

MATERIALISM AND WELL BEING: EXAMINING THE STRENGTH OF THE  
NEGATIVE RELATIONSHIP USING MULTIPLE MATERIALISM MEASURES  
AND CONTROLLING FOR IMPORTANT VARIABLES

by

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This manuscript has been read and accepted for the Graduate Faculty in Clinical Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

MATERIALISM AND WELL BEING: EXAMINING THE STRENGTH OF THE  
NEGATIVE RELATIONSHIP USING MULTIPLE MATERIALISM MEASURES  
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by

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The present study examined whether the established negative relationship between materialism and well being remained significant after controlling for important variables that the literature has previously shown to be associated with well being. The study also sought to examine multiple materialism measures in relationship to one another and well being, as little past research has examined more than one materialism measure within the same study. Additionally, the present study sought to better understand the relationship between materialism and important well being measures that had not been examined extensively in previous studies. Finally, this study sought to examine the relationship between materialism and well being with an adult sample, as a significant amount of past research examined the relationship with samples of college undergraduates. Materialism measures examined were the Ger/Belk Scale, the Richins/Dawson Scale, and the importance, likelihood, and attainment dimensions of the Aspirations Index. Well being measures examined were the Satisfaction with Life Scale (SWLS) and the Rosenberg Self Esteem Scale (RSES). Zero order correlations and multiple regression analyses were conducted. Correlations among the materialism measures supported theoretical divides previously proposed regarding the varied

conceptualizations and measurements of materialism. Results also indicated that the Ger/Belk Scale, the Richins/Dawson Scale, and the dimension of extrinsic attainment on the Aspirations Index each had a significant negative correlation with both the SWLS and the RSES, while the extrinsic importance and extrinsic likelihood dimensions of the Aspirations Index did not. The possibility that the dimension of extrinsic attainment, of the three dimensions on the Aspirations Index, is an incrementally better measure of extrinsic prioritization was explored. The multiple regression analyses indicated that the negative relationship between materialism and well being is strong, remaining significant after controlling for other important variables associated with well being and even as those other variables ceased showing a significant association with well being. These findings support previous theorizing regarding the unsatisfying nature of material pursuits. Finally, results also indicated that looking at materialism as a personal value (Richins & Dawson, 1992) may be a particularly strong and useful theoretical conceptualization, especially when it comes to assessing the relationship between materialism and well being.

## Preface

Poor man wanna be rich,  
Rich man wanna be king,  
And a king ain't satisfied till he rules everything

*-Bruce Springsteen*

## **Acknowledgments**

In the Fall of 2003, I reached out to Paul Wachtel to see about being a part of a research project he was leading regarding money and materialism. As the years have gone by, and as my road has gotten twisted in the dissertation process, Paul has been there with his kindness, patience, time, and wisdom to help untwist me, and not lose faith when I then got twisted again. I cannot thank him enough for his help or for his clarity and courage to write about social issues from a complex psychological perspective. His work inspired this dissertation and serves as an example of what I can do as I embark on my career as a psychologist.

I would also like to thank Elliot Jurist and Lissa Weinstein. They have been supportive and encouraging throughout the dissertation process and more generally have pushed me during my years in the CUNY clinical program to think about psychology in a deep and complex manner. I also want to thank Peter Fraenkel and Steve Tuber for being on my committee. I have learned a great deal from both of them over the years and greatly appreciate them being a part of this process. A big debt of gratitude also goes to Sarai Batchelder who helped me get centered when I was wobbly.

I want to thank my mom, Carole Wasser, for the love and support that allowed me to grow as a person and student throughout my life. From Frost school to now, my mom has always been my biggest supporter and I could never have accomplished what I have without her.

I deeply appreciate the pride my father, Herb Wasser, has taken in me and I know that he will prominently display a copy of this dissertation, though he may never read it. I also want to thank my brother, Marc Wasser, his wife, Heather, and my two nieces,

Olivia and Mia. My older brother helped foster in me a sense of humor and possibility that has been much needed in the challenges that have come with the dissertation and in life more generally. I also want to thank my dog, Roger. His wet kisses often gave me solace and perspective throughout the dissertation process.

My grandfather, Sol Friedman, was the indelible influence in my life. His love, wisdom, and goodness fundamentally shaped who I am and who I want to be. Poppy, as we called him, grew up on the Lower East Side. He survived a depression and the battle fields of war. He never soured, but only grew from the experiences he endured. He came home to raise a family and run a business. He gave me my opportunities in life and he taught me more than anyone else to love and deeply respect knowledge. He was a scholar without the degree and the PhD I earn is as much his as it is mine.

My daughter, Julia, arrived on the scene late in the dissertation game, but she has brought unparalleled joy to my wife and I. The pockets of time spent away from her working on my dissertation were not easy, but I look forward to all of the time we will now have.

Finally, my wife, Keri, has been my best friend and companion for the past 15 years. When I decided I wanted to go back to school for my PhD in clinical psychology she supported me completely and has every day since. She has never complained about the sacrifices we have made, whether it has been in terms of finances, time, or my increased baseline of irritability. I love her so much and am so thankful to share my life with her.

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## **Introduction**

I made the decision to leave my job in the business world and pursue a PhD in clinical psychology because I wanted my working life, indeed my life overall, to be about something more than just making money. Making money is not an unimportant goal for me, but I wanted it to be balanced with other goals, like being intellectually challenged, connecting to other human beings, making a positive difference in people's lives, and having time for my family and friends. When I came across the research Paul Wachtel was conducting into the choices people make in their busy lives between material and what I will call more humanistic pursuits, I was immediately interested. The subject matter mirrored the thought processes I had recently gone through and I felt that this was a compelling arena to examine. How are people's experiences of well-being impacted by the aspects of life and goals they value and prioritize? Are certain choices going to make people feel satisfied and good about themselves while other choices are going to leave people feeling dissatisfied and bad about themselves? These are the questions I took with me into the psychological research with which I became engaged.

My interest has rested with wanting to investigate what happens when people increasingly prioritize money and materialistic objects more than they prioritize the human side of life: relationships, personal growth, the betterment of society, etc. Looking at US culture, it seems clear that money and material pursuits are highly prioritized and that many believe these are the things that lead to well being. The media is filled with coverage of the rich and famous and the fabulous lives they lead. Companies spend billions of dollars per year advertising that their products will give

people a better life and consumers spend hundreds of billions of dollars a year purchasing those products. For many the American Dream is about becoming rich and living the “good life” because they have a big house, current fashions, luxury cars, and fancy vacations.

Yet as I will detail in my literature review, previous research and theorizing by increasing numbers of economists and psychologists has shown that money and material pursuits are not associated with well-being. Research has found only a small positive relationship between income and well-being, and there seems to be something about the positional nature of material goods, the fact that people will almost always find somebody who has more of a material something than they do, that prevents them from experiencing well-being when they increasingly focus on that area of life.

Materialism itself has been studied for the past 30 years and the literature shows that the more materialistic people are, the less they experience well-being. The basic negative relationship between materialism and well being has been established in various studies involving assorted materialism and well being measures. Despite this established negative association, most studies throughout the years have not examined the strength of the negative relationship. For example, little if any research has examined whether the negative relationship between materialism and well being persists after controlling for other important variables that have been associated with well being. This was a significant area of inquiry to investigate further.

In looking into the past research more closely, it also became evident that very few studies had examined each of the prominent materialism measures and their respective relationships with well being within the same study. Instead, previous

research typically approached the relationship in a one-off manner, looking only at a single materialism measure and its relationships with well being. It seemed increasingly important to examine each of the prominent materialism measures in relationship to well being in the same study so as to get a better sense of how the materialism measures related to one another and whether certain measures showed a strong negative relationship with well being while others did not.

Another theme that became evident as a result of examining the previous research was the issue of what which particular well-being measures to examine. Life satisfaction is the aspect of well being that has been most often examined in relationship to materialism, but the life satisfaction measures used in previous research did not include the most well known measure of life satisfaction over the past 25 years, the Satisfaction with Life Scale (SWLS). It seemed important to use the SWLS to examine the negative relationship between materialism and well being. A big reason it seemed important was that the SWLS has routinely been combined with two other scales to construct the most widely used measure of Subjective Well Being (SWB). SWB is a well-being construct that has itself received much focus over the past two decades and is more influential in policy making decisions than other well being measures. In a study focusing on the strength of the relationship between materialism and well being, using good well being measures, such as the Rosenberg Self-Esteem Scale (RSES), would be critical, but using a well known SWB measure, such as the SWLS, would only strengthen the validity of findings.

Finally, some of the past research that examined the relationship between materialism and well being sampled adults, but a significant amount of the past research

sampled undergraduates. It seemed only appropriate that an adult sample be used in a study examining the strength of the negative association between materialism and well being.

Taking each of the factors described above into account, there was an opportunity to take a next step in the research regarding the relationship between materialism and well being. Helping to develop a better understanding of the nature of that relationship seemed like a worthy endeavor.

## Literature Review

The literature review begins with an overview of the theoretical traditions that have proposed a negative association between materialism and well being. The major materialism measures are then introduced and reviewed, followed by a review of life satisfaction and the importance of measures of Subjective Well Being (SWB). The literature review then chronicles past research that has shown a negative association between materialism and well being. The section concludes by reviewing literature supporting the current study's focus on examining the relative strength of the negative relationship between materialism and well being.

### Economists' Perspectives on Materialism and Well-Being

Early thinking and research on the relationship between materialism and well being came from economists who were interested in the effects that different types of goods, experiences, and judgments had on well-being, particularly satisfaction. Their work suggested that material goods are associated with less satisfaction than non-material goods.

Keynes (1930/2008) described *absolute needs* like food, water, shelter, clothing, and transportation that humans require in order to simply survive in the economy in which they live. He believed absolute needs are independent of social status and can be satisfied, whereas *relative needs* are those that address the desire for superiority and whose satisfaction prove much more difficult (Guillen-Royo, 2007; Lin, 2008).

Duesenberry (1952) believed that people's consumption patterns are influenced by comparisons with the consumption patterns of others and even their own earlier consumption patterns. In particular, people make upward comparisons, in which they compare themselves to others who consume more and times when they themselves consumed more (Frank, 2005; Guillen Royo, 2007). Duesenberry's *relative-income hypothesis* asserts that the point at which people are satisfied with their level of consumption is based on relative and not absolute considerations.

Easterlin (1974) argued that judgments of happiness are made based on comparisons to the norms or *reference standards* of a nation. As a nation's income and wealth increase the material norms within that nation increase in proportion and thus impede a perception of increased well-being.

Scitovsky (1976) focused on the relationship between happiness and consumption. He theorized a distinction between experiences of *comfort* and *pleasure*. *Comfort*, he said, involves the experience of adaptation, in which the joy from certain experiences fades over time and a person either returns to his baseline level of happiness or his new, higher level of happiness comes to be experienced as the baseline. Scitovsky felt that materialistic objects typically result in experiences of *comfort*. In comparison, he felt that experiences of *pleasure* do not result in adaptation. The joy a person obtains from experiencing *pleasure* does not fade over time or with repetition. Scitovsky felt that many non-materialistic pursuits, from spending time with friends to enjoying time with nature, result in experiences of *pleasure*.

Hirsch (1976) explored the concept of *positional goods*. These are goods that are defined by the social status they impart on the select few who own them and include

things whose very enjoyment or use is altered by others having it. For example, a beautiful landscape outside one's window is not so beautiful if many have a house right there. The pleasure of a quiet ride in the country is interfered with if many are driving on that road. Positional goods are scarce and derive most of their value from that scarcity and the fact that the enjoyment of those goods will be altered if more people gain access to them. If the supply of positional goods increases too much, their positional quality is lost, along with most of the satisfaction they once brought to those who owned them. The positional goods of 100 years ago, such as an automobile, have become the standard material goods of today. The positional goods of today are likely to become the standard material goods of tomorrow.

Building on the work of Hirsch, Frank (1985) elaborated on the differences between positional and non-positional goods. Positional goods are defined as “those things whose value depends relatively strongly on how they compare with things owned by others”, whereas non-positional goods are “goods that depend relatively less strongly on such comparisons” (p. 101). Frank (1999) identified many materialistic pursuits as positional and many other pursuits, such as spending vacation time with family, as non-positional.

Frank (1999) believes that people are caught in a self-perpetuating spiral regarding positional goods and that such a spiral does nothing for people's satisfaction. For instance, houses can be considered positional goods. A 2,000 square foot house was once considered large in comparison to other houses and was assumed to bring the owner a proportional level of satisfaction. Today that same owner would require a 5,000 square foot house in order to keep positional pace, and because the owner would have

experienced no change in her relative position in respect to others, the additional 3,000 feet would be assumed to bring her no increased satisfaction. Alternatively, Frank argued that *non-positional* goods do *not* place people on such a satisfaction treadmill (Kahneman, Diener, & Schwarz, 1999). For example, vacation time is a non-positional good and a person who has four weeks of vacation time would be assumed to be more satisfied than if she has two weeks, regardless of the fact that her neighbor has five weeks (Frank, 1999). And yet this is only partially true, as we do think that a certain number of vacation weeks are “a lot” or “a little” in relation to what others have, which generates social expectations.

#### Integrating Psychology and Economic Perspectives

Wachtel has also theorized about the relationship between materialism and well being, bringing together a great deal of psychological and economic literature to argue that the American obsession with continuous economic growth and more material possessions results in less satisfaction (Wachtel, 1989). Integrating ideas from the adaptation-level theory of Helson (1964) to Hirsch’s (1976) consideration of positional goods, Wachtel (1989) states:

our sense of contentment and satisfaction is not a simple result of any absolute level of what we acquire or achieve. It depends upon our frame of reference, on how what we attain compares to what we expected... We do not tend to think in terms of a particular set of conditions and amenities that we regard as sufficient and appropriate for a good life. Our calculations tend to be relative. It is not what

we have that determines whether we think we are doing well; it is whether we have more- more than our parents, more than we had ten years ago, perhaps more than our neighbors (p. 17).

