EXPLORING THE RELATIONSHIP BETWEEN LONELINESS, MATERIALISM, AND LIFE SATISFACTION IN A WESTERN CONTEXT: THE MODERATING ROLE OF GENDER

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**Abstract:**  
Both loneliness and materialism have been associated with decrement in one's life satisfaction. However, the relationship between loneliness, materialism, and life satisfaction has not been explored in the Western context. Therefore, the present study addresses two issues: (1) the relationship between loneliness and life satisfaction taking into account the mediating role of materialism and (2) the moderating role of gender in the aforementioned mediation model. A research model was proposed. To test the proposed model, data were collected via an online survey administered to U.S. nationals convenience sample (N = 312). Structural equation modeling was used to test the proposed model. Loneliness was negatively related to life satisfaction and positively related to materialism. Contrary to the expectation, materialism was positively related to life satisfaction. Materialism mediated the relationship between loneliness and life satisfaction. Gender did not moderate the relationship between loneliness and materialism, whereas gender did moderate the relationship between materialism and life satisfaction.

**Key words:** loneliness, materialism, life-satisfaction, gender

1. **Introduction**

In recent years, *positive psychology* has caught the attention of the academic community as well as the general public (Lopez & Snyder, 2011). Positive psychology refers to “the scientific study of what makes life worth living” (Lopez & Snyder, 2011, p. xxiii). Several concepts, such as subjective well-being and altruism, come in the purview of positive psychology(e.g., Lopez & Snyder, 2011). Among the various positive psychology topics, *life satisfaction* has received “the most research attention” (Ang, Mansor, & Tan,
Life satisfaction has been characterized as a cognitive assessment of one's own life in general or one's overall judgment of life conditions stemming from one's personal standard (Diener, Emmons, Larsen, & Griffin, 1985). In other words, Shin and Johnson (1978, p. 478) defined life satisfaction as "a global assessment of a person's quality of life according to his chosen criteria." The concept of life satisfaction has been deemed as an important prerequisite for an individual's happiness (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Frisch, 2005) as well as a significant contributor to happiness and a good life. (Peterson, Park, & Seligman, 2005).

Life satisfaction has been studied in relation to various life domains such as childhood/adolescence (Gilman & Huebner, 2003; Huebner, 2004) and agedness (Gray, Ventis, & Hayslip, 1992; Spreitzer & Snyder, 1974). Mahmoud, Staten, Hall, and Lennie (2012) surveyed college-aged students and found that one's life satisfaction predicted an individual's vulnerability to depression. Likewise, life satisfaction has been found to be related to personality variables (e.g., self-esteem (Diener, & Diener, 2009); cultural variables e.g., individualism (Kwan, Bond, & Singelis, 1997; Oishi, Diener, Lucas, & Suh, 2009); demographic variables such as age (Diener et al., 1985) and income (Tang, Arocas, & Whiteside, 1997)). In short, life satisfaction is an important concept, which has received ample attention.

Both loneliness (e.g., Goodwin, Cook, & Yung, 2001) and materialism (e.g., Ryan & Dziurawiec, 2001) have been associated with a decrement in one's life satisfaction. However, the relationship between loneliness, materialism, and life satisfaction has been explored in the Eastern context (Ang et al., 2014); the same has not been explored in the Western context. Given that the psychological mindset of the west differs from that of the east (Triandis, 1996), which is reflected in the behavior of people (Shweder & Sullivan, 1993), this present study attempted to fill the research gap.

The concept of life satisfaction is perceived differently across cultures (Park & Huebner, 2005) due to the difference in their needs and values (Lu, Gilmour, & Kao, 2001; Oishi, Diener, Lucas, & Suh, 2009). Rokach, Orzeck, Cripps, Lackovic-Grgin, and Penezic (2001), in their cross-cultural study, examined the effect of cultural background on loneliness and found that individuals in the west were more prone to loneliness and its negative implications than individuals from the east. Likewise, studies have established cross-cultural difference in materialistic values (Ger & Belk, 1996; Podoshen, Li, & Zhang, 2011), wherein the tendency of using material goods as a status symbol is higher in the east whereas the use of material goods to accentuate self-efficacy is higher for people in the west (Belk & Pollay, 1985). The current research aims to emulate the previous research done on the Malaysian sample (Ang et al., 2014), by focusing on the relationship between loneliness, materialism, and life satisfaction in a western context.

