art; having the kind of house, car, or clothes that other people admire”; and “owning a country or beach home in beautiful natural surroundings.” This would indicate that materialists and non-materialists place a similarly high priority on relational values and low priority on materialistic values.

That relational items were in the top five for both materialists and non-materialist groups can be interpreted as evidence against the idea that materialists value money and possessions at the expense of valuing close relationships. A related, but different, interpretation of this finding would be to suggest this is evidence that materialism has both positive and negative attributes. While much of the literature on materialism links it to problems with personal relationships,

another strand of research has found beneficial, normal, and goal-directed behaviors to relate to materialistic goals (i.e., ownership as a normal and universal, viewing possessions as extensions of the self; attaching to objects because they serve as symbols of security, a means of expressing self-concept/individuality and as a way of signaling connection to other members of society (Wallendorf & Arnould, 1988). It may be that for the current sample, those in the high materialism group are motivated by aspects of materialism that are believed to be positive, and not at odds with relational aspects of life (e.g., saving money to provide for family members, collecting objects that hold memories of personal relationships, focusing on acquisition as a means of being creative, individuating or pursuing freedom, etc.). Since motives are not measured in the current study, this idea would require further investigation in future studies.

Another possible explanation is that this sample is relatively low on materialism compared to the general population, so that even those who are in the high-materialism group are relatively non-materialistic compared to the population at large. The current sample, being a convenience sample, was composed largely of individuals from parent groups and religious/spiritual/philosophical organizations. Thus, it is possible that these participants are generally more focused on relational and community values (generally less materialistic) as a group.

Another possibility is that subjects understood that these items are conventionally thought of as “the right things” and as things that “should” be valued highly, and were motivated by social acceptability to appear to be doing “the right thing.” Related to this, the present study focused primarily on consciously held views and values. Because people may live in ways that belie what they consciously profess, it may be that the Q-sort measure did not accurately capture differences between materialists and non-materialists in terms of behaviors that are inconsistent

with consciously held values. These explanations would help to explain why, contrary to the literature and the way materialism is operationalized in the materialism scales (placing high importance on materialistic values), materialistic items appeared in the least five category in both materialistic and non-materialistic groups and did not appear frequently in the top five category.

Although the top items for the materialist and non-materialist groups were generally similar, there were some notable exceptions. Consistent with the idea that prioritizing material values is at odds with community and environmental values, a community themed item appeared more frequently in the top five items of the non-materialist groups, and moreover, was one of the few items that was significantly different between the high materialist and low-materialist groups. This was the item: “doing work that contributes usefully to society.” This was consistent in the Good Life administration, indicating that those who are less materialistic prioritize this community value more compared to other values (e.g., more individualistic or materialistic values). The exception to this was that on the Actual Life administration this item appeared in the top five of both low and high materialists on one occasion. However, this was not a significant difference and does not necessarily contradict the previous interpretation given that it is possible for someone to be working at a job that is pro-social without having strong ideals for community values.

Another difference observed between Low and High materialist groups was found for the groups derived using the Richins Dawson scale. In the Good Life administration the item “knowing I have people in my life who will take care of me when I need them”, appeared in the top five category of the High Materialist group, and in one case was significantly different from the Low Materialist group. The item can be interpreted as indicating relational anxiety in that it expresses concern regarding whether people will be available for comfort and protection in times

of need. This interpretation is consistent with the idea that materialists are generally insecure in relationships. Another difference is that in two cases the item “being a down to earth person who does not need to show off” appears in the top five category for low materialists. These results are consistent with the idea that low materialists are intrinsically oriented and derive self-esteem from internal sources whereas high materialists rely on external sources of validation, which are known to cause distress and undermine feelings of personal agency (Kasser and Ryan, 1996). Lastly, “being a risk taker, both financially and in other ways” appears in the least five category of many of the high materialism groups. This may indicate that materialists are reluctant to explore, perhaps because they lack what attachment theory describes as a secure base for exploration (i.e., while protected by proximity to caregivers, infants feel free to explore the environment in order to learn about the world) (Bowlby, 1969).

While differences in items that seem related to attachment style appeared between the materialist and non-materialist groups, surprisingly these types of differences did not emerge when comparing the Secure and Insecure groups. The Q-Sort items of the Secure and Insecure groups were very similar. Low-anxiety relational and community items were in the top five of both groups and materialistic items appeared frequently in the least five category. One exception to this in the top five category was that for the Good Life administration the item “Being satisfied with what I have” appeared in the insecure group only. This may indicate, as the literature review (e.g., discrepancies theory) would suggest, that the insecure group, similar to the high-materialist group, is more concerned with striving for a sense of satisfaction with material aspects of life, whereas the secure group has less concern about this (perhaps because they feel more satisfied with what they have). However, given the similarity between the groups other explanations may better account for this.

In terms of the least five category, a difference between groups was that “living life with big ambitions” appeared in the least five category of the Secure, but not the Insecure group, indicating this item is more of a concern for the Insecure group. Also, “keeping clearly focused on what will bring me and my family a better income and making that my top priority” appeared in the least five category of the Insecure, but not Secure group, indicating this is more of a concern for the Secure group. Without a better understanding of the motivations behind these items, it is difficult to interpret these results. For example, ambition might be healthy or unhealthy striving that does, or does not, relate to difficulties in relationships. Also, making family income a top priority may be related to a the feeling that one’s value to one’s family is based mainly on financial success, or may be due to a feeling that it is important to protect the family financially.

Finally, based on the literature it was expected that Security/Insecurity in combination with high and low materialism would relate to changes in the sorting of the Q-sort, where security might dampen the effects of high materialism and exaggerate the effects of low materialism. For example, the top five Q-sort items of Secure-High Materialists might have been expected to relate to themes of materialism that involve taking care of family members and promoting creativity, freedom and self-esteem. On the other hand, the Insecure-High Materialism group might have top five items with more materialistic items related to concerns about how one is viewed by others and some indication of anxiety in relationships or dismissiveness of relationships.

Some trends in this direction were observed, but they were not consistent. For example, the item “having a job that leaves me time and energy for other things” appeared in the top five list of the Secure (combined with either high or low materialism) more frequently and appeared

as a significant difference (but also appeared in some of the Insecure combinations). Also, the items: “making exercise and other healthy activities a regular part of my life”; “being satisfied with what I have”; “being in a position of influence or authority”; and “living life with big ambitions” appeared more frequently in the top five list of Insecure (combined with either high or low materialism) and were often significant differences.

Contrary to these trends, overall differences between the Low Materialism-Securely Attached; Low Materialism-Insecurely Attached; High Materialism-Securely Attached; and High Materialism-Insecurely Attached were small. These combination groups all had relational items (not indicating anxiety-discomfort in relationships), community related items, and items that could relate to having a “secure base for exploration” in the top five Q-Sort items. For example the items: “knowing I have people in my life who will take care of me when I need them” and “having opportunities at work to be creative or to use my talents or skills” appeared in both secure and insecure combinations of high-materialism.

While it is difficult to interpret these results, one can speculate that the ambiguity observed might relate to the fact that materialism is a complex construct that in some ways relates to attachment style and in other ways is independent of attachment style (and/or other personality differences). Also, again, social acceptability and the focus on consciously held views and values may have obscured differences between the groups.

Relationships between Discrepancy, Materialism, Life Satisfaction, and Attachment

Security

Highest Discrepancy Items. To gain a sense of which Q-sort items/themes changed the most between the Good Life administration and the Actual Life administration, items with the largest Discrepancy were reported. Results show the Q-sort item with the highest discrepancy in

the current sample relates to feeling financially secure and having enough materially to provide for family. This supports the discrepancies theory of materialism (Michalos, 1985; Solberg et al., 2004), which proposes that because there is an unreachable aspect to material goals (i.e., no limit as to how much money and goods one can accumulate) people are generally going to be further from material goals than other kinds of goals (meaning they will have higher discrepancies in this domain and, in turn, higher levels of dissatisfaction with life) (Solberg et al., 2004; Tatzel, 2003). Also in line with this idea, one of the top ten items involved the degree to which a material item has been obtained (that of having a country home). Furthermore, several of the top ten discrepancy items relate to feeling satisfied with what one has in the material domain (meaning there is a relatively higher discrepancy compared to other Q-sort items between how satisfied one views oneself to be if one were living in an ideal fashion and how much one actually is satisfied with what one has) pointing to the idea that higher material discrepancies explain higher levels of dissatisfaction with life.

Overall, the rest of the top ten items with the largest Discrepancies reflected the following themes: (1) extrinsic goals and externally focused self-presentational concerns (such as how successful, respected or prestigious others judge a person to be or how influential or ambitious one is); (2) relational priorities or anxieties (such as will I have people in my life who want to take care of me, having time to spend with loved ones; having a stable, satisfying home life); (3) having the type of work that allows ample leisure time; and (4) the degree to which one can travel around the world and experience other cultures (which may not be possible without certain financial means). This points to the idea that people experience greater gaps between the actual and ideal lives in these areas (and thus may experience more dissatisfaction in these domains).

Discrepancy and Materialism. In examining the relationship between Discrepancy and Materialism, the current study found that as Aspirations Index Relative Intrinsic attainment goes up, Discrepancy goes down, meaning that where subjects believe they have attained satisfaction of inherent psychological needs and wants (i.e., affiliation, community feeling and self-acceptance), they also have lower discrepancies between Good Life and Actual life Q-sort administrations. In addition, results showed that as Richins Dawson materialism increases (i.e., as acquisition centrality, acquisition as the pursuit of happiness, possession defined success increase) Discrepancy also increases. This finding is consistent with the idea that non-materialists generally experience smaller have-want gaps (at least in the material domain) and materialists experience wider discrepancies (Michalos, 1985; Solberg et al., 2004; Tatzel, 2003). Because the Q-sort items from the current study tap both materialistic and non-materialistic domains, these results indicate that higher levels of materialism are associated with higher discrepancies, not only in the material domain, but in non-material domains as well (i.e., those who rate high on materialism have larger gaps between what is imagined for the “good life” and what one actually has obtained, across the domains of materialism, health, time and relationships).

At least one previous study suggests this idea under specific conditions. Solberg et al. (2004) assessed discrepancies across the domains of financial/material success, intimacy/friendship, societal contribution, popularity, physical attractiveness and achievement. They found that the largest gap between where one is currently and where one ideally wants to be in the future was in the financial domain. In contrast, when measuring the gap between where one is currently and where one wants to be currently the largest gap was in societal contribution, then self-acceptance, and lastly the financial domain. However, this result should be interpreted

with caution given that the Q-sort items in this study were not systematically derived to represent various materialistic and non-materialistic values and goals and that the current study did not specify whether the Good Life administration deals with nearer term goals or far-term future goals.

In addition, there is ambiguity in these results because no significant relationships were found between Aspirations Index Relative Intrinsic importance and likelihood and Discrepancy, indicating no relationship between subjects' beliefs about the importance of intrinsic needs and wants, or likelihood these will be achieved, and lower Discrepancy. Also, no significant relationship was found between Extrinsic Centrality (importance, likelihood or attainment) and Discrepancy, indicating that none of these (not a strong focus on Extrinsic goals, not the belief that these goals are likely to be met, and not the degree to which these have been attained) significantly relate to an increase in Discrepancy. This contradicts the idea that materialists experience higher discrepancies in a variety of domains. Finally, no significant relationship was found between Ger Belk materialism and Discrepancy. This would indicate that higher levels of enduring materialistic personality traits do not relate to experiencing wider general discrepancies. Future research would need to further examine these differences in Discrepancy for materialism specifically, and for the domains of health, time and relationships, paying special attention to whether there is a distinction between asking subjects to imagine the "good life" or "ideal life" in relation to the near term or the farther-term future.

Discrepancy and Satisfaction with Life. The current study found a significant relationship between the Life Satisfaction measure and Discrepancy as measured by the Q-sort (the Good Life-Actual Life gap). This finding is consistent with previous research (Solberg et al., 2004) and supports the idea that people experience a negative state of self-awareness

(psychological pain) when they believe their current life situation falls below personal and social expectations and desires (presumably because attention becomes focused on personal weaknesses, deficiencies, and failures).

Discrepancy and Adult Attachment. Examining the relationship between adult attachment and discrepancy yielded ambiguous results in that significant results were not found for correlations and multiple regressions employing the separate and combined attachment dimensions of Anxiety and Avoidance, but were found when employing the Secure and Insecure coefficient-based categorical groups [(calculated according to the criteria described by Brennan et al. (1998)]. In the present study the Insecure group (the combined Fearful, Dismissive and Preoccupied group) scored significantly higher on Discrepancy. The latter is consistent with the connections that have been found between insecure adult attachment and difficulties such as personal insecurity, affect dysregulation and psychopathology on the one hand, and between discrepancies, insecurity/psychological pain, and compensatory strategies on the other. Although results were not significant when employing the attachment dimensions, somewhat consistent with this general hypothesis, results were not extremely far from significance and were in the expected direction (meaning there was a positive relationship between the dimensions of Anxiety and Avoidance and greater Discrepancy) [for Anxiety and Discrepancy $r(69) = .193, p = .111$, and for Avoidance and Discrepancy $r(69) = .160, p = .190$]. At the same time, as mentioned already, trait materialism did not relate to Discrepancy, indicating that aspects of insecure adult relationships that relate to higher discrepancies do not overlap with the traits described by the Ger Belk measure. Alternately, it is possible that so called “positive” aspects of the Ger Belk traits obscured overlaps between the two.

Good/Actual Discrepancy and Combined Attachment and Materialism. The current

study found that Materialism and Attachment (both dimensional and two-group) accounted for 18.8% to 25.6% of variability in the Good/Actual Discrepancy (depending on whether the importance, likelihood or attainment dimension of the Aspirations Index was entered). The overall model suggests that Materialism and Attachment together significantly predict some of the variability in Discrepancy. Examining the coefficients of the independent variables (the independent effects of variable when the other independent variables are held constant) showed that Discrepancy scores in the overall model were higher for the Insecure attachment groups, and that both Richins Dawson Materialism and Extrinsic Aspirations Index Materialism were positively related to Discrepancy. In contrast, Ger Belk materialism had a negative relationship with Discrepancy.

However, in examining each of the independent variables within this model (where attachment dimensions were entered), only Richins Dawson Materialism was significant. Where Secure-Insecure (categorical, two-group) Attachment was entered, Richins Dawson Materialism and Secure-Insecure Attachment (in the attainment condition) were significant. Thus the connections between value materialism and insecurity and discrepancy remain, but the lack of significance of the other independent variables, and the fact that the overall model is only able to account for a modest amount of the variability, suggests that other models better explain discrepancy. Given the complexities of how individuals may come to have discrepancies between the Good Life and the Actual Life, including the idea that there may be interactions between individual differences in personality and social context variables, perhaps it is not surprising that this model captures a relatively small amount of the variation.

Good/Actual Discrepancy and Combined Attachment, Life Satisfaction and Materialism. The Combined Attachment, Life Satisfaction and Materialism variables

significantly explained 24.3% - 28.5% of variability in the Good/Actual Discrepancy (depending on whether the importance, likelihood or attainment dimension of the Aspirations Index was entered). The overall model suggests that Attachment, Life Satisfaction and Materialism together significantly predict some of the variability in Discrepancy. Examining the coefficients of the independent variables (the independent effects of the variable when the other independent variables are held constant) showed that Insecure attachment was positively related to Discrepancy, that Life Satisfaction was negatively related to Discrepancy and that both Richins Dawson Materialism and Extrinsic Aspirations Index Materialism were positively related to Discrepancy. In contrast, Ger Belk materialism had a negative relationship with Discrepancy.

However, in examining each of the independent variables within this model, where Avoidance-Anxiety attachment dimensions were entered, only Satisfaction with Life was significant. Where the Secure-Insecure(two-group, categorical) variable was entered only the Secure-Insecure variable and Satisfaction with Life were significant (with Aspirations Index Extrinsic importance and likelihood, and Richins Dawson Materialism in the attainment condition approaching significance). This provides some support for the idea that there is some connection between Insecurity and greater general Discrepancy in the context of this overall model. This also suggests that Life Satisfaction significantly predicts general Discrepancy when holding the other variables in this model constant, indirectly supporting the idea that increased dissatisfaction with life leads to increased general Discrepancy or, alternatively, that greater general Discrepancy leads to greater dissatisfaction with life. However, the lack of significance of many of the independent variables and the fact that the overall model is only able to account for a modest amount of the variability in discrepancy suggests that other models may better explain discrepancy.

Limitations of the Study

The current study has several limitations. Some of these involve the sampling method and composition of the sample. As mentioned already, a convenience sample was obtained via advertising the project and sending letters to various schools. Also, the snowball method yielded further recruitment from parent groups and religious/spiritual/philosophical organizations. Given this, it is possible that the sample is biased in that it is composed largely of participants who are generally less materialistic than the greater population. Further, the sample evidenced a gender bias in that approximately three quarters of the sample was female. Also, the sample had higher annual household income and educational level than what would be expected from a random sample. Approximately 75% of subjects' household income was \$85,000 and above, and approximately 92% had completed college or graduate school. This limits the applicability of the results to a broader population. In addition, the sample was primarily an adult sample (with a mean age of 48). Although this is another demographic bias, meaning that that results may not generalize to a full spectrum of ages, this also represents a strength of the study given that most of the previous research on materialism was done on college populations. Also, because many of the subjects have children, the current study was able to examine individuals who might be facing dilemmas related to juggling work, money and family responsibilities.

Another limitation of the study relates to the types of measures employed. With the Q-sort measure, although items were meant to represent broadly materialistic and non-materialistic values and to tap into the domains of relationships, health and time, the validity of this Q-sort as a measure of these domains has not been established. In terms of the adult attachment, materialism, life satisfaction and Q-sort measures, all of these are self-report measures and have limitations inherent to this kind of measurement. Known drawbacks of self-report measures

include: being subject to response biases; focusing on conscious attitudes and relying on a subject's honesty and self-understanding; being insensitive to phenomena that manifest only when activated, and tapping mainly currently held views about the self and others, rather than past and present views (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010).

In relation to the materialism measures used in this study, self-report biases such as the social desirability bias, where subjects attempt to portray themselves in a good light when answering questions (Saunders, 1991), may have impacted results given the negative connotation materialism has in popular culture. Although the word materialism was not used with participants in the current study, subjects probably could discern that the questions related to these types of values and were likely motivated to present themselves as non-materialistic and pro-social.

Taking into account that self-report measures examine consciously held views and values and do not speak to motivational underpinnings is of increasing importance in efforts to understand materialism. Moreover, there are significant ambiguities that are just beginning to be usefully explored regarding whether materialistic choices can at times be made in the interest of (rather than in opposition to) relational goals and whether materialistic traits and values can be psychologically beneficial. As Carver & Baird (1998) have noted, it may not simply be that striving and focusing on materialistic goals per se is what negatively impacts well-being, but that the negative impact of materialistic choices relates also to why a person chooses to focus on these aspirations. They based this idea on the finding that when "financial striving" is intrinsically motivated it is positively related to self-actualization and when extrinsically motivated it is negatively related to this. In addition, Sheldon, Ryan, Deci, & Kasser (2004) note that, "Both what goals people pursue (i.e., whether they strive for extrinsic vs. intrinsic goal

contents) and why people pursue them (i.e., whether they strive for autonomous vs. controlled motives) make significant independent contributions to psychological well-being” (p. 475).

In relation to the Experiences in Close Relationships attachment measure used in this study the issue of self-report limitations is especially germane. Although there is a consensus that all attachment measures probe emotional regulation, interpersonal awareness, and behavioral strategies in close relationships, the literature on adult attachment measurement has long noted a lack of convergence between self-report measures and interview measures of attachment. Controversies regarding whether this represents limitations of the self-report measures or whether the different assessment methods simply tap different aspects of adult attachment style remain unresolved. Those who advocate using interview measures, most prominently the Adult Attachment Interview (AAI), generally claim self-report measures are less powerful and revealing than interview measures in discovering unconscious dynamics and defenses and examining internal working models, and that unconscious structures are both critically important and only accessible through interview methods.

Interview methods presumably assess attachment style by tapping into unconscious cognitive and affective mechanisms employed to organize information connected to the attachment relationship with the parents. The AAI, for example, assesses narrative coherence and the individual’s capacity to reflect on his/her internal world and to grasp the intentions or experiences of others. On the other hand, self-report measures assess attachment by examining the adult’s conscious attitudes towards experiences of separation, loss, intimacy, dependence, and trust and cognizance of attachment behaviors in intimate relationships. Thus, the AAI and other interview methods are praised for successfully picking up on defensive, unconscious dynamics of attachment representations, whereas self-report measures like the ECR are criticized

for failing to assess defenses and unconscious dynamics by focusing too limitedly on conscious feelings and behaviors (Bernier, Larose, & Boivin, 2007; Brennan, Clark, & Shaver, 1998; Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). In the present study, it is possible that this type of limitation might have impacted the accurate measurement of adult attachment style.

A third limitation relates to the study design. One weakness of the present study is that, as with previous studies, the design is correlational. Thus, it is not possible to say whether observed differences in attachment style cause increases in the materialistic trait orientation. Also, the current study examined individual differences, but not socio-cultural factors. Given that both individual differences (like attachment insecurity) and socio-cultural factors (like advertising) are both thought to account for the degree to which one exhibits materialism, it is important that future research attempt to describe the role these play both separately and together.

Future Directions

The current study represented only a beginning look at how materialism and experiences in close relationships (i.e., adult attachment) relate to one another. Only one previous work specifically examined adult attachment measures in relation to materialism, and in general the literature on the subject is scant. Thus, there are many areas of study related to this topic that may be fruitfully explored in the future. Some possible directions of particular interest to the current study are as follows.

The present study only partially replicated Kosmicki's (2002) study showing significant relationships between adult attachment and material trait and value scales. The difference between the results of the two studies suggests it is necessary to see if Kosmicki's results can be replicated with other samples. Also, because Insecurity in the present study was found to relate only to trait materialism, future studies may want to examine if other personality variables (such

as personality style, object relations, and psychopathology) better explain the connections between materialism, personality factors separately and low levels of well-being/dissatisfaction with life. In connection with this, future studies need to continue to examine if the Ger Belk materialism measure is a valid measure of materialism or if it is measuring a separate construct (i.e., is overly correlated with other measures such as individualism and neuroticism).

Also, it has been increasingly suggested that it is important to understand the motivations that underlie people's decisions to prioritize material values above other values and that underlie higher scores on the trait measure. Thus, future research on the connections between adult attachment and materialism would likely benefit from adding measures that tap into motives. These could include measures that tap conscious and unconscious motives, so that behaviors related to unconscious motives can also be examined. For example, both interview and self-report measures might usefully be employed, as well as projective tests.

Another important future expansion of the current study would be to add experimental research designs. Future research might experimentally induce relational insecurity and measure whether materialism increases or decreases. This would provide valuable information regarding the connection between personal insecurity and materialism in terms of causal direction. Also, in terms of research design, research ought to include random samples and longitudinal and cross-sectional designs.

Another research design direction relates to previous studies showing that separately external, socio-cultural factors (such as exposure to advertising) and personality factors produce problems with materialism (such as greater discrepancies and dissatisfaction with life). Less clear is how micro-level and macro-level factors in combination (interacting) relate to materialism. Many questions related to this have not been examined in research. For example,

how do contextual, socio-cultural attitudes and pressures related to materialism differentially affect individuals of various personalities? Does the external pressure create an exponential negative effect in those who exhibit or are pre-disposed to personality insecurity (whether related to attachment style or whether better described by other models)? To what degree are materialistic traits fixed and pervasive and to what degree are they mutable? What is the impact of materialistic stressors on the average person who is not highly materialistic? Future research ought to assess the interactions between macro and micro-level variables. For example, future studies may want to select people with various types of personal insecurity (including attachment insecurity) and test if exposure to materialistic ideals affects these individuals differently.

More generally regarding the study of materialism, future research is needed to better understand if there are positive aspects of materialism and if so, what specifically makes for a positive or healthy materialistic trait or value, and if there are specific “materialistic disorders”.