Focusing on why Americans pursue ever-greater material goods, Wachtel theorized that the phenomenon results from the vulnerability individuals experience living in a society where a sense of interpersonal interdependence, connection, and community has been vastly degraded. In the absence of a sense of belonging previously provided by the connections individuals had with one another, people now flock to the promise of security offered by material goods and increasingly look to material goods for their sense of well-being. Yet as Wachtel pointed out, the satisfaction offered by material goods is ephemeral at best and unattainable at worst. The genuinely satisfying elements of life, interpersonal connection and community, have given way to those material elements with which satisfaction is chronically elusive.

Wachtel's (1989) proposed solution to the satisfaction treadmill onto which material goods have shackled Americans is to focus on the attainment of more intrinsic pursuits.

Attention to human relationships and cultivation of the senses and of aesthetic experience can point us towards domains where 'more and less' thinking- while not completely absent- is not so dominant.... I would like to see less emphasis on the economic dimension of our lives- growth, productivity, the creation of needs for more and more goods, the "bottom line" – and more on the psychological: the richness of subjective experience and the quality of human relationships (p.141).

Delving further into the intra-psychic dynamics that may contribute to a more materialistic orientation and the decreased satisfaction that accompanies such an orientation, Wachtel (2003) discussed how material possessions can “serve as substitute self-objects” (p. 118). Kohut (1977) came to view self-objects as a necessary component in maintaining a healthy sense of self throughout life. Now that American lives unfold in a society where interpersonal connections and a sense of community have vastly decreased, Wachtel (2003) theorizes that money and material possessions have come to serve as self objects and the need to rely on such factors to help sure up peoples’ sense of self precludes them from “more satisfactory self-object relations” and results in them being “further alienated from more human sources of psychic nourishment” (p. 118-119).

Due to the ephemeral nature of the satisfaction derived from material goods, more are necessary in order to maintain the positive sense of self that individuals seek when they pursue identification with those goods (Wachtel, 2003). Additionally, focusing more on identifying with material goods as self-objects takes individuals away from the time in their life that they have to experience and identify with interpersonal connections and a sense of community. Thus when material goods, instead of other people, are identified with as self-objects, a vicious circle ensues. The genuinely satisfying elements of life, more intrinsic in nature, get cannibalized by the non-satisfying elements of life, which are more extrinsic in nature.

The perspectives and research described above from both economic and more psychodynamic perspectives shows that various theoretical vantage points have long asserted and sought to explain a negative relationship between materialism and well

being. These various perspectives can be used as theoretical backdrops to help in the further investigation of the negative relationship between materialism and well being.

### Self Determination Theory

Self Determination Theory (SDT) is another theoretical perspective that has examined the relationship between materialism and well being. In fact, SDT was the driving theoretical force behind the development of one of the three prominent scales eventually developed to measure materialism.

SDT, co-developed by Deci and Ryan (2000), posits that human beings have basic psychological needs, much as humans have basic physical needs such as oxygen, water, and food. Basic psychological needs are viewed from an organismic perspective, combining Hull's (1943) view of the development of innate drive states with the psychological focus of Murray (1938). Together it is theorized that certain psychological needs are essential for the human organism to reach its natural evolutionary potential (Deci & Ryan, 2000). The theory asserts that without fulfillment of basic psychological needs human beings will experience stunted growth and development.

The basic psychological needs are theorized to be *autonomy*, *competency*, and *relatedness* (Deci & Ryan, 2000; Ryan & Deci, 2000). Autonomy does not mean individualism and independence, and is hardly anathema to communal values and interdependence (Ryan & Deci, 2000). Instead autonomy "refers to volition- the organismic desire to self-organize experience and behavior and to have activity be concordant with one's integrated sense of self" (Deci & Ryan, 2000, p. 230). Competency is the innate need to have an effect on the environment and achieve

outcomes that are valued. Relatedness is “the desire to feel connected to others- to love and care, and to be loved and cared for” (Deci & Ryan, 2000, p. 230).

Goals that are believed to fulfill the basic psychological needs have been labeled *intrinsic* whereas goals that are believed to not fulfill those needs have been labeled *extrinsic* (Deci & Ryan, 2000; Kasser & Ryan, 1993). A relative focus on extrinsic goals has been associated with lower well being (Deci & Ryan, 2000; Kasser, 2002). Thus SDT represents another theoretical perspective, and a particularly well researched one, conceptualizing the dynamics behind a negative relationship between materialism and well being.

#### The Belk, Ger/Belk, and Richins/Dawson Materialism Scales

None of the theoretical perspectives described above was the driving force in the initial efforts to measure materialism. Instead the modern empirical study of materialism began with Belk, a professor of marketing who was trying to better understand how materialistic messages might impact marketing efforts. An expectation might be that as a marketing professor, Belk had a positive bias regarding materialism, but an examination of his work shows that he has often identified its negative aspects.

In a review of the work of Belk as compared to that of Richins and Dawson, another set of materialism researchers who developed one of the other prominent measures of materialism, Ahuvia and Wong (2002) noted that Belk views materialism as a personality trait whereas Richins and Dawson view materialism as a personal value. Accordingly, Belk’s view is that materialism is a set of inculcated aspects of an individual’s character.

Belk (1985) defines materialism as, “the importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person’s life and are believed to provide the greatest sources of satisfaction and dissatisfaction” (p. 265). Belk examined three personality traits that he believed together construct materialism. Possessiveness is “the inclination and tendency to retain control or ownership of one’s possessions”, non-generosity is “an unwillingness to give possessions to or share possessions with others”, and envy is desire for other people’s possessions with accompanied dislike for others who have the possessions that one covets (p. 267-268). Belk (1985) developed a measure of these three personality traits and found that the measure was reliable and valid, in terms of the three subscales and an overall materialism score that combined all three subscales.

In subsequent years Ger, a business professor in Turkey, worked with Belk to develop a cross-cultural variation of the original materialism scale for use internationally. The first Ger/Belk materialism scale was developed in the late 1980’s and early 1990’s (Ger & Belk, 1990). It was composed of many items from the original Belk scale, with alterations made to some items to work within a cross-cultural context, and with some new items added. Factor analysis revealed a fourth dimension, “tangibility”, defined as the “conversion of experience into material form” (p. 186). Behaviors such as taking pictures on a vacation and collecting souvenirs are examples of tangibility. Ger and Belk (1996) subsequently revised their measure, but kept the four dimensions. Additional changes were made to some items, while others were added and removed, but the measure retained its overall structure. Tangibility was renamed “preservation,” and the definition was changed to “the conservation of events, experiences, and memories in

material form” (Ger & Belk, 1996, p. 64). The Ger/Belk scale also combined all four subscales to produce an overall materialism score.

Richins and Dawson, also academics in marketing, devised a materialism scale nearly ten years after Belk first developed his. They view materialism as a personal value rather than as a personality trait.

Materialism... is a value that guides people’s choices and conduct in a variety of situations, including, but not limited to, consumption areas. With respect to consumption, materialism will influence the allocation of a variety of resources, including time. A materialist, for instance, might choose to work longer hours and earn more money instead of using that time for leisure activities” (Richins & Dawson, 1992, p.307).

Richins and Dawson believe that values lead to behavior patterns and if behavior patterns become solidified they can be understood as personality traits. It seems that Richins and Dawson’s understanding of materialism, taken to its logical behavioral end, intersects with Belk’s theorizing of materialism as a personality trait. Yet in the development of their materialism measure, Richins and Dawson (1992) did not focus on behaviors relevant to the valuing of materialism, but instead focused on beliefs highly associated with such valuing. This focus on beliefs would lead to subsequent researchers (Ahuvia & Wong, 2002; Kasser, 2005) arguing that Richins and Dawson’s materialism measure was more cognitive in nature, whereas Belk’s was more affective in nature.

In their investigation of the literature, Richins and Dawson (1992) identified three distinct beliefs prominent in materialism. The first is *acquisition centrality* or the central place that materialistic people have for the importance of acquiring and having various possessions. Materialistic people place the pursuit of possessions as critical to their life and thus consider other aspects of life, like relationships, relatively peripheral. The second is the degree to which people believe *acquisition is the pursuit of happiness*. The more materialistic people are the more they believe happiness depends on the acquisition of certain possessions. The third is *possession-defined success* or the degree to which people believe that success is determined by the possessions they are able to accumulate. Materialists believe they are successful to the degree that they have acquired certain possessions. While Richins and Dawson made it clear that these three categories of beliefs were not the only ones associated with a valuing of materialism, these were the three essential categories they sought to capture in their materialism measure.

Confirmatory factor analysis supported the three domains proposed by Richins and Dawson (1992). Analysis also supported the combination of all three subscales into an overall materialism score. Additionally, social desirability was assessed given concerns that participants might respond to the scale in a manner that portrayed them as less materialistic. Social desirability had small negative correlations with the three subscales and the overall materialism score.

### The Aspirations Index

The third and most recently developed materialism measure is also the only one of the prominent materialism scales that was developed out of theory asserting a negative relationship between materialism and well being. The measure constructed, the Aspirations Index, was based on Self Determination Theory (SDT) (Kasser & Ryan, 1993, 1996). Consistent with SDT, the Aspirations Index examines both intrinsic goals believed to fulfill the basic psychological needs and extrinsic goals believed *not* to fulfill the basic psychological needs. Thus while the Ger/Belk scale and the Richins/Dawson scale came from the world of marketing and an effort to better understand materialism within the context of marketing and commerce, the Aspirations Index developed out of psychological theory regarding the goals that promote psychological health and those that do not.

The Aspirations Index has gone through several changes throughout the years. Four *intrinsic* goal domains were constructed on earlier versions: personal growth, affiliation/relatedness with others, community feeling, and physical fitness/health (Kasser & Ryan, 1996; Aspirations Index Scale Description, 2007). The three *extrinsic* goal domains were financial success, fame, and image. These seven goal domains were subsequently submitted to principle components factor analysis, with the four intrinsic goal domains falling along one factor and the three extrinsic goal domains falling along a second factor (Kasser & Ryan, 1996). These factoring results supported the theoretical distinction between intrinsic and extrinsic goals. The intrinsic goal domain of health was later recognized as not being either intrinsic or extrinsic and instead became a neutral goal domain (Aspirations Index Scale Description, 2007).

Initially the Aspirations Index asked people to rate on a Likert scale both the perceived importance of each intrinsic and extrinsic goal and the perceived likelihood that each intrinsic and extrinsic goal would be attained. Another dimension was later added, in which people were asked to rate the degree to which each intrinsic and extrinsic goal was perceived as having *been* attained.

On a recent iteration of the Aspirations Index, and the version used in the current study, there are 35 individual goals (Aspirations Index Scale Description, 2007; Kasser & Ryan, 1996, 2001). Fifteen of the goals are classified as extrinsic, 15 of the goals are classified as intrinsic, and five of the goals are not classified as either extrinsic or intrinsic. The 15 extrinsic goals are composed of five goals of financial success, five of image, and five of fame. These 15 extrinsic goals are then added together to form a higher order extrinsic goal scale. In similar fashion, the 15 intrinsic goals on the Aspirations Index are made up of five of personal growth, five of affiliation/relatedness with others, and five of community feeling. The 15 intrinsic goals are then added together to form a higher order intrinsic goal scale.

The concept of the relative centrality of extrinsic and intrinsic goals is essential in working with the Aspirations Index and refers to the need to control for the ratings given to all other goals when considering the rating of any particular goal or set of goals. Earlier research by Rokeach (1973) first showed the essential importance of considering the relative centrality of people's values and goals. The relative centrality of goals is achieved on the Aspirations Index by calculating each person's grand mean for all 35 goals along the dimension of interest (be it perceived importance, perceived likelihood, or perceived attainment) and then subtracting that grand mean from the person's mean score

on whatever goals along that dimension wish to be examined. For example, say a person's grand mean across all 35 goals on the dimension of perceived attainment is 5.2 and the mean for perceived attainment of all 15 extrinsic goals is 4.3. Subtracting 5.2 from 4.3 results in -.9 and that is the extrinsic attainment score for that person.

It is also important to point out that due to the manner in which the Aspirations Index is constructed and relative scores are calculated, the values for extrinsic and intrinsic attainment (or importance or likelihood) will approximate, but not be exact, opposites of one another. By this I mean that if a participant's extrinsic attainment score is -.68, their intrinsic attainment score is going to be a value approximating, but not exactly equal to, +.68.<sup>1</sup>

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<sup>1</sup> Let me explain why this is so. The grand attainment mean is calculated by averaging together the 15 extrinsic attainment (or importance or likelihood) scores, the 15 intrinsic attainment scores, and the 5 health attainment scores, with the 5 health attainment scores considered neither extrinsic nor intrinsic. *If* the grand mean were composed only of the 15 extrinsic attainment scores and the 15 intrinsic attainment scores, then subtracting the grand attainment mean from the mean of the 15 extrinsic attainment scores would result in a value equal to, but of opposite sign, than the value attained by subtracting the grand attainment mean from the mean of the 15 intrinsic attainment scores. While earlier iterations of the Aspirations Index had a grand attainment (or importance or likelihood) mean composed of only these two factors, the version of the Aspirations Index used in this study has a grand attainment mean not only composed of the 15 extrinsic attainment scores and the 15 intrinsic attainment scores, but also the 5 health attainment scores. As a result, the mathematical difference between the mean of the five "neutral" health attainment scores with the mean of the 15 extrinsic attainment scores will almost always be slightly different, and always in an opposite direction, than the mathematical difference between the mean of the five health attainment scores and the mean of the 15 intrinsic attainment scores. And since the mean of the 5 health attainment scores composes 1/7<sup>th</sup> of the grand attainment (or importance or likelihood) mean, the difference identified just above will manifest in relative extrinsic and relative intrinsic attainment scores that approximate exact opposites of one another.