Furthermore, research studies have demonstrated that loneliness (e.g., Borys & Perlman, 1985), materialism (e.g., Workman & Lee, 2011), and life satisfaction (e.g., Calasanti, 1996) vary across gender. Therefore, the present study investigates two issues: (1) the relationship between loneliness and life satisfaction taking into account the mediating role of materialism and (2) the moderating role of gender in the aforementioned mediation model.
2. Literature Review and Hypotheses

Loneliness. Loneliness has been described as individuals’ subjective experience (Gotesky, 1965; Mijuskovic, 2012), which can be experienced at many stages of life (Nilsson, Lindström, & Nåden, 2006). The concept of loneliness surfaced as a full-fledged research area in the 1970s. Weiss (1973) conceived the idea of loneliness as perceived social isolation and lack of connectedness. Rook (1984) defined loneliness as a lack of sense or opportunity for social integration and emotional intimacy. Studies have shown that it is not the quantity but the quality of social connectedness that corroborates the level of loneliness throughout one’s life (Cacioppo & Cacioppo, 2014; Perlman & Peplau, 1984). Tomoka, Thompson, and Palacios (2006, p. 360) defined loneliness as “subjective feeling state of being alone, separated, or apart from others.” Perceived social isolation is considered synonymous with loneliness (Hawkley & Cacioppo, 2010).

It has been observed that loneliness is a common experience, with 80% of those under 18 years of age and 40% of adults over 65 years of age report being lonely sometimes (Berguno, Leroux, McAnish, & Shaikh, 2004; Weeks, 1994). In an extensive review of literature, West, Kellner, and Moore-West (1986) found that loneliness was related to demographics (Borys, & Perlman, 1985; Page & Cole, 1991), psychiatric disorders, and physical disease (Hawkley & Cacioppo, 2010). For example, it has been maintained that loneliness initiates a loop that is accompanied by feelings of hostility, stress, self-consciousness, pessimism, anxiety, and low self-esteem (Cutrona 1982; Hawkley & Caccioppo, 2010; Jones, Freemon, & Goswick, 1981). It affects well-being and give rise to negative emotions such as negative self-assessment, despair, undesirablleness, hopelessness, grief, and distress (Osterman, 2001; Russell, Peplau & Cutrona, 1980) as well as health issues like obesity, fatigue, heart disease and even premature death (Leroy, Murdock, Jarema, Loya & Fagundes, 2017). In across-cultural study, it was found that the people in the west exhibited a greater amount of loneliness in terms of their social insufficiency, self-hostility, disaffection, and social seclusion than their counterparts in the Eastern Europe (Rokach et al., 2001).

Within the domain of life satisfaction, studies found that loners are at greater risk of experiencing lower life satisfaction. The person feels lonely when his/her need for belongingness remains unfulfilled or experiences isolation. An unfulfilled need causes dissatisfaction and reduces well-being (Mellor, Stokes, Firth, Hayashi, & Cummins, 2008).

Thus, loneliness is one of the important predictors of life satisfaction (Civitci & Civitci, 2009). These findings are consistent with the loneliness model, which posits that loneliness is paramount in feeling unsafe, which sets off implicit emotional observation for lifesituations and leads to sleeplessness, illness, and psychological reconciliation (Hawkley & Cacioppo, 2010). Therefore, based on the literature reviewed (e.g., Goodwin, Cook, & Yung, 2001), the following hypothesis is proposed:

H1: Loneliness is negatively related to life satisfaction.

Materialism. Materialism is defined as “the importance a consumer attaches to worldly possessions” (Belk, 1984, p. 291). The meaning of the word “materialism” is rooted in philosophy, which refers to the philosophical conceptualization that nothing exists except matter and its movement (Scott, 2009). In his book, The History of Materialism, Lange
(1873-75, p. 215) noted the then prevalent notion about materialism, as a belief in "material, self-existent things." Today, in common usage, materialism is associated with a tendency to consider material possessions and physical comfort as more important than spiritual values (Oxford Dictionaries, 2012; for a review, see Kasser, 2002; Manchiraju, 2013).

Several studies (e.g., Piko, 2006) have noted the negative relationship between materialism and life satisfaction. A recent meta-analytic study by Dittmar, Bond, Hurst, and Kasser (2014) found that materialism was negatively related to life satisfaction or personal well-being (Roberts, Tsang, & Manolis, 2015; Tsang, Carpenter, Roberts, Frisch, & Carlisle, 2014). One rationale for the aforementioned negative relationship is that materialistic people have low self-esteem and their desire for possessions to satisfy self becomes the reason for their low sense of self-worth and reduce their satisfaction with life in general (Donnelly, Ksendzova, Howell, Vohs & Baumeister, 2016).