Concluding Summary

As various nations across the globe increasingly embrace Western economic values and as individuals are increasingly influenced by the belief that having more wealth and pursuing goods is essential to having a good life, the study of materialism has become more and more necessary and important. Making decisions about the material aspects of life now constitutes a significant aspect of daily living experiences, where it is difficult to know whether focusing on materialism will be beneficial or detrimental to one’s mental health (Kasser & Kanner, 2004; Tatzel, 2003). Contrary to what is touted by popular culture, and to previous research linking materialism to beneficial, goal-directed behaviors, there is a substantial body of data showing a relationship between being highly materialistic and increased levels of unhappiness, decreased levels of well-being and poverty in the area of personal relationships (Kashdan & Breen, 2007;

Kasser, 2002; Solberg et al., 2004; Tatzel, 2003). In addition, it seems that overconsumption is creating environmental risks that may threaten basic human survival. Yet, people continue to be pressured to adopt materialistic values and, by and large, are not able to extricate themselves from the systems that place these values at the forefront of life.

Given this context, the investigation of the psychological origins and consequences of materialism is especially vital. Thus far, the study of materialism from this perspective is only in its beginning stages and information remains relatively scant. If it is true that in order to lead a more satisfying life, individuals need to have a greater focus on quality relationships, and a lesser focus on materialism, it is crucial that more research detailing the specifics of these findings be conducted. Having more available information may help to change prevailing attitudes that encourage materialism and contribute to guiding individuals, health practitioners and public policy makers towards making decisions that are more conducive to maximizing psychological well-being.

The present study sought to add to research examining materialism from a psychological perspective by looking at the relationship between adult attachment style and materialism. Individual differences on an attachment measure were correlated with ratings of materialism and of life satisfaction. The basis of this investigation was a web of connections between personality attributes and development and contemporary experiences and relationships on the one hand, and materialistic traits and values on the other, exploring whether adult attachment styles may reflect some of the personal insecurities that play a role in determining whether an individual places materialistic goals at the top of his or her value system. The current study sought to replicate and extend previous research indicating that attachment style is predictive of both materialistic traits and values (Kosmicki, 2002).

To extend previous research, the current study sought to better understand the states of mind that lead people to choose materialistic values by examining subjects' responses on a Q-sort measure gauging a broad range of items and things people can value across the areas of materialism, relationships, health and time. The top five and least five Q-sort items for the groups: Materialistic and Non-Materialistic; Secure-Materialistic, Secure-Non-Materialistic, Insecure-Materialistic, and Insecure-Non-Materialistic were examined and tested for significance. Further, to examine the discrepancies hypothesis, a Good Life and Actual Life administration of the Q-sort were compared. Items with the largest Discrepancy between these two administrations were reported and relationships between Discrepancy and the variables Materialism, Life Satisfaction and Attachment (separately and in combination) were described.

Results show that, inconsistent with previous findings (Kosmicki, 2002), attachment Avoidance/Anxiety did not significantly predict materialism but that Insecurity was significantly associated with lower scores on the trait measure of materialism.

In terms of states of mind related to materialism, examining top five and least five Q-sort items showed that the groups were remarkably similar, both on the Good Life and the Actual Life administrations. However, some notable variations appeared in relation to items tapping the themes of anxiety in relationships and community/societal values. The high degree of items related to doing "the right thing" in life suggests that social desirability factors may have affected these results.

Examining discrepancies between the Good Life Q-sort and the Actual Life Q-sort revealed that higher discrepancy scores correlated with higher levels of materialism and higher dissatisfaction with life, and that the Secure adult attachment group had lower Discrepancy scores. The interconnections between Discrepancy, Materialism, Attachment and Life

Satisfaction were ambiguous and would need to be studied further. Items with the highest average discrepancy scores on the Q-sort appeared to be those related to feeling one has “enough” in life, having time for relationships and leisure, and being successful/influential according to external judgments.

The ambiguous relationships found between attachment style and materialism suggest further research is necessary to determine if adult attachment styles relate to value and trait materialism and if so, how. Also, the complex relationships found between attachment style, materialism and discrepancies results suggest further research is necessary to determine how individual differences factors, such as adult attachment style, personality style and psychopathology (independently and in combination with contextual, socio-cultural variables) relate to materialism and life satisfaction.

Appendix A

Q-Sort

Table A1

Forced Choice Distribution and Scale Values Assigned to Categories of Q-Sort

| | (Most Important) | | | | (Least Important) | | | |
|----------------------------|------------------|----|----|----|-------------------|----|----|--|
| Frequencies | 3 | 5 | 9 | 12 | 9 | 5 | 3 | |
| Scale Values | +3 | +2 | +1 | 0 | -1 | -2 | -3 | |
| Total Number of Statements | | | | 46 | | | | |

Table A2
Q-Sort Items

1. Making exercise and other healthy activities a regular part of my life
2. Keeping myself fit so that I can look as good as I can
3. Having enough money that I can buy what I want without having to worry “can I afford it?”
4. Being able to have nice things and buy things when I’d like to
5. Feeling financially secure; having enough savings or job security to take care of myself or my family in the future
6. Being in a position of influence or authority
7. Living and working in a relatively cooperative, non-competitive environment
8. Living and working in an atmosphere in which everyone competes and does their best
9. Having opportunities at work to be creative or to use my talents or skills
10. Doing work that contributes usefully to society
11. Doing a good job for its own sake, regardless of whether I earn more money for it
12. Having a job that leaves me time and energy for other things
13. Engaging in hobbies or interests that allow me to express my creativity
14. Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am
15. Having precious and beautiful things, such as jewelry or works of art
16. Keeping clearly focused on what will bring me and my family a better income and making that my top priority
17. Having the kind of house, car, or clothes that other people admire
18. Looking my best and knowing that others see me as an attractive person
19. Being respected by other people and viewed as successful
20. Knowing I have people in my life who will take care of me when I need them
21. Having close friends and spending time with them

22. Associating with people who are successful and prestigious
23. Being a down to earth person who does not need to show off
24. Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature
25. Owning a country or beach home in beautiful natural surroundings
26. Having a strong religious or spiritual dimension to one's life
27. Passing on to future generations the values that I hold important
28. Going to parties, dancing, enjoying music and other kinds of fun
29. Making choices that make my life more calm and tranquil
30. Having a stable and satisfying home life
31. Having the means to do such things as eat at fine restaurants on a regular basis
32. Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea
33. Having time to do things like read a book, listen to music, watch a favorite television program
34. Not being overburdened with demands and expectations
35. Being satisfied with what I have
36. Never being quite satisfied; always striving for something better
37. Living life with big ambitions
38. Having a niche in which I can feel secure and successful
39. Being able to travel and stay at luxurious resorts and hotels
40. Being able to see the sights and experience the cultures of other parts of the world
41. Having enough time to spend with friends and loved ones
42. Having an intimate relationship in which I can really share and be myself
43. Living in a clean and healthful environment (air, water, natural resources)
44. Knowing my neighbors or feeling part of a community
45. Not having to rely on others for financial support

46. Being a risk taker, both financially and in other ways

Appendix B

Q-sort Responses as They Relate to Coefficient Based Attachment Groups and Median Based
High-Low Materialism Groups

Table B1

The Good Life (Protocol A): Securely Attached (n = 42) and Insecurely Attached Groups (n = 27)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Securely Attached Group | | | | Insecurely Attached Group | | | |
|-------------------------|--|-------|------|---------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.05 | 1.06 | 1 | Having a stable and satisfying home life | 2.07 | .87 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.93 | 1.30 | 2 | Having enough time to spend with friends and loved ones | 1.93 | .78 |
| 3 | Having enough time to spend with friends and loved ones | 1.64 | 1.08 | 3 | Having an intimate relationship in which I can really share and be myself | 1.85 | 1.06 |
| 4 | Having close friends and spending time with them (6) | 1.48 | .99 | 4 | Being satisfied with what I have (9) | 1.37 | 1.21 |
| 5 | Doing work that contributes usefully to society | 1.26 | 1.06 | 5 | Doing work that contributes usefully to society | 1.30 | 1.54 |
| Least Five | | | | | | | |
| 39 | Living life with big ambitions (32) | -1.43 | 1.06 | 35 | Having the means to do such things as eat at fine restaurants on a regular basis (32) ** | -1.63 | .79 |
| 40 | Owning a country or beach home in beautiful natural surroundings (31)⁺ | -1.48 | 1.22 | 36 | Being able to travel and stay at luxurious resorts and hotels (38) | -1.67 | .88 |
| 41 | Associating with people who are successful and prestigious | -1.76 | 1.12 | 37 | Having precious and beautiful things, such as jewelry or works of art | -2.15 | .91 |

| | | | | | | | |
|----|---|-------|-----|----|--|-------|-----|
| 42 | Having precious and beautiful things, such as jewelry or works of art | -2.02 | .81 | 38 | Associating with people who are successful and prestigious | -2.44 | .70 |
| 43 | Having the kind of house, car, or clothes that other people admire | -2.24 | .79 | 39 | Having the kind of house, car, or clothes that other people admire | -2.52 | .64 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B2

*The Actual Life (Protocol B): Securely Attached (n = 42) and Insecurely Attached Groups (n = 27)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Securely Attached Group | | | | Insecurely Attached Group | | | |
|-------------------------|---|-------|------|---------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.05 | 1.06 | 1 | Having enough time to spend with friends and loved ones | 1.48 | 1.22 |
| 2 | Having a stable and satisfying home life | 2.00 | 1.06 | 2 | Having an intimate relationship in which I can really share and be myself | 1.41 | 1.60 |
| 3 | Passing on to future generations the values that I hold important | 1.57 | 1.13 | 3 | Passing on to future generations the values that I hold important | 1.37 | 1.25 |
| 4 | Doing work that contributes usefully to society (6) | 1.24 | 1.17 | 4 | Having close friends and spending time with them (6) | 1.26 | 1.29 |
| 5 | Having enough time to spend with friends and loved ones | 1.19 | 1.25 | 5 | Having a stable and satisfying home life | 1.15 | 1.70 |
| Least Five | | | | | | | |
| 36 | Being able to travel and stay at luxurious resorts and hotels (37) | -1.36 | 1.38 | 38 | Associating with people who are successful and prestigious | -1.19 | 1.44 |
| 37 | Having precious and beautiful things, such as jewelry or works of art | -1.45 | 1.25 | 39 | Owning a country or beach home in beautiful natural surroundings | -1.22 | 1.89 |
| 38 | Associating with people who are successful and prestigious | -1.48 | 1.27 | 40 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (31) | -1.26 | 1.13 |
| 39 | Owning a country or beach home in beautiful natural surroundings | -1.67 | 1.44 | 41 | Having precious and beautiful things, such as jewelry or works of art | -1.70 | 1.17 |

| | | | | | | | |
|----|--|-------|------|----|--|-------|------|
| 40 | Having the kind of house, car, or clothes that other people admire | -1.69 | 1.09 | 42 | Having the kind of house, car, or clothes that other people admire | -1.74 | 1.32 |
|----|--|-------|------|----|--|-------|------|

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B3

The Good Life (Protocol A): Low Materialism (n = 35) and High Materialism Groups (n = 32) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 1.94 | 1.14 | 1 | Having a stable and satisfying home life | 2.19 | .93 |
| | Having a stable and satisfying home life | 1.94 | 1.06 | | | | |
| 2 | Having enough time to spend with friends and loved ones | 1.57 | 1.07 | 2 | Having enough time to spend with friends and loved ones | 1.97 | .78 |
| 3 | Having close friends and spending time with them | 1.37 | 1.19 | 3 | Having an intimate relationship in which I can really share and be myself | 1.78 | 1.31 |
| 4 | Doing work that contributes usefully to society (6) | 1.34 | 1.16 | 4 | Having close friends and spending time with them | 1.34 | .94 |
| 5 | Being satisfied with what I have (9) | 1.29 | 1.27 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (6) | 1.22 | 1.13 |
| Least Five | | | | | | | |
| 32 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (28) | -1.40 | 1.36 | 31 | Owning a country or beach home in beautiful natural surroundings (28)* | -1.56 | 1.11 |
| 33 | Being able to travel and stay at luxurious resorts and hotels | -1.49 | .919 | 32 | Being a risk taker, both financially and in other | -1.69 | 1.18 |

| | (31) | | | ways (29) ⁺ | | |
|----|---|-------|------|------------------------|---|------------|
| 34 | Never being quite satisfied; always striving for something better (29) | -1.66 | 1.26 | 33 | Having precious and beautiful things, such as jewelry or works of art | -1.88 .98 |
| 35 | Associating with people who are successful and prestigious | -2.17 | .86 | 34 | Associating with people who are successful and prestigious | -1.94 1.19 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.17 | .79 | 35 | Having the kind of house, car, or clothes that other people admire | -2.31 .69 |
| 36 | Having the kind of house, car, or clothes that other people admire | -2.43 | .78 | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B4

The Actual Life (Protocol B): Low Materialism (n = 35) and High Materialism Groups (n = 32) Derived from Ger Belk Scale

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 1.97 | 1.27 | 1 | Having a stable and satisfying home life | 1.63 | 1.52 |
| 2 | Having a stable and satisfying home life | 1.60 | 1.29 | 2 | Having an intimate relationship in which I can really share and be myself | 1.56 | 1.39 |
| 3 | Passing on to future generations the values that I hold important | 1.57 | 1.09 | 3 | Passing on to future generations the values that I hold important | 1.50 | 1.22 |
| 4 | Having enough time to spend with friends and loved ones | 1.26 | 1.17 | 4 | Having enough time to spend with friends and loved ones | 1.31 | 1.33 |
| 5 | Doing work that contributes usefully to society | 1.11 | 1.23 | 5 | Doing work that contributes usefully to society | 1.25 | 1.44 |
| Least Five | | | | | | | |
| 31 | Being able to travel and stay at luxurious resorts and hotels | -1.06 | 1.47 | 33 | Associating with people who are successful and prestigious | -1.25 | 1.41 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (31) | -1.06 | 1.41 | 34 | Being able to travel and stay at luxurious resorts and hotels | -1.47 | 1.19 |
| 32 | Owning a country or beach home in beautiful natural surroundings | -1.31 | 1.55 | 35 | Having precious and beautiful things, such as jewelry or works of art | -1.56 | 1.08 |
| 33 | Associating with people who are successful and prestigious | -1.46 | 1.31 | 36 | Being a risk taker, both financially and in other ways (28)* | -1.59 | 1.04 |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 34 | Having precious and beautiful things, such as jewelry or works of art | -1.49 | 1.38 | 37 | Having the kind of house, car, or clothes that other people admire | -1.75 | 1.24 |
| 35 | Having the kind of house, car, or clothes that other people admire | -1.66 | 1.16 | | Owning a country or beach home in beautiful natural surroundings | -1.75 | 1.69 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B5

The Good Life (Protocol A): Low Materialism-Securely Attached (n = 26) and Low Materialism-Insecurely Attached Groups (n = 10) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|-------|------|-------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 1.92 | 1.13 | 1 | Having an intimate relationship in which I can really share and be myself | 2.20 | 1.03 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.88 | 1.18 | 2 | Having a stable and satisfying home life | 2.10 | .88 |
| 3 | Having enough time to spend with friends and loved ones | 1.62 | 1.20 | 3 | Being satisfied with what I have (7) | 1.70 | 1.25 |
| 4 | Having close friends and spending time with them (6) | 1.50 | .99 | 4 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.60 | 1.27 |
| 5 | Passing on to future generations the values that I hold important (7) | 1.35 | 1.23 | | Having enough time to spend with friends and loved ones | 1.60 | .70 |
| | | | | 5 | Doing work that contributes usefully to society (6) | 1.50 | 1.51 |
| | | | | | Making exercise and other healthy activities a regular part of my life (12)⁺ | 1.50 | .97 |
| Least Five | | | | | | | |
| 32 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.23 | 1.42 | 23 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.70 | 1.16 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 33 | Being able to travel and stay at luxurious resorts and hotels | -1.38 | .98 | 24 | Having the means to do such things as eat at fine restaurants on a regular basis (30)* | -1.80 | .79 |
| 34 | Never being quite satisfied; always striving for something better | -1.50 | 1.24 | | Being able to travel and stay at luxurious resorts and hotels | -1.80 | .63 |
| | (37) Living life with big ambitions (20) | -1.50 | 1.07 | 25 | Never being quite satisfied; always striving for something better | -2.00 | 1.25 |
| 35 | Associating with people who are successful and prestigious | -2.12 | .91 | 26 | Associating with people who are successful and prestigious | -2.40 | .70 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.12 | .82 | | Having precious and beautiful things, such as jewelry or works of art | -2.40 | .70 |
| 36 | Having the kind of house, car, or clothes that other people admire | -2.31 | .84 | 27 | Having the kind of house, car, or clothes that other people admire | -2.70 | .48 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B6

The Good Life (Protocol A): High Materialism-Securely Attached (n = 17) and High Materialism-Insecurely Attached Groups (n = 14) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.29 | .99 | 1 | Having enough time to spend with friends and loved ones | 2.12 | .78 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.86 | 1.61 | 2 | Having a stable and satisfying home life | 2.06 | .90 |
| | Having enough time to spend with friends and loved ones | 1.86 | .77 | 3 | Having an intimate relationship in which I can really share and be myself | 1.65 | 1.06 |
| 3 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (8) | 1.43 | 1.22 | 4 | Having close friends and spending time with them | 1.35 | .93 |
| 4 | Doing work that contributes usefully to society | 1.29 | 1.20 | 5 | Doing work that contributes usefully to society | 1.18 | 1.59 |
| | Having close friends and spending time with them | 1.29 | .99 | | Being satisfied with what I have (8) | 1.18 | 1.19 |
| 5 | Knowing my neighbors or feeling part of a community (16) | 1.07 | 1.39 | | Having opportunities at work to be creative or to use my talents or skills (6) | 1.18 | 1.13 |
| | Having a job that leaves me time and energy for other things (10) | 1.07 | 1.14 | | | | |
| | Passing on to future generations the values that I hold important (7) | 1.07 | 1.07 | | | | |

Least
Five

| | | | | | | | |
|----|--|-------|------|----|---|-------|------|
| 23 | Being able to travel and stay at luxurious resorts and hotels (31) | -1.50 | 1.16 | 30 | Having the means to do such things as eat at fine restaurants on a regular basis (16)* | -1.53 | .80 |
| 24 | Being a risk taker, both financially and in other ways | -1.79 | 1.12 | 31 | Being a risk taker, both financially and in other ways | -1.59 | 1.28 |
| 25 | Having precious and beautiful things, such as jewelry or works of art | -1.86 | .86 | | Being able to travel and stay at luxurious resorts and hotels | -1.59 | 1.00 |
| 26 | Owning a country or beach home in beautiful natural surroundings (28)⁺ | -1.93 | 1.27 | 32 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.00 |
| 27 | Having the kind of house, car, or clothes that other people admire | -2.14 | .66 | 33 | Having the kind of house, car, or clothes that other people admire | -2.41 | .71 |
| | | | | 34 | Associating with people who are successful and prestigious (20)** | -2.47 | .71 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B7

The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 26) and Low Materialism-Insecurely Attached Groups (n = 10) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|-------|------|-------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.04 | .15 | 1 | Having an intimate relationship in which I can really share and be myself | 1.90 | 1.60 |
| 2 | Having a stable and satisfying home life | 1.73 | 1.08 | 2 | Having a stable and satisfying home life | 1.40 | 1.78 |
| 3 | Passing on to future generations the values that I hold important | 1.65 | 1.06 | 3 | Making exercise and other healthy activities a regular part of my life (11) | 1.30 | 1.57 |
| 4 | Having enough time to spend with friends and loved ones | 1.42 | 1.10 | | Passing on to future generations the values that I hold important | 1.30 | 1.16 |
| 5 | Doing work that contributes usefully to society | 1.12 | 1.14 | 4 | Having close friends and spending time with them (6) | 1.10 | 1.20 |
| | | | | 5 | Doing work that contributes usefully to society | 1.00 | 1.49 |
| | | | | | Having enough time to spend with friends and loved ones | 1.00 | 1.41 |
| Least Five | | | | | | | |
| 34 | Living and working in an atmosphere in which everyone competes and does their best (17)* | -1.15 | 1.01 | 26 | Going to parties, dancing, enjoying music and other kinds of fun (31) | -1.20 | 1.23 |
| 35 | Owning a country or beach home in beautiful natural surroundings (25) | -1.31 | 1.59 | 27 | Associating with people who are successful and prestigious | -1.30 | 1.42 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 36 | Having precious and beautiful things, such as jewelry or works of art | -1.54 | 1.39 | 28 | Having the means to do such things as eat at fine restaurants on a regular basis (28)* | -1.40 | .84 |
| 37 | Associating with people who are successful and prestigious | -1.58 | 1.30 | 29 | Having precious and beautiful things, such as jewelry or works of art | -1.50 | 1.43 |
| 38 | Having the kind of house, car, or clothes that other people admire | -1.73 | 1.12 | | Having the kind of house, car, or clothes that other people admire | -1.50 | 1.27 |
| | | | | 30 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (30)⁺ | -1.70 | 1.06 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B8

The Actual Life (Protocol B): High Materialism-Securely Attached (n = 14) and High Materialism-Insecurely Attached Groups (n = 17) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|-------|------|--------------------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life (6)* | 2.36 | .93 | 1 | Having enough time to spend with friends and loved ones (8)* | 1.76 | 1.03 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | .96 | 2 | Passing on to future generations the values that I hold important | 1.41 | 1.33 |
| 3 | Passing on to future generations the values that I hold important | 1.64 | 1.15 | 3 | Having close friends and spending time with them (10) | 1.35 | 1.37 |
| 4 | Doing work that contributes usefully to society | 1.50 | 1.29 | 4 | Having an intimate relationship in which I can really share and be myself | 1.12 | 1.58 |
| 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (18)⁺ | 1.00 | 1.75 | 5 | Doing work that contributes usefully to society | 1.06 | 1.60 |
| | Knowing my neighbors or feeling part of a community (14) | 1.00 | 1.52 | | | | |
| Least Five | | | | | | | |
| 26 | Associating with people who are successful and prestigious | -1.29 | 1.33 | 30 | Associating with people who are successful and prestigious | -1.12 | 1.50 |
| 27 | Going to parties, dancing, enjoying music and other kinds of fun (26)⁺ | -1.36 | 1.34 | 31 | Owning a country or beach home in beautiful natural surroundings | -1.29 | 2.09 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| | Having precious and beautiful things, such as jewelry or works of art | -1.36 | 1.08 | | Being able to travel and stay at luxurious resorts and hotels | -1.29 | 1.16 |
| 28 | Having the kind of house, car, or clothes that other people admire | -1.50 | 1.09 | 32 | Being a risk taker, both financially and in other ways | -1.41 | 1.12 |
| 29 | Being able to travel and stay at luxurious resorts and hotels | -1.79 | 1.19 | 33 | Having precious and beautiful things, such as jewelry or works of art | -1.82 | 1.02 |
| | Being a risk taker, both financially and in other ways | -1.79 | .98 | 34 | Having the kind of house, car, or clothes that other people admire | -1.88 | 1.36 |
| 30 | Owning a country or beach home in beautiful natural surroundings | -2.29 | .91 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B9

The Good Life (Protocol A): Low Materialism (n = 32) and High Materialism Groups (n = 33) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.06 | .95 | 1 | Having a stable and satisfying home life | 2.21 | .99 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.97 | 1.03 | 2 | Having an intimate relationship in which I can really share and be myself | 1.94 | 1.35 |
| 3 | Having enough time to spend with friends and loved ones | 1.91 | .89 | 3 | Having enough time to spend with friends and loved ones | 1.70 | 1.05 |
| 4 | Doing work that contributes usefully to society (7)** | 1.72 | 1.14 | 4 | Having close friends and spending time with them (7) | 1.55 | 1.12 |
| 5 | Passing on to future generations the values that I hold important (7)* | 1.44 | 1.24 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (9) | 1.30 | 1.49 |
| Least Five | | | | | | | |
| 36 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (28) | -1.53 | .92 | 31 | Being a risk taker, both financially and in other ways (34) | -1.52 | 1.46 |
| 37 | Being able to travel and stay at luxurious resorts and hotels (30) | -1.63 | 1.07 | 32 | Living life with big ambitions (31)⁺ | -1.61 | .86 |
| 38 | Associating with people who are successful and prestigious | -1.97 | 1.00 | 33 | Never being quite satisfied; always striving for something better (33) | -1.76 | 1.09 |

| | | | | | | | |
|----|---|-------|-----|----|---|-------|-----|
| 39 | Having precious and beautiful things, such as jewelry or works of art | -2.34 | .83 | | Having precious and beautiful things, such as jewelry or works of art | -1.76 | .87 |
| 40 | Having the kind of house, car, or clothes that other people admire | -2.53 | .62 | 34 | Having the kind of house, car, or clothes that other people admire | -2.18 | .81 |
| | | | | 35 | Associating with people who are successful and prestigious | -2.27 | .94 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺*p* < .10 **p* < .05 ** *p* < .01.