For example, let's say that a person's mean extrinsic attainment score for the 15 extrinsic goals is 3.65, while their mean intrinsic attainment score for the 15 intrinsic goals is 4.97. The mean of 3.65 and 4.97 is 4.31. If 4.31 is subtracted from 3.65, the result is -.66, and if 4.31 is subtracted from 4.97, the result is .66. Here relative extrinsic and intrinsic attainment are calculated as being of equal value, but opposite signs. However, the mean of 4.31 that was calculated did not include the mean health attainment score for the five health goals. Let's say that the mean health attainment score for the five health goals is 4.48. Bringing all three factors together now, if the previously determined mean extrinsic attainment score of 4.97 counts for 3/7ths of the grand attainment

In the literature, extrinsic goals represented on the Aspirations Index have come to be described as materialistic goals (Kasser, 2002), and the divide between extrinsic and intrinsic goals is now often considered synonymous with the divide between materialism and the absence of materialism. In terms of measurement, the dimension of extrinsic importance on the Aspirations Index has been described as being similar to the Ger/Belk and Richins/Dawson materialism measures. Despite such assertions of an association among these three measures, research speaking to the link appears quite limited.

Only one study has looked at the correlations between the Ger/Belk scale, the Richins/Dawson scale, and importance dimension of the Aspirations Index (Kasser, 2005). This study found significantly positive correlations among the three measures, and that all three measures loaded on the same factor. Thus although this study supported the idea that the three scales may all be measures of the general construct of materialism, replication of such correlations has not been conducted, and correlations among these materialism measures and the likelihood and attainment dimensions of the Aspirations Index have yet to be examined. Finally, future research should also examine if the expected positive associations among the measures are evidenced with an adult sample, as the one past study that examined several of these associations was conducted with a college aged sample.

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mean, the mean intrinsic attainment score of 3.65 counts for the second 3/7ths of the grand attainment mean, and the mean health attainment score of 4.48 counts for the final 1/7<sup>th</sup> of the grand attainment mean, then the genuine grand attainment mean equals 4.33, instead of 4.31. Further, when this genuine grand attainment mean of 4.33 is then subtracted from the mean extrinsic attainment score of 4.97, the result is -.68, but when this genuine grand attainment mean of 4.33 is subtracted from the mean intrinsic attainment score of 3.65, the result is .64. These two values of -.68 and .64 closely approximate each other in value and opposite sign, but are not exact mirror opposites of one another.

### Life Satisfaction, the SWLS, and Subjective Well-Being

Before turning to an examination of the specific research regarding the relationships that the three prominent materialism measures have with well being, it must be noted that life satisfaction is the area of well being that has been examined the most in relationship to materialism. Little of the past research, however, has examined life satisfaction as measured by the Satisfaction with Life Scale (SWLS), even as the SWLS has become the most prominent measure of life satisfaction over the past two decades. Part of why the SWLS has become so prominent is because it is one of three components that are combined to create the most widely used measure of Subjective Well Being (SWB), which is itself a conceptualization of great significance within the study of well being over the past 25 years (Deiner, Suh, Lucas, & Smith, 1999).

Diener (1984) ushered in the modern study of SWB, which specifically focuses on “how and why people experience their lives in positive ways, including both cognitive judgment and affective reactions” (p. 542). There are three elements important in defining SWB and that make it a unique measure of well-being. The first is that no objective conditions need to be met; the determination of positive experience occurs subjectively “within the experience of the individual” (Diener, 1984, p. 543). While objective factors may influence such a positive determination, they are not necessary for that determination. The second element fundamental to SWB is that it includes the measure of positive experience and not just the absence of negative experience. The third element is that SWB is a global assessment of a person’s experience. SWB does not

assess a person's experience within certain life domains, but across the integrated experience of the person as a whole.

SWB is most notably operationalized via a composite index of measurements of life satisfaction, the presence of positive affect, and the absence of negative affect (Deiner et al., 1999). Diener (1994) has developed the most well-known and widely used measure of SWB. In his instrument life satisfaction is measured with the SWLS (Diener, Emmons, Larsen, & Griffin, 1985), while positive and negative affect are both measured by the two separate scales of the Positive and Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988). To obtain an overall SWB score, ratings from the SWLS and the positive affect component of the PANAS are added together and the score from the negative affect component of the PANAS is subtracted. More recent research continues to support the distinction of each factor (Lucas, Diener, & Suh, 1996), while also showing that the combined index of the three factors captures a higher order construct (Sheldon & Hoon, 2007).

Over the past 25 years SWB and its component parts have become measures of well-being that psychologists, economists, and other social scientists rely on to quantify the impact of an array of important factors on human beings (Diener & Seligman, 2004). Studies that use SWB and its component parts as outcome measures are more likely than they might otherwise be to capture the attention of decision makers, advocates, and the public because the validity and applicability of these measures has been embraced by many. As Diener (2006) notes in his guidelines for the use of SWB measures:

There is increasing interest in using indicators of subjective well-being and ill-being to inform policy debates, and there are now national and international surveys of subjective well-being... Subjective well-being measures may be used as input to discussions about national policies, and they can also be helpful to business leaders, as well as government officials at the local and regional levels. The indicators of subjective well-being and ill-being can be used for the evaluation of policies in many domains, including health care, public health, social services, parks and recreation, work life, transportation, families, and the environment. In democratic societies, the indicators provide an important source of information to leaders about well-being and concerns of citizens” (p. 397).

Thus examining the relationship between materialism and prominent measures of SWB, such as the SWLS, is especially important, yet has not been a focus of much previous research.

### The Materialism Measures and Well Being

Findings have consistently supported the negative association between materialism and well being.

From the beginning of his work on materialism, Belk (1985) was interested in determining whether a materialistic orientation was associated with happiness and he found a significant negative correlation ( $r = -.24$ ) between his scale and a satisfaction with life measure developed by Bradburn and Caplovits (1967).

Several years later, as part of the initial effort to validate their own materialism measure, Richins and Dawson (1992) theorized that their scale would show a negative relationship with life satisfaction. Earlier work of theirs had indicated such a negative relationship with materialism (Dawson 1988, Richins 1987), Belk's measure had shown that such a relationship existed, and the theoretical perspective of Scitovsky, the psychologically minded economist referenced earlier, suggested that such a negative relationship was expected given that the desire for possessions was believed to be insatiable and thus satisfaction vis-à-vis possessions ephemeral (Brickman & Campbell, 1971; Scitovszky, 1976).

In an effort to test the relationship they hypothesized to exist, Richins and Dawson had their adult participants complete the Andrews and Withey Delighted – Terrible Scale (1976), which measures overall life satisfaction and satisfaction in the particular life domains of fun, family life, income/standard of living, and relationships with friends. The Richins/Dawson materialism measure had a significant negative correlation with satisfaction with life as a whole ( $r = -.32$ ), satisfaction with fun ( $r = -.34$ ), satisfaction with family life ( $r = -.17$ ), satisfaction with income/standard of living ( $r = -.39$ ), and satisfaction with relationships with friends ( $r = -.31$ ). Richins and Dawson also examined their scale in relationship to self esteem as measured with the Rosenberg Self Esteem Scale (RSES). A significant negative correlation ( $r = -.12$ ) was found between the Richins/Dawson scale and the RSES.

Thus the early studies showed that materialism measures had a negative association with life satisfaction, though the SWLS was not used and other important variables were not controlled. The early studies also showed that the Richins/Dawson

scale had a negative association with self esteem, specifically with the RSES. No subsequent research would attempt to replicate the negative association between the Richins/Dawson scale and self esteem.

In 1993 Wright and Larsen conducted a meta-analysis on the research that had examined the association between materialism and life satisfaction up to that point. It included seven different studies and 39 specific data points between materialism and life satisfaction within those seven studies. Overall, the meta-analysis found the effect size of the relationship between materialism and life satisfaction to be  $r = -.25$ .

Either the Belk scale or the Richins/Dawson scale was used as the materialism measure in nearly all of the studies composing the meta-analysis, yet the two measures were not used together in any of the studies. Additionally, although several life satisfaction measures were used in the various studies, the SWLS was not one of them. Also, though a few of the samples in the meta-analysis were composed of adults, a large number of the samples were composed of college undergraduates. Finally, the authors of the meta-analysis specifically stated that it would be important in future research to control for variables that might impact the significant negative relationship found between materialism and life satisfaction. Despite that recommendation, it appears that controlling for important variables was not a focus of subsequent research.

Keng, Jung, Jiuan, and Wirtz (2000) conducted a study with a Singaporean population ranging in age from 15 to 54 examining the relationship between satisfaction and materialism. The researchers used structured questionnaires, developed specifically for their study, to measure materialism, overall life satisfaction, and satisfaction in various life domains. They found that those who were more materialistic were

significantly less satisfied with life overall, and were also less satisfied in the life domains of marriage/relationship, friends, material comfort, and money. In addition to not controlling for important variables, the most prominent limitation of this study was that it used measures of materialism and satisfaction that did not have established psychometric properties.

Another study (Ryan & Dziurawiec, 2001) did take the step of controlling for gender, age, and socioeconomic status in its examination of the relationship between materialism and satisfaction. The Andrews and Withey Delighted-Terrible Scale (1976) measured overall life satisfaction and satisfaction within several life domains and a 14-item modified version of the Richins/Dawson materialism scale measured materialism. After controlling for the potentially confounding variables of gender, age, and socioeconomic status, Ryan and Dziurawiec found a significant negative relationship between materialism and overall life satisfaction, as well as between materialism and satisfaction in the life domains of *standard of living*, *family life*, and *fun and enjoyment*.

While this study took an important step in controlling for several demographic variables, it did not control for background variables that were previously shown to have significant relationships with well being. In effect, the variables controlled did not help in determining whether or not the relationship between materialism and satisfaction was relatively strong because particularly relevant variables were not controlled. It is also worth pointing out that the study did not use standardized scales to measure both materialism and satisfaction and that the applicability of the study was limited because the sample was composed of Australian adults.

Joseph Sirgy (1998) developed a theoretical model of materialism's relationship to overall life satisfaction. He argues that the relationship between materialism and life satisfaction is mediated by satisfaction in the life domain of *standard of living*. He believes materialists are less satisfied with their standard of living, and, by extension, their overall life. This occurs because the life domain of *standard of living* is thought to be very salient to materialists and thus a high ideal for that domain results in a greater discrepancy between ideal and real. Sirgy, Lee, Larsen, and Wright (1998) examined this theoretical view and found general support for it. In their study, materialism was measured by a scale that included some of their own items and some items from the Richins/Dawson scale. Life satisfaction and satisfaction in various life domains was measured with the Delighted-Terrible Scale (Andrews & Withey, 1976). Sirgy's work is important to touch upon because even as it focuses on a modifier of the relationship between materialism and well being, it nonetheless supports the negative relationship between materialism and well being.

Roberts and Clement (2007) examined the relationship between materialism, overall life satisfaction, and satisfaction in eight domains of life. Materialism was measured with a shortened version of the Richins/Dawson scale and satisfaction was measured via self-reports uniquely constructed for the study. The sample was composed of 402 participants, with age ranging from 18 to over 65, annual income ranging from \$10,000 to over \$100,000, and diversity in other important demographic variables, including gender, education, having children or not, and ethnicity. The specific demographic variables of gender, age, education, and income were subsequently controlled when the relationship between materialism and life satisfaction was examined.

The relationship between materialism and life satisfaction, after controlling for the particular demographic variables, was significantly negative (-.32,  $p < .001$ ).

While a limitation of this study was that it did not use established measures of well being, great strengths were the sample's size and diversity and that it controlled for other variables. Yet looking more critically at the variables that were controlled, nearly all were not variables that the literature has previously shown to be significantly associated with measures of well being. Thus there was substantially less value in controlling for these variables than there would have been in controlling for variables already shown to have a meaningful association with well being. In sum, the study made some important contributions to the literature, but it also had its limitations.

In the first published article involving the Aspirations Index, Kasser and Ryan (1993) conducted three studies, all of which were with samples composed of college undergraduates. In the first two studies, it was hypothesized that lower levels of self-actualization and vitality and higher levels of anxiety and depression would be experienced as the relative importance and likelihood of financial success increased. Results showed that the relative importance of financial success had a significant negative correlation with self-actualization and vitality and a significant positive correlation with depression and anxiety. The relative likelihood of financial success had a significant negative correlation with self-actualization and vitality and a significant positive correlation with anxiety (Kasser & Ryan, 1993).

The third study initially conducted by Kasser and Ryan (1993) involved a more heterogeneous undergraduate sample than the particularly homogenous undergraduate sample of the first two studies and used an array of clinical assessments as measures of

well being - specifically the Children's Global Assessment Scale, the Diagnostic Interview for Children and Adolescents, and the Community Mental Health Interview. A significant negative relationship was found between the relative importance of financial success and each of the clinical assessments. A significant negative relationship was also found between the relative likelihood of attaining financial success and two of the three clinical assessments (Kasser & Ryan, 1993).

While these early studies involving the Aspirations Index showed that extrinsic goals had negative relationships with well being, aspects of well being such as life satisfaction and self esteem were not assessed, results were with undergraduate samples, and other variables were not controlled.

Two more studies regarding the relationship between the Aspirations Index and measures of well being were soon conducted (Kasser & Ryan, 1996). The first study was with adult participants to see if earlier findings (Kasser & Ryan, 1993) were applicable to a broader population. Participants were adults who ranged in age from 18 to 79. The same well-being measures were used as in the three studies from 1993, except that a measure of physical symptoms was added. Additionally, the number of goal domains on the Aspirations Index was expanded. The extrinsic goal domains of fame and image were added, as was the intrinsic goal domain of health (Kasser & Ryan, 1996, Kasser, 2002).<sup>2</sup>

Results showed that the higher order construct of extrinsic importance (a combination of the three extrinsic goal domains of financial success, image and fame) had a significant negative association with self-actualization and vitality and a significant

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<sup>2</sup> The goal domain of health would later be recognized as not being either intrinsic or extrinsic.

positive association with physical symptoms such as headaches, faintness, and sore muscles (Kasser & Ryan, 1996; Kasser, 2002). The higher order construct of extrinsic likelihood had a significant negative association with self-actualization and vitality and a significant positive association with depression and physical symptoms.

The second Kasser and Ryan study (1996) expanded the well being measures examined in relationship to extrinsic and intrinsic goals. Specifically, the daily diary entries of college undergraduates were collected and examined over 14 days in an effort to assess the degree to which those participants experienced four positive moods and five negative moods and the association between those moods and the Aspirations Index. Results showed that extrinsic importance and extrinsic likelihood had significant negative associations with self reports of positive mood.