Likewise, in some studies, materialism has been associated with loneliness (e.g., Pieters, 2013; Williams, 2014). Materialism has been found to be one of the important factors that augment loneliness and lead to diverging one from keeping relationships (Froh, Emmons, Card, Bono, & Wilson, 2011). People looking for pleasure in material possessions are more likely to indulge in tangible purchases, cut down on their social relationships, and experienceloneliness (Van Boven, & Gilovich, 2003). It has been established that if one attaches too much importance to material possessions, then the social relationships in their lives relegate to the background. A materialistic person in the process of being influenced by the material world and reduced social interaction, tend to experience loneliness (Williams, 2014).

In a longitudinal study, it was found that loneliness and materialism feed each other in a cyclical way (Pieters, 2013). Thus, materialism is the outcome as well as the reason for loneliness, noted by Pieters (2013). Based on the literature reviewed, the following hypotheses are proposed:

\[ H2: \text{Loneliness is positively related to materialism.} \]

\[ H3: \text{Materialism is negatively related to life satisfaction.} \]

\[ \text{Loneliness, materialism, and life satisfaction.} \text{The interconnection between} \]

\[ \text{loneliness, materialism, and life satisfaction has been proposed as early as the 1950s, noted Ang et al. (2014). For example, Adler’s individual psychology theory (Adler, 1959) posits that social interest and feeling of relatedness [to others] are useful in protecting an} \]

\[ \text{individual from experiencing feelings of inferiority. Furthermore, if an individual experiences} \]

\[ \text{feeling of inferiority, a compensatory mechanism gets underway, noted Ang et al. (2014; see also Adler, 1959). For example, when people experience loneliness, they engage in conspicuous consumption as a defensive mechanism (e.g., Kasser, 2002). Therefore, it} \]

\[ \text{has been maintained that loneliness acts as a precursor to materialism, which in turn might influence an individual’s life satisfaction negatively.} \]

\[ \text{In their study, Ang et al. (2014) found that among Malaysian students, loneliness} \]

\[ \text{was positively correlated with materialism (r = .36, p< .001) and negatively correlated with} \]

\[ \text{life satisfaction (r = -.48, p< .001). To date, to our knowledge, there has been only one} \]

\[ \text{study (i.e., Ang et al., 2014), which analyzed the mediating role of materialism between} \]

\[ \text{loneliness and life satisfaction. Ang et al. (2014) analyzed the mediating role of materialism} \]
between loneliness-life satisfaction relationships in an eastern culture (i.e., Malaysia). They found that materialism significantly mediated the relationship between the two aforementioned constructs. Therefore, based on the literature reviewed, the following hypothesis is proposed:

**H4: Materialism mediates the relationship between loneliness and life satisfaction.**

**Gender moderation.** Studies have demonstrated that gender played an important role as a differentiating factor when it comes to key constructs related to the present study. Gender differences have been noted in the context of loneliness (e.g., Borys & Perlman, 1985; Salimi, 2011; Tumkaya, Aybek & Çelik, 2008), materialism (e.g., Workman & Lee, 2011), and life satisfaction (Calasanti, 1996). Borys and Perlman (1985) found in their review that men are more likely to experience loneliness than women. Salimi (2011) also reported the similar results that male university students experience greater loneliness. On the other hand, some studies have found that women may experience greater loneliness than men (e.g., Ang et al., 2014; Bugay, 2007). Yet, in some cases, the findings related to gender differences in the context of loneliness were mixed (Tornstam, 1992).

Ang et al. (2014) found that gender moderated the relationship between loneliness-materialism-life-satisfaction in a collectivistic culture (i.e., Malaysia) context. However, to date, gender moderation between the aforementioned constructs in the context of individualistic culture (e.g., the US) has not been conducted. However, based on the literature review, there is certain evidence that gender might moderate loneliness-materialism-life satisfaction relationships. Therefore, the following hypothesis is proposed:

**H5a:** Relationship between loneliness and materialism is stronger for male participants than female.

**H5b:** Relationship between materialism and life satisfaction is stronger for male participants than female.

3. Methods

**Participants and Procedure:** Primary data was collected through an online survey developed in Qualtrics to test the hypotheses. The convenience sample of U.S. nationals consisting of male and female consumers above 18 years was used.

Data were collected through an online survey administered by a market research company located in the U.S. Prior to data collection, human subject approval was obtained