Table B10
The Actual Life (Protocol B): Low Materialism (n = 32) and High Materialism Groups (n = 33) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 1.94 | 1.11 | 1 | Having an intimate relationship in which I can really share and be myself | 1.73 | 1.57 |
| 2 | Having a stable and satisfying home life | 1.91 | 1.12 | 2 | Having a stable and satisfying home life | 1.36 | 1.64 |
| 3 | Passing on to future generations the values that I hold important | 1.81 | 1.12 | 3 | Having enough time to spend with friends and loved ones | 1.33 | 1.11 |
| 4 | Doing work that contributes usefully to society (11)** | 1.69 | 1.23 | 4 | Passing on to future generations the values that I hold important | 1.30 | 1.13 |
| 5 | Having enough time to spend with friends and loved ones | 1.50 | 1.16 | 5 | Having close friends and spending time with them (7) | 1.15 | 1.40 |
| Least Five | | | | | | | |
| 33 | Being able to travel and stay at luxurious resorts and hotels (37) | -1.25 | 1.30 | 38 | Having precious and beautiful things, such as jewelry or works of art | -1.18 | 1.19 |
| 34 | Associating with people who are successful and prestigious | -1.31 | 1.31 | 39 | Having the kind of house, car, or clothes that other people admire | -1.24 | 1.30 |
| 35 | Owning a country or beach home in beautiful natural surroundings | -1.44 | 1.56 | 40 | Being a risk taker, both financially and in other ways (31) | -1.33 | 1.29 |
| 36 | Having precious and beautiful things, such as jewelry or works of art | -1.91 | 1.25 | 41 | Associating with people who are successful and prestigious | -1.52 | 1.33 |

| | | | | | | | |
|----|--|-------|-----|----|--|-------|------|
| 37 | Having the kind of house, car, or clothes that other people admire | -2.19 | .90 | 42 | Owning a country or beach home in beautiful natural surroundings | -1.61 | 1.58 |
|----|--|-------|-----|----|--|-------|------|

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B11

The Good Life (Protocol A): Low Materialism-Securely Attached (n = 20) and Low Materialism-Insecurely Attached Groups (n = 12) Derived from Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|-------|------|-------------------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.05 | 1.05 | 1 | Having a stable and satisfying home life | 2.08 | .79 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.03 | 2 | Having an intimate relationship in which I can really share and be myself | 1.92 | 1.08 |
| 3 | Having enough time to spend with friends and loved ones | 1.90 | .97 | | Having enough time to spend with friends and loved ones | 1.92 | .79 |
| 4 | Doing work that contributes usefully to society | 1.75 | .97 | 3 | Being satisfied with what I have (9)* | 1.83 | 1.19 |
| 5 | Passing on to future generations the values that I hold important (6) | 1.55 | 1.19 | 4 | Making exercise and other healthy activities a regular part of my life (7) | 1.75 | .75 |
| | | | | 5 | Doing work that contributes usefully to society | 1.67 | 1.44 |
| Least Five | | | | | | | |
| 31 | Being a risk taker, both financially and in other ways (24) | -1.40 | .88 | 26 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (30) | -1.83 | .84 |
| 32 | Never being quite satisfied; always striving for something better (22) | -1.45 | 1.32 | 27 | Being able to travel and stay at luxurious resorts and hotels | -1.92 | 1.00 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.45 | 1.10 | 28 | Associating with people who are successful and prestigious | -2.33 | .78 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|-----|
| 33 | Associating with people who are successful and prestigious | -1.75 | 1.07 | 29 | Having precious and beautiful things, such as jewelry or works of art | -2.58 | .67 |
| 34 | Having precious and beautiful things, such as jewelry or works of art | -2.20 | .89 | 30 | Having the kind of house, car, or clothes that other people admire | -2.75 | .45 |
| 35 | Having the kind of house, car, or clothes that other people admire | -2.40 | .68 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺*p* < .10 **p* < .05 ** *p* < .01.

Table B12

The Good Life (Protocol A): High Materialism-Securely Attached (n = 18) and High Materialism-Insecurely Attached Groups (n = 14) Derived from Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|-------|------|--------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.22 | 1.06 | 1 | Having a stable and satisfying home life | 2.14 | .95 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.94 | 1.55 | 2 | Having enough time to spend with friends and loved ones | 1.93 | .83 |
| 3 | Having enough time to spend with friends and loved ones | 1.56 | 1.20 | 3 | Having an intimate relationship in which I can really share and be myself | 1.86 | 1.10 |
| 4 | Having close friends and spending time with them | 1.50 | 1.10 | 4 | Having close friends and spending time with them | 1.57 | 1.22 |
| 5 | Knowing my neighbors or feeling part of a community (13) | 1.17 | 1.15 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (6) | 1.50 | 1.29 |
| Least Five | | | | | | | |
| 25 | Never being quite satisfied; always striving for something better | -1.33 | 1.19 | 28 | Living life with big ambitions | -1.43 | .94 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.33 | .97 | | Being able to travel and stay at luxurious resorts and hotels | -1.43 | .76 |
| 26 | Owning a country or beach home in beautiful natural surroundings (27)⁺ | -1.67 | 1.19 | 29 | Having the means to do such things as eat at fine restaurants on a regular basis (20)** | -1.64 | .75 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 27 | Living life with big ambitions | -1.72 | .83 | 30 | Being a risk taker, both financially and in other ways (24) | -1.79 | 1.48 |
| 28 | Having precious and beautiful things, such as jewelry or works of art | -1.83 | .71 | | Having precious and beautiful things, such as jewelry or works of art | -1.79 | .98 |
| 29 | Associating with people who are successful and prestigious | -2.06 | 1.11 | 31 | Never being quite satisfied; always striving for something better | -2.29 | .73 |
| | Having the kind of house, car, or clothes that other people admire | -2.06 | .87 | | Having the kind of house, car, or clothes that other people admire | -2.29 | .73 |
| | | | | 32 | Associating with people who are successful and prestigious | -2.50 | .65 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B13
*The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 20) and Low Materialism-Insecurely Attached Groups (n = 12) Derived from Richins Dawson Scale
 Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|-------|------|-------------------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.15 | .88 | 1 | Doing work that contributes usefully to society | 2.08 | 1.17 |
| 2 | Having a stable and satisfying home life | 2.10 | 1.07 | 2 | Having enough time to spend with friends and loved ones | 1.67 | 1.23 |
| 3 | Passing on to future generations the values that I hold important | 2.00 | .97 | 3 | Having an intimate relationship in which I can really share and be myself | 1.58 | 1.38 |
| 4 | Doing work that contributes usefully to society | 1.45 | 1.23 | | Having a stable and satisfying home life | 1.58 | 1.17 |
| 5 | Having enough time to spend with friends and loved ones | 1.40 | 1.14 | 4 | Passing on to future generations the values that I hold important | 1.50 | 1.31 |
| | | | | 5 | Making exercise and other healthy activities a regular part of my life (7) | 1.25 | 1.29 |
| Least Five | | | | | | | |
| 29 | Being able to travel and stay at luxurious resorts and hotels | -1.25 | 1.45 | 28 | Living life with big ambitions (26) | -1.25 | 1.60 |
| | Being a risk taker, both financially and in other ways (25) | -1.25 | 1.02 | | Being able to travel and stay at luxurious resorts and hotels | -1.25 | 1.06 |

| | | | | | | | |
|----|--|-------|------|----|---|-------|------|
| | Living and working in an atmosphere in which everyone competes and does their best (23) | -1.25 | .97 | 29 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (27) | -1.42 | .90 |
| 30 | Owning a country or beach home in beautiful natural surroundings | -1.40 | 1.67 | 30 | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.45 |
| 31 | Associating with people who are successful and prestigious | -1.55 | 1.19 | 31 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.21 |
| 32 | Having precious and beautiful things, such as jewelry or works of art | -1.85 | 1.31 | 32 | Having the kind of house, car, or clothes that other people admire | -2.50 | .80 |
| 33 | Having the kind of house, car, or clothes that other people admire | -2.00 | .92 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B14

*The Actual Life (Protocol B): High Materialism-Securely Attached (n = 18) and High Materialism-Insecurely Attached Groups (n = 14) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.28 | 1 | Having close friends and spending time with them (9) | 1.43 | 1.28 |
| 2 | Having a stable and satisfying home life | 1.83 | 1.10 | | Having enough time to spend with friends and loved ones | 1.43 | 1.22 |
| 3 | Passing on to future generations the values that I hold important | 1.33 | 1.09 | 2 | Having an intimate relationship in which I can really share and be myself | 1.29 | 1.86 |
| 4 | Having enough time to spend with friends and loved ones | 1.22 | 1.06 | | Passing on to future generations the values that I hold important | 1.29 | 1.27 |
| 5 | Having opportunities at work to be creative or to use my talents or skills (6) | 1.11 | 1.13 | 3 | Knowing I have people in my life who will take care of me when I need them (11) | 1.14 | 1.41 |
| | | | | 4 | Having time to do things like read a book, listen to music, watch a favorite television program (11) | .93 | .92 |
| | | | | 5 | Having a stable and satisfying home life | .71 | 2.05 |
| | | | | | Doing a good job for its own sake, regardless of whether I earn more money for it (13) | .71 | 1.59 |
| Least Five | | | | | | | |

| | | | | | | | |
|----|--|-------|------|----|---|-------|------|
| 25 | Going to parties, dancing, enjoying music and other kinds of fun | -1.22 | 1.31 | 24 | Being able to travel and stay at luxurious resorts and hotels | -1.00 | 1.52 |
| 26 | Living life with big ambitions (16)⁺ | -1.28 | 1.53 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (22) | -1.00 | 1.24 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.28 | 1.41 | | Going to parties, dancing, enjoying music and other kinds of fun | -1.00 | 1.04 |
| | Having the kind of house, car, or clothes that other people admire | -1.28 | 1.23 | 25 | Having the kind of house, car, or clothes that other people admire | -1.07 | 1.39 |
| 27 | Being a risk taker, both financially and in other ways | -1.39 | 1.46 | 26 | Being a risk taker, both financially and in other ways | -1.21 | 1.12 |
| 28 | Associating with people who are successful and prestigious | -1.61 | 1.24 | 27 | Owning a country or beach home in beautiful natural surroundings | -1.29 | 1.98 |
| 29 | Owning a country or beach home in beautiful natural surroundings | -1.83 | 1.25 | | Associating with people who are successful and prestigious | -1.29 | 1.44 |
| | | | | 28 | Having precious and beautiful things, such as jewelry or works of art (24) | -1.43 | 1.16 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B15

*The Good Life (Protocol A): Low Materialism (n = 16) and High Materialism Groups (n = 15) Derived from Aspirations Index (Importance)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society (13)** | 2.44 | .63 | 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.07 |
| 2 | Having a stable and satisfying home life | 2.19 | .83 | | Having a stable and satisfying home life | 2.00 | .85 |
| 3 | Having enough time to spend with friends and loved ones | 2.13 | .81 | 2 | Having close friends and spending time with them | 1.80 | .94 |
| 4 | Having an intimate relationship in which I can really share and be myself | 1.50 | 1.41 | 3 | Having enough time to spend with friends and loved ones | 1.67 | 1.18 |
| 5 | Having close friends and spending time with them | 1.31 | 1.01 | 4 | Knowing I have people in my life who will take care of me when I need them (16)** | 1.47 | 1.06 |
| | | | | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.40 | .99 |
| Least Five | | | | | | | |
| 31 | Having the means to do such things as eat at fine restaurants on a regular basis (22)* | -1.63 | 1.03 | 26 | Living life with big ambitions (29) | -1.33 | 1.18 |
| | Being a risk taker, both financially and in other ways | -1.63 | .72 | | Being able to travel and stay at luxurious resorts and hotels (30) | -1.33 | .90 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 32 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (24)⁺ | -1.81 | 1.33 | 27 | Being a risk taker, both financially and in other ways | -1.80 | 1.08 |
| 33 | Associating with people who are successful and prestigious | -1.88 | 1.03 | 28 | Associating with people who are successful and prestigious | -1.87 | 1.13 |
| 34 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .97 | | Owning a country or beach home in beautiful natural surroundings (25)* | -1.87 | 1.13 |
| 35 | Having the kind of house, car, or clothes that other people admire | -2.44 | .73 | 29 | Having precious and beautiful things, such as jewelry or works of art | -2.20 | .78 |
| | | | | 30 | Having the kind of house, car, or clothes that other people admire | -2.27 | .80 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B16

The Actual Life (Protocol B): Low Materialism (n = 16) and High Materialism Groups (n = 15) Derived from Aspirations Index (Importance)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|------|------|------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society** | 2.25 | 1.00 | 1 | Having an intimate relationship in which I can really share and be myself | 2.13 | 1.13 |
| 2 | Having a stable and satisfying home life | 1.63 | 1.03 | | Having a stable and satisfying home life | 2.13 | 1.13 |
| | Passing on to future generations the values that I hold important | 1.63 | 1.03 | 2 | Passing on to future generations the values that I hold important | 1.60 | 1.12 |
| 3 | Having an intimate relationship in which I can really share and be myself | 1.56 | 1.32 | 3 | Having enough time to spend with friends and loved ones | 1.40 | 1.12 |
| 4 | Having close friends and spending time with them | 1.25 | 1.18 | | Having close friends and spending time with them | 1.40 | 1.40 |
| 5 | Doing a good job for its own sake, regardless of whether I earn more money for it | 1.00 | 1.46 | 4 | Having time to do things like read a book, listen to music, watch a favorite television program⁺ | .93 | .70 |
| | | | | | Having opportunities at work to be creative or to use my talents or skills | .93 | 1.10 |
| | | | | 5 | Doing a good job for its own sake, regardless of whether I earn more money for it | .87 | .74 |
| Least Five | | | | | | | |

| | | | | | | | |
|----|--|-------|------|----|---|-------|------|
| 28 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.25 | 1.24 | 27 | Having the kind of house, car, or clothes that other people admire | -1.40 | .99 |
| 29 | Owning a country or beach home in beautiful natural surroundings | -1.31 | 1.70 | 28 | Associating with people who are successful and prestigious | -1.53 | 1.13 |
| 30 | Having precious and beautiful things, such as jewelry or works of art | -1.63 | 1.09 | 29 | Having precious and beautiful things, such as jewelry or works of art | -1.60 | 1.18 |
| 31 | Being able to travel and stay at luxurious resorts and hotels | -1.69 | 1.25 | 30 | Being a risk taker, both financially and in other ways** | -1.87 | .74 |
| 32 | Having the kind of house, car, or clothes that other people admire | -1.88 | 1.41 | 31 | Owning a country or beach home in beautiful natural surroundings | -2.20 | 1.37 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B17

The Good Life (Protocol A): Low Materialism-Securely Attached (n = 7) and Low Materialism-Insecurely Attached Groups (n = 9) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|-------|------|-------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.29 | .95 | 1 | Doing work that contributes usefully to society | 2.67 | .71 |
| 2 | Having enough time to spend with friends and loved ones | 2.14 | .90 | 2 | Having enough time to spend with friends and loved ones | 2.11 | .78 |
| | Doing work that contributes usefully to society | 2.14 | .38 | | Having a stable and satisfying home life | 2.11 | .78 |
| 3 | Having close friends and spending time with them (7) | 1.57 | 1.13 | 3 | Having an intimate relationship in which I can really share and be myself (6) | 1.78 | 1.09 |
| 4 | Having a job that leaves me time and energy for other things (13)* | 1.43 | .54 | 4 | Being satisfied with what I have (9)* | 1.67 | .87 |
| 5 | Living in a clean and healthful environment (air, water, natural resources) (10) | 1.29 | .95 | 5 | Making exercise and other healthy activities a regular part of my life (11)* | 1.33 | .71 |
| Least Five | | | | | | | |
| 18 | Going to parties, dancing, enjoying music and other kinds of fun (19) | -1.14 | 1.22 | 25 | Being able to travel and stay at luxurious resorts and hotels | -1.78 | 1.09 |
| | Living and working in an atmosphere in which everyone competes and does their best (22) | -1.14 | .69 | 26 | Having the means to do such things as eat at fine restaurants on a regular basis | -1.89 | .78 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 19 | Being able to travel and stay at luxurious resorts and hotels | -1.29 | 1.38 | 27 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.12 |
| | Having the means to do such things as eat at fine restaurants on a regular basis | -1.29 | 1.25 | 28 | Associating with people who are successful and prestigious | -2.22 | .83 |
| | Being in a position of influence or authority (20) | -1.29 | 1.11 | 29 | Having the kind of house, car, or clothes that other people admire | -2.56 | .73 |
| | Living life with big ambitions (24) | -1.29 | .49 | | | | |
| | Looking my best and knowing that others see me as an attractive person (22) | -1.29 | .49 | | | | |
| 20 | Keeping myself fit so that I can look as good as I can (20) | -1.43 | .98 | | | | |
| | Associating with people who are successful and prestigious | -1.43 | 1.13 | | | | |
| 21 | Being a risk taker, both financially and in other ways (23)⁺ | -2.00 | .00 | | | | |
| | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .82 | | | | |
| 22 | Having the kind of house, car, or clothes that other people admire | -2.29 | .76 | | | | |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (24) | -2.29 | .95 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B18

The Good Life (Protocol A): High Materialism-Securely Attached (n = 11) and High Materialism-Insecurely Attached Groups (n = 4) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.18 | 1 | Having close friends and spending time with them | 2.25 | .50 |
| | Having a stable and satisfying home life | 2.00 | .89 | 2 | Having enough time to spend with friends and loved ones | 2.00 | 1.16 |
| 2 | Having close friends and spending time with them | 1.64 | 1.03 | | Having an intimate relationship in which I can really share and be myself | 2.00 | .82 |
| 3 | Having enough time to spend with friends and loved ones | 1.55 | 1.21 | | Having a stable and satisfying home life | 2.00 | .82 |
| 4 | Knowing I have people in my life who will take care of me when I need them | 1.36 | .92 | 3 | Knowing I have people in my life who will take care of me when I need them | 1.75 | 1.50 |
| 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.27 | 1.10 | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.75 | .50 |
| | | | | 4 | Passing on to future generations the values that I hold important (7) | 1.25 | 1.26 |
| | | | | | Engaging in hobbies or interests that allow me to express my creativity (12) | 1.25 | 1.26 |

| | | | | | | | | |
|------------|----|---|-------|------|--|--|-------|------|
| | | | | | Being able to see the sights and experience the cultures of other parts of the world (10) | 1.25 | .96 | |
| | | | | 5 | Having opportunities at work to be creative or to use my talents or skills (5) | 1.00 | 1.83 | |
| Least Five | 25 | Being able to travel and stay at luxurious resorts and hotels | -1.45 | .93 | 13 | Owning a country or beach home in beautiful natural surroundings | -1.00 | 1.41 |
| | 26 | Associating with people who are successful and prestigious | -1.82 | 1.33 | | Being able to have nice things and buy things when I'd like to (13) | -1.00 | 1.41 |
| | 27 | Being a risk taker, both financially and in other ways | -1.91 | .83 | | Being able to travel and stay at luxurious resorts and hotels | -1.00 | .82 |
| | 28 | Owning a country or beach home in beautiful natural surroundings | -2.18 | .87 | 14 | Living life with big ambitions (14) | -1.25 | .96 |
| | | Having precious and beautiful things, such as jewelry or works of art | -2.18 | .75 | | Having the means to do such things as eat at fine restaurants on a regular basis (14) | -1.25 | .96 |
| | 29 | Having the kind of house, car, or clothes that other people admire | -2.27 | .79 | 15 | Being a risk taker, both financially and in other ways | -1.50 | 1.73 |
| | | | | | 16 | Never being quite satisfied; always striving for something better (16) | -2.00 | .82 |
| | | | | | | Associating with people who are successful and prestigious | -2.00 | .00 |
| | | | | | 17 | Having the kind of house, car, or clothes that other people admire | -2.25 | .96 |

| | | |
|---|-------|-----|
| Having precious and beautiful things, such as jewelry or works of art | -2.25 | .96 |
|---|-------|-----|

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B19

The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 7) and Low Materialism-Insecurely Attached Groups (n = 9) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|-------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society | 2.14 | .90 | 1 | Doing work that contributes usefully to society | 2.33 | 1.12 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.86 | 1.07 | 2 | Having close friends and spending time with them (7) | 1.67 | 1.12 |
| | Having a stable and satisfying home life | 1.86 | .69 | 3 | Passing on to future generations the values that I hold important | 1.56 | .88 |
| 3 | Passing on to future generations the values that I hold important | 1.71 | 1.25 | 4 | Having a stable and satisfying home life | 1.44 | 1.24 |
| 4 | Doing a good job for its own sake, regardless of whether I earn more money for it (9) | 1.43 | .98 | 5 | Having an intimate relationship in which I can really share and be myself | 1.33 | 1.50 |
| 5 | Having opportunities at work to be creative or to use my talents or skills (10) | 1.29 | 1.38 | | | | |
| Least Five | | | | | | | |
| 21 | Keeping myself fit so that I can look as good as I can (19) | -1.29 | 1.70 | 21 | Not being overburdened with demands and expectations (17) | -.89 | 1.05 |
| 22 | Having precious and beautiful things, such as jewelry or works of art | -1.43 | .98 | | Making choices that make my life more calm and tranquil (11) | -.89 | 1.17 |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 23 | Owning a country or beach home in beautiful natural surroundings | -1.57 | 1.27 | | Looking my best and knowing that others see me as an attractive person (18) | -.89 | .78 |
| | Associating with people who are successful and prestigious (20) | -1.57 | 1.90 | 22 | Owning a country or beach home in beautiful natural surroundings | -1.11 | 2.03 |
| 24 | Having the kind of house, car, or clothes that other people admire | -1.86 | 1.07 | | Having the means to do such things as eat at fine restaurants on a regular basis (20) | -1.11 | 1.17 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (20)⁺ | -1.86 | .69 | 23 | Being able to travel and stay at luxurious resorts and hotels | -1.33 | 1.41 |
| 25 | Being able to travel and stay at luxurious resorts and hotels | -2.14 | .90 | 24 | Having precious and beautiful things, such as jewelry or works of art | -1.78 | 1.20 |
| | | | | 25 | Having the kind of house, car, or clothes that other people admire | -1.89 | 1.69 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B20

The Actual Life (Protocol B): High Materialism-Securely Attached (n = 11) and High Materialism-Insecurely Attached Groups (n = 4) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.18 | 1 | Having a stable and satisfying home life | 2.75 | .50 |
| 2 | Having a stable and satisfying home life | 1.91 | 1.22 | 2 | Having an intimate relationship in which I can really share and be myself | 2.50 | 1.00 |
| 3 | Passing on to future generations the values that I hold important | 1.55 | 1.21 | 3 | Passing on to future generations the values that I hold important | 1.75 | .96 |
| | Having enough time to spend with friends and loved ones | 1.55 | .93 | 4 | Having close friends and spending time with them | 1.50 | 1.29 |
| 4 | Having close friends and spending time with them | 1.36 | 1.50 | | Engaging in hobbies or interests that allow me to express my creativity (10) | 1.50 | 1.29 |
| 5 | Doing work that contributes usefully to society (9)⁺ | 1.09 | .94 | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (9) | 1.50 | .58 |
| | | | | 5 | Having enough time to spend with friends and loved ones | 1.00 | 1.63 |
| | | | | | Having time to do things like read a book, listen to music, watch a favorite television program (6) | 1.00 | .82 |

| | | | | | | | |
|------------|---|-------|------|----|---|-------|------|
| | | | | | Doing a good job for its own sake, regardless of whether I earn more money for it (7) | 1.00 | .82 |
| | | | | | Having opportunities at work to be creative or to use my talents or skills (6) | 1.00 | .82 |
| Least Five | | | | | | | |
| 21 | Having the kind of house, car, or clothes that other people admire | -1.27 | 1.01 | 13 | Living life with big ambitions | -1.00 | 2.45 |
| 22 | Living life with big ambitions | -1.45 | 1.64 | | Having a strong religious or spiritual dimension to one's life (14) | -1.00 | 2.16 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.45 | 1.29 | | Never being quite satisfied; always striving for something better (17) | -1.00 | .82 |
| | Associating with people who are successful and prestigious | -1.45 | 1.13 | 14 | Being in a position of influence or authority (19) | -1.25 | 1.50 |
| 23 | Being able to travel and stay at luxurious resorts and hotels (11) | -1.55 | 1.37 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (18) | -1.25 | .96 |
| 24 | Being a risk taker, both financially and in other ways | -1.82 | .75 | 15 | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.73 |
| 25 | Owning a country or beach home in beautiful natural surroundings | -2.45 | 1.21 | | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.73 |
| | | | | 16 | Associating with people who are successful and prestigious | -1.75 | 1.26 |

| | | | |
|----|---|-------|-----|
| | Having the kind of house, car, or clothes that other people admire | -1.75 | .96 |
| 17 | Being a risk taker, both financially and in other ways | -2.00 | .82 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .82 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table B21