A major accomplishment of these two studies was that they expanded to a sample of adults the negative relationship found between extrinsic goals and well being. Limitations of the two studies included that they did not examine certain aspects of well being, such as life satisfaction and self esteem, and that they did not control for other variables.

Extrinsic importance was examined in relationship to well established measures of life satisfaction and Subjective Well Being for the one and only time in a study with a sample of Belgian undergraduates (Vansteenkiste, Duriez, Simons, & Soenens, 2006). Specifically, the SWLS was used, but because a very high correlation was found between the SWLS and a measure of vitality, the two measures were combined into a well being index. A significant negative relationship was found between extrinsic importance and the well being index. This study established the relationship between extrinsic

importance and the SWLS, but did so with an undergraduate sample. There remained a void in the literature regarding a replication of this relationship using an adult sample. Additionally, the study did not control for other variables.

Turning to extrinsic attainment, it appears that only two studies focused on this dimension of the Aspirations Index and both studies were conducted with college undergraduate (Kasser & Ryan, 2001). In those two studies, the attainment dimension was examined alongside the importance and likelihood dimensions and all three dimensions were examined in relationship to a well being index that included measures such as self-actualization and vitality. Some other well-being measures were examined individually, including self-esteem as assessed by the Rosenberg Self Esteem Scale (RSES). Results showed that *intrinsic* attainment had a significant positive association with the combined index of well-being measures, as well as with self-esteem. *Intrinsic* importance also had a significant positive association with the well being index and self esteem, while *intrinsic* likelihood had a significant positive association with the well being index, but did not have a significant association with self esteem. Though the authors elected to frame the results with an emphasis on intrinsic goals and not extrinsic goals, if they had chosen to emphasize the latter they basically would have found equally significant, but *negative* associations between extrinsic goals and the well being measures.

The two studies conducted by Kasser and Ryan (2001) represent the only studies that have examined the attainment dimension of the Aspirations Index. They also represent the only time that each of the three dimensions of the Aspirations Index have been examined in relationship to self esteem.

In terms of the studies' specific limitations, they did not examine the relationship between extrinsic attainment and the SWLS. Additionally, the studies did not control for other variables and only used an undergraduate sample.

### Multiple Materialism Measures and Well Being

The literature examining the relationship between individual materialism measures and well being is relatively abundant, even while there is a lack of uniformity in which materialism measures have been examined in relationship to which well being measures. Alternatively, little research has been conducted looking at the relationship between multiple materialism measures and well being in the same study.

Ahuvia and Wong (1995) examined both the Ger/Belk and the Richins/Dawson materialism scales, but not the Aspirations Index, with an undergraduate sample. Interest was in examining the relationship that the two materialism measures had with life satisfaction and satisfaction in different domains of life. Satisfaction was measured by the Terrible-Delighted Scale (Andrews & Withey, 1976). The Ger/Belk scale had a significant negative correlation with life satisfaction while the Richins/Dawson scale did not. Though the two materialism measures showed different relationships with *life* satisfaction, they each showed significant negative associations with the overall satisfaction scale when life satisfaction was combined with satisfaction ratings in the various life domains.

Overall, this study examined the Ger/Belk and Richins/Dawson scales together, but it did not include any dimension of the Aspirations Index, it did not include well

being measures such as the SWLS or the RSES, and it did not control for other important variables.

Ahuvia and Wong (2002) again examined both the Ger/Belk and the Richins/Dawson measures in a single study. This time their focus was less on examining how the two materialism measures were associated with life satisfaction, but instead with determining whether, for increasingly materialistic people, life satisfaction was increasingly related more to *lower-order needs* (such as income and standard of living) than *higher order needs* (such as family and friends). The sample was college undergraduates and the life satisfaction measure used was the Delighted-Terrible Scale (Andrews & Withey, 1976). Results were mixed across the two materialism measures, but did show some support for the idea that life satisfaction, for increasingly materialistic people, was related more to satisfaction with income and standard of living than satisfaction with friends and family.

In terms of the limitations of this study, though two materialism measures were examined together, the Aspirations Index was not assessed. Additionally, well being measures did not include the SWLS, other prominent measures of SWB, or the RSES. Finally, relevant control variables were not included.

In what appears to be the only study to do so, Kasser and Ahuvia (2002) examined the Ger/Belk scale, the Richins/Dawson scale, and the extrinsic importance dimension of the Aspirations Index together. Nonetheless, the inclusion of all three materialism measures was a minor focus of the study, with the relationships among the three materialism measures only being a part of the study's preliminary analyses and conducted simply to see if the three measures could then be combined to construct an

overall materialism measure. The main focus of the study was determining whether the negative association between materialism and well being persisted even amongst a sample in which materialistic values were encouraged. Commensurate with the main goal of the study, the sample was business students from Singapore, with a mean age of 21.

In the preliminary analyses, the authors found that the importance dimension on the Aspirations Index had a significant positive correlation with both the Ger/Belk scale ( $r = .44, p < .01$ ) and the Richins/Dawson scale ( $r = .52, p < .01$ ), while the Ger/Belk and the Richins/Dawson scales also had a significant positive correlation with one another ( $r = .26, p < .02$ ). In addition to running these correlations, which surprisingly appear to be the only in the literature among all three materialism measures, a factor analysis of the three measures was conducted and showed that all three measures loaded on one factor. No subsequent research replicated the correlations found among the materialism measures, nor looked to see if these correlations continued to exist in an adult sample.

As for the main analyses of the study, the three materialism measures and a single composite materialism measure composed of all three measures were each correlated with the well being measures of self actualization, vitality, general happiness, and time happy. General happiness and time happy were measured by the Fordyce (1988) happiness measure. Each of the materialism measures showed a significant negative association with at least one of the well-being measures (or significant positive associations with various “ill-being” measures such as anxiety, physical symptoms, and time unhappy).

Taken as a whole, this study did not focus on the relationships among the three materialism measures, nor how the relationships that each materialism measure had with the well being measures compared with the relationships the other materialism measures had with the well being measures. Additionally, this study did not examine the dimensions of extrinsic likelihood and extrinsic attainment. It also did not examine the three materialism measures in relationship to the SWLS or the RSES, although it did explicitly point out that the relationship between the three materialism measures and life satisfaction was not examined and that future research should examine that aspect of well being. Finally, the study did not control for other important variables. Thus the one study that did examine the three prominent materialism measures together did not focus on important elements that would be of interest in future research.

#### Background Variables and Well Being: Relationships Not Previously Controlled

Although there is a sizable amount of literature showing a negative relationship between materialism and well being, other factors found to be significantly associated with well being have rarely been controlled in an effort to see if the relationship between materialism and well being remains significant when those other factors are taken into account.

Income is one factor that has been shown to be significantly associated with well being, albeit to a relatively small degree. Satisfaction with finances moderately predicts life satisfaction within poorer countries, in which there is a greater concern regarding the ability to obtain the basic necessities of life (Deiner & Deiner, 1995). Within wealthier nations, where the basic necessities of life are less in doubt, there is only a small positive

correlation between income and well being, coming in at .12 in one study using a representative US sample (Diener, Sandvik, Seidlitz, & Diener, 1993). While the positive association between income and well being is not overwhelmingly strong, it is still a factor that is associated with well being, and thus is worth controlling when examining the association between materialism and well being. Yet there is another reason why it is particularly worthwhile to control for income when looking at the relationship between materialism and well being. People can conflate income and materialism, mistakenly thinking that higher income translates into more materialism. While the two constructs are actually quite different, it nonetheless makes sense to control income so as to make clear that any negative association between materialism and well being has to do with the construct of materialism and not income.

Besides income, well being has been strongly associated with various other factors over the past 25 years (Diener, et al., 1999). Health, specifically self-reported health, is associated with well being (George & Landerman, 1984; Okun, Stock, Haring & Witter, 1984). Indeed, health self reports show more powerful associations with well being than do “objective” reports of health completed by healthcare providers.

Marriage is another factor that has shown a consistent positive association with well being (Diener, et al., 1999). Those who are married report greater happiness than those who have never been married or those who have been separated, divorced, or widowed. In the same vein, research has shown that in various cultures those who live with a partner are happier than those who live alone (Kurdek, 1991; Mastekaasa, 1995). More generally, close relationships are also associated with well being (Myers & Diener, 1995; Myers, 2000).

Finally, job satisfaction is another factor that has been positively associated with well being. In a meta-analysis looking at the association between job satisfaction and life satisfaction, the average correlation was .44 (Tait, Padgett, & Baldwin, 1989).

Past research has sparingly used any of the variables described above as controls when examining the relationship between materialism and well being. Income was controlled in a few past studies, but those studies only looked at the Richins/Dawson scale and did not use established measures of well being. A small amount of research has controlled for other variables, but these have typically been variables that have not previously been shown to have particularly significant associations with well-being. For example, age and gender were used as controls in prior research (Roberts & Clement, 2007; Ryan & Dziurawiec, 2001). While, age, particularly being younger, was initially believed to be associated with greater happiness (Wilson, 1967), subsequent research found little correlation between age and well being (Diener, et al., 1999). As for gender, while women are reported to experience more depression than men, the relationship between well being and gender is quite small. In fact, it is believed that while women may experience more intense negative emotion they also experience more intense positive emotion and thus the intensity of their emotion in both directions helps to minimize any significant negative association between gender and well being. As a result, controlling for variables such as age and gender may have done little to meaningfully assess the relative strength of the negative relationship between materialism and well being.

There is a need in the research to examine the relationship between materialism and well being while controlling for important background variables that have demonstrated a significant association with well being.

### Brief Overview of the Current Study

The previous literature shows that while the relationship between materialism and well being is well established, the relative strength of that relationship needs to be further assessed. The literature also indicates that any effort to assess the strength of that relationship will benefit from examining each of the prominent scales used to measure materialism and by incorporating well being measures that are particularly meaningful and relevant. Finally, it is important to assess the relationship between materialism and well being with an adult sample.

With these considerations in mind, the current study first examines the basic associations among the three prominent materialism measures. Little research has actually examined the correlations amongst these measures, even as significant theorizing has occurred regarding how each measure represents a different conceptualization of materialism and how the different conceptualizations of materialism represented by each measure relate to one another. Based on correlations obtained, how similar or different are the measures with one another? Are the materialism measures actually correlated with one another in some of the ways previous theorizing suggests? To what degree do the observed correlations support or not support similarities and differences theorized to exist between the different conceptualizations of materialism?

Second, the current study examines the correlations of the prominent materialism measures with two particular aspects of well being: life satisfaction, as measured by the Satisfaction with Life Scale (SWLS), and self esteem as measured by the Rosenberg Self Esteem Scale (RSES). Throughout the years, life satisfaction has been the aspect of well being most examined in relationship to materialism, but little research has involved the SWLS, even though it is a particularly important measure of life satisfaction. Indeed the SWLS has become the most prominent measure of life satisfaction over the past 25 years and is a component of the most well known measure of Subjective Well Being (SWB), which is itself a well being construct that has come to have particular influence in policy discourse and policy decision-making. As for the RSES, it is a long-standing measure of self esteem and self esteem is an important construct of psychological well being. Surprisingly, however, self esteem has been examined sparingly in relationship to materialism and this study attempts to address that point.

Do the materialism measures have the same negative associations with the SWLS and the RSES as they have been shown to have with other measures of life satisfaction and with other measures of well being more generally? In those few situations when certain of the materialism measures have previously been examined in relationship to the SWLS and the RSES, does the current study replicate those relationships and do those relationships continue to exist with an adult, as opposed to an undergraduate, sample?

Third, the current study examines whether or not the negative relationship between materialism and well being is relatively strong and does so with an adult sample. This is achieved by conducting regression analyses, one for each of the two well being measures. In the regression analyses, the well being measures are entered as the

dependent variables and the independent variables are both the materialism measures and particular background variables that previous research has shown to have an association with well being. Past research has not examined the relationship between materialism and well being while controlling for such pertinent variables. Does materialism continue to be negatively associated with well-being after controlling for the influence of these variables?

The regressions also examine which of the specific materialism measures show a unique association with well being after controlling for each other and the pertinent background variables. Are particular materialism measures, if any, uniquely associated with well-being?

## Methods

### Participants

Participants recruited lived in the New York Metro area. Some participants were from New York City and others were from the surrounding areas in New York State and New Jersey. Participants were first recruited as a result of outreach to parent organizations at assorted schools, various community groups, and religious congregations. Point people were contacted by phone and email at these various organizations and a basic explanation of the study was provided both verbally and via email and a flyer. Sometimes a member of the study's team would go to a meeting of a particular organization and provide an introduction of the study to a larger group, with those people who were interested coming up afterwards. Many participants were recruited by the "snowball method", in which participants suggested the names of others whom they believed might volunteer for the study. Snowball sampling provided two sets of siblings and one married couple.

The sample was composed of 71 adults. The mean age, excluding two participants who did not provide their age, was 49. The median age was 48 and the age range was between 29 and 88 (the next oldest person was 74). Fifty-three (75%) of the participants were female and 18 (25%) of the participants were male (see Table 1).

Participants were asked to fill in the blank as to their ethnicity on a demographics form (see Table 1) and 56 (79%) said they were some variation of Caucasian (i.e. German-Jewish, Anglo-Irish, Greek-American, Eastern European, Caucasian). Seven (10%) said they were African American, African-Caribbean American, or Black. Seven

(10%) identified themselves as something else (i.e. Puerto Rican, white Hispanic, Philippino-American, “American”).