The Good Life (Protocol A): Low Materialism (n = 20) and High Materialism Groups (n = 18)
Q-sort Items Falling into Top Five and Lowest Five Categories Derived from Combined Ger Belk-Richins Dawson Scale

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 1.95 | 1.00 | 1 | Having a stable and satisfying home life | 2.44 | .78 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.85 | 1.04 | 2 | Having enough time to spend with friends and loved ones | 2.06 | .80 |
| | Doing work that contributes usefully to society (8)* | 1.85 | 1.04 | 3 | Having an intimate relationship in which I can really share and be myself | 1.83 | 1.43 |
| 3 | Having enough time to spend with friends and loved ones | 1.80 | .95 | 4 | Having close friends and spending time with them | 1.50 | 1.04 |
| 4 | Passing on to future generations the values that I hold important (8) | 1.60 | 1.23 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (6) | 1.28 | 1.22 |
| 5 | Being satisfied with what I have (13)⁺ | 1.20 | 1.36 | | | | |
| | Having close friends and spending time with them | 1.20 | 1.15 | | | | |
| Least Five | | | | | | | |
| 29 | Being able to travel and stay at luxurious resorts and hotels (28) | -1.60 | 1.00 | 30 | Owning a country or beach home in beautiful natural surroundings (24) | -1.56 | 1.15 |

| | | | | | | | |
|----|---|-------|-----|----|--|-------|------|
| 30 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (26) | -1.65 | .88 | 31 | Never being quite satisfied; always striving for something better (28) | -1.67 | 1.19 |
| 31 | Associating with people who are successful and prestigious | -2.00 | .92 | 32 | Being a risk taker, both financially and in other ways (26)⁺ | -1.83 | 1.30 |
| 32 | Having precious and beautiful things, such as jewelry or works of art (29)* | -2.25 | .85 | 33 | Having the kind of house, car, or clothes that other people admire | -2.06 | .72 |
| 33 | Having the kind of house, car, or clothes that other people admire | -2.50 | .69 | 34 | Associating with people who are successful and prestigious | -2.17 | 1.10 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table B22

The Actual Life (Protocol B): Low Materialism (n = 20) and High Materialism Groups (n = 18) Derived from Combined Ger Belk-Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Passing on to future generations the values that I hold important | 2.10 | .85 | 1 | Passing on to future generations the values that I hold important | 1.67 | 1.14 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.08 | 2 | Having a stable and satisfying home life | 1.61 | 1.79 |
| | Having a stable and satisfying home life | 2.00 | 1.03 | 3 | Having an intimate relationship in which I can really share and be myself | 1.56 | 1.62 |
| 3 | Doing work that contributes usefully to society (9)⁺ | 1.65 | 1.18 | 4 | Having enough time to spend with friends and loved ones | 1.33 | 1.03 |
| 4 | Having enough time to spend with friends and loved ones | 1.20 | 1.15 | 5 | Having opportunities at work to be creative or to use my talents or skills (6) | 1.11 | .96 |
| 5 | Being a down to earth person who does not need to show off (17) | .85 | 1.31 | | | | |
| | Doing a good job for its own sake, regardless of whether I earn more money for it (10) | .85 | 1.14 | | | | |
| Least Five | | | | | | | |
| 27 | Never being quite satisfied; always striving for something better (23) | -1.15 | 1.60 | 28 | Going to parties, dancing, enjoying music and other kinds of fun (24) | -1.17 | 1.34 |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 28 | Owning a country or beach home in beautiful natural surroundings | -1.25 | 1.62 | | Having precious and beautiful things, such as jewelry or works of art | -1.17 | 1.10 |
| 29 | Associating with people who are successful and prestigious | -1.25 | 1.33 | 29 | Having the kind of house, car, or clothes that other people admire (31)⁺ | -1.28 | 1.36 |
| 30 | Being able to travel and stay at luxurious resorts and hotels | -1.35 | 1.35 | 30 | Associating with people who are successful and prestigious | -1.33 | 1.37 |
| 31 | Having precious and beautiful things, such as jewelry or works of art | -1.70 | 1.42 | 31 | Being able to travel and stay at luxurious resorts and hotels | -1.50 | 1.20 |
| | | | | | Being a risk taker, both financially and in other ways (22)* | -1.50 | .99 |
| | | | | 32 | Owning a country or beach home in beautiful natural surroundings | -1.78 | 1.67 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table B23

The Good Life (Protocol A): Low Materialism-Securely Attached (n = 15) and Low Materialism-Insecurely Attached Groups (n = 5) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|------|------|-------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 1.93 | 1.10 | 1 | Being satisfied with what I have* | 2.40 | .89 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.87 | 1.06 | | Having a stable and satisfying home life | 2.00 | .71 |
| 3 | Having enough time to spend with friends and loved ones | 1.80 | 1.01 | 2 | Doing work that contributes usefully to society | 2.00 | 1.73 |
| | Doing work that contributes usefully to society | 1.80 | .78 | | Having an intimate relationship in which I can really share and be myself | 1.80 | 1.10 |
| 4 | Passing on to future generations the values that I hold important | 1.60 | 1.30 | 3 | Having enough time to spend with friends and loved ones | 1.80 | .84 |
| 5 | Having close friends and spending time with them (7) | 1.40 | .99 | | Passing on to future generations the values that I hold important | 1.60 | 1.14 |
| | | | | 4 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.60 | 1.14 |
| | | | | | Making exercise and other healthy activities a regular part of my life (8) | 1.60 | .89 |

| | | | | | | | | |
|------------|----|---|-------|------|---|---|-------|-----|
| | | | | | Living in a clean and healthful environment (air, water, natural resources) (11) | 1.20 | 1.64 | |
| | | | | 5 | Having a strong religious or spiritual dimension to one's life (13) | 1.20 | 1.30 | |
| | | | | | Being satisfied with what I have (9)* | 2.40 | .89 | |
| Least Five | | | | | | | | |
| | 31 | Being able to travel and stay at luxurious resorts and hotels | -1.47 | 1.06 | 18 | Looking my best and knowing that others see me as an attractive person (27) | -1.80 | .45 |
| | | Never being quite satisfied; always striving for something better (17) | -1.47 | 1.41 | 19 | Being able to travel and stay at luxurious resorts and hotels | -2.00 | .71 |
| | 32 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.53 | .92 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.00 | .71 |
| | 33 | Associating with people who are successful and prestigious | -1.93 | .96 | 20 | Associating with people who are successful and prestigious | -2.20 | .84 |
| | 34 | Having precious and beautiful things, such as jewelry or works of art | -2.13 | .92 | 21 | Having precious and beautiful things, such as jewelry or works of art | -2.60 | .55 |
| | 35 | Having the kind of house, car, or clothes that other people admire | -2.40 | .74 | 22 | Having the kind of house, car, or clothes that other people admire | -2.80 | .45 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table B24

The Good Life (Protocol A): High Materialism-Securely Attached (n = 8) and High Materialism-Insecurely Attached Groups (n = 9) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|-------|------|--------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.75 | .46 | 1 | Having enough time to spend with friends and loved ones | 2.22 | .83 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.13 | 1.81 | 2 | Having a stable and satisfying home life | 2.11 | .93 |
| 3 | Having enough time to spend with friends and loved ones | 2.00 | .76 | 3 | Having close friends and spending time with them | 1.56 | 1.01 |
| 4 | Having a job that leaves me time and energy for other things (7) | 1.50 | .54 | 4 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.44 | 1.24 |
| 5 | Having close friends and spending time with them | 1.38 | 1.19 | | Having an intimate relationship in which I can really share and be myself | 1.44 | 1.01 |
| | | | | 5 | Passing on to future generations the values that I hold important (10) | 1.22 | 1.20 |
| Least Five | | | | | | | |
| 22 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (16) | -1.25 | 1.67 | 22 | Having the means to do such things as eat at fine restaurants on a regular basis (19)⁺ | -1.44 | .73 |

| | | | | | | | |
|----|--|-------|------|----|--|-------|------|
| 23 | Being able to travel and stay at luxurious resorts and hotels (21) | -1.50 | 1.07 | 23 | Having precious and beautiful things, such as jewelry or works of art | -1.56 | 1.01 |
| 24 | Living life with big ambitions (21) | -1.63 | .74 | 24 | Being a risk taker, both financially and in other ways | -1.78 | 1.64 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.63 | .74 | 25 | Having the kind of house, car, or clothes that other people admire | -2.11 | .78 |
| 25 | Associating with people who are successful and prestigious (27) | -1.75 | 1.39 | 26 | Never being quite satisfied; always striving for something better (20)* | -2.22 | .83 |
| 26 | Owning a country or beach home in beautiful natural surroundings (20) | -1.88 | 1.36 | | | | |
| | Being a risk taker, both financially and in other ways | -1.88 | .99 | | | | |
| | Having the kind of house, car, or clothes that other people admire | -1.88 | .64 | | | | |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table B25

The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 15) and Low Materialism-Insecurely Attached Groups (n = 5) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|-------|------|-------------------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.13 | .92 | 1 | Passing on to future generations the values that I hold important | 2.20 | .84 |
| 2 | Passing on to future generations the values that I hold important | 2.07 | .88 | 2 | Having a stable and satisfying home life | 2.00 | 1.23 |
| 3 | Having a stable and satisfying home life | 2.00 | 1.00 | 3 | Being in a position of influence or authority (15)** | 1.80 | 1.10 |
| 4 | Doing work that contributes usefully to society | 1.67 | 1.11 | 4 | Having an intimate relationship in which I can really share and be myself | 1.60 | 1.52 |
| 5 | Having enough time to spend with friends and loved ones (8) | 1.40 | 1.18 | | Doing work that contributes usefully to society | 1.60 | 1.52 |
| | | | | 5 | Making exercise and other healthy activities a regular part of my life (10) | 1.40 | 1.14 |
| Least Five | | | | | | | |
| 27 | Owning a country or beach home in beautiful natural surroundings | -1.27 | 1.71 | 17 | Not being overburdened with demands and expectations (19) | -1.00 | .71 |
| 28 | Being able to travel and stay at luxurious resorts and hotels | -1.40 | 1.40 | | Looking my best and knowing that others see me as an attractive person (24) | -1.00 | .71 |

| | | | | | | | |
|----|--|-------|------|----|---|-------|------|
| 29 | Associating with people who are successful and prestigious (15) | -1.47 | 1.30 | 18 | Owning a country or beach home in beautiful natural surroundings | -1.20 | 1.48 |
| | Living and working in an atmosphere in which everyone competes and does their best (10)** | -1.47 | .92 | | Being able to travel and stay at luxurious resorts and hotels | -1.20 | 1.30 |
| 30 | Having precious and beautiful things, such as jewelry or works of art | -1.73 | 1.39 | | Making choices that make my life more calm and tranquil (17)⁺ | -1.20 | 1.30 |
| 31 | Having the kind of house, car, or clothes that other people admire | -1.93 | .96 | 19 | Never being quite satisfied; always striving for something better (26) | -1.40 | 2.07 |
| | | | | | Going to parties, dancing, enjoying music and other kinds of fun (22) | -1.40 | 1.34 |
| | | | | | Having the means to do such things as eat at fine restaurants on a regular basis (20) | -1.40 | 1.14 |
| | | | | 20 | Having precious and beautiful things, such as jewelry or works of art | -1.60 | 1.67 |
| | | | | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (24) | -1.60 | 1.14 |
| | | | | 21 | Having the kind of house, car, or clothes that other people admire | -2.20 | 1.10 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺ p < .10 *p < .05 ** p < .01

Table B26

The Actual Life (Protocol B): High Materialism-Securely Attached (n = 8) and High Materialism-Insecurely Attached Groups (n = 9) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life (7)* | 2.63 | .52 | 1 | Passing on to future generations the values that I hold important | 1.78 | 1.30 |
| 2 | Having an intimate relationship in which I can really share and be myself (6)⁺ | 2.25 | 1.04 | 2 | Having enough time to spend with friends and loved ones | 1.44 | .88 |
| 3 | Passing on to future generations the values that I hold important | 1.63 | 1.06 | 3 | Having close friends and spending time with them (10) | 1.22 | 1.39 |
| 4 | Doing work that contributes usefully to society (11)* | 1.63 | 1.30 | | Engaging in hobbies or interests that allow me to express my creativity (14) | 1.22 | 1.64 |
| 5 | Knowing my neighbors or feeling part of a community (10) | 1.13 | 1.25 | | Having opportunities at work to be creative or to use my talents or skills (6) | 1.22 | .67 |
| | Having enough time to spend with friends and loved ones | 1.13 | 1.25 | 4 | Knowing I have people in my life who will take care of me when I need them | 1.00 | 1.32 |
| | Having a job that leaves me time and energy for other things (7) | 1.13 | 1.13 | | Having time to do things like read a book, listen to music, watch a favorite television program (12) | 1.00 | 1.12 |
| | Knowing I have people in my life who will take care of me when I need them | 1.13 | .84 | 5 | Doing a good job for its own sake, regardless of whether I earn more money for it (10) | .89 | 1.69 |

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| | | | | | | | |
|----|--|-------|------|----|--|-------|------|
| 23 | Going to parties, dancing, enjoying music and other kinds of fun | -1.38 | 1.77 | 17 | Being in a position of influence or authority (19) | -0.67 | 1.50 |
| | Living life with big ambitions (12)⁺ | -1.38 | 1.06 | 18 | Being able to see the sights and experience the cultures of other parts of the world (15) | -0.89 | 1.69 |
| 24 | Associating with people who are successful and prestigious | -1.63 | 1.19 | | Associating with people who are successful and prestigious | -0.89 | 1.45 |
| 25 | Being a risk taker, both financially and in other ways | -1.75 | .89 | | Never being quite satisfied; always striving for something better (15) | -0.89 | 1.05 |
| 26 | Being able to travel and stay at luxurious resorts and hotels | -2.00 | .76 | | Living in a clean and healthful environment (air, water, natural resources) (16) | -0.89 | .93 |
| 27 | Owning a country or beach home in beautiful natural surroundings | -2.13 | 1.13 | 19 | Going to parties, dancing, enjoying music and other kinds of fun | -1.00 | 1.00 |
| | | | | 20 | Having the kind of house, car, or clothes that other people admire (22) | -1.22 | 1.56 |
| | | | | | Being able to travel and stay at luxurious resorts and hotels | -1.22 | 1.39 |
| | | | | | Being a risk taker, both financially and in other ways | -1.22 | 1.09 |
| | | | | 21 | Owning a country or beach home in beautiful natural surroundings | -1.44 | 2.13 |

| | | |
|---|-------|------|
| Having precious and beautiful things, such as jewelry or works of art (21) | -1.44 | 1.13 |
|---|-------|------|

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺ p < .10 *p < .05 ** p < .01

Appendix C

Q-sort Responses as they Relate to Coefficient Based Attachment Groups and Quartile Based
High-Low Materialism Groups

Table C1

The Good Life (Protocol A): Low Materialism (n = 17) and High Materialism Groups (n = 16) Derived from Ger Belk Scale

Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|------|------|------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having enough time to spend with friends and loved ones | 1.94 | 1.14 | 1 | Having a stable and satisfying home life | 2.38 | .96 |
| 2 | Having a stable and satisfying home life | 1.71 | 1.11 | 2 | Having enough time to spend with friends and loved ones | 2.00 | .82 |
| | Doing work that contributes usefully to society (8)⁺ | 1.71 | .92 | 3 | Having an intimate relationship in which I can really share and be myself | 1.81 | 1.05 |
| 3 | Having an intimate relationship in which I can really share and be myself | 1.53 | 1.28 | 4 | Having close friends and spending time with them | 1.50 | .73 |
| 4 | Having close friends and spending time with them | 1.35 | 1.00 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (8) | 1.38 | 1.09 |
| 5 | Passing on to future generations the values that I hold important (6) | 1.29 | 1.11 | | | | |
| Least Five | | | | | | | |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 31 | Never being quite satisfied; always striving for something better (28) | -1.53 | 1.28 | 29 | Associating with people who are successful and prestigious | -1.63 | 1.31 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (26) | -1.53 | 1.07 | 30 | Being a risk taker, both financially and in other ways (27)⁺ | -1.75 | 1.24 |
| 32 | Being able to travel and stay at luxurious resorts and hotels (27) | -1.65 | 1.06 | 31 | Having precious and beautiful things, such as jewelry or works of art | -1.81 | .98 |
| 33 | Associating with people who are successful and prestigious | -2.06 | .83 | 32 | Owning a country or beach home in beautiful natural surroundings (29)⁺ | -1.88 | 1.03 |
| 34 | Having precious and beautiful things, such as jewelry or works of art | -2.24 | .75 | 33 | Having the kind of house, car, or clothes that other people admire | -2.38 | .62 |
| 35 | Having the kind of house, car, or clothes that other people admire | -2.41 | .87 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C2

The Actual Life (Protocol B): Low Materialism (n = 17) and High Materialism Groups (n = 16) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 1.94 | 1.30 | 1 | Having a stable and satisfying home life | 1.94 | 1.57 |
| 2 | Having a stable and satisfying home life | 1.82 | 1.24 | 2 | Having an intimate relationship in which I can really share and be myself | 1.75 | 1.48 |
| 3 | Passing on to future generations the values that I hold important | 1.76 | 1.03 | 3 | Passing on to future generations the values that I hold important | 1.56 | 1.32 |
| 4 | Having enough time to spend with friends and loved ones | 1.47 | 1.13 | | Having enough time to spend with friends and loved ones | 1.56 | .96 |
| 5 | Doing work that contributes usefully to society | 1.24 | 1.25 | 4 | Doing work that contributes usefully to society | 1.06 | 1.44 |
| | | | | 5 | Having a job that leaves me time and energy for other things (16) | 1.00 | 1.16 |
| Least Five | | | | | | | |
| 30 | Being able to travel and stay at luxurious resorts and hotels (28) | -1.06 | 1.64 | 30 | Associating with people who are successful and prestigious | -1.31 | 1.25 |
| 31 | Owning a country or beach home in beautiful natural surroundings | -1.29 | 1.69 | 31 | Having precious and beautiful things, such as jewelry or works of art | -1.56 | 1.26 |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 32 | Associating with people who are successful and prestigious | -1.53 | 1.33 | 32 | Being a risk taker, both financially and in other ways (26)** | -2.00 | .63 |
| 33 | Having precious and beautiful things, such as jewelry or works of art | -1.65 | 1.32 | 33 | Having the kind of house, car, or clothes that other people admire | -2.06 | .85 |
| 34 | Having the kind of house, car, or clothes that other people admire | -1.88 | 1.17 | 34 | Owning a country or beach home in beautiful natural surroundings | -2.19 | 1.22 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺*p* < .10 **p* < .05 ** *p* < .01.

Table C3

*The Good Life (Protocol A): Low Materialism-Securely Attached (n = 14) and Low Materialism-Insecurely Attached Groups (n = 3) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having enough time to spend with friends and loved ones | 1.93 | 1.21 | 1 | Doing work that contributes usefully to society | 2.67 | .58 |
| 2 | Having a stable and satisfying home life | 1.71 | 1.20 | 2 | Having an intimate relationship in which I can really share and be myself | 2.33 | .58 |
| 3 | Doing work that contributes usefully to society | 1.50 | .86 | 3 | Living in a clean and healthful environment (air, water, natural resources) (12)* | 2.00 | 1.73 |
| 4 | Having an intimate relationship in which I can really share and be myself | 1.36 | 1.34 | | Having enough time to spend with friends and loved ones | 2.00 | 1.00 |
| | Passing on to future generations the values that I hold important (6) | 1.36 | 1.15 | | Being satisfied with what I have (6) | 2.00 | 1.00 |
| | Having close friends and spending time with them | 1.36 | 1.08 | 4 | Having a stable and satisfying home life | 1.67 | .58 |
| 5 | Being able to see the sights and experience the cultures of other parts of the world (10) | 1.14 | 1.41 | 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (8) | 1.33 | 1.53 |
| | Having a job that leaves me time and energy for other things (6) | 1.14 | 1.23 | | Having a strong religious or spiritual dimension to one's life (10) | 1.33 | 1.53 |

| | | | | | | | |
|------------|---|-------|------|----|---|-------|------|
| | | | | | Having opportunities at work to be creative or to use my talents or skills (10) | 1.33 | 1.16 |
| | | | | | Having close friends and spending time with them | 1.33 | .58 |
| | | | | | Making exercise and other healthy activities a regular part of my life (8) | 1.33 | .58 |
| Least Five | | | | | | | |
| 29 | Being able to travel and stay at luxurious resorts and hotels | -1.50 | 1.09 | 12 | Not having to rely on others for financial support (11)⁺ | -1.00 | .00 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.50 | 1.16 | 13 | Owning a country or beach home in beautiful natural surroundings (27) | -1.33 | .58 |
| 30 | Living life with big ambitions (10) | -1.57 | 1.22 | 14 | Having the means to do such things as eat at fine restaurants on a regular basis (26) | -1.67 | 1.16 |
| 31 | Associating with people who are successful and prestigious | -2.00 | .88 | | Being a risk taker, both financially and in other ways (24) | -1.67 | .58 |
| 32 | Having precious and beautiful things, such as jewelry or works of art | -2.14 | .77 | | Looking my best and knowing that others see me as an attractive person (23) | -1.67 | .58 |
| 33 | Having the kind of house, car, or clothes that other people admire | -2.36 | .93 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.67 | .58 |
| | | | | 15 | Being able to travel and stay at luxurious resorts and hotels | -2.33 | .58 |

| | | | |
|----|---|-------|-----|
| | Associating with people who are successful and prestigious | -2.33 | .58 |
| 16 | Never being quite satisfied; always striving for something better (28)⁺ | -2.67 | .58 |
| | Having the kind of house, car, or clothes that other people admire | -2.67 | .58 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.67 | .58 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C4

*The Good Life (Protocol A): High Materialism-Securely Attached (n = 8) and High Materialism-Insecurely Attached Groups (n = 7) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.25 | 1.17 | 1 | Having a stable and satisfying home life | 2.43 | .79 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.20 | 2 | Having enough time to spend with friends and loved ones | 2.14 | .69 |
| | Having enough time to spend with friends and loved ones | 2.00 | .93 | 3 | Having close friends and spending time with them | 1.57 | .79 |
| 3 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.50 | 1.41 | 4 | Having an intimate relationship in which I can really share and be myself | 1.43 | .79 |
| 4 | Having close friends and spending time with them | 1.38 | .74 | 5 | Passing on to future generations the values that I hold important | 1.14 | 1.35 |
| 5 | Passing on to future generations the values that I hold important | 1.25 | 1.17 | | Having opportunities at work to be creative or to use my talents or skills (7) | 1.14 | 1.35 |
| | Doing work that contributes usefully to society (9) | 1.25 | 1.49 | | Engaging in hobbies or interests that allow me to express my creativity (11)⁺ | 1.14 | .90 |
| | | | | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future ⁸ | 1.14 | .69 |

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| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 21 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (14) | -1.25 | 1.49 | 20 | Never being quite satisfied; always striving for something better | -1.57 | 1.13 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.25 | 1.17 | | Being able to travel and stay at luxurious resorts and hotels | -1.57 | .98 |
| 22 | Never being quite satisfied; always striving for something better | -1.38 | 1.19 | 21 | Being a risk taker, both financially and in other ways | -1.71 | 1.38 |
| | Living life with big ambitions (28) | -1.38 | .74 | 22 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.00 |
| 23 | Being a risk taker, both financially and in other ways | -1.75 | 1.28 | 23 | Having the kind of house, car, or clothes that other people admire | -2.29 | .76 |
| | Going to parties, dancing, enjoying music and other kinds of fun (12)** | -1.75 | 1.28 | 24 | Associating with people who are successful and prestigious (19)** | -2.43 | .54 |
| 24 | Having precious and beautiful things, such as jewelry or works of art | -1.88 | .84 | | | | |
| 25 | Owning a country or beach home in beautiful natural surroundings (19)* | -2.38 | .74 | | | | |
| | Having the kind of house, car, or clothes that other people admire | -2.38 | .52 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C5

*The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 14) and Low Materialism-Insecurely Attached Groups (n = 3) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 1.79 | 1.37 | 1 | Having enough time to spend with friends and loved ones | 2.00 | .82 |
| | Having a stable and satisfying home life | 1.79 | 1.19 | 2 | Passing on to future generations the values that I hold important | 1.43 | 1.51 |
| 2 | Passing on to future generations the values that I hold important | 1.71 | 1.07 | 3 | Having a stable and satisfying home life | 1.29 | 2.22 |
| 3 | Having enough time to spend with friends and loved ones | 1.57 | 1.16 | | Having an intimate relationship in which I can really share and be myself | 1.29 | 2.06 |
| 4 | Doing work that contributes usefully to society (9) | 1.14 | 1.23 | 4 | Doing a good job for its own sake, regardless of whether I earn more money for it (7) | 1.14 | .38 |
| 5 | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (18) | .93 | 1.21 | 5 | Having close friends and spending time with them (6) | 1.00 | 1.53 |
| | | | | | Being a down to earth person who does not need to show off (11) | 1.00 | 1.41 |
| | | | | | Having time to do things like read a book, listen to music, watch a favorite television program (8) | 1.00 | 1.29 |
| Least Five | | | | | | | |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 26 | Being a risk taker, both financially and in other ways | -1.07 | 1.21 | 22 | Associating with people who are successful and prestigious | -1.14 | 1.46 |
| 27 | Owning a country or beach home in beautiful natural surroundings | -1.14 | 1.79 | | Never being quite satisfied; always striving for something better (21)⁺ | -1.14 | .90 |
| 28 | Living and working in an atmosphere in which everyone competes and does their best (18)* | -1.29 | .91 | 22 | Being a risk taker, both financially and in other ways | -1.71 | .49 |
| 29 | Having precious and beautiful things, such as jewelry or works of art | -1.57 | 1.40 | 23 | Having precious and beautiful things, such as jewelry or works of art | -1.86 | 1.22 |
| | Associating with people who are successful and prestigious | -1.57 | 1.40 | 24 | Owning a country or beach home in beautiful natural surroundings | -2.00 | 1.73 |
| 30 | Having the kind of house, car, or clothes that other people admire | -1.79 | 1.19 | 25 | Having the kind of house, car, or clothes that other people admire | -2.14 | .90 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C6

*The Actual Life (Protocol B): High Materialism-Securely Attached (n = 8) and High Materialism-Insecurely Attached Groups (n = 7) Derived from Ger Belk Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.50 | .54 | 1 | Having an intimate relationship in which I can really share and be myself | 2.67 | .58 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | .76 | 2 | Having a stable and satisfying home life | 2.00 | 1.73 |
| 3 | Passing on to future generations the values that I hold important | 1.75 | 1.28 | | Passing on to future generations the values that I hold important | 2.00 | 1.00 |
| 4 | Doing work that contributes usefully to society | 1.63 | 1.30 | | Making exercise and other healthy activities a regular part of my life (11) | 2.00 | 1.00 |
| 5 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.38 | 1.69 | 3 | Doing work that contributes usefully to society | 1.67 | 1.53 |
| | | | | | Being in a position of influence or authority (11)⁺ | 1.67 | 1.16 |
| | | | | 4 | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (17)* | 1.33 | 1.16 |

| | | | | | | | | |
|------------|----|--|-------|------|---|---|-------|------|
| | | | | 5 | Having enough time to spend with friends and loved ones (6)⁺ | 1.00 | 1.00 | |
| | | | | | Having a niche in which I can feel secure and successful (8) | 1.00 | .00 | |
| | | | | | Having a strong religious or spiritual dimension to one's life (10) | 1.00 | .00 | |
| | | | | | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (8) | 1.00 | .00 | |
| | | | | | Having opportunities at work to be creative or to use my talents or skills (11) | 1.00 | 1.00 | |
| Least Five | | | | | | | | |
| | 20 | Being able to travel and stay at luxurious resorts and hotels | -1.38 | 1.41 | 12 | Having the means to do such things as eat at fine restaurants on a regular basis (15) | -1.00 | 1.00 |
| | 21 | Having precious and beautiful things, such as jewelry or works of art | -1.50 | 1.31 | | Making choices that make my life more calm and tranquil (8) | -1.00 | 1.00 |
| | | Going to parties, dancing, enjoying music and other kinds of fun (11)⁺ | -1.50 | 1.20 | | Looking my best and knowing that others see me as an attractive person (14) | -1.00 | 1.00 |
| | 22 | Having the kind of house, car, or clothes that other people admire | -1.88 | .84 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (19) | -1.00 | 1.00 |
| | 23 | Being a risk taker, both financially and in other ways (6) | -2.25 | .71 | 13 | Not having to rely on others for financial support (14) | -1.33 | 1.53 |

| | | | | | | |
|----|--|-------|-----|---|-------|------|
| 24 | Owning a country or beach home in beautiful natural surroundings | -2.38 | .74 | Being able to travel and stay at luxurious resorts and hotels | -1.33 | 1.53 |
| | | | | Associating with people who are successful and prestigious (19) | -1.33 | 1.16 |
| | | | | 14 Being able to have nice things and buy things when I'd like to (13)⁺ | -1.67 | .58 |
| | | | | 15 Owning a country or beach home in beautiful natural surroundings | -2.00 | 1.00 |
| | | | | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.00 |
| | | | | 16 Never being quite satisfied; always striving for something better (18) | -2.33 | 1.16 |
| | | | | Having the kind of house, car, or clothes that other people admire | -2.33 | 1.16 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C7

The Good Life (Protocol A): Low Materialism (n = 17) and High Materialism Groups (n = 17) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society (6)** | 2.24 | .83 | 1 | Having a stable and satisfying home life | 2.41 | .87 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.18 | .95 | 2 | Having an intimate relationship in which I can really share and be myself | 2.06 | 1.39 |
| 3 | Having enough time to spend with friends and loved ones | 2.12 | .86 | 3 | Having enough time to spend with friends and loved ones | 1.76 | 1.09 |
| 4 | Having a stable and satisfying home life | 2.06 | .97 | 4 | Having close friends and spending time with them (7) | 1.65 | .93 |
| 5 | Passing on to future generations the values that I hold important (13)* | 1.47 | 1.13 | 5 | Having a strong religious or spiritual dimension to one's life (20)⁺ | 1.35 | 1.66 |
| Least Five | | | | | | | |
| 30 | Owning a country or beach home in beautiful natural surroundings | -1.35 | 1.06 | 33 | Owning a country or beach home in beautiful natural surroundings | -1.65 | 1.22 |
| 31 | Never being quite satisfied; always striving for something better | -1.41 | 1.28 | 34 | Never being quite satisfied; always striving for something better | -1.76 | 1.30 |
| 32 | Being able to travel and stay at luxurious resorts and hotels (30) | -1.53 | 1.07 | 35 | Having precious and beautiful things, such as jewelry or works of art | -1.82 | .88 |
| | Associating with people who are successful and prestigious | -1.53 | 1.07 | 36 | Having the kind of house, car, or clothes that other people admire | -2.12 | .78 |

| | | | | | | | |
|----|--|-------|-----|----|--|-------|-----|
| | Being a risk taker, both financially and in other ways (32) | -1.53 | .80 | 37 | Associating with people who are successful and prestigious | -2.24 | .83 |
| 33 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.71 | .92 | | | | |
| 34 | Having the kind of house, car, or clothes that other people admire | -2.53 | .62 | | | | |
| | Having precious and beautiful things, such as jewelry or works of art | -2.53 | .62 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C8

The Actual Life (Protocol B): Low Materialism (n = 17) and High Materialism Groups (n = 17) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|-------|------|------------------------|---|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.06 | 1.03 | 1 | Having an intimate relationship in which I can really share and be myself | 1.71 | 1.69 |
| 2 | Having a stable and satisfying home life | 2.00 | 1.17 | 2 | Having enough time to spend with friends and loved ones | 1.35 | 1.17 |
| 3 | Passing on to future generations the values that I hold important | 1.94 | .97 | 3 | Passing on to future generations the values that I hold important | 1.29 | .99 |
| 4 | Doing work that contributes usefully to society (7)* | 1.88 | 1.27 | 4 | Having close friends and spending time with them (7) | 1.12 | 1.50 |
| 5 | Having enough time to spend with friends and loved ones | 1.41 | 1.12 | 5 | Having a stable and satisfying home life | 1.06 | 1.95 |
| | | | | | Having a strong religious or spiritual dimension to one's life (16)⁺ | 1.06 | 1.75 |
| Least Five | | | | | | | |
| 26 | Being able to travel and stay at luxurious resorts and hotels | -1.29 | 1.40 | 29 | Being a risk taker, both financially and in other ways | -1.06 | 1.35 |
| | Associating with people who are successful and prestigious | -1.29 | 1.40 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.06 | 1.30 |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| | Being a risk taker, both financially and in other ways | -1.29 | 1.21 | | Going to parties, dancing, enjoying music and other kinds of fun (23) | -1.06 | 1.14 |
| 27 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.35 | .79 | 30 | Having the kind of house, car, or clothes that other people admire | -1.12 | 1.17 |
| 28 | Owning a country or beach home in beautiful natural surroundings | -1.53 | 1.55 | 31 | Associating with people who are successful and prestigious | -1.24 | 1.25 |
| 29 | Having precious and beautiful things, such as jewelry or works of art (28)* | -1.94 | 1.20 | 32 | Being able to travel and stay at luxurious resorts and hotels | -1.59 | 1.42 |
| 30 | Having the kind of house, car, or clothes that other people admire | -2.24 | .75 | 33 | Owning a country or beach home in beautiful natural surroundings | -2.06 | 1.20 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C9

*The Good Life (Protocol A): Low Materialism-Securely Attached (n = 12) and Low Materialism-Insecurely Attached Groups (n = 5) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.08 | 1.08 | 1 | Doing work that contributes usefully to society | 2.80 | .45 |
| | Having a stable and satisfying home life | 2.08 | 1.00 | 2 | Having an intimate relationship in which I can really share and be myself | 2.40 | .55 |
| 2 | Having enough time to spend with friends and loved ones | 2.00 | .95 | | Having enough time to spend with friends and loved ones | 2.40 | .55 |
| | Doing work that contributes usefully to society | 2.00 | .85 | 3 | Having a stable and satisfying home life | 2.00 | 1.00 |
| 3 | Passing on to future generations the values that I hold important (7) | 1.67 | 1.16 | 4 | Being satisfied with what I have (8) | 1.60 | .89 |
| 4 | Making exercise and other healthy activities a regular part of my life | 1.33 | 1.16 | | Making exercise and other healthy activities a regular part of my life | 1.60 | .55 |
| 5 | Having close friends and spending time with them (7) | 1.17 | 1.03 | 5 | Having opportunities at work to be creative or to use my talents or skills (7) | 1.40 | .89 |
| | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (8) | 1.17 | .84 | | | | |
| Least Five | | | | | | | |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| 28 | Never being quite satisfied; always striving for something better (18) | -1.42 | 1.38 | 19 | Having the means to do such things as eat at fine restaurants on a regular basis (23) | -1.80 | .84 |
| 29 | Owning a country or beach home in beautiful natural surroundings (16) | -1.50 | 1.09 | 20 | Being able to travel and stay at luxurious resorts and hotels (27) | -2.00 | 1.00 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.50 | .91 | 21 | Associating with people who are successful and prestigious (26)⁺ | -2.20 | .84 |
| 30 | Being a risk taker, both financially and in other ways (17) | -1.67 | .89 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.20 | .84 |
| 31 | Having the kind of house, car, or clothes that other people admire | -2.42 | .67 | 22 | Having precious and beautiful things, such as jewelry or works of art | -2.60 | .55 |
| 32 | Having precious and beautiful things, such as jewelry or works of art | -2.50 | .67 | 23 | Having the kind of house, car, or clothes that other people admire | -2.80 | .45 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C10

The Good Life (Protocol A): High Materialism-Securely Attached (n = 9) and High Materialism-Insecurely Attached Groups (n = 7) Derived from Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|---|------|-------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.67 | .50 | 1 | Having an intimate relationship in which I can really share and be myself | 2.14 | 1.215 |
| 2 | Having an intimate relationship in which I can really share and be myself | 1.89 | 1.62 | 2 | Having a stable and satisfying home life | 2.00 | 1.16 |
| 3 | Having enough time to spend with friends and loved ones | 1.67 | 1.32 | | Having enough time to spend with friends and loved ones | 2.00 | .82 |
| | Having close friends and spending time with them | 1.67 | 1.00 | | Having a strong religious or spiritual dimension to one's life (6) | 2.00 | 1.16 |
| 4 | Knowing my neighbors or feeling part of a community (11)⁺ | 1.56 | 1.13 | 3 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (10) | 1.71 | 1.38 |
| 5 | Knowing I have people in my life who will take care of me when I need them (6) | 1.22 | 1.09 | 4 | Having close friends and spending time with them | 1.57 | .98 |
| | | | | 5 | Doing work that contributes usefully to society (6) | 1.43 | 1.72 |
| Least Five | | | | | | | |

| | | | | | | | |
|----|---|-------|------|----|---|-------|-----|
| 23 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (16) | -1.33 | 2.18 | 24 | Having precious and beautiful things, such as jewelry or works of art | -1.86 | .90 |
| | Living life with big ambitions (21) | -1.33 | .71 | 25 | Having the means to do such things as eat at fine restaurants on a regular basis (20)* | -2.00 | .58 |
| 24 | Being a risk taker, both financially and in other ways (22) | -1.56 | 1.59 | 26 | Having the kind of house, car, or clothes that other people admire | -2.29 | .76 |
| | Living and working in an atmosphere in which everyone competes and does their best (20) | -1.56 | .53 | 27 | Associating with people who are successful and prestigious | -2.43 | .79 |
| 25 | Having the kind of house, car, or clothes that other people admire | -1.89 | .78 | 28 | Never being quite satisfied; always striving for something better (21)** | -2.71 | .49 |
| 26 | Associating with people who are successful and prestigious | -2.00 | .87 | | | | |
| | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .71 | | | | |
| 27 | Owning a country or beach home in beautiful natural surroundings (19)⁺ | -2.11 | .93 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C11

*The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 12) and Low Materialism-Insecurely Attached Groups (n = 5) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.17 | 1.03 | 1 | Doing work that contributes usefully to society | 2.40 | 1.34 |
| | Having an intimate relationship in which I can really share and be myself | 2.17 | .94 | 2 | Having an intimate relationship in which I can really share and be myself | 1.80 | 1.30 |
| 2 | Passing on to future generations the values that I hold important | 2.08 | 1.08 | | Having close friends and spending time with them (7) | 1.80 | 1.10 |
| 3 | Doing work that contributes usefully to society | 1.67 | 1.23 | 3 | Having a stable and satisfying home life | 1.60 | 1.52 |
| 4 | Having enough time to spend with friends and loved ones | 1.50 | 1.09 | | Being satisfied with what I have (11)* | 1.60 | 1.14 |
| 5 | Making exercise and other healthy activities a regular part of my life (6) | 1.33 | 1.30 | | Passing on to future generations the values that I hold important | 1.60 | .55 |
| | | | | 4 | Having enough time to spend with friends and loved ones | 1.20 | 1.30 |
| | | | | 5 | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (14) | .80 | 1.10 |

| | | | | | | | |
|------------|--|-------|------|----|---|-------|------|
| | | | | | Having a strong religious or spiritual dimension to one's life (17) | .80 | 1.10 |
| | | | | | Being a down to earth person who does not need to show off (12) | .80 | 1.64 |
| | | | | | Having opportunities at work to be creative or to use my talents or skills (10) | .80 | 1.64 |
| | | | | | Being in a position of influence or authority (15) | .80 | 1.48 |
| Least Five | | | | | | | |
| 24 | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.57 | 16 | Being able to travel and stay at luxurious resorts and hotels (23) | -1.20 | 1.30 |
| 25 | Associating with people who are successful and prestigious (13) | -1.58 | 1.38 | | Never being quite satisfied; always striving for something better (20) | -1.20 | 1.30 |
| 26 | Being a risk taker, both financially and in other ways (12)* | -1.67 | .89 | | Making choices that make my life more calm and tranquil (14)⁺ | -1.20 | 1.30 |
| 27 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | 1.04 | 17 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (23)⁺ | -1.40 | 1.14 |
| 28 | Having the kind of house, car, or clothes that other people admire | -2.25 | .62 | 18 | Owning a country or beach home in beautiful natural surroundings | -1.60 | 1.67 |
| | | | | | Having the means to do such things as eat at fine restaurants on a regular basis (17)* | -1.60 | .89 |

| | | | |
|----|---|-------|------|
| 19 | Having precious and beautiful things, such as jewelry or works of art | -1.80 | 1.64 |
| 20 | Having the kind of house, car, or clothes that other people admire | -2.20 | 1.10 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C12

*The Actual Life (Protocol B): High Materialism-Securely Attached (n = 9) and High Materialism-Insecurely Attached Groups (n = 7) Derived from Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life (16)** | 2.11 | 1.10 | 1 | Having enough time to spend with friends and loved ones (7)* | 2.00 | 1.16 |
| | Having an intimate relationship in which I can really share and be myself (6) | 2.11 | 1.05 | 2 | Having a strong religious or spiritual dimension to one's life (8) | 1.86 | 1.22 |
| 2 | Doing work that contributes usefully to society (12)* | 1.56 | 1.01 | 3 | Having close friends and spending time with them (9) | 1.57 | 1.27 |
| 3 | Knowing my neighbors or feeling part of a community (12)* | 1.44 | 1.33 | 4 | Knowing I have people in my life who will take care of me when I need them | 1.29 | 1.25 |
| 4 | Passing on to future generations the values that I hold important | 1.33 | 1.00 | | Passing on to future generations the values that I hold important | 1.29 | 1.11 |
| 5 | Knowing I have people in my life who will take care of me when I need them | 1.00 | 1.32 | 5 | Living life with big ambitions (23)** | 1.14 | .69 |
| Least Five | | | | | | | |

| | | | | | | | |
|----|---|-------|------|----|--|-------|------|
| 21 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (20) | -1.11 | 1.36 | 21 | Associating with people who are successful and prestigious | -1.00 | 1.41 |
| | Not being overburdened with demands and expectations (17) | -1.11 | 1.27 | 22 | Having the kind of house, car, or clothes that other people admire (19) | -1.14 | 1.22 |
| 22 | Associating with people who are successful and prestigious | -1.22 | 1.09 | 23 | Being able to see the sights and experience the cultures of other parts of the world (15)⁺ | -1.43 | 1.51 |
| 23 | Living life with big ambitions (5)** | -1.33 | 1.58 | 24 | Being able to travel and stay at luxurious resorts and hotels | -1.57 | 1.62 |
| | Being a risk taker, both financially and in other ways (18) | -1.33 | 1.50 | 25 | Owning a country or beach home in beautiful natural surroundings | -1.86 | 1.46 |
| | Going to parties, dancing, enjoying music and other kinds of fun (19) | -1.33 | 1.50 | | | | |
| 24 | Being able to travel and stay at luxurious resorts and hotels | -1.78 | 1.30 | | | | |
| 25 | Owning a country or beach home in beautiful natural surroundings | -2.22 | 1.09 | | | | |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C13

*The Good Life (Protocol A): Low Materialism (n = 6) and High Materialism Groups (n = 3) Derived from Aspirations Index (Importance)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|------|------|------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society* | 2.50 | .55 | 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.73 |
| 2 | Having a stable and satisfying home life | 2.17 | .98 | | Having enough time to spend with friends and loved ones | 2.00 | 1.00 |
| 3 | Having close friends and spending time with them | 1.83 | .98 | | Having a stable and satisfying home life | 2.00 | 1.00 |
| 4 | Having an intimate relationship in which I can really share and be myself | 1.67 | 1.86 | | Having close friends and spending time with them | 2.00 | 1.00 |
| | Living in a clean and healthful environment (air, water, natural resources) (8) | 1.67 | 1.21 | 2 | Having enough money that I can buy what I want without having to worry "can I afford it?" (17) | 1.67 | 1.53 |
| | Passing on to future generations the values that I hold important | 1.67 | 1.03 | | Having time to do things like read a book, listen to music, watch a favorite television program (13) | 1.67 | 1.16 |
| | Having enough time to spend with friends and loved ones | 1.67 | .52 | 3 | Having opportunities at work to be creative or to use my talents or skills (6) | 1.33 | 1.53 |
| 5 | Making exercise and other healthy activities a regular part of my life | 1.33 | 1.03 | | Knowing my neighbors or feeling part of a community (6) | 1.33 | 1.53 |

| | | | | | | | | |
|------------|--|---|-------|------|---|--|------|------|
| | Doing a good job for its own sake, regardless of whether I earn more money for it (7) | 1.33 | .87 | | Knowing I have people in my life who will take care of me when I need them (13) | 1.33 | 1.16 | |
| | | | | | Having a job that leaves me time and energy for other things (11) | 1.33 | .58 | |
| | | | | 4 | Being able to see the sights and experience the cultures of other parts of the world (9) | 1.00 | 1.73 | |
| | | | | | Being satisfied with what I have (6) | 1.00 | 1.00 | |
| | | | | | Passing on to future generations the values that I hold important | 1.00 | 1.00 | |
| | | | | 5 | Engaging in hobbies or interests that allow me to express my creativity (11) | .67 | 1.16 | |
| | | | | | Making exercise and other healthy activities a regular part of my life | .67 | 1.16 | |
| | | | | | Being able to have nice things and buy things when I'd like to (18)⁺ | .67 | 1.16 | |
| | | | | | Making choices that make my life more calm and tranquil (14) | .67 | .58 | |
| | | | | | Not having to rely on others for financial support (15) | .67 | .58 | |
| Least Five | 21 | Being able to travel and stay at luxurious resorts and hotels | -1.50 | 1.38 | 9 | Having the means to do such things as eat at fine restaurants on a regular basis | -.67 | 1.53 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| | Having the means to do such things as eat at fine restaurants on a regular basis | -1.50 | 1.23 | | Having a niche in which I can feel secure and successful (12) | -.67 | 1.16 |
| 22 | Keeping myself fit so that I can look as good as I can | -1.67 | .82 | | Looking my best and knowing that others see me as an attractive person (20)** | -.67 | .58 |
| | Being a risk taker, both financially and in other ways | -1.67 | .52 | | Living and working in a relatively cooperative, non-competitive environment (8)⁺ | -.67 | .58 |
| 23 | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .89 | | Keeping myself fit so that I can look as good as I can | -.67 | .58 |
| 24 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.17 | .98 | 10 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.00 | 1.00 |
| 25 | Associating with people who are successful and prestigious | -2.33 | .82 | | Living and working in an atmosphere in which everyone competes and does their best (16) | -1.00 | 1.00 |
| | Having the kind of house, car, or clothes that other people admire | -2.33 | .82 | 11 | Associating with people who are successful and prestigious | -1.67 | 2.31 |
| | | | | | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature (10)** | -1.67 | 1.53 |
| | | | | | Being able to travel and stay at luxurious resorts and hotels | -1.67 | 1.16 |
| | | | | | Being in a position of influence or authority (19) | -1.67 | .58 |

| | | | |
|----|--|-------|------|
| 12 | Living life with big ambitions (19) | -2.00 | 1.00 |
| | Owning a country or beach home in beautiful natural surroundings (19) | -2.00 | 1.00 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .00 |
| 13 | Having the kind of house, car, or clothes that other people admire | -2.33 | 1.16 |
| | Being a risk taker, both financially and in other ways | -2.33 | .58 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C14