Table 1

<i>Sample Demographics</i>	N
<i>Gender</i>	
Male	53
Female	18
<i>Ethnicity/Race</i>	
Caucasian	57
Black	7
Other	7
<i>Religion</i>	
Christian	22
Jewish	22
Atheist	11
Unitarian Universalist	5
Agonstic/Mixed	5
<i>Relationship Status</i>	
Married	53
Living with partner	4
Separated	5
Divorced	3
Single	6
<i>Household Income</i>	
Under \$25,000	0
\$25,001 and \$40,000	2
\$40,001 and \$60,000	2
\$60,001 and \$85,000	10
\$85,001 and \$125,001	17
\$125,001 and \$250,000	16
\$250,001 and \$500,000	13
Over \$500,000	8
<i>Personal Income</i>	
Under \$25,000	9
\$25,001 and \$40,000	3
\$40,001 and \$60,000	11
\$60,001 and \$85,000	10
\$85,001 and \$125,001	14
\$125,001 and \$250,000	6
\$250,001 and \$500,000	6
Over \$500,000	1

Participants were also asked to fill in the blank as to their religion (see Table 1). Twenty-two (31%) described themselves as some variation of Christianity (i.e. Catholic, Episcopalian, Protestant, Presbyterian, Quaker, “Christian”), 22 (31%) as Jewish, 11 (15%) as atheist (i.e. atheist, non-believer, none), 5 (7%) as Unitarian Universalist, and 5 (7%) as agnostic or mixed (i.e. agnostic, “confused”).

When asked to choose from several options regarding their marital or relationship status (see Table 1), 53 (75%) replied that they were married, 6 (9%) were single, 5 (7%) were separated, 4 (6%) were living with a partner, and 3 (4%) were divorced.

Participants selected their household income from one of nine choices (see Table 1). No participants reported household income under \$25,000. Two (3%) reported a household income between \$25,001 and \$40,000, 2 (3%) between \$40,001 and \$60,000, 10 (14%) between \$60,001 and \$85,000, 17 (24%) \$85,001 and \$125,001, 16 (23%) between \$125,001 and \$250,000, 13 (18%) between \$250,001 and \$500,000, and 8 (11%) over \$500,000. There was thus considerable variation in household income, but the sample was a bit skewed toward the high end.

As for personal income (see Table 1), 9 (13%) participants reported personal income under \$25,000. Three (4%) reported a personal income between \$25,001 and \$40,000, 11 (16%) between \$40,001 and \$60,000, 10 (14%) between \$60,001 and \$85,000, 14 (20%) \$85,001 and \$125,001, 6 (9%) between \$125,001 and \$250,000, 6 (19%) between \$250,001 and \$500,000, and 1 (1%) over \$500,000.

## Procedure

Several participants came to the CUNY Graduate Center to partake in the study, but most participants were met at their place of work, home, or a neighborhood location in order to make their participation as easy as possible. Participants signed consent forms and were met with twice. Two sessions were required to complete other elements of the larger project from which the current study is derived. The time between meetings was typically about one week, but there were instances when several weeks passed between meetings. During the first session, participants completed the demographics form, the Satisfaction with Life Scale (SWLS), the Aspirations Index, the Rosenberg Self Esteem Scale (RSES), the Richins and Dawson scale, and the Ger/Belk scale. During the second session, participants completed the Life Evaluation Questionnaire and the Life Satisfaction Questionnaire, both of which were uniquely developed for the current study and assessed several of the background variables of interest. When the protocol of the larger project was completed on the second day, participants were debriefed.

## Measures

*Materialism-* Materialism was measured with three different scales, but because one of those scales has three dimensions, a total of five unique materialism measures were collected.

The first measure of materialism was the Ger/Belk scale. The scale is composed of 23 items (see Table 2 for a list of the items) that together are theorized to examine materialism as a personality trait (Ger & Belk, 1990). The 23 items are rated on a 5-point

Likert scale from strongly disagree to strongly agree. Several items are reverse scored. The scores on each item are then added together to obtain a total score for the scale.

The Ger/Belk scale evolved out of the original Belk materialism scale, with the goal of making a measure that could be used with people from many different cultures. In terms of reliability, the total scale shows alpha levels ranging from .49 to .67 (Ger & Belk, 1990). In terms of validity, the scale was positively correlated with seeing more material objects as “necessities” and negatively correlated with seeing less material objects as “necessities” (Ger & Belk, 1990).

Table 2  
*Ger/Belk Scale Items*

---

1. I don't like to have anyone in my home when I'm not there.
2. Renting or leasing a place to live is more appealing to me than owning one.\*
3. I don't get particularly upset when I lose things.\*
4. I never discard old pictures or snapshots.
5. I am less likely than most people to lock things up\*.
6. I would rather buy something I need than borrow it from someone else.
7. I enjoy having people I like stay in my home.\*
8. I enjoy sharing what I have.\*
9. I don't like to lend things, even to good friends.
10. When friends do better than me in competition it usually makes me feel happy for them.\*
11. I worry about people taking my possessions.
12. I enjoy donating things for charity.\*
13. There are certain people I would like trading places with.
14. I don't seem to get what is coming to me.
15. If I have to choose between buying something for myself versus for someone I love, I would prefer buying for myself.
16. I am bothered when I see people who buy anything they want.
17. People who are very wealthy often feel they are too good to talk to average people.
18. I tend to hang on to things I should probably throw out.
19. When I travel I like to take a lot of photographs.
20. I have a lot of souvenirs.
21. I would rather give someone a gift that will last than take him or her to dinner.
22. I like to collect things.
23. I get very upset if something is stolen from me, even if it has little monetary value.

---

\*Reverse scored

The second measure of materialism was the Richins/Dawson scale. The Richins/Dawson scale is composed of 18 items (see Table 3 for a list of the items) that are theorized to measure materialism as a personal value (Richins & Dawson, 1992). The 18 items are rated on a 5-point Likert scale from strongly disagree to strongly agree. Several items are reversed scored. The scores on all 18 items are then added together to arrive at a total score.

Table 3  
*Richins/Dawson Scale Items*

---

1. I admire people who own expensive homes, cars, and clothes.
2. Some of the most important achievements in life include acquiring material possessions.
3. I don't place much emphasis on the amount of material objects people own as a sign of success.\*
4. The things I own say a lot about how well I'm doing in life.
5. I like to own things that impress people.
6. I don't pay much attention to the material objects other people own.\*
7. I usually buy only the things I need.\*
8. I try to keep my life simple, as far as possession are concerned.\*
9. The things I own aren't all that important to me.\*
10. I enjoy spending money on things that aren't practical.
11. Buying things gives me a lot of pleasure.
12. I like a lot of luxury in my life.
13. I put less emphasis on material things than most people I know.\*
14. I have all the things I really need to enjoy life.\*
15. My life would be better if I owned certain things I don't have.
16. I wouldn't be any happier if I owned nicer things.\*
17. I'd be happier if I could afford to buy more things.
18. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

---

\*Reverse scored

The Richins/Dawson scale shows good reliability, with an alpha ranging between .80 and .88, and a test-retest reliability over three weeks of .87 (Richins & Dawson, 1992). The validity of the Richins/Dawson scale was evidenced in several different manners.

People who scored both high and low on the Richins/Dawson scale were compared on how much income they felt they needed in order to be satisfied and the former group reported needing a significantly higher amount of income. Additionally, people who scored high on the Richins/Dawson scale were shown to value “financial security” *more* and “warm relationships with others” *less* than people who scored low on the scale (Richins & Dawson, 1992).

The third measure of materialism used was the Aspirations Index, which has three dimensions that were examined in the current study. The three dimensions are extrinsic importance, extrinsic likelihood, and extrinsic attainment. The 15 extrinsic goals on the Aspirations Index are rated on a Likert scale from 1 (not at all) to 7 (very) regarding their importance, their likelihood of being attained, and their current attainment (see Table 4 for a list of the 15 extrinsic goals). Subtracted from the importance, likelihood, and attainment mean for these 15 extrinsic goals is then the respective importance, likelihood, and attainment grand means, which is each dimension’s mean across all 35 goals (15 extrinsic, 15 intrinsic, and 5 neutral). The mathematical difference between the extrinsic mean and the corresponding grand mean equals, respectively, an extrinsic importance score, an extrinsic likelihood score, and an extrinsic attainment score (Aspirations Index Scale Description, 2007).

Earlier research has shown the test-retest and internal reliability of extrinsic and intrinsic goals on the Aspirations Index (Ryan, 1998; Kasser & Ryan, 1993, 1996). Additionally, higher order factor analysis has shown that extrinsic and intrinsic goals on the Aspirations Index are distinct when measured along the dimensions of importance and likelihood (Kasser & Ryan, 1996).

Table 4

*Extrinsic Goals on the Aspirations Index*

---

1. To be a very wealthy person.
  2. To have my name known by many people.
  3. To successfully hide the signs of aging.
  4. To have many expensive possessions.
  5. To be admired by many people.
  6. To have people comment often about how attractive I look.
  7. To be financially successful.
  8. To be famous.
  9. To keep up with fashions in hair and clothing.
  10. To be rich.
  11. To have my name appear frequently in the media.
  12. To achieve the "look" I've been after.
  13. To have enough money to buy everything I want.
  14. To be admired by lots of different people.
  15. To have an image that others find appealing.
- 

*Life Satisfaction-* The Satisfaction with Life Scale (SWLS) measured life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is a five-item self-report measure that assesses overall life satisfaction (see Table 5 for the list of items). Respondents rate each of the five items on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). The five items are then added together to arrive at a summary score.

The SWLS shows strong internal reliability, with Chronbach's alpha of .87 and a two-month test-retest coefficient of .82 (Diener, Emmons, Larsen, & Griffin, 1985). Principal-axis factor analysis showed a single factor for the SWLS, accounting for 66% of the variance of the scale. Pavot and Diener (1993) report extensive evidence for the construct validity of the SWLS.

Table 5  
*SWLS Items*

---

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.
- 

*Self Esteem*- The Rosenberg Self Esteem Scale (RSES) assessed self-esteem (Rosenberg, 1965). The RSES is a 10 item self-report measure that assesses global self-esteem (see Table 6 for the list of items). Items are rated on a Likert scale from 1 (strongly disagree) to 4 (agree) and half of the items are reverse scored. All 10 items are then added together to arrive at an overall self-esteem score. In terms of reliability, Chronbach's alpha ranges from .77 to .88 and test-retest correlations range from .82 to .88 (Rosenberg, 1965; Blascovich & Tomaka, 1991; Rosenberg, 1986).

Table 6  
*RSES Items*

---

1. On the whole, I am satisfied with myself.
  2. At times I think I am no good at all.\*
  3. I feel that I have a number of good qualities.
  4. I am able to do things as well as most other people.
  5. I feel I do not have much to be proud of.\*
  6. I certainly feel useless at times.\*
  7. I feel that I'm a person of worth, at least on an equal plane with others.
  8. I wish I could have more respect for myself.\*
  9. All in all, I am inclined to feel that I am a failure.\*
  10. I take a positive attitude toward myself.
- 

\*Reverse scored

*Background Variables-* The background variables examined in the current study were job satisfaction, personal relationships satisfaction, health satisfaction, marriage/partnership status, household income, and personal income. Job satisfaction was assessed with a one-item measure developed for the current study that asked, “Overall, how satisfied do you feel with your job?” The question was answered on a 4-point Likert scale from very unsatisfied to very satisfied. On a similar 4-point Likert scale, personal relationships satisfaction was assessed with a one-item measure developed for the current study that asked, “Overall, how satisfied do you feel with your personal relationships?” Health satisfaction was assessed with a one-item measure developed specifically for the current study that asked, “How satisfied are you with your health and ability to do things?” This question was answered on a 10-point Likert scale. Marriage/partnership status was assessed by a demographics form that asked participants to select one of the following six options: married, living with a partner, single, separated, divorced, or widowed. Single, separated, and divorced were grouped together and coded with a “1” while married and living with a partner were grouped together and coded with a “2”. No participants in the sample indicated that they were widowed. As for household income, on a demographics form participants were asked to select from one of nine categories that best captured their current household income, “including all sources of spouse or partner’s income, investments, inheritances, etc.” The choices were: 1) less than \$15,000 2) \$15,001 to \$25,000 3) \$25,001 to \$40,000 4) \$40,001 to \$60,000 5) \$60,001 to \$85,000 6) \$85,001 to \$125,000 7) \$125,001 to \$250,000 8) \$250,001 to \$500,000 9) over \$500,000. Personal income was assessed in the same manner.

Participants were provided with the same nine options and asked their “current annual income (from your job).”

## Results

As a general overview of the data, Table 7 provides the means, standard deviations, and N's of all of the measures used in the current study. Seventy-one participants were administered the full protocol of a larger research project, but not every measure of the current study was completed by each of those participants. As few as one and as many as five participants did not complete at least one of the materialism and well being measures, and the same was the case for all but one of the measures of the background variables that were used as controls in the multiple regression analyses. Eleven participants did not complete the background variable measure of personal income.

### Associations among Materialism Measures

Zero order correlations were conducted among the three materialism measures to examine their relationship with one another (see Table 8). In terms of the Aspirations Index, each of its three extrinsic dimensions was examined individually in relationship to one another and in relationship to both the Ger/Belk and the Richins/Dawson scales.

The Ger/Belk and the Richins/Dawson scales had a significant positive correlation with one another. The Ger/Belk scale was not correlated with each of the three extrinsic dimensions of the Aspirations Index. In contrast, the Richins/Dawson scale had significant positive correlation with each of the extrinsic dimensions of the Aspirations Index.

Extrinsic importance on the Aspirations Index had a high positive correlation with extrinsic likelihood and a lower, but still strong, positive correlation with extrinsic

attainment. Extrinsic likelihood and extrinsic attainment also had a high positive correlation with one another.

Table 7  
*Means and Standard Deviations of the Study Measures*

	M	SD	N
SWLS	25.96	6.11	67
RSE	32.90	4.66	70
Ger/Belk	64.26	8.59	68
Richins/Dawson	43.85	9.74	66
Aspirations Index Relative Importance	-1.78	.61	71
Aspirations Index Relative Likelihood	-1.37	.49	67
Aspirations Index Relative Attainment	-1.13	.49	70
Job Satisfaction	3.16	.80	69
Relationship Satisfaction	3.49	.70	71
Health Satisfaction	8.43	1.31	69
Marriage/Partnership Status	1.80	.40	71
Household Income	6.68	1.47	68
Personal Income	4.07	1.89	60

#### Associations between Background Variables and Well Being Measures

Zero order correlations were conducted between each of the two well being measures and the six background variables that the literature has previously shown to be associated with well being (see Table 9). Those background variables were marriage/partnered status, personal relationships satisfaction, job satisfaction, subjective health status, personal income, and household income. Correlations were run to see

which of the background variables were significantly associated with each of the well being measures within the data set of the current study. Those background variables that had a significant correlation with each well being measure were then entered as covariates into the respective multiple regression analysis that followed.

Table 8  
*Correlations Among Materialism Measures*

Variable	1	2	3	4	5
1. Ger/Belk	-				
2. Richins/Dawson	.27*	-			
3. Aspirations Index Extrinsic Importance	.15	.47**	-		
4. Aspirations Index Extrinsic Likelihood	.11	.42**	.74**	-	
5. Aspirations Index Extrinsic Attainment	.18	.36**	.46**	.81**	-

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

The Satisfaction with Life Scale (SWLS) had a significant positive correlation with being married/partnered, personal relationships satisfaction, and personal income. It also had a trend level correlation with job satisfaction ( $p < .10$ ). The SWLS did not have a significant correlation with health satisfaction or household income.

The Rosenberg Self-Esteem Scale (RSES) had a significant positive correlation with personal relationships satisfaction and job satisfaction. It also had a trend level positive correlation ( $p < .10$ ) with being married/partnered. Like the SWLS, the RSES did not have a significant correlation with either health satisfaction or household income, but unlike the SWLS, the RSES also did not have a significant correlation with personal income.

Table 9  
*Correlations of Background and Well Being Measures*

	SWLS	RSE
Marriage/Partnered Status	.36**	.22 <sup>+</sup>
Personal Relationships Satisfaction	.54**	.39**
Health Satisfaction	.14	.08
Job Satisfaction	.23 <sup>+</sup>	.32**
Household Income	-.09	-.11
Personal Income	.26*	.11

<sup>+</sup>p<.10 \*p<.05 \*\*p<.01

#### Relationship of Materialism to Life Satisfaction

Zero order correlations were first conducted involving each of the three materialism measures and the SWLS, but because the Aspirations Index contains three dimensions, there were actually five materialism measures correlated with the SWLS (see Table 10). These correlations were run in order to examine the basic relationship between materialism and the SWLS and to see what similarities or differences emerged in the associations between each of the materialism measures and the SWLS.

The Ger/Belk scale had a significant negative correlation with the SWLS. Similarly the Richins/Dawson scale had a significant negative correlation with the SWLS. The extrinsic importance and extrinsic likelihood dimensions of the Aspirations Index had very low and non- significant correlations with the SWLS. In contrast, the extrinsic attainment dimension of the Aspirations Index did have a significant negative correlation with the SWLS.

Table 10  
*Correlations of Materialism and Well Being Measures*

	SWLS	RSE
Ger/Belk	-.36**	-.31**
Richins/Dawson	-.41**	-.42**
Aspirations Index Extrinsic Importance	-.06	-.01
Aspirations Index Extrinsic Likelihood	-.18	-.08
Aspirations Index Extrinsic Attainment	-.38**	-.26*

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

A hierarchical multiple regression analysis was then conducted with the SWLS as the dependent variable and both the materialism measures and the background variables that were significantly related to the SWLS at the zero order level as the independent variables (see Table 11). This regression was conducted to determine which of these materialism measures, if any, continued to have a unique association with the SWLS after controlling for one another and the background variables that the literature has shown to be associated with well being.

In the first step of the hierarchical regression, marriage/partnered status, personal relationships satisfaction, job satisfaction, and personal income were simultaneously entered as covariates. Together these variables were significantly associated with the SWLS ( $F = 7.79, p < .001$ ) and accounted for 40% of the variance of the SWLS. In a second step, the Ger/Belk scale, the Richins/Dawson scale, and the extrinsic attainment dimension of the Aspirations Index were simultaneously added. The overall regression was significant ( $F = 7.97, p < .001$ ) and all together the seven independent variables entered into the regression accounted for 56% of the variance of the SWLS. As a group

taken together, the three materialism measures uniquely accounted for 16% of the variance of the SWLS ( $F = 5.34, p < .003$ ).

Looking at each independent variable, personal relationships satisfaction and personal income were the two background variables from the literature that had significant positive associations with the SWLS after controlling for all of the other independent variables. Personal relationships satisfaction uniquely accounted for 10% and personal income 7% of the variance of the SWLS. Marriage/partnered status and job satisfaction did not have significant associations with the SWLS after controlling for all of the other independent variables.

As for the individual materialism measures, the extrinsic attainment dimension of the Aspirations Index had a significant negative association with the SWLS after controlling for all of the other independent variables, while the Richins/Dawson scale had a marginally significant negative association with the SWLS ( $\beta = -.22, p < .10$ ). Extrinsic attainment uniquely accounted for 6% and the Richins/Dawson scale 4% of the variance of the SWLS. The Ger/Belk scale did not have a significant association with the SWLS after controlling for all of the other independent variables.

#### Relationship of Materialism to Self Esteem

In exactly the same fashion as with the SWLS, zero order correlations were conducted involving each of the three materialism measures and the RSES. Again, because the Aspirations Index contains three dimensions there were actually five materialism measures correlated with the RSES (see Table 10). These correlations were run in order to examine the basic relationship between materialism and the RSES and to

see what similarities or differences emerged in the correlations between each of the materialism measures and the RSES.

The Ger/Belk scale had a significant negative correlation with the RSES, as did the Richins/Dawson scale. Again, the extrinsic importance and extrinsic likelihood dimensions of the Aspirations Index did not have significant correlations with the RSES, and in contrast, the extrinsic attainment dimension of the Aspirations Index did have a significant negative correlation with the RSES.

Table 11  
*Hierarchical Regression Analysis for Controls and Materialism Measures Predicting SWLS (N=52)*

Variable	Final Step Statistics						R <sup>2</sup>	ΔR <sup>2</sup>
	B	SEB	r	β	sr <sup>2</sup>			
Step 1						.40***		
Marriage/Partnered Status	1.16	1.18	.34	.08	.00			
Personal Relationships Satisfaction	3.81	1.19	.58	.42**	.10			
Job Satisfaction	.61	.92	.24	.08	.00			
Personal Income	.84	.32	.26	.27*	.07			
Step 2						.56***	.16**	
Ger/Belk	-.02	.08	-.32	-.02	.00			
Richins/Dawson	-.13	.07	-.43	-.22 <sup>+</sup>	.04			
Aspirations Index Attainment	-3.0	1.23	-.36	-.27*	.06			

<sup>+</sup>p<.10 \*p<.05 \*\*p<.01 \*\*\*p<.001

A second hierarchical regression was then conducted with RSES as the dependent variable and both the materialism measures and background variables that were

significant at the zero order level as independent variables (see Table 12). This regression was conducted to determine which of these materialism measures, if any, continued to have a unique association with the RSES after controlling for one another and the background variables that the literature has shown to be associated with well being.

As a first step the background variables of marriage/partnered status, personal relationships satisfaction, and job satisfaction were simultaneously entered into the regression. Together these three variables were significantly associated with the RSES ( $F = 4.37, p < .01$ ) and accounted for 18% of the variance of the RSES. In a second step, the Ger/Belk scale, the Richins/Dawson scale, and the extrinsic attainment dimension of the

Table 12  
*Hierarchical Regression Analysis for Controls and Materialism Measures Predicting RSES (N=62)*

Variable	B	SEB	Final Step Statistics				R <sup>2</sup>	ΔR <sup>2</sup>
			r	β	sr <sup>2</sup>			
Step 1						.18**		
Marriage/Partnered Status	.51	1.49	.24	.04	.00			
Personal Relationships Satisfaction	1.17	.89	.36	.17	.02			
Job Satisfaction	1.25	.71	.32	.21 <sup>+</sup>	.04			
Step 2						.34**	.16**	
Ger/Belk	-.06	.07	-.32	-.11	.01			
Richins/Dawson	-.16	.06	-.44	-.33**	.08			
Aspirations Index Attainment	-.96	1.13	-.26	-.10	.01			

\*\*p<.01

Aspirations Index were simultaneously entered. The overall regression was significant ( $F = 4.81, p < .01$ ) and in total the six independent variables entered into the regression accounted for 34% of the variance of the RSES. Together the three materialism measures uniquely accounted for 16% of the variance of the RSES ( $F = 4.46, p < .01$ ).

Looking at the independent variables individually after controlling for the influence of the other variables, marriage/partnered status, personal relationships satisfaction, and job satisfaction each did not have a significant association with the RSES, although job satisfaction did have a trend positive association with the RSES ( $\beta = .21, p = .08$ ). Job satisfaction uniquely accounted for 4% of the variance of the RSES.

As for the individual materialism measures, only the Richins/Dawson scale had a significant negative association with the RSES ( $\beta = -.33, p < .01$ ) after controlling for all of the other independent variables. The Richins/Dawson scale uniquely accounted for 8% of the variance of the RSES. Neither the Ger/Belk scale nor the extrinsic attainment dimension of the Aspirations Index had significant associations with the RSES after controlling for all of the other independent variables.

## Discussion

The current study examined the relationship between materialism and well being, with special focus on examining whether the negative association in the literature continued to exist when other important variables previously associated with well being were controlled. The current study also examined the negative relationship between materialism and well being with multiple materialism measures, as little previous research had examined more than one materialism measure in the same study. Additionally, the particular well being measures examined in the current study are important and influential and had been examined little in relationship to materialism in past research. Finally, although some previous research examining the relationship between materialism and well being involved an adult sample, much of it involved college undergraduates. Examining the relative strength of the negative relationship between materialism and well being in an adult sample was an important element of the current study.

Results showed that the negative relationship between materialism and well-being is relatively robust, as materialism continued to have a significant negative association with both life satisfaction and self-esteem after controlling for other important variables associated with well being. Indeed, materialism continued to show a significant association with the well being measures even as factors such as job satisfaction, subjective health status, and personal relationships satisfaction did not. Results also indicated that certain materialism measures - particularly the Richins/Dawson scale and, to a lesser degree, the attainment dimension of the Aspirations Index – demonstrated unique negative associations with the well being measures after controlling for all other

variables. The results suggest these two instruments may be particularly good measures of materialism, especially when examining the association between materialism and well being,

Some of the correlations between specific materialism and well being measures had not been examined previously and thus some of the correlations found in the current study represented new empirical data regarding the negative relationship between specific materialism and well being measures. Finally, correlations among the materialism measures indicated support for some of the relationships theorized to exist among the different conceptualizations of materialism.

#### The Relationships among Materialism Measures

The correlations in the current study among the three materialism measures provide support for the idea that the materialism measures represent associated, but distinct areas within the overall conceptualization of materialism.

The correlation between the Ger/Belk and the Richins/Dawson scales ( $r = .27$ ,  $p < .05$ ) in the current study is almost identical to the one correlation ( $r = .26$ ,  $p < .02$ ) involving these two measures previously referenced in the literature (Kasser & Ahuvia, 2002). This moderate correlation is consistent with previous theorizing that the Ger/Belk scale looks at materialism as a personality trait while the Richins/Dawson scale looks at materialism as a personal value. The correlation itself does nothing to validate the content of these two different theoretical understandings of materialism, but it does suggest that while the Ger/Belk and Richins/Dawson scales to some degree examine a common construct, they seem to be doing so from different vantage points. Additionally,

the correlation in the current study not only replicates the correlation in the one previous study, but also extends the finding to a sample composed of adults, whereas the previous study was with a sample composed of college students.

While the Richins/Dawson scale had significant positive correlations with each of the three dimensions of the Aspirations Index, the Ger/Belk scale did not show significant correlations with any of the three dimensions of the Aspirations Index. The one previous study that examined the Aspirations Index in relationship to both the Ger/Belk and the Richins/Dawson scales only included a measure of extrinsic importance (Kasser & Ahuvia, 2002). That study found that the extrinsic importance measure had significant positive correlations with both the Ger/Belk ( $r = .44, p < .01$ ) and the Richins/Dawson ( $r = .52, p < .01$ ) scales. Thus the lack of significant correlations in the current study between the Ger/Belk scale and each of the three dimensions of the Aspirations Index was surprising. Since both scales are well established measures of materialism, albeit different aspects of materialism, it was expected that the measures would have significant positive correlations, even if those correlations were not particularly strong, as with the correlations found in the current study and previously between the Ger/Belk and the Richins/Dawson scales (Kasser & Ahuvia, 2002).

The insignificant correlations between the Ger/Belk scale and each of the three dimensions of the Aspirations Index indicates that the Ger/Belk scale and the Aspirations Index may have the least in common with one another in how they conceptualize and measure materialism. Indeed Ahuvia and Wong (2002) have commented on how the Belk and Ger/Belk scales are theorized to measure more emotional aspects of materialism whereas the Richins/Dawson scale is theorized to measure more of the cognitive values

associated with materialism. Further, Kasser and Ahuvia (2002) suggested that the Aspirations Index, like the Richins/Dawson scale, is more cognitive in nature. Thus the non-significant correlations found in the current study between the Ger/Belk scale and the Aspirations Index and the significant positive correlations found between the Richins/Dawson scale and the Aspirations Index provide some support for the possible affective/cognitive split among the materialism measures previously hypothesized in the literature.

The correlations among the three dimensions of the Aspirations Index were relatively high, but sizeable differences in the strength of the correlations existed. The extrinsic importance and extrinsic attainment measures had a moderate to high correlation with one another ( $r = .46, p < .01$ ), indicating that they are both strongly associated with one another, but also likely represent distinct concepts within the realm of extrinsic goals. In comparison, the extrinsic likelihood measure had very high correlations with both the extrinsic importance ( $r = .74, p < .01$ ) and extrinsic attainment ( $r = .81, p < .01$ ) measures, suggesting that the dimension of extrinsic likelihood may not represent a particularly unique aspect of extrinsic goals or of materialism more generally. Surprisingly, previous research has not appeared to examine the correlations among the different dimensions of the Aspirations Index and thus the current study indicates what those associations may be.