The Actual Life (Protocol B): Low Materialism (n = 6) and High Materialism Groups (n = 3) Derived from Aspirations Index (Importance)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|---|------|------|------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society | 2.50 | .84 | 1 | Having enough time to spend with friends and loved ones | 2.33 | .58 |
| 2 | Having a stable and satisfying home life | 2.33 | .82 | 2 | Having a stable and satisfying home life | 1.67 | 1.53 |
| | Passing on to future generations the values that I hold important | 2.33 | .82 | | Having opportunities at work to be creative or to use my talents or skills (6) | 1.67 | 1.16 |
| 3 | Having an intimate relationship in which I can really share and be myself | 2.17 | 1.17 | | Having time to do things like read a book, listen to music, watch a favorite television program (9) | 1.67 | .58 |
| 4 | Having close friends and spending time with them | 1.33 | 1.37 | 3 | Having close friends and spending time with them | 1.33 | 2.08 |
| | Doing a good job for its own sake, regardless of whether I earn more money for it | 1.33 | 1.03 | | Passing on to future generations the values that I hold important | 1.33 | 1.53 |
| | Being a down to earth person who does not need to show off (7)** | 1.33 | .82 | | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (10) | 1.33 | 1.53 |
| 5 | Having enough time to spend with friends and loved ones | 1.17 | 1.33 | | Having an intimate relationship in which I can really share and be myself | 1.33 | 1.16 |

| | | | | | | | | |
|---------------|----|---|-------|------|--|---|------|------|
| | | | | | | | | |
| | | | | 4 | Knowing my neighbors or feeling part of a community (9) | 1.00 | 2.00 | |
| | | | | | Being able to see the sights and experience the cultures of other parts of the world (12) | 1.00 | 2.00 | |
| | | | | | Doing work that contributes usefully to society | 1.00 | 1.00 | |
| | | | | 5 | Looking my best and knowing that others see me as an attractive person (17)** | .67 | .58 | |
| | | | | | Knowing I have people in my life who will take care of me when I need them (13) | .67 | .58 | |
| | | | | 5 | Engaging in hobbies or interests that allow me to express my creativity (13) | .67 | 2.08 | |
| | | | | | Having a job that leaves me time and energy for other things (7) | .67 | 1.16 | |
| | | | | | Doing a good job for its own sake, regardless of whether I earn more money for it | .67 | .58 | |
| Least Five | 17 | Looking my best and knowing that others see me as an attractive person (5)** | -1.33 | 1.21 | 8 | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (9)* | -.33 | 1.53 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| | Being a risk taker, both financially and in other ways | -1.33 | .82 | | Having the means to do such things as eat at fine restaurants on a regular basis | -.33 | 1.16 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.33 | .52 | | Keeping myself fit so that I can look as good as I can (16)* | -.33 | 1.16 |
| 18 | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.05 | | Making choices that make my life more calm and tranquil (14) | -.33 | .58 |
| | Having the means to do such things as eat at fine restaurants on a regular basis | -1.50 | .55 | 9 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (10) | -.67 | 2.31 |
| 19 | Being able to travel and stay at luxurious resorts and hotels | -1.67 | 1.21 | | Being satisfied with what I have (11) | -.67 | 1.53 |
| 20 | Having precious and beautiful things, such as jewelry or works of art | -1.83 | 1.17 | | Living and working in a relatively cooperative, non-competitive environment (8) | -.67 | 1.16 |
| 21 | Having the kind of house, car, or clothes that other people admire | -2.50 | 1.23 | | Living life with big ambitions (15) | -.67 | .58 |
| | Associating with people who are successful and prestigious | -2.50 | .55 | | Living in a clean and healthful environment (air, water, natural resources) (8) | -.67 | .58 |
| | | | | 10 | Being able to travel and stay at luxurious resorts and hotels | -1.00 | 2.65 |
| | | | | | Having a strong religious or spiritual dimension to one's life (12) | -1.00 | 2.65 |

| | | | |
|----|---|-------|------|
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.00 | 2.00 |
| | Living and working in an atmosphere in which everyone competes and does their best (16) | -1.00 | 1.00 |
| | Not being overburdened with demands and expectations (14) | -1.00 | 1.00 |
| 11 | Having the kind of house, car, or clothes that other people admire | -1.33 | 1.53 |
| | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature (9)** | -1.33 | 1.53 |
| | Being in a position of influence or authority (16)* | -1.33 | 1.16 |
| 12 | Owning a country or beach home in beautiful natural surroundings | -1.67 | 2.31 |
| | Associating with people who are successful and prestigious | -1.67 | 1.53 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.67 | 1.53 |
| | Being a risk taker, both financially and in other ways | -1.67 | .58 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C15

*The Good Life (Protocol A): Low Materialism-Securely Attached (n = 3) and Low Materialism-Insecurely Attached Groups (n = 3) Derived from Aspirations Index (Importance)
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean*

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having a stable and satisfying home life | 2.33 | 1.16 | 1 | Doing work that contributes usefully to society | 3.00 | .00 |
| | Having close friends and spending time with them | 2.33 | 1.16 | 2 | Having an intimate relationship in which I can really share and be myself | 2.33 | .58 |
| 2 | Living in a clean and healthful environment (air, water, natural resources) | 2.00 | 1.00 | 3 | Having a stable and satisfying home life | 2.00 | 1.00 |
| | Doing work that contributes usefully to society | 2.00 | .00 | | Passing on to future generations the values that I hold important | 2.00 | 1.00 |
| 3 | Doing a good job for its own sake, regardless of whether I earn more money for it (6) | 1.67 | 1.16 | | Making exercise and other healthy activities a regular part of my life (6) | 2.00 | .00 |
| | Having enough time to spend with friends and loved ones | 1.67 | .58 | 4 | Being a down to earth person who does not need to show off (6) | 1.67 | 1.16 |
| 4 | Having opportunities at work to be creative or to use my talents or skills (6) | 1.33 | 1.53 | | Having enough time to spend with friends and loved ones | 1.67 | .58 |
| | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (7) | 1.33 | 1.53 | | Being satisfied with what I have (6) | 1.67 | .58 |

| | | | | | | | |
|------------|--|-------|------|----|---|-------|------|
| | Passing on to future generations the values that I hold important | 1.33 | 1.16 | 5 | Living in a clean and healthful environment (air, water, natural resources) | 1.33 | 1.53 |
| | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (8) | 1.33 | .58 | | Knowing my neighbors or feeling part of a community | 1.33 | .58 |
| 5 | Having an intimate relationship in which I can really share and be myself | 1.00 | 2.65 | | Having close friends and spending time with them | 1.33 | .58 |
| | Knowing my neighbors or feeling part of a community | 1.00 | 1.00 | | | | |
| | Being able to see the sights and experience the cultures of other parts of the world (8) | 1.00 | 1.00 | | | | |
| | Having a job that leaves me time and energy for other things (10) | 1.00 | .00 | | | | |
| Least Five | | | | | | | |
| 10 | Never being quite satisfied; always striving for something better (10) | -.67 | .58 | 13 | Owning a country or beach home in beautiful natural surroundings | -1.33 | 1.16 |
| | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (11) | -.67 | .58 | | Being a risk taker, both financially and in other ways (13) | -1.33 | .58 |
| 11 | Being able to travel and stay at luxurious resorts and hotels | -1.00 | 1.73 | | Looking my best and knowing that others see me as an attractive person | -1.33 | .58 |
| | Going to parties, dancing, enjoying music and other kinds of fun (10) | -1.00 | 1.00 | | Keeping myself fit so that I can look as good as I can | -1.33 | .58 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| | Owning a country or beach home in beautiful natural surroundings | -1.00 | 1.00 | 14 | Having the means to do such things as eat at fine restaurants on a regular basis (12) | -1.67 | 1.16 |
| | Living and working in an atmosphere in which everyone competes and does their best (9) | -1.00 | 1.00 | 15 | Being able to travel and stay at luxurious resorts and hotels | -2.00 | 1.00 |
| 12 | Having the means to do such things as eat at fine restaurants on a regular basis (14) | -1.33 | 1.53 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.00 | 1.00 |
| | Living life with big ambitions (12) | -1.33 | .58 | 16 | Associating with people who are successful and prestigious | -2.33 | .58 |
| | Being respected by other people and viewed as successful (9)* | -1.33 | .58 | 17 | Having the kind of house, car, or clothes that other people admire | -2.67 | .58 |
| | Looking my best and knowing that others see me as an attractive person | -1.33 | .58 | | Having precious and beautiful things, such as jewelry or works of art | -2.67 | .58 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.33 | .58 | | | | |
| | Being able to have nice things and buy things when I'd like to (11) | -1.33 | .58 | | | | |
| 13 | Having the kind of house, car, or clothes that other people admire | -2.00 | 1.00 | | | | |
| | Being in a position of influence or authority (10)⁺ | -2.00 | 1.00 | | | | |
| | Keeping myself fit so that I can look as good as I can | -2.00 | 1.00 | | | | |
| | Being a risk taker, both financially and in other ways (13) | -2.00 | .00 | | | | |

| | | | |
|----|---|-------|------|
| 14 | Associating with people who are successful and prestigious | -2.33 | 1.16 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.33 | 1.16 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C16

The Good Life (Protocol A): High Materialism-Securely Attached (n = 3) and High Materialism-Insecurely Attached Groups (n = 0) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|---|------|------|--------------------------------------|-------------|---|----|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.73 | - | | | |
| | Having enough time to spend with friends and loved ones | 2.00 | 1.00 | - | | | |
| | Having a stable and satisfying home life | 2.00 | 1.00 | - | | | |
| | Having close friends and spending time with them | 2.00 | 1.00 | - | | | |
| 2 | Having enough money that I can buy what I want without having to worry "can I afford it?" | 1.67 | 1.53 | - | | | |
| | Having time to do things like read a book, listen to music, watch a favorite television program | 1.67 | 1.16 | - | | | |
| 3 | Having opportunities at work to be creative or to use my talents or skills | 1.33 | 1.53 | - | | | |
| | Knowing my neighbors or feeling part of a community | 1.33 | 1.53 | - | | | |
| | Knowing I have people in my life who will take care of me when I need them | 1.33 | 1.16 | - | | | |

| | | | | |
|------------|--|------|------|---|
| | Having a job that leaves me time and energy for other things | 1.33 | .58 | - |
| 4 | Being able to see the sights and experience the cultures of other parts of the world | 1.00 | 1.73 | - |
| | Being satisfied with what I have | 1.00 | 1.00 | - |
| | Passing on to future generations the values that I hold important | 1.00 | 1.00 | - |
| 5 | Engaging in hobbies or interests that allow me to express my creativity | .67 | 1.16 | - |
| | Making exercise and other healthy activities a regular part of my life | .67 | 1.16 | - |
| | Not having to rely on others for financial support | .67 | .58 | - |
| | Making choices that make my life more calm and tranquil | .67 | .58 | - |
| | Engaging in hobbies or interests that allow me to express my creativity | .67 | 1.16 | - |
| Least Five | | | | |
| 9 | Having the means to do such things as eat at fine restaurants on a regular basis | -.67 | 1.53 | - |
| | Having a niche in which I can feel secure and successful | -.67 | 1.16 | - |
| | Looking my best and knowing that others see me as an attractive person | -.67 | .58 | - |

| | | | | |
|----|---|-------|------|---|
| | Living and working in a relatively cooperative, non-competitive environment | -.67 | .58 | - |
| | Keeping myself fit so that I can look as good as I can | -.67 | .58 | - |
| 10 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.00 | 1.00 | - |
| | Living and working in an atmosphere in which everyone competes and does their best | -1.00 | 1.00 | - |
| 11 | Associating with people who are successful and prestigious | -1.67 | 2.31 | - |
| | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature | -1.67 | 1.53 | - |
| | Being able to travel and stay at luxurious resorts and hotels | -1.67 | 1.16 | - |
| | Being in a position of influence or authority | -1.67 | .58 | - |
| 12 | Living life with big ambitions | -2.00 | 1.00 | - |
| | Owning a country or beach home in beautiful natural surroundings | -2.00 | 1.00 | - |
| | Having precious and beautiful things, such as jewelry or works of art | -2.00 | .00 | - |
| 13 | Having the kind of house, car, or clothes that other people admire | -2.33 | 1.16 | - |

| | | | |
|--|-------|-----|---|
| Being a risk taker, both financially and in other ways | -2.33 | .58 | - |
|--|-------|-----|---|

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

Note: A dash indicates there was no data for this group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C17

The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 3) and Low Materialism-Insecurely Attached Groups (n = 3) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Passing on to future generations the values that I hold important | 2.33 | 1.16 | 1 | Doing work that contributes usefully to society | 3.00 | .00 |
| 2 | Having a stable and satisfying home life | 2.00 | 1.00 | 2 | Having an intimate relationship in which I can really share and be myself | 2.67 | .58 |
| | Doing a good job for its own sake, regardless of whether I earn more money for it (7) | 2.00 | 1.00 | | Having a stable and satisfying home life | 2.67 | .58 |
| | Doing work that contributes usefully to society | 2.00 | 1.00 | 3 | Passing on to future generations the values that I hold important | 2.33 | .58 |
| | Having opportunities at work to be creative or to use my talents or skills (9) | 2.00 | 1.00 | 4 | Having close friends and spending time with them | 1.67 | 1.16 |
| 3 | Having an intimate relationship in which I can really share and be myself | 1.67 | 1.53 | | Being a down to earth person who does not need to show off | 1.67 | .58 |
| 4 | Having a job that leaves me time and energy for other things (8) | 1.33 | 1.16 | 5 | Having enough time to spend with friends and loved ones | 1.33 | .58 |
| | Living in a clean and healthful environment (air, water, natural resources) (9) | 1.33 | .58 | | Having a niche in which I can feel secure and successful (6) | 1.33 | .58 |

| | | | | | | | |
|------------|---|-------|------|----|---|-------|------|
| 5 | Having enough time to spend with friends and loved ones | 1.00 | 2.00 | | Making exercise and other healthy activities a regular part of my life (8) | 1.33 | .58 |
| | Having close friends and spending time with them | 1.00 | 1.73 | | | | |
| | Being a down to earth person who does not need to show off | 1.00 | 1.00 | 4 | | | |
| | Living and working in a relatively cooperative, non-competitive environment (8) | 1.00 | 1.00 | | | | |
| Least Five | | | | | | | |
| 11 | Keeping myself fit so that I can look as good as I can (12) | -1.00 | 2.00 | 14 | Being a risk taker, both financially and in other ways | -1.67 | .58 |
| | Being a risk taker, both financially and in other ways | -1.00 | 1.00 | 15 | Owning a country or beach home in beautiful natural surroundings | -2.00 | 1.00 |
| | Owning a country or beach home in beautiful natural surroundings | -1.00 | 1.00 | 16 | Associating with people who are successful and prestigious | -2.33 | .58 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.00 | 1.00 | 17 | Having precious and beautiful things, such as jewelry or works of art | -2.67 | .58 |
| 12 | Going to parties, dancing, enjoying music and other kinds of fun (8) | -1.33 | 1.53 | 18 | Having the kind of house, car, or clothes that other people admire | -3.00 | .00 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (13) | -1.33 | .58 | | | | |

| | | | |
|----|--|-------|------|
| 13 | Looking my best and knowing that others see me as an attractive person (12) | -1.67 | 1.53 |
| | Being in a position of influence or authority (10) | -1.67 | 1.53 |
| | Having the means to do such things as eat at fine restaurants on a regular basis (13) | -1.67 | .58 |
| 14 | Having the kind of house, car, or clothes that other people admire | -2.00 | 1.73 |
| | Being able to travel and stay at luxurious resorts and hotels (13) | -2.00 | 1.00 |
| 15 | Associating with people who are successful and prestigious | -2.67 | .58 |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C18

The Actual Life (Protocol B): High Materialism-Securely Attached (n = 3) and High Materialism-Insecurely Attached Groups (n = 4) Derived from Aspirations Index (Importance) Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|-------------|---|----|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having enough time to spend with friends and loved ones | 2.33 | .58 | - | | | |
| 2 | Having a stable and satisfying home life | 1.67 | 1.53 | - | | | |
| | Having opportunities at work to be creative or to use my talents or skills | 1.67 | 1.16 | - | | | |
| | Having time to do things like read a book, listen to music, watch a favorite television program | 1.67 | .58 | - | | | |
| 3 | Having close friends and spending time with them | 1.33 | 2.08 | - | | | |
| | Passing on to future generations the values that I hold important | 1.33 | 1.53 | - | | | |
| | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am | 1.33 | 1.53 | - | | | |
| | Having an intimate relationship in which I can really share and be myself | 1.33 | 1.16 | - | | | |
| 4 | Knowing my neighbors or feeling part of a community | 1.00 | 2.00 | - | | | |

| | | | | |
|------------|---|------|------|---|
| | Being able to see the sights and experience the cultures of other parts of the world | 1.00 | 2.00 | - |
| | Doing work that contributes usefully to society | 1.00 | 1.00 | - |
| 5 | Engaging in hobbies or interests that allow me to express my creativity | .67 | 2.08 | - |
| | Having a job that leaves me time and energy for other things | .67 | 1.16 | - |
| | Looking my best and knowing that others see me as an attractive person | .67 | .58 | - |
| | Knowing I have people in my life who will take care of me when I need them | .67 | .58 | - |
| | Doing a good job for its own sake, regardless of whether I earn more money for it | .67 | .58 | - |
| | | | | - |
| | | | | - |
| Least Five | | | | |
| 8 | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea | -.33 | 1.53 | - |

| | | | | |
|----|---|-------|------|---|
| | Having the means to do such things as eat at fine restaurants on a regular basis | -.33 | 1.16 | - |
| | Keeping myself fit so that I can look as good as I can | -.33 | 1.16 | - |
| | Making choices that make my life more calm and tranquil | -.33 | .58 | - |
| 9 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | -.67 | 2.31 | - |
| | Being satisfied with what I have | -.67 | 1.53 | - |
| | Living and working in a relatively cooperative, non-competitive environment | -.67 | 1.16 | - |
| | Living in a clean and healthful environment (air, water, natural resources) | -.67 | .58 | - |
| | Living life with big ambitions | -.67 | .58 | - |
| 10 | Being able to travel and stay at luxurious resorts and hotels | -1.00 | 2.65 | - |
| | Having a strong religious or spiritual dimension to one's life | -1.00 | 2.65 | - |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.00 | 2.00 | - |

| | | | | |
|----|---|-------|------|---|
| | Not being overburdened with demands and expectations | -1.00 | 1.00 | - |
| | Living and working in an atmosphere in which everyone competes and does their best | -1.00 | 1.00 | - |
| 11 | Having the kind of house, car, or clothes that other people admire | -1.33 | 1.53 | - |
| | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature | -1.33 | 1.53 | - |
| | Being in a position of influence or authority | -1.33 | 1.16 | - |
| 12 | Owning a country or beach home in beautiful natural surroundings | -1.67 | 2.31 | - |
| | Associating with people who are successful and prestigious | -1.67 | 1.53 | - |
| | Having precious and beautiful things, such as jewelry or works of art | -1.67 | 1.53 | - |
| | Being a risk taker, both financially and in other ways | -1.67 | .58 | - |

Note: Bolded items are top five or least five items that appear one of the groups being compared but not the other.

Note: Numbers in parentheses indicate the rank of this item in the comparison group.

Note: A dash indicates there was no data for this group.

⁺ $p < .10$ * $p < .05$ ** $p < .01$.

Table C19

The Good Life (Protocol A): Low Materialism (n = 8) and High Materialism Groups (n = 5) Derived from Combined Ger Belk-Richins Dawson Scale
Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|-------|------|------------------------|--|-------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Doing work that contributes usefully to society (7)⁺ | 2.25 | .71 | 1 | Having a stable and satisfying home life | 2.80 | .45 |
| 2 | Having enough time to spend with friends and loved ones | 2.13 | 1.13 | 2 | Having enough time to spend with friends and loved ones | 2.40 | .89 |
| 3 | Having an intimate relationship in which I can really share and be myself | 1.88 | 1.13 | 3 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.00 |
| 4 | Having a stable and satisfying home life | 1.75 | 1.04 | 4 | Having close friends and spending time with them (6) | 1.60 | .55 |
| 5 | Passing on to future generations the values that I hold important (8) | 1.25 | 1.17 | 5 | Having a job that leaves me time and energy for other things (6) | 1.40 | .89 |
| | | | | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (10)* | 1.40 | .55 |
| Least Five | | | | | | | |
| 24 | Being able to travel and stay at luxurious resorts and hotels | -1.63 | 1.06 | 17 | Looking my best and knowing that others see me as an attractive person (19) | -1.00 | .71 |
| 25 | Associating with people who are successful and prestigious | -1.75 | .89 | 18 | Being able to travel and stay at luxurious resorts and hotels | -1.20 | 1.10 |

| | | | | | | | |
|----|---|-------|-----|----|---|-------|------|
| 26 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (19) | -1.88 | .64 | | Living life with big ambitions (19) | -1.20 | .84 |
| 27 | Having the kind of house, car, or clothes that other people admire | -2.38 | .74 | | Having precious and beautiful things, such as jewelry or works of art | -1.20 | .84 |
| 28 | Having precious and beautiful things, such as jewelry or works of art | -2.63 | .52 | 19 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.00 | 1.41 |
| | | | | | Being a risk taker, both financially and in other ways (23) | -2.00 | 1.23 |
| | | | | 20 | Never being quite satisfied; always striving for something better (22) | -2.20 | 1.30 |
| | | | | | Associating with people who are successful and prestigious | -2.20 | .84 |
| | | | | 21 | Owning a country or beach home in beautiful natural surroundings (21)* | -2.40 | .55 |
| | | | | | Having the kind of house, car, or clothes that other people admire | -2.40 | .55 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table C20

The Actual Life (Protocol B): Low Materialism (n = 8) and High Materialism Groups (n = 5) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism Group | | | | High Materialism Group | | | |
|-----------------------|--|------|------|------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.38 | 1.06 | 1 | Having enough time to spend with friends and loved ones | 2.00 | .71 |
| 2 | Doing work that contributes usefully to society (6) | 2.00 | 1.20 | 2 | Having close friends and spending time with them | 1.60 | 1.34 |
| | Having a stable and satisfying home life | 2.00 | 1.07 | | Passing on to future generations the values that I hold important | 1.60 | .89 |
| 3 | Passing on to future generations the values that I hold important | 1.88 | .99 | 3 | Having a strong religious or spiritual dimension to one's life (9) | 1.40 | 1.82 |
| 4 | Having enough time to spend with friends and loved ones | 1.38 | 1.19 | 4 | Having an intimate relationship in which I can really share and be myself | 1.20 | 2.49 |
| 5 | Making exercise and other healthy activities a regular part of my life (11) | .88 | 1.25 | | Having a stable and satisfying home life | 1.20 | 2.39 |
| | Having close friends and spending time with them | .88 | .84 | | Knowing I have people in my life who will take care of me when I need them (10)⁺ | 1.20 | 1.64 |
| | | | | 5 | Having a job that leaves me time and energy for other things (14) | 1.00 | 1.23 |

| | | | | | | | |
|------------|---|-------|------|----|---|-------|-------|
| | | | | | Doing a good job for its own sake, regardless of whether I earn more money for it (6) | 1.00 | .71 |
| Least Five | | | | | | | |
| 18 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.38 | .74 | 17 | Associating with people who are successful and prestigious | -1.20 | 1.64 |
| | Being able to have nice things and buy things when I'd like to (13)* | -1.38 | .52 | | Going to parties, dancing, enjoying music and other kinds of fun (16) | -1.20 | 1.10 |
| 19 | Owning a country or beach home in beautiful natural surroundings | -1.50 | 1.60 | 18 | Being able to travel and stay at luxurious resorts and hotels | -1.40 | 1.140 |
| | Associating with people who are successful and prestigious | -1.50 | 1.60 | 19 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.60 | 1.14 |
| 20 | Being able to travel and stay at luxurious resorts and hotels | -1.63 | 1.60 | | Having the kind of house, car, or clothes that other people admire | -1.60 | .89 |
| 21 | Having precious and beautiful things, such as jewelry or works of art (15)⁺ | -2.00 | 1.07 | 20 | Being a risk taker, both financially and in other ways (17)* | -2.20 | .45 |
| 22 | Having the kind of house, car, or clothes that other people admire | -2.13 | .64 | 21 | Owning a country or beach home in beautiful natural surroundings | -2.60 | .55 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table C21