### The Background Variables and Well Being

A number of the background variables previously shown in the literature to be associated with well being - including marriage/partnered status, personal relationships

satisfaction, and job satisfaction - had significant correlations with the well being measures in the current study, while other of the background variables did not show the expected significant correlations.

Health satisfaction did not show the positive correlations expected with the SWLS or the RSES. The literature indicates that objective measures of health do not show the same positive correlations with well being as do subjective ratings of health, but the measure used in the current study was of subjective health and thus the subjective/objective divide does not explain the insignificant correlations found in the current study. An alternative explanation for the absence of expected significant correlations is that the one-item scale measuring subjective health in the current study asked how satisfied participants were with their “health and ability to do things”. Perhaps the second clause of this item caused a lack of clarity for participants’ as they assessed their subjective health. Another explanation for the absence of the expected positive correlation is that a previously established measure of subjective health, with established psychometric properties, was not used. Finally, results may also have been more in line with expectations if a multiple item measure of subjective health had been used as opposed to the single item measure that was employed.

Past literature indicated a small positive correlation between income and well being, but in the current study household income showed non-significant correlations with both measures of well-being. Thus as overall household income increased, individual well-being did not. The current study suggests that for the sample and those people who are well represented by the sample, more household income may not be correlated with more well-being.

In juxtaposition to the non-significant correlations with household income, personal income had a positive correlation with life satisfaction, but no correlation with self-esteem. It is possible that personal income may measure feelings of success derived from work, while household income may simply measure the means to buy more stuff. Yet if this is the case it is curious that personal income did not have a positive association with self-esteem, as it is reasonable to think that experiences of work success, believed to be represented by increased personal income, would be positively associated with self esteem as much as with life satisfaction. Perhaps only certain types of work success translate into increased personal income and life satisfaction while other types of work success translate into increased self-esteem. Future research should examine the relationship between personal income and various measures of well being to see if the results of the current study are replicated. Is personal income positively associated with certain aspects of well being, such as life satisfaction, and not others, such as self esteem? Are there types of work success that do not translate into increased personal income or life satisfaction, but do translate into increased self esteem?

Returning to the fact that household income had a non-significant association with life satisfaction and personal income had a significant positive association with life satisfaction, the explanation of that incongruity is currently unknown and can only be speculated about. Yet the current study suggests, at least for certain segments of the population, there is satisfaction that may be associated with personal income that is not associated with household income, even though the latter typically is a better gauge of buying power. Future research should examine whether there is a consistent difference in the correlations that household and personal income have with life satisfaction,

particularly for certain segments of the population, and whether any difference found is related to the idea that personal income reflects certain experiences of success while household income does not.

### Materialism and Life Satisfaction

Previous research had not examined the relationships between the Ger/Belk or the Richins/Dawson scales and the SWLS. The current study established a significant negative correlation between these materialism measures and the SWLS, thus expanding the range of well being measures with which the Ger/Belk and the Richins/Dawson scales demonstrate a significant negative correlation. Although an impressive amount of past research has shown a significant negative correlation between the two materialism measures and life satisfaction more generally, measures of life satisfaction other than the SWLS had been used in those previous studies, even as the SWLS became the most prominent measure of life satisfaction over the past 25 years. Additionally, the SWLS, uniquely among life satisfaction scales, is one of three measures combined to compose the most well known measure of Subjective Well Being (SWB) (Diener, 1984, 1994), which itself has become a particularly relevant measure in public policy decision-making. Thus the current study also showed that materialism was correlated with a well being measure that is often looked to when making policy decisions. The more the negative relationship between materialism and well being continues to be evidenced with measures that carry greater weight in policy making, the greater chance policy making can be impacted by the negative relationship that is found.

The extrinsic importance and extrinsic likelihood measures of the Aspirations Index did not have significant correlations with the SWLS in the current study and these results contrast with the one previous study that looked at the relationship between the dimension of extrinsic importance on the Aspirations Index and life satisfaction (Vansteenkiste, Duriez, Simons, & Soenens, 2006). The previous study - which did use the SWLS, but combined it with a vitality measure to construct a “well-being” index - found a significant negative correlation ( $r = -.22, p < .001$ ) between the extrinsic importance measure and that well-being index. Additionally, other research that did not use the Aspirations Index found a negative association between extrinsic goals and the well accepted measure of SWB, of which one component is life satisfaction as measured by the SWLS (Sheldon & Kasser, 1998; Sheldon & Elliot, 1999; Diener, 1984, 1994). These previous findings contrast with the non-significant correlation found in the current study between the measure of extrinsic importance and the SWLS (as well as the non-significant correlation found between the measure of extrinsic likelihood and the SWLS). One aspect of those previous studies that may explain the difference in findings from the present study is that each of those previous studies involved an undergraduate sample, whereas the current study involves an adult sample. Perhaps the dimensions of extrinsic goal importance and extrinsic goal likelihood are negatively associated with life satisfaction in late adolescents and young adults, but the association weakens in adults, many of whom are in the midst of raising families, working, and attempting to balance a multitude of life demands. Additional research should be conducted to help clarify the relationship between the dimensions of extrinsic importance and extrinsic likelihood on

the one hand and life satisfaction, especially as measured with the SWLS, on the other, and to determine if age and stage of life mediate those relationships.

The dimension of extrinsic attainment on the Aspirations Index had not been previously examined in relationship to life satisfaction. Thus the current study showed for the first time a significant negative correlation between the measure of extrinsic attainment and life satisfaction and did so measuring life satisfaction with the particularly influential SWLS. The current study also showed that of the three extrinsic dimensions on the Aspirations Index, extrinsic attainment had the only significant negative correlation with the SWLS.

The current study's finding that the measure of extrinsic attainment showed the only significant negative association with life satisfaction needs to be replicated in future research. No previous study has examined the relationship between extrinsic attainment and life satisfaction and only one study has examined extrinsic attainment in relationship to well being more generally (Kasser & Ryan, 2001). Thus little is known about the dimension of extrinsic attainment and its relationship with well being, let alone how its relationship with well being compares to the relationships that extrinsic importance and extrinsic likelihood have shown with well being in the literature. Is extrinsic attainment, of all the dimensions on the Aspirations Index, uniquely related to well being? This is a question for future research. Nonetheless, it is worth noting that in the current study the measure of extrinsic attainment also had a significant negative correlation with self esteem, while the measures of extrinsic importance and extrinsic likelihood did not. The current study raises the question of what it might mean if the dimension of extrinsic attainment is shown to have a unique, or particularly powerful, negative association with

measures of well being in future research. A possible meaning is that extrinsic attainment may be an incrementally better measure of the degree to which people organize their lives around extrinsic goals than are the dimensions of extrinsic importance or extrinsic likelihood.

The dimension of attainment may reflect a closer link to what people have actually done, rather than what they feel has been important or likely, and it is not unreasonable to think that what people do (action) is a better measure of how people actually organize their lives than what they say (words). Of course, since the Aspirations Index is based entirely on self-report, it is not definitive that the measure of attainment reflects actual behavior in people's lives, as the biases inherent in self-reports are present with the measure of attainment as much as with the measures of importance or likelihood. Nonetheless, it is possible that the dimension of attainment may be capturing a slightly better measure of extrinsic orientation than either the dimensions of importance or likelihood and the results from the current study are consistent with that possibility.

#### Materialism and Life Satisfaction after Controlling for Other Variables

Previous research did not look at the relationship between materialism and life satisfaction after controlling for other important background variables. In the current study, while it is not particularly surprising that the background variables entered into the first step of the regression analysis - marriage/partnered status, personal relationships satisfaction, job satisfaction, and personal income - together accounted for 40% of the variance of life satisfaction, it is compelling that the three materialism measures entered in the second step together accounted for 16% of the variance of life satisfaction. These

results suggest that materialism, measured in several different manners, is not only a factor associated with life satisfaction, but is a relatively strong factor associated with life satisfaction. While previous research consistently showed a significant negative association between materialism and life satisfaction, the current study helps put the strength of that association in context relative to other factors associated with well being. Additionally, the current study indicated materialism's strong association with a life satisfaction measure that has particular credibility in public policy discourse. If future results continue to replicate such a robust association between materialism and measures of Subjective Well Being, they are likely to have an increased chance of influencing policy making as compared to results with other well being measures.

Though the results involving the relatively strong negative relationship between materialism and life satisfaction are relevant to public policy, they are also relevant to clinical work. Clinicians should feel more confident that examining materialistic pursuits in a person's life has a legitimate place in the therapeutic relationship. A concern may be that questioning materialism is a value judgment made by a therapist and thus may not be appropriate as part of the therapeutic process. Yet the research suggests that if examining materialism is a value judgment, it is a value judgment similar to examining other problematic behaviors that have negative consequences for patients. In short, the current study helps support the idea that examining materialism may be similar to the therapist's decision to examine unhealthy relationships or even substance use. Like these other choices that are associated with decreased well being, a therapist must seek to understand the meaning materialism has for each particular patient. What are the motivations fueling a patient's materialism? How does the past of a patient influence the meaning of

materialism in their current life? What does materialism help a patient to avoid or defend against? What is the purpose of materialism in a patient's life?

Differences existed in the relationships each of the materialism measures had with life satisfaction based on the regression analysis. The extrinsic attainment measure of the Aspirations Index showed the strongest negative association with life satisfaction after controlling for all other variables ( $\beta = -.27, p < .05$ ), while the Richins/Dawson scale had a marginally significant negative association ( $\beta = -.22, p < .10$ ). In contrast, the Ger/Belk scale was not associated with life satisfaction after controlling for all the other variables. It was surprising that the extrinsic attainment dimension of the Aspirations Index had the strongest unique association with life satisfaction because extrinsic attainment has been the least examined dimension on the Aspirations Index. These results further support the possibility discussed earlier that extrinsic attainment might be an incrementally better and more precise measure of extrinsic goals orientation than the other dimensions on the Aspirations Index. Further research should focus on the dimension of extrinsic attainment to determine if it demonstrates particular strength as a materialism measure or not.

Of all the independent variables entered into the regression analysis, personal relationships satisfaction showed the strongest unique association with life satisfaction ( $\beta = .42, p < .01$ ), followed equally by both extrinsic attainment ( $\beta = -.27, p < .05$ ) and personal income ( $\beta = .27, p < .05$ ), and then by the Richins/Dawson scale ( $\beta = -.22, p < .10$ ). The strong positive association between personal relationships satisfaction and life satisfaction, after controlling for all other variables, is consistent with various theorizing, from Self Determination Theory to relational psychodynamics, regarding the importance of relationships with people (Deci & Ryan, 2000; Wachtel, 1989, 2003). While

materialism did not show as strong a unique association with life satisfaction as personal relationships satisfaction, the negative relationship, after controlling for all other variables, was significant and was significant as measured by two different materialism scales. Thus materialism showed a relatively strong association with life satisfaction and one that was similar to the relatively strong association evidenced by personal relationships satisfaction. Further, the regression analysis showed that the measure of extrinsic attainment and the Richins/Dawson scale were uniquely associated with life satisfaction, while factors such as marriage/partnership status and job satisfaction were not. Thus two measures of materialism were uniquely associated with life satisfaction when well-established correlates of well being were not. Together these results are unique evidence further supporting the theorizing of economic thinkers like Scitovsky (1976), Hirsh (1976), and Frank (1999) and psychological thinkers like Wachtel (1989, 2003), Kasser (2002), and Deci and Ryan (2000) that materialistic pursuits are a problematic foundation for enduring satisfaction.

Personal income also showed a relatively strong positive association with life satisfaction in the regression. It was surprising to find that personal income showed a significant positive association with life satisfaction in the regression when seemingly potent factors like marriage/partnership status and job satisfaction did not. The results suggest that personal income may have been a proxy for feelings of success and accomplishment that can come from work. Again, further research should seek to replicate the strong positive association between personal income and life satisfaction and also examine whether feelings of success and accomplishment at work mediate that relationship.

Reasons can be hypothesized for the variables that did not have significant associations with life satisfaction in the regression analysis. One reason is that portions of the variance of life satisfaction previously associated with the Ger/Belk scale were likely accounted for by the other materialism measures. Similarly, marriage/partnership status and personal relationships satisfaction are distinct variables, but they are also related, and it is likely that portions of the variance of life satisfaction previously attributable to marriage/partnership status were better accounted for by personal relationships satisfaction when all the variables were entered into the regression.

### Materialism and Self Esteem

The current study appears to be the first to examine the relationship between the Ger/Belk scale and the RSES. In fact, the current study appears to be the first to examine the relationship between the Ger/Belk scale and self esteem more generally. The significant negative correlation found between the Ger/Belk scale and RSES ( $r = -.31$ ,  $p < .01$ ) indicates that greater endorsement of materialism as a personality trait is associated with less self esteem. The current study expands the well being constructs with which the Ger/Belk scale demonstrates a significant negative correlation.

The significant negative correlation found in the current study between the Richins/Dawson scale and the RSES ( $r = -.42$ ,  $p < .01$ ) corroborates the one previous correlation ( $r = -.12$ ,  $p < .05$ ) found in the literature between the Richins/Dawson scale and self esteem (Richins & Dawson, 1992). In that previous correlation, self esteem had also been measured with the RSES. Looking at the two correlations together, the correlation found in the current study appears to be substantially stronger than the

correlation found in the previous study. One possibility is that the “true” negative correlation between personal values materialism and self-esteem is simply stronger than previously determined. Yet this cannot be conclusively determined in based upon the current study. Instead, further research is warranted to determine the actual strength of the negative correlation between personal values materialism and self esteem.

The measures of extrinsic importance and extrinsic likelihood were not correlated with the RSES in the current study. Although an earlier study (Kasser & Ryan, 2001) did report a significant negative correlation between extrinsic importance and self esteem, it was quite small (-.20). The rather similar correlation in that study (-.18) between extrinsic likelihood and self esteem did not achieve statistical significance. The overall findings of Kasser and Ryan’s and the current study suggest that perhaps the dimensions of extrinsic importance and extrinsic likelihood are negatively correlated with aspects of well being such as self actualization and vitality, as previous studies have shown, but not with the distinct well being construct of self esteem. Another possibility is that the current study may be indicating that these two dimensions have a particularly weak or insignificant correlation with self-esteem when it comes specifically to adults, since the previous study showing a significant correlation between extrinsic importance and self-esteem was conducted with college undergraduates. Additional research is suggested to better understand the nature of the correlations each of these two dimensions of the Aspirations Index have with self esteem.

Extrinsic attainment was the one dimension of the Aspirations Index that showed a significant negative correlation with self esteem in the current study. One previous study had looked at the correlation between extrinsic attainment and self esteem, though

not with the RSES (Kasser & Ryan, 2001). In that study the extrinsic attainment measure had a stronger correlation with self-esteem ( $r = -.38, p < .01$ ) than with the measures of extrinsic importance ( $r = -.20, p < .05$ ) or extrinsic likelihood (.18, ns). It seems that the current study may corroborate and elucidate an unnoticed pattern first revealed in the study by Kasser and Ryan (2001); the measure of extrinsic attainment may have stronger negative correlations with self-esteem – and as discussed earlier, with well being more generally - than do the measures of extrinsic importance or extrinsic likelihood.

#### Materialism and Self Esteem after Controlling for Other Variables

Similar to the situation with life satisfaction, previous research had not looked at the relationship between materialism and self esteem after controlling for other important background variables. The background variables of marriage/partnered status, personal relationships satisfaction, and job satisfaction entered together in the first step of the regression analysis in the current study accounted for 18% of the variance in self esteem, while the three materialism measures entered together in the second step accounted for 16% of the variance in self esteem. It is compelling that the materialism measures together accounted for nearly as much of the variance in self-esteem as the background variables. The results of this second regression analysis support a robust association between materialism and self-esteem in particular and materialism and well being more generally. They build upon previous research that established a negative correlation between materialism and self esteem (Richins & Dawson, 1992; Kasser & Ryan, 2001), but extend that previous research by looking at the negative association in the context of and relative to other significant variables.

The Richins/Dawson scale was the only materialism measure that showed a significant negative association with self esteem after all of the other independent variables were controlled ( $\beta = -.33, p < .01$ ). Extrinsic attainment of the Aspirations Index and the Ger/Belk scale did not maintain significant associations with self-esteem once entered into the regression analysis. These results indicate that the Richins/Dawson scale had a particularly robust negative association with self-esteem. These results contrast with those from the multiple regression analysis involving life satisfaction, in which the Richins/Dawson scale had a marginally significant negative association with life satisfaction while the measure of extrinsic attainment had the strongest negative association with life satisfaction. The Ger/Belk scale was consistent in its non-significant associations with life satisfaction and self esteem across both regression analyses.

The non-significant associations the Ger/Belk scale had with both well being measures suggest that it may be a less robust materialism measure. As for the dimension of extrinsic attainment on the Aspirations Index, its non-significant association with self esteem in the second regression analysis suggests using restraint in considering it a particularly strong materialism measure. Although it showed a significant negative association with life satisfaction once all other independent variables were controlled, it did not maintain a significant negative association with self esteem. Nonetheless, the overall results involving the dimension of extrinsic attainment on the Aspirations Index do not contradict the possibility that it is an incrementally better measure of extrinsic goal orientation than the other dimensions of the Aspirations Index. Finally, the significant negative associations the Richins/Dawson scale had with each well being measure when entered into each of the two regression analyses suggest that it may in fact be a

particularly strong materialism measure and one that can be used more broadly. Again, it showed a marginally significant negative association with life satisfaction and a significant negative association with self esteem. No other materialism measure examined in the current study showed a significant relationship with both well being measures after controlling for all other independent variables. Thus the current study suggests that conceptualizing materialism as a personal value, as theorized and operationalized by Richins and Dawson, may be a particularly compelling approach to the study of materialism.

### Study Limitations

There were several limitations to the current study. One limitation was the number of participants. Due to measures that were not completed, though the study began with 71 participants, only 52 participants were included in the multiple regression involving the SWLS and only 62 participants were included in the multiple regression involving the RSES. These are relatively small sample sizes and the results of the study may have limited applicability to a broader population.

The sample was also one of convenience and there is likely a bias in the people who participated. Those who participated were willing to allocate approximately four hours of their time over two separate days and were open to thinking about, discussing, and completing measures regarding the choices they make in their lives regarding money and materialism. Initial success with recruitment was with parent groups and religious/spiritual/philosophical organizations and inroads with these particular groups only resulted in word of mouth recruitment of similar participants. It seems likely that

the people who were active in such organizations and were willing to allocate their time to talk about these topics may have been less materialistic than those people who did not see or respond to communications about the study. As a result it is possible that the sample is composed of participants who are less materialistic. Such a possibility would further limit the population to whom the findings of the study may be applicable. Also, the possibly-biased sample suggests that the validity of the negative relationships found in the current study need to be considered with caution. Future research should attempt to control for selection bias in and see whether the findings in the current study are replicated with other adult samples. In fact, future research may want to look at samples that are skewed with participants believed to be more materialistic, perhaps focusing on participants from professions that are commonly associated with a more materialistic orientation.

At the same time that the weaknesses of the sample are identified, a strength is that it was composed of adults with a mean age of 45, who were in the midst of their busy lives, with many raising children. A significant portion of previous research regarding the relationship between materialism and well being was conducted with college undergraduates, and examining the relationship between materialism and well being with an adult sample is important. Results showing a robust negative association between materialism and well being in an adult sample speak to the possibility that the results may be increasingly applicable to certain pockets of the adult population.

Another limitation of the study was the particular instruments used to measure the background variables that the previous literature had shown to be associated with well being. All of the instruments used to measure these variables were composed of one

item. It is possible that multi-item measures would better assess the particular background constructs, such as subjective health status, personal relationships satisfaction, and job satisfaction. Instruments that better measured the background constructs would either further support or challenge the unique association materialism was shown to have with well being in the multiple regressions of the current study.

The instruments used to measure the background variables were also uniquely constructed for the current study and thus were not shown in prior research to be valid and reliable. Though they show face validity, it would be an improvement to measure the background variables with instruments that have demonstrated psychometric properties.

Similarly, some of the instruments used to measure the background variables were on a Likert scale from one to four while others were on a one to ten scale. Though all instruments do not need to be rated on the same Likert scale, minimizing differences in the range of the Likert scales would help to increasingly standardize the measurement of the background variables and their subsequent influence on the unique relationship between materialism and well being.

The self-report nature of the measures is another limitation of the current study. The measures of well-being, materialism, and the background variables were self-reports and come with the limitations and potential biases inherent with self-reports. For example, self-presentation concerns may have spurred people, be it consciously or unconsciously, to report themselves as less, or more, materialistic than they actually were. Similarly, some people may have rated their well being higher than it actually was in order to save face with the interviewer or, more importantly, themselves. Others may have under-reported their well-being. A goal of future research examining the

relationship between materialism and well-being should be to implement more objective measures where possible.

A theoretical limitation of the current study is that it did not examine the reasons why participants valued materialism and materialistic goals more or less. Research (Carver & Baird, 1998; Deci & Ryan, 2000) points out that looking at *why* materialistic pursuits are valued may be as important as looking at the fact that they are valued. People can have very different reasons for valuing materialistic pursuits. For example, wealth and fame can be valued because people want to feel they have self-worth or because such achievements help in their efforts to end world hunger. While the current study further examines the degree to which the content of people's goals are more or less materialistic and how such goal content is associated with well being, the study does not examine the impact on well being of why particular goals are valued and the interaction between what goals are valued and why they are valued. Looking at both of these aspects together would provide a more nuanced understanding of materialism's relationship with well being.

Different ways of achieving social connectedness is one example of the interesting way in which there may be an interaction between a goal and the reasons the goal is being prioritized. Imagine that some people want to be a part of an exclusive country club in order to experience social connection and cohesion. The motivation is actually quite intrinsic, even if the goal is more extrinsic. Is valuing the country club materialistic even what it is motivated by a desire to experience social connection? Future research should try to answer this question. Yet one does have to wonder what is taking place for people if they need to attain their social connections within an exclusive

setting. Can such people find satisfaction of their needs for social connection in less rarified domains or can social connection only be attained as a result of it being *exclusive* social connection? A possibility may be that being flexible, less concrete, and perhaps even playful in the pursuits with which people fulfill their motivations are factors contributing to less materialism and in better understanding the relationship between materialism and well being.

### Future Directions

Throughout the discussion section of the current study several avenues of future research have been suggested and particular focus is warranted regarding a couple of those topics.

The results of the current study regarding the significant negative association between extrinsic attainment and well being suggest this dimension of the Aspirations Index, and what it may represent, is worth taking a closer look at. It was hypothesized that the dimension of extrinsic attainment may be an incrementally better measure of people's prioritization of extrinsic goals because it may capture what people do more than the dimensions of extrinsic importance and extrinsic likelihood. In the spirit of this possibility, it would be interesting to create another dimension on the Aspirations Index, one that even more directly attempts to measure the manner in which people actually organize their lives around extrinsic goals. A new dimension of the Aspirations Index could ask something to the effect of, "Rate on a scale from 1 to 7 how much each goal is actually a part of your day-to-day life; how much each goal speaks to how you actually spend your time and energy." A relative extrinsic *actuality* score could then be

calculated and this dimension could be compared to the other dimensions of the Aspirations Index in terms of their associations with well-being. It is hypothesized that this new dimension would show stronger negative associations with well being than the dimension of attainment, even while attainment would be expected to show stronger negative associations than the dimensions of extrinsic importance and extrinsic likelihood.

Another idea influenced by the significant results involving extrinsic attainment would be to perform a q sort with the goals of the Aspirations Index, rather than rate them according to Likert scales. This idea comes from the larger project from which the current study was derived. The larger project had two q-sorts in which participants were asked to sort various statements that represented different aspects of daily life, some more materialistic and some more intrinsic/humanistic. Participants were asked to sort the cards once in terms of what they thought was important for a good and happy life and once according to how they actually led their life. A limitation of these q-sorts was that the q-sort items had not been systematically examined as to their validity of representing more materialistic or more intrinsic aspects of life. Using the goals of the Aspirations Index as the q-sort items would help to address the validity issue of the previous q-sort items. Additionally, because the q-sort methodology requires that people rank the q-sort items based on whatever particular directions are given, a q-sort involving the goals of the Aspirations Index would be a new and interesting way to examine the place of extrinsic goals in people's lives. While directions that ask participants to sort the goals according to what is important, what is likely in the future, and what has been attained would be interesting, more interesting might be asking them to sort the cards according to

how they actually live their lives. It is hypothesized that the latter question would more powerfully measure how much people organize their lives around extrinsic goals and thus would show stronger negative associations with measures of well being. Regardless of whether a new “actuality” dimension of the Aspirations Index was examined with Likert scales or the goals of the Aspirations Index were used in a q-sort, another interesting aspect of future research would be to have other people who know participants fill out the materialism measures on the participants. This would be a way of bringing more objectivity to the assessment of materialism and materialism’s relationship with well being. It is important to keep in mind, however, that other people’s assessments of participants’ materialism would have their own potential biases.

The current study’s results show the relative strength of the negative association between materialism and well being and this is an association theorized by various schools of thought, including the more psychodynamic (Wachtel, 1989, 2003). It would be worthwhile for future research to examine the negative relationship between materialism and well being from the unique vantage point of psychodynamic thinking. Thus another area of future research would be to examine the relationship between materialism and psychodynamic constructs of psychological health. Specifically, it would be interesting to see if materialism is associated with a lower quality of object relations. One possibility is that poorer object relations contribute to the development of materialism, a relationship that finds some support in a previous study that examined the impact of mother/child relationships on valuing extrinsic goals (Kasser, Ryan, Zax, & Sameroff, 1995). Another possibility is that materialism contributes to the development of lower quality object relations. Casual pathways aside, an initial focus of future

research could be to see if materialism and quality of object relations have a significant negative association.

A study looking at the relationship between attachment style and materialism is currently being conducted from the larger data set from which the current study was derived. That study, when completed, will provide a better sense of whether there is a negative relationship between emotional development and materialism. Yet attachment style, while greatly impacted by intra-psychic representations, is not a direct measure of self and object representations and a study that more directly assesses these representations, and their relationship with materialism, would be compelling.

Commensurately, one possibility for future research with the larger data set from which the current study is derived would be to examine the qualitative interviews that were conducted with participants and code those interviews for quality of object relations via scales that can be used with narratives (Krohn & Mayman, 1974; Urist, 1977). The coding results could then be examined in relationship to the materialism measures to assess the relationship between materialism and quality of object relations.

### Concluding Summary

The current study examined the relative strength of the relationship between materialism and well being by controlling for important variables in the literature that previously have been shown to have a significant association with well being.

Influential well being measures were used, as were multiple materialism measures, and the relationships were examined with an adult sample.

Materialism showed the relative strength of its negative relationship with well being, as materialism measures continued to show a significant negative association with life satisfaction and self esteem after controlling for the influence of other important background variables. Indeed, background variables that would seem to have especially strong relationships with well being, such as personal relationships satisfaction and job satisfaction, did not continue to show significant associations with the well being measures once all other variables were controlled, whereas materialism did. The attainment dimension of the Aspirations Index and, in particular, the Richins/Dawson scale stood out as strong materialism measures when examining the relationship between materialism and well being. It is also significant to note that the strength of the relationship between materialism and well being was evidenced with a measure of Subjective Well Being and such measures hold increased weight in public policy decision making. The results also lend further support to the appropriate place of examining materialism within the therapy process.

This study also examined the correlations among particular materialism measures and particular well being measures that had not been examined previously. Results expand the measures that show a negative association between materialism and well being. There were some surprising non-significant findings involving the extrinsic importance and extrinsic likelihood dimensions of the Aspirations Index and determining the legitimacy of these non-significant findings is a area for future research

Finally, the study also examined the correlations among materialism measures, providing more empirical support that they are examining the same general construct, but from different vantage points. The correlations also supported particular differences

previously theorized to exist among the different conceptualizations and measures of materialism.

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