The Good Life (Protocol A): Low Materialism-Securely Attached (n = 6) and Low Materialism-Insecurely Attached Groups (n = 2) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|---|------|------|-------------------------------------|---|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having enough time to spend with friends and loved ones | 2.00 | 1.27 | 1 | Doing work that contributes usefully to society | 3.00 | .00 |
| | Doing work that contributes usefully to society | 2.00 | .63 | 2 | Having an intimate relationship in which I can really share and be myself | 2.50 | .71 |
| 2 | Having a stable and satisfying home life | 1.83 | 1.17 | | Having enough time to spend with friends and loved ones | 2.50 | .71 |
| 3 | Having an intimate relationship in which I can really share and be myself | 1.67 | 1.21 | 3 | Having a strong religious or spiritual dimension to one's life (9) | 2.00 | 1.41 |
| 4 | Having a job that leaves me time and energy for other things (6) | 1.33 | 1.37 | | Having opportunities at work to be creative or to use my talents or skills (6)⁺ | 2.00 | .00 |
| | Passing on to future generations the values that I hold important | 1.33 | 1.21 | 4 | Living in a clean and healthful environment (air, water, natural resources) (6) | 1.50 | 2.12 |
| 5 | Having close friends and spending time with them | 1.17 | 1.33 | | Being satisfied with what I have (7) | 1.50 | .71 |
| | | | | | Having a stable and satisfying home life | 1.50 | .71 |
| | | | | | Engaging in hobbies or interests that allow me to express my creativity (10) | 1.50 | .71 |

| | | | | | | | | |
|------------|----|---|-------|------|---|---|-------|------|
| | | | | | Making exercise and other healthy activities a regular part of my life (7) | 1.50 | .71 | |
| | | | | 5 | Passing on to future generations the values that I hold important | 1.00 | 1.41 | |
| | | | | | Knowing my neighbors or feeling part of a community (7) | 1.00 | .00 | |
| | | | | | Having close friends and spending time with them | 1.00 | .00 | |
| Least Five | | | | | | | | |
| | 18 | Being a risk taker, both financially and in other ways | -1.33 | 1.03 | 10 | Having enough money that I can buy what I want without having to worry "can I afford it?" (16) | -1.00 | 1.41 |
| | | Being able to travel and stay at luxurious resorts and hotels | -1.33 | 1.03 | | Not having to rely on others for financial support (7) | -1.00 | .00 |
| | 19 | Associating with people who are successful and prestigious | -1.50 | .84 | | Knowing I have people in my life who will take care of me when I need them (9)⁺ | -1.00 | .00 |
| | 20 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.00 | .63 | 11 | Being a risk taker, both financially and in other ways | -1.50 | .71 |
| | 21 | Having the kind of house, car, or clothes that other people admire | -2.33 | .82 | | Owning a country or beach home in beautiful natural surroundings (16) | -1.50 | .71 |
| | 22 | Having precious and beautiful things, such as jewelry or works of art | -2.67 | .52 | | Looking my best and knowing that others see me as an attractive person (14) | -1.50 | .71 |

| | | | |
|----|---|-------|------|
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.50 | .71 |
| 12 | Having the means to do such things as eat at fine restaurants on a regular basis (16) | -2.00 | 1.41 |
| 13 | Being able to travel and stay at luxurious resorts and hotels | -2.50 | .71 |
| | Never being quite satisfied; always striving for something better (15) | -2.50 | .71 |
| | Associating with people who are successful and prestigious | -2.50 | .71 |
| | Having the kind of house, car, or clothes that other people admire | -2.50 | .71 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.50 | .71 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺ p < .10 *p < .05 ** p < .01

Table C22

The Good Life (Protocol A): High Materialism-Securely Attached (n = 2) and High Materialism-Insecurely Attached Groups (n = 2) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having enough time to spend with friends and loved ones | 3.00 | .00 | 1 | Having enough time to spend with friends and loved ones | 2.50 | .71 |
| | Having a stable and satisfying home life | 3.00 | .00 | | Having a stable and satisfying home life | 2.50 | .71 |
| 2 | Having an intimate relationship in which I can really share and be myself | 2.00 | 1.41 | 2 | Having a strong religious or spiritual dimension to one's life | 2.00 | 1.41 |
| | Having a job that leaves me time and energy for other things | 2.00 | .00 | 3 | Knowing I have people in my life who will take care of me when I need them | 1.50 | 2.12 |
| 3 | Knowing my neighbors or feeling part of a community (8) | 1.50 | .71 | | Engaging in hobbies or interests that allow me to express my creativity (8) | 1.50 | 2.12 |
| | Passing on to future generations the values that I hold important (6)⁺ | 1.50 | .71 | | Having an intimate relationship in which I can really share and be myself | 1.50 | .71 |
| | Having close friends and spending time with them | 1.50 | .71 | | Having close friends and spending time with them | 1.50 | .71 |
| | Knowing I have people in my life who will take care of me when I need them | 1.50 | .71 | | Living and working in a relatively cooperative, non-competitive environment (6) | 1.50 | .71 |

| | | | | | | | |
|---|---|------|------|---|---|------|------|
| | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (6)⁺ | 1.50 | .71 | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.50 | .71 |
| 4 | Having a strong religious or spiritual dimension to one's life | 1.00 | 2.83 | 4 | Doing work that contributes usefully to society | 1.00 | 2.83 |
| | Doing work that contributes usefully to society | 1.00 | 1.41 | | Living in a clean and healthful environment (air, water, natural resources) | 1.00 | 1.41 |
| | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future | 1.00 | .00 | | Having a niche in which I can feel secure and successful (6) | 1.00 | .00 |
| | Being able to see the sights and experience the cultures of other parts of the world | 1.00 | .00 | | Making exercise and other healthy activities a regular part of my life (8)⁺ | 1.00 | .00 |
| 5 | Doing a good job for its own sake, regardless of whether I earn more money for it (6) | .50 | 2.12 | 5 | Not being overburdened with demands and expectations | .50 | 2.12 |
| | Not having to rely on others for financial support (6) | .50 | .71 | | Having opportunities at work to be creative or to use my talents or skills (6) | .50 | 2.12 |
| | Living in a clean and healthful environment (air, water, natural resources) | .50 | .71 | | Being able to see the sights and experience the cultures of other parts of the world | .50 | .71 |
| | Not being overburdened with demands and expectations | .50 | .71 | | Having time to do things like read a book, listen to music, watch a favorite television program (8) | .50 | .71 |

| | | | | | | | |
|------------|--|-------|------|----|--|-------|------|
| | Being respected by other people and viewed as successful (7) | .50 | .71 | | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (8) | .50 | .71 |
| | Having enough money that I can buy what I want without having to worry "can I afford it?" (7) | .50 | .71 | | Going to parties, dancing, enjoying music and other kinds of fun (10) | .50 | .71 |
| | | | | | Having a job that leaves me time and energy for other things | .50 | .71 |
| Least Five | | | | | | | |
| 9 | Being able to travel and stay at luxurious resorts and hotels | -1.00 | 1.41 | 8 | Knowing my neighbors or feeling part of a community (3) | -1.00 | 1.41 |
| | Looking my best and knowing that others see me as an attractive person | -1.00 | 1.41 | | Looking my best and knowing that others see me as an attractive person | -1.00 | .00 |
| | Living and working in an atmosphere in which everyone competes and does their best | -1.00 | .00 | | Living and working in an atmosphere in which everyone competes and does their best | -1.00 | .00 |
| 10 | Never being quite satisfied; always striving for something better | -1.50 | 2.12 | 9 | Being a risk taker, both financially and in other ways | -1.50 | 2.12 |
| | Going to parties, dancing, enjoying music and other kinds of fun (5) | -1.50 | 2.12 | | Having the means to do such things as eat at fine restaurants on a regular basis (6)⁺ | -1.50 | .71 |
| | Associating with people who are successful and prestigious | -1.50 | .71 | | Having precious and beautiful things, such as jewelry or works of art | -1.50 | .71 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.50 | .71 | 10 | Being able to travel and stay at luxurious resorts and hotels | -2.00 | .00 |

| | | | | | | | |
|----|---|-------|-----|----|--|-------|-----|
| | Living life with big ambitions (7) | -1.50 | .71 | 11 | Owning a country or beach home in beautiful natural surroundings | -2.50 | .71 |
| 11 | Having the kind of house, car, or clothes that other people admire | -2.00 | .00 | | Associating with people who are successful and prestigious | -2.50 | .71 |
| 12 | Being a risk taker, both financially and in other ways | -2.50 | .71 | | Having the kind of house, car, or clothes that other people admire | -2.50 | .71 |
| | Owning a country or beach home in beautiful natural surroundings | -2.50 | .71 | 12 | Never being quite satisfied; always striving for something better | -3.00 | .00 |
| 13 | Keeping clearly focused on what will bring me and my family a better income and making that my top priority (7)* | -3.00 | .00 | | | | |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺p < .10 *p < .05 ** p < .01

Table C23

The Actual Life (Protocol B): Low Materialism-Securely Attached (n = 6) and Low Materialism-Insecurely Attached Groups (n = 2) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| Low Materialism-Securely Attached | | | | Low Materialism-Insecurely Attached | | | |
|-----------------------------------|--|------|------|-------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself | 2.17 | 1.17 | 1 | Having an intimate relationship in which I can really share and be myself | 3.00 | .00 |
| | Doing work that contributes usefully to society | 2.17 | .98 | 2 | Being in a position of influence or authority (9) | 2.00 | 1.41 |
| | Having a stable and satisfying home life | 2.17 | .75 | 3 | Living life with big ambitions (12) | 1.50 | 2.12 |
| 2 | Passing on to future generations the values that I hold important | 2.00 | 1.10 | | Having a stable and satisfying home life | 1.50 | 2.12 |
| 3 | Having enough time to spend with friends and loved ones | 1.67 | 1.21 | | Doing work that contributes usefully to society | 1.50 | 2.12 |
| 4 | Doing a good job for its own sake, regardless of whether I earn more money for it (6) | .83 | .98 | | Having opportunities at work to be creative or to use my talents or skills (7)* | 1.50 | .71 |
| | Having close friends and spending time with them | .83 | .98 | | Making exercise and other healthy activities a regular part of my life | 1.50 | .71 |
| 5 | Making exercise and other healthy activities a regular part of my life | .67 | 1.37 | | Passing on to future generations the values that I hold important | 1.50 | .71 |
| | Having time to do things like read a book, listen to music, watch a favorite television program (7) | .67 | .82 | 4 | Being satisfied with what I have (6) | 1.00 | 1.41 |

| | | | |
|---|--|------|------|
| | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (8) | 1.00 | 1.41 |
| | Being respected by other people and viewed as successful (6) | 1.00 | 1.41 |
| | Engaging in hobbies or interests that allow me to express my creativity (6) | 1.00 | 1.41 |
| | Having a niche in which I can feel secure and successful (9)⁺ | 1.00 | .00 |
| | Having a strong religious or spiritual dimension to one's life (9) | 1.00 | .00 |
| | Having close friends and spending time with them | 1.00 | .00 |
| | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (7) | 1.00 | .00 |
| 5 | Being a risk taker, both financially and in other ways (15)⁺ | .50 | 2.12 |
| | Living and working in an atmosphere in which everyone competes and does their best (15) | .50 | 2.12 |

| | | | | | | | |
|------------|---|-------|------|---|--|------|------|
| | | | | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (9) | .50 | 2.12 |
| | | | | | Having enough time to spend with friends and loved ones | .50 | .71 |
| Least Five | | | | | | | |
| 14 | Owning a country or beach home in beautiful natural surroundings ³⁸ | -1.17 | 1.72 | 7 | Keeping myself fit so that I can look as good as I can (9) | -.50 | 2.12 |
| 15 | Living and working in an atmosphere in which everyone competes and does their best (5) | -1.33 | 1.03 | | Being a down to earth person who does not need to show off (7) | -.50 | 2.12 |
| | Being a risk taker, both financially and in other ways (5)⁺ | -1.33 | .52 | | Not having to rely on others for financial support (6) | -.50 | .71 |
| | Being able to have nice things and buy things when I'd like to | -1.33 | .52 | | Living in a clean and healthful environment (air, water, natural resources) (6) | -.50 | .71 |
| 16 | Associating with people who are successful and prestigious | -1.67 | 1.75 | | Having time to do things like read a book, listen to music, watch a favorite television program (5) | -.50 | .71 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.67 | 1.63 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -.50 | .71 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -1.67 | .52 | | Having a job that leaves me time and energy for other things (11) | -.50 | .71 |

| | | | | | | | |
|----|---|-------|------|---|---|-------|------|
| 17 | Having precious and beautiful things, such as jewelry or works of art | -1.83 | 1.17 | | Living and working in a relatively cooperative, non-competitive environment (6) | -.50 | .71 |
| 18 | Having the kind of house, car, or clothes that other people admire | -2.17 | .41 | 8 | Having enough money that I can buy what I want without having to worry "can I afford it?" (11) | -1.00 | 2.83 |
| | | | | | Making choices that make my life more calm and tranquil (10) | -1.00 | 1.41 |
| | | | | | Associating with people who are successful and prestigious | -1.00 | 1.41 |
| | | | | | Looking my best and knowing that others see me as an attractive person (12) | -1.00 | 1.41 |
| | | | | | Not being overburdened with demands and expectations (11) | -1.00 | .00 |
| | | | | 9 | Being able to travel and stay at luxurious resorts and hotels | -1.50 | 2.12 |
| | | | | | Being able to see the sights and experience the cultures of other parts of the world (7) | -1.50 | .71 |
| | | | | | Having the means to do such things as eat at fine restaurants on a regular basis (11) | -1.50 | .71 |
| | | | | | Being able to have nice things and buy things when I'd like to | -1.50 | .71 |

| | | | |
|----|---|-------|------|
| 10 | Never being quite satisfied; always striving for something better (12) | -2.00 | 1.41 |
| | Having the kind of house, car, or clothes that other people admire | -2.00 | 1.41 |
| 11 | Owning a country or beach home in beautiful natural surroundings | -2.50 | .71 |
| | Having precious and beautiful things, such as jewelry or works of art | -2.50 | .71 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

⁺ p < .10 *p < .05 ** p < .01

Table C24

The Actual Life (Protocol B): High Materialism-Securely Attached (n = 2) and High Materialism-Insecurely Attached Groups (n = 2) Derived from Combined Ger Belk-Richins Dawson Scale Q-sort Items Falling into Top Five and Lowest Five Categories Based on Mean

| High Materialism-Securely Attached | | | | High Materialism-Insecurely Attached | | | |
|------------------------------------|--|------|------|--------------------------------------|--|------|------|
| Rank | Q-Sort Item | M | SD | Rank | Q-Sort Item | M | SD |
| Top Five | | | | | | | |
| 1 | Having an intimate relationship in which I can really share and be myself (8) | 2.50 | .71 | 1 | Having enough time to spend with friends and loved ones | 2.50 | .71 |
| | Having a stable and satisfying home life (7) | 2.50 | .71 | | Having a strong religious or spiritual dimension to one's life | 2.50 | .71 |
| | Doing work that contributes usefully to society (8)* | 2.50 | .71 | 2 | Passing on to future generations the values that I hold important | 2.00 | 1.41 |
| 2 | Having close friends and spending time with them | 2.00 | 1.41 | | Living life with big ambitions (10) | 2.00 | .00 |
| | Knowing I have people in my life who will take care of me when I need them | 2.00 | .00 | 3 | Knowing I have people in my life who will take care of me when I need them | 1.50 | 2.12 |
| 3 | Having a job that leaves me time and energy for other things | 1.50 | 2.12 | | Engaging in hobbies or interests that allow me to express my creativity (7) | 1.50 | 2.12 |
| | Having a strong religious or spiritual dimension to one's life | 1.50 | 2.12 | | Enjoying life's simple pleasures such as eating breakfast outdoors in the sunshine, taking a leisurely walk, or enjoying a hot cup of coffee or tea (6) | 1.50 | .71 |
| | Knowing my neighbors or feeling part of a community (8)* | 1.50 | .71 | | Being a down to earth person who does not need to show off | 1.50 | .71 |

| | | | | | | | |
|---|--|------|------|---|--|------|------|
| | Having enough time to spend with friends and loved ones | 1.50 | .71 | | Having opportunities at work to be creative or to use my talents or skills (7) | 1.50 | .71 |
| | Passing on to future generations the values that I hold important | 1.50 | .71 | 4 | Living and working in an atmosphere in which everyone competes and does their best (8) | 1.00 | 2.83 |
| | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (8) | 1.50 | .71 | | Doing a good job for its own sake, regardless of whether I earn more money for it | 1.00 | .00 |
| 4 | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (7) | 1.00 | 1.41 | 5 | Making choices that make my life more calm and tranquil (6) | .50 | 2.12 |
| | Being satisfied with what I have (8) | 1.00 | .00 | | Having time to do things like read a book, listen to music, watch a favorite television program | .50 | .71 |
| 5 | Having a niche in which I can feel secure and successful | .50 | .71 | | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature (7) | .50 | .71 |
| | Having time to do things like read a book, listen to music, watch a favorite television program | .50 | .71 | | Having close friends and spending time with them | .50 | .71 |
| | Being a down to earth person who does not need to show off | .50 | .71 | | Being respected by other people and viewed as successful (8) | .50 | .71 |
| | Doing a good job for its own sake, regardless of whether I earn more money for it | .50 | .71 | | Looking my best and knowing that others see me as an attractive person (7) | .50 | .71 |

| | | | | | |
|--|-----|-----|--|-----|-----|
| Having enough money that I can buy what I want without having to worry “can I afford it?” (6) | .50 | .71 | Having a job that leaves me time and energy for other things | .50 | .71 |
| | | | Living and working in a relatively cooperative, non-competitive environment (6) | .50 | .71 |

Least
Five

| | | | | | | | |
|---|--|------|------|---|--|------|------|
| 7 | Enjoying hiking, walking in the park, a beautiful sunset or other experiences of nature (5) | -.50 | 2.12 | 7 | Having a stable and satisfying home life (1) | -.50 | 3.54 |
| | Looking my best and knowing that others see me as an attractive person (7) | -.50 | 2.12 | | Associating with people who are successful and prestigious | -.50 | 2.12 |
| | Not having to rely on others for financial support (6) | -.50 | .71 | | Feeling financially secure; having enough savings or job security to take care of myself or my family in the future (4) | -.50 | 2.12 |
| | Not being overburdened with demands and expectations | -.50 | .71 | | Never being quite satisfied; always striving for something better | -.50 | .71 |

| | | | | | | | |
|---|---|-------|------|---|---|-------|------|
| | Having the means to do such things as eat at fine restaurants on a regular basis | -0.50 | .71 | | Having the means to do such things as eat at fine restaurants on a regular basis | -0.50 | .71 |
| | Engaging in hobbies or interests that allow me to express my creativity (7) | -0.50 | .71 | | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -0.50 | .71 |
| | Having opportunities at work to be creative or to use my talents or skills (7) | -0.50 | .71 | 8 | Having an intimate relationship in which I can really share and be myself (1) | -1.00 | 2.83 |
| | Being able to have nice things and buy things when I'd like to | -0.50 | .71 | | Living in a clean and healthful environment (air, water, natural resources) (6) | -1.00 | 1.41 |
| 8 | Associating with people who are successful and prestigious | -1.00 | 1.41 | | Being satisfied with what I have (4) | -1.00 | 1.41 |
| | Living and working in an atmosphere in which everyone competes and does their best (8) | -1.00 | 1.41 | | Having precious and beautiful things, such as jewelry or works of art | -1.00 | 1.41 |
| | Keeping myself fit so that I can look as good as I can (8) | -1.00 | 1.41 | | Living in a home that feels comfortable and attractive to me and is decorated in a way that expresses who I am (3) | -1.00 | 1.41 |
| | Making exercise and other healthy activities a regular part of my life (8) | -1.00 | .00 | | Being in a position of influence or authority (6) | -1.00 | 1.41 |
| | Having precious and beautiful things, such as jewelry or works of art | -1.00 | .00 | | Having the kind of house, car, or clothes that other people admire | -1.00 | .00 |
| 9 | Going to parties, dancing, enjoying music and other kinds of fun | -1.50 | 2.12 | | Going to parties, dancing, enjoying music and other kinds of fun | -1.00 | .00 |
| | Being able to travel and stay at luxurious resorts and hotels | -1.50 | .71 | | Knowing my neighbors or feeling part of a community (3)* | -1.00 | .00 |

| | | | | | | | |
|----|---|-------|------|----|---|-------|------|
| | Having the kind of house, car, or clothes that other people admire | -1.50 | .71 | | Doing work that contributes usefully to society (1)* | -1.00 | .00 |
| 10 | Living life with big ambitions (2)⁺ | -2.00 | 1.41 | | Being able to have nice things and buy things when I'd like to | -1.00 | .00 |
| | Never being quite satisfied; always striving for something better | -2.00 | 1.41 | | Not being overburdened with demands and expectations | -1.00 | - |
| 11 | Being a risk taker, both financially and in other ways | -2.50 | .71 | 9 | Being able to see the sights and experience the cultures of other parts of the world (6) | -1.50 | 2.12 |
| | Owning a country or beach home in beautiful natural surroundings | -2.50 | .71 | 10 | Being able to travel and stay at luxurious resorts and hotels | -2.00 | 1.41 |
| | Keeping clearly focused on what will bring me and my family a better income and making that my top priority | -2.50 | .71 | | Being a risk taker, both financially and in other ways | -2.00 | .00 |
| | | | | 11 | Owning a country or beach home in beautiful natural surroundings | -3.00 | .00 |

Note: The combined Ger Belk-Richins Dawson measure is derived by grouping subjects who scored high or low (based on upper and lower quartiles rather than median split halves) on both the Ger Belk and Richins Dawson measures.

Note: Bolded items are those that are ranked differently by the groups being compared.

Note: Numbers in parentheses indicate item rank for the comparison group.

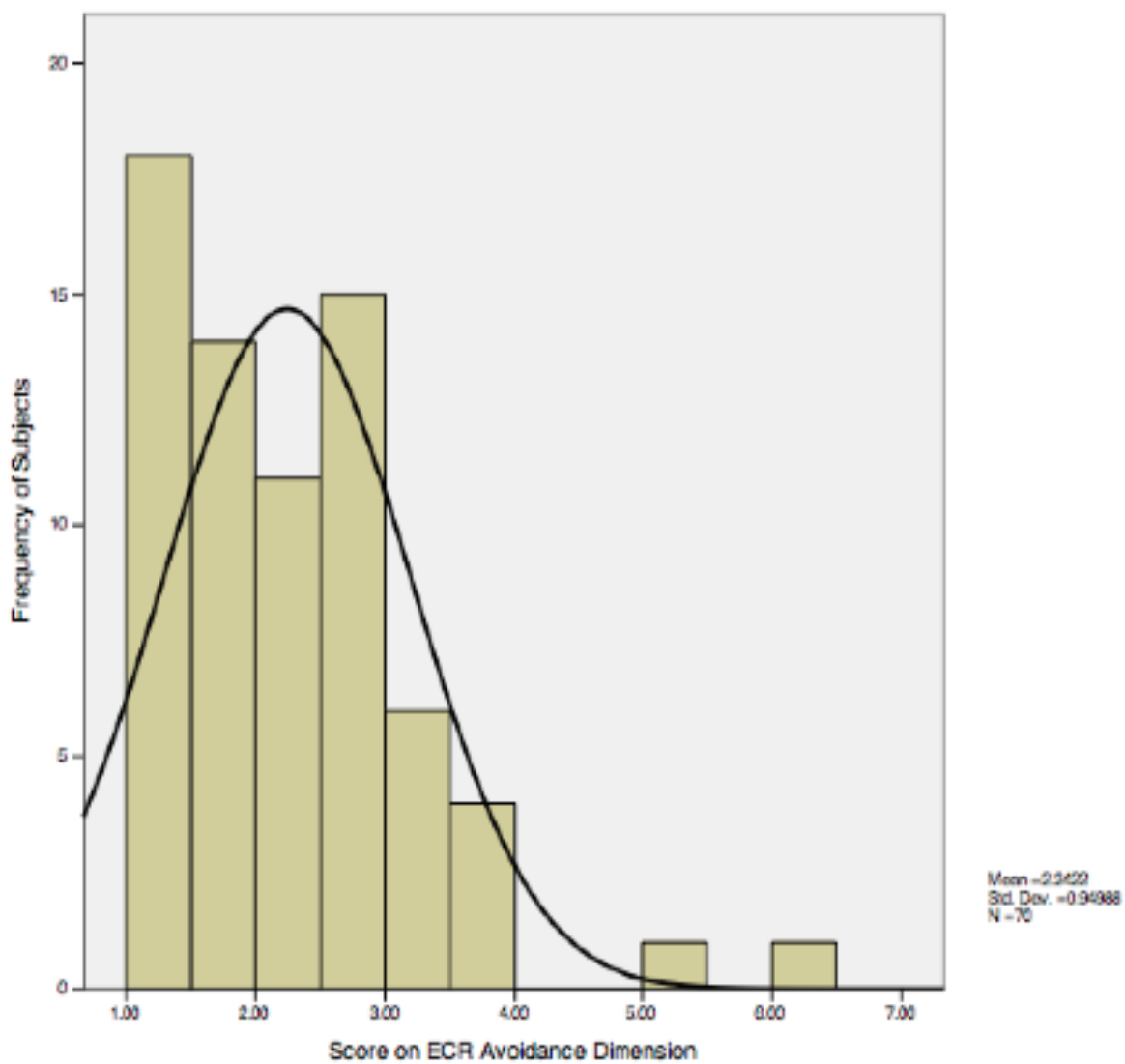
⁺p < .10 *p < .05 ** p < .01

Appendix D

ECR Avoidance Dimension Frequency Histogram

Figure D1

Frequency for Avoidance Dimension on Experiences In Close Relationships Measure: Low Avoidance Sample



Appendix E

Ger Belk Scale

Please rate the level to which you agree or disagree with the following statements using the following scale:

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I get very upset if something is stolen from me, even if it has little monetary value.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I don't like to have anyone in my home when I'm not there.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

Renting or leasing a place to live is more appealing to me than owning one.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I don't get particularly upset when I lose things.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I never discard old pictures or snapshots.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I am less likely than most people to lock things up.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I would rather buy something I need than borrow it from someone else.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I enjoy having people I like stay in my home.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I enjoy sharing what I have.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I don't like to lend things, even to good friends.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

When friends do better than me in competition it usually makes me feel happy for them.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I worry about people taking my possessions.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I enjoy donating things for charity.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

There are certain people I would like trading places with.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I don't seem to get what is coming to me.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

If I have to choose between buying something for myself versus for someone I love, I would prefer buying for myself.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I am bothered when I see people who buy anything they want.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

People who are very wealthy often feel they are too good to talk to average people.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I tend to hang on to things I should probably throw out.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

When I travel I like to take a lot of photographs.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I have a lot of souvenirs.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I would rather give someone a gift that will last than take him or her to dinner.

| | | | | |
|---------------------------------------|-----------------------|----------------------|--------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | somewhat agree | neither agree | somewhat disagree | strongly disagree |

I like to collect things.

1
strongly agree
or disagree

2
somewhat agree

3
neither agree

4
somewhat disagree

5
strongly disagree

Appendix F

M Scale

Please rate the level to which you agree or disagree with the following statements using the following scale:

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I admire people who own expensive homes, cars, and clothes.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

Some of the most important achievements in life include acquiring material possessions.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I don't place much emphasis on the amount of material objects people own as a sign of success.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

The things I own say a lot about how well I'm doing in life.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I like to own things that impress people.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I don't pay much attention to the material objects other people own.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I usually buy only the things I need.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

I try to keep my life simple, as far as possession are concerned.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

The things I own aren't all that important to me.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

I enjoy spending money on things that aren't practical.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

Buying things gives me a lot of pleasure.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

I like a lot of luxury in my life.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

I put less emphasis on material things than most people I know.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

I have all the things I really need to enjoy life.

| | | | | |
|-----------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree | agree | neither agree | disagree | strongly disagree |
| or disagree | | | | |

My life would be better if I owned certain things I don't have.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I wouldn't be any happier if I owned nicer things.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

I'd be happier if I could afford to buy more things.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

| | | | | |
|---------------------------------------|--------------|----------------------|-----------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 |
| strongly agree or disagree | agree | neither agree | disagree | strongly disagree |

Appendix G

Aspirations Index

Everyone has long-term Goals or Aspirations. These are the things that individuals hope to accomplish over the course of their lives. In this section, you will find a number of life goals, presented one at a time, and we ask you three questions about each goal. (a) How important is this goal to you? (b) How likely is it that you will attain this goal in your future? and (c) How much have you already achieved this goal thus far? Please use the following scale in answering each of the three questions about each life goal.

not at all moderately very
1 2 3 4 5 6 7

Life-goal: To be a very wealthy person.

1. How important is this to you?

not at all moderately very
1 2 3 4 5 6 7

2. How likely is it that this will happen in your future?

not at all moderately very
1 2 3 4 5 6 7

3. How much have you already attained this goal?

not at all moderately very
1 2 3 4 5 6 7

Life-goal: To grow and learn new things.

4. How important is this to you?

not at all moderately very
1 2 3 4 5 6 7

5. How likely is it that this will happen in your future?

not at all moderately very
1 2 3 4 5 6 7

6. How much have you already attained this goal?

not at all moderately very
1 2 3 4 5 6 7

Life-goal: To have my name known by many people.

7. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

8. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

9. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have good friends that I can count on.

10. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

11. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

12. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To successfully hide the signs of aging.

13. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

14. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

15. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To work for the betterment of society.

16. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

17. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

18. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be physically healthy.

19. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

20. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

21. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have many expensive possessions.

22. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

23. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

24. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: At the end of my life, to be able to look back on my life as meaningful and complete.

25. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

26. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

27. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be admired by many people.

28. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

29. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

30. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To share my life with someone I love.

31. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

32. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

33. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have people comment often about how attractive I look.

34. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

35. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

36. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To assist people who need it, asking nothing in return.

37. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

38. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

39. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To feel good about my level of physical fitness.

40. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

41. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

42. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be financially successful.

43. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

44. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

45. How much is this satisfied currently?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To choose what I do, instead of being pushed along by life.

46. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

47. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

48. How much is this satisfied currently?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be famous.

49. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

50. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

51. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have committed, intimate relationships.

52. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

53. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

54. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To keep up with fashions in hair and clothing.

55. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

56. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

57. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To work to make the world a better place.

58. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

59. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

60. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To keep myself healthy and well.

61. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

62. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

63. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be rich.

64. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

65. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

66. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To know and accept who I really am.

67. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

68. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

69. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have my name appear frequently in the media.

70. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

71. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

72. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To feel that there are people who really love me, and whom I love.

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

73. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

74. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To achieve the "look" I've been after.

75. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

76. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

77. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To help others improve their lives.

78. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

79. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

80. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be relatively free from sickness.

81. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

82. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

83. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have enough money to buy everything I want.

84. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

85. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

86. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To gain increasing insight into why I do the things I do.

87. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

88. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

89. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To be admired by lots of different people.

90. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

91. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

92. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have deep enduring relationships.

93. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

94. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

95. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have an image that others find appealing.

96. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

97. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

98. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To help people in need.

99. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

100. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

101. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Life-goal: To have a physically healthy life style.

102. How important is this to you?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

103. How likely is it that this will happen in your future?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

104. How much have you already attained this goal?

| | | | | | | |
|------------|---|---|------------|---|---|------|
| not at all | | | moderately | | | very |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix H

Experiences in Close Relationships Inventory

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

| | | | | | | |
|-----------------|-------|---|-----------------|-------|--------------|-----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <i>Disagree</i> | | | <i>Neutral/</i> | | <i>Agree</i> | |
| <i>Strongly</i> | | | <i>Mixed</i> | | | <i>Strongly</i> |

- 1. I prefer not to show a partner how I feel deep down. _____
- 2. I worry about being abandoned. _____
- 3. I am very comfortable being close to romantic partners. _____
- 4. I worry a lot about my relationships. _____
- 5. Just when my partner starts to get close to me I find myself pulling away. _____
- 6. I worry that romantic partners won't care about me as much as I care about them. _____
- 7. I get uncomfortable when a romantic partner wants to be very close. _____
- 8. I worry a fair amount about losing my partner. _____
- 9. I don't feel comfortable opening up to romantic partners. _____
- 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her. _____

1 2 3 4 5 6 7
Disagree *Neutral/* *Agree*
Strongly *Mixed* *Strongly*

11. I want to get closer to my partner, but I keep pulling back. _____
12. I often want to merge completely with romantic partners, and this sometimes scares them away. _____
13. I am nervous when my partners get too close to me. _____
14. I worry about being alone. _____
15. I feel comfortable sharing my private thoughts and feelings with my partner. _____
16. My desire to be close sometimes scares people away. _____
17. I try to avoid getting too close to my partner. _____
18. I need a lot of reassurance that I am loved by my partner. _____
19. I find it relatively easy to get close to my partner. _____
20. Sometimes I feel that I force my partners to show more feeling, more commitment. _____
21. I find it difficult to allow myself to depend on romantic partners. _____
22. I do not often worry about being abandoned. _____
23. I prefer not to be too close to romantic partners. _____
24. If I can't get my partner to show interest in me, I get upset or angry. _____
25. I tell my partner just about everything. _____
26. I find that my partner(s) don't want to get as close as I would like. _____
27. I usually discuss my problems and concerns with my partner. _____

Appendix I

Satisfaction With Life Scale

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is as follows:

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = neither agree nor disagree

5 = slightly agree

6 = agree

7 = strongly agree

__ 1. In most ways my life is close to my ideal.

__ 2. The conditions of my life are excellent.

__ 3. I am satisfied with my life.

__ 4. So far I have gotten the important things I want in life.

__ 5. If I could live my life over, I would change almost nothing.

References

- Abrams, S., & Neubauer, P.B. (1976). Object orientedness: The person or the thing. *Psychoanalytic Quarterly*, 45, 73-99.
- Aspirations Index Scale Description. (2008). Retrieved June 21, 2010 from http://www.psych.rochester.edu/SDT/measures/ai_scale.php#rev_scale
- Ahuvia, A.C, & Wong, N.Y (1995). Materialism: Origins and implications for personal well-being. In F. Hansen (Ed.), *European Advances in Consumer Research* (Vol. 2, pp. 172-178). Provo, UT: Association for Consumer Research. Retrieved from <http://worlddatabaseofhappiness.eur.nl>
- Ahuvia, A.C, & Wong, N.Y (2002). Personality and values based materialism: Their relationship and origins. *Journal Of Consumer Psychology*, 12(4), 389–402.
- Akhtar, S. (2003). Things: Developmental, psychopathological, and technical aspects of inanimate objects. *Canadian Journal of Psychoanalysis*, 11,1-44.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Roles (Ed.), *Attachment theory and close relationships* (pp. 25-45). New York, NY: Guilford Press.
- Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226-241.
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, 97, 90-113.
- Belk, R. W. (1983). Worldly possessions: Issues and criticisms. In R. T. Bagozzi (Ed.), *Advances in Consumer Research* (Vol. 10, pp. 514-519). Ann Arbor, MI: Association for Consumer Research.
- Belk, R.W. (1984a). Cultural and historical differences in concepts of self and their effects on

- attitudes toward having and giving. *Advances in Consumer Research*, 11(1), 753-760.
- Belk, R.W. (1984b). Three scales to measure constructs related to materialism: Reliability, validity, and relationships to measures of happiness. *Advances in Consumer Research*, 11, 291-297.
- Belk, R.W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12, 265-280.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15, 139-168.
- Belk, R.W, Ger, G., & Askegaard, S. (2003). The fire of desire: A multisited inquiry into consumer passion. *Journal of Consumer Research*, 30(3), 326-351.
- Belsky, J., & Cassidy, J. (1994). Attachment: Theory and evidence. In M. Rotter, D.F. Hay, & S. Baron Cohen (Eds.) *Development through life: A handbook for clinicians* (pp. 373-402). London: Blackwell.
- Bender, B. (1978). Gatherer-Hunter to farmer: A social perspective. *World Archaeology*, 10(2), 204-222.
- Bernier, A., Larose, S., & Boivin, M. (2007). Individual differences in adult attachment: Disentangling two assessment traditions. *European Journal of Developmental Psychology*, 4(2), 220-238.
- Blatt, S.J., & Levy, K.N (2003). Attachment theory, psychoanalysis, personality development, and psychopathology. *Psychoanalytic Inquiry*, 23(1), 102-150.
- Block, J. (1961). *The Q-sort method in personality assessment and psychiatric research*. Springfield, IL: Charles C Thomas.
- Bowlby, J. (1969/1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed). New York, NY:

Basic Books.

- Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Roles (Ed.), *Attachment theory and close relationships* (pp. 46-76). New York, NY: Guilford Press.
- Buss, D.M. (1994). Personality evoked: The evolutionary psychology of stability and change. In T.F. Heatherton, & J.L. Weinberger, (Eds.), *Can personality change?* (pp. 41-57). Washington, DC: American Psychological Association
- Buss, D.M. (2000). The evolution of happiness. *American Psychologist*, 55(1), 15-23.
- Carlson, E., & Sroufe, L.A. (1995). The contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental processes and psychopathology Volume 1: Theoretical perspectives and methodological approaches* (pp. 581-617). New York, NY: Cambridge University Press.
- Carver, C.S., & Baird, E. (1998). The American dream revisited: Is it what you want or why you want it that matters? *Psychological Science*, 9, (4), 289-292
- Chang, L.C., & Arkin, R.M (2002). Materialism as an attempt to cope with uncertainty. *Psychology and Marketing*, 19(5), 389-406.
- Christopher, A.N., Marek, P., & Carroll, S.M. (2004). Materialism and attitudes toward money: An exploratory investigation. *Individual Differences Research*, 2(2), 109-117.
- Christopher, A.N., & Schlenker, B.R. (2004). Materialism and affect: The role of self-presentational concerns. *Journal of Social and Clinical Psychology*, 23(2), 260-272.
- Cross, R.M. (2005) Exploring attitudes: The case for Q methodology. *Health Education Research*, 20(2), 206-213.
- Crowell, J.A., Fraley, R.C., & Shaver, P.R (1999). Measurement of individual differences in

- adult attachment. In J.C. Shaver (Ed.), *Handbook of attachment* (pp. 434-465). New York, NY: Guilford Press.
- Crowell, J.A., & Treboux, D. (1995). A review of adult attachment measures: Implications for theory and research. *Social Development, 4*, 294-327.
- Csikszentmihalyi, M. (1999). If we are so rich, why aren't we happy? *American Psychologist, 54*(10), 821-827.
- Csikszentmihalyi, M. (2004). Materialism and the evolution of consciousness. In T. Kasser, & A.D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 91-106). Washington, DC: American Psychological Association.
- De Fraja, G. (2006, 10 23). *The origin of utility*. (CEPR Discussion Paper). Retrieved from www.cepr.org: <http://www.cepr.org/pubs/dps/DP5859.asp>
- Diamond, J. (2002). Evolution, consequences and future of plant and animal domestication. *Nature, 418*, 700-707. Retrieved from http://www.santafe.edu/events/workshops/images/c/c9/Diamond_Nature_02.pdf
- Du Nann Winter, D. (2004). Shopping for sustainability: Psychological solutions to overconsumption. In T. Kasser, & A.D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 69-90). Washington DC: American Psychological Association.
- Ellis, S.R. (1992). A factor analytic investigation of Belk's structure of the materialism construct. In J.F. Sherry, Jr. & B. Sternthal (Eds.), *Advances in Consumer Research* (Vol. 19, pp. 688-695). Provo, UT: Association for Consumer Research.
- Fitzmaurice, J., & Comegys, C. (2006). Materialism and social consumption. *The Journal of Marketing Theory and Practice, 14*(4), 287-299.

- Flouri, E. (1999). An integrated model of consumer materialism: Can economic socialization and maternal values predict materialistic attitudes in adolescents? *Journal of Socio-Economics, 28*, 707-724.
- Fraley, R.C. (2010). Information on the Experiences in Close Relationships-Revised (ECR-R) Adult Attachment Questionnaire. Retrieved from <http://internal.psychology.illinois.edu/~rcfraley/measures/ecrr.htm>
- Fraley, R.C., & Shaver, P.R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology, 4*(2), 132-154.
- Fraley, R.C., Waller, N.G., & Brennan, K.A. (2000). An item response theory analysis of self-report measures of Adult Attachment. *Journal of Personality and Social Psychology, 78*(2), 350-365.
- Frost, R. O., Kyrios, M., McCarthy, K.D., & Matthews, Y. (2007). Self-ambivalence and attachment to possessions. *Journal of Cognitive Psychotherapy: An International Quarterly, 21*(3), 232-242.
- Gallo, L., Smith, T.W., & Ruiz, J.M. (2003). An interpersonal analysis of adult attachment style: Circumplex descriptions, recalled developmental experiences, self-representations, and interpersonal functioning in adulthood. *Journal of Personality, 71*(2), 141-182.
- Garrett, H.R. (1958). *Statistics in psychology and education* (5th ed.). New York, NY: Longmans, Green & Co.
- Ger, G. & Belk, R.W. (1990). Measuring and comparing materialism cross-culturally. *Advances in Consumer Research, 17*, 186-192.
- Ger, G. & Belk, R.W. (1996). Cross-cultural differences in materialism. *Journal of Economic*

Psychology, 17, 55-77.

Kanner, A.D & Soule, R.G. (2004). Globalization, corporate culture and freedom. In T. K.

Kanner (Eds.), *Psychology and consumer culture: The struggle for the good life in a materialistic world* (pp. 49-67). Washington DC: American Psychological Association.

Kashdan, T.B., & Breen, W.E. (2007). Materialism and diminished well-being: Experiential avoidance as a mediating mechanism. *Journal of Social and Clinical Psychology, 26(5)*, 521-539.

Kasser, T. (n.d.). *Aspirations Index*. Retrieved from

<http://faculty.knox.edu/tkasser/aspirations.html>.

Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: The MIT Press.

Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students.

European Journal of Social Psychology, 32 (1), 137-146.

Kasser, T., & Kanner, A. D. (2004). Where is the psychology of consumer culture? In T. Kasser,

& A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 3-7). Washington, DC: American Psychological Association.

Kasser, T., & Ryan, R.M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65(2)*, 410-422.

Kasser, T., & Ryan, R.M. (1996). Further examining the American dream: Different correlates of

intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22(3)*, 280-287.

Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and the

relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. Sheldon (Eds.)

Life goals and well-being. Gottingen: Hogrefe.

- Kasser, T., Ryan, R. M., Couchman, C.E., & Sheldon, K.M. (2004). Materialistic values: Their causes and consequences. In T. Kasser, & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 11-28). Washington, DC: American Psychological Association.
- Kosmicki, F.X. (2002). *Materialism, attachment style, and relational ethics: Interpersonal correlates of materialistic orientation*. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3057029)
- Kottler, J. M.; Montgomery, M., & Shepard, D. (2004). Aquisitive desire: Assessment and treatment. In T. Kasser, & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 149-187). Washington, DC: American Psychological Association.
- Lyddon, W.J., Bradford, E., & Nelson, J.P. (1993). Assessing adolescent and adult attachment: A review of current self-report measures. *Journal of Counseling & Development, 71*, 390-395.
- Martin, L.L. (1999a). Another look at I–D compensation Theory: Addressing some concerns and misconceptions. *Psychological Inquiry, 10*(3), 257–267.
- Martin, L.L. (1999b). I–D compensation theory: Some implications of trying to satisfy immediate-return needs in a delayed-return culture. *Psychological Inquiry, 10*(3), 195-208.
- Micken, K.S. (1995). A new appraisal of the Belk materialism scale. In F.R. Karees & M. Sujan (Eds.), *Advances in Consumer Research, Vol 22* (pp. 398–405). Provo, UT: Association for Consumer Research.
- Mikulincer M., Gillath, O., &P.R. Shaver. (2002). Activation of the attachment system in

- adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology*, 83(4), 881–895.
- Mikulincer, M. & Shaver, P.R. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships*, 12, 149–168.
- Murray, F. (2000). Shame on credit. In A. Baker, *Serious shopping*(pp. 221–41). London: Free Association Books.
- Phillips, E.L., Raiford, A., & El-Batrawi, S. (1965). The q-sort re-evaluated. *Journal of Consulting Psychology*, 29(5), 422-425.
- Richins, M.L. (1994). Special possessions and the expression of material values. *The Journal of Consumer Research*, 21(3), 522-533.
- Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69, 419–432.
- Richins, M.L. (2004). The Material Values Scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1), 209-219.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19, 303-316.
- Rindfleisch, A., Burroughs, J. E., & Denton, F. (1997). Family structure, materialism, and compulsive consumption. *Journal of Consumer Research*, 23(4), 312-325.
- Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Journal of Interpersonal Violence*, 55(1), 68-78.

- Saunders, D.G. (1991). Procedures for adjusting self-reports of violence for social desirability bias. *American Psychology, 6*(3), 336-344.
- Schore, A. (2003) *Affect dysregulation and disorders of the self*. New York, London: W.W. Norton & Company.
- Sharpe, J.P. (2000). A construct validation study of the Belk Materialism Scale and the Material Values Scale. *Dissertation Abstracts International, 60* (8-B), 4287B).
- Sheldon, K.M., Ryan, R.M., Deci, E.L., & Kasser, T. (2004). *Personality and Social Psychology Bulletin, 30*(4), 475-86.
- Sirgy, J. M. (1998). Materialism and quality of life. *Social Indicators Research, 43*, 227–260.
- Slade, A. & Cohen, L.J. (1996) The process of parenting and remembrance of things past. *Infant Mental Health Journal, 17*(3), 217-238.
- Solberg, E.G., Diener, E., & Robinson, M.D. (2004). Why are materialists less satisfied? In T. Kasser, & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 29-48). Washington, DC: American Psychological Association.
- Solomon, S., Greenberg, J., & Pyszczynski, T.A. (2004). Lethal consumption: Death-denying materialism. In T. Kasser, & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 127-146). Washington, DC: American Psychological Association.
- Sperling, M. B., Berman, W.H., & Fagen, G. (1992). Classification of adult attachment: An integrative taxonomy from attachment and psychoanalytic theories. *Journal of Personality Assessment, 59*(2), 239-247.
- Srivastava, A., Locke, E.A., & Bartol, K.M. (2001). Money and subjective well-being: It's not

- the money, it's the motives. *Journal of Personality and Social Psychology*, 80(6), 959-971.
- Stein, H., Koontz, A.D., Fonagy, P., Allen, J.G., Fultz, J., Brethour, J.R. Jr., Allen, D., & Evans, R.B. (2002). Adult attachment: What are the underlying dimensions? *Psychology and Psychotherapy: Theory, Research and Practice* 75, 77-91.
- Tatzel, M. (2003). The art of buying: Coming to terms with money and materialism. *Journal of Happiness Studies*, 4(4), 405-435.
- Wachtel, P.L. (1983). *The poverty of affluence: A psychological portrait of the American way of life*. New York, NY: The Free Press.
- Wachtel, P. L. (2003). Full pockets, empty lives: A psychoanalytic exploration of the contemporary culture of greed. *The American Journal of Psychoanalysis*, 63(2), 103-122.
- Wasser, R. (2010). *Materialism and well being: Examining the strength of the negative relationship using multiple materialism measures and controlling for important variables*. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3426893)
- Wallendorf, M., & Arnould, E.J. (1988). "My Favorite Things": A cross-cultural inquiry into object attachment, possessiveness, and social linkage. *Journal of Consumer Research*, 14, 531-547.
- Williams, G.C., Cox, E.M., Hedberg, V.A., & Deci, E.L. (2000). Extrinsic life goals and health-risk behaviors in adolescents. *Journal of Applied Social Psychology* 30(8), 1756-1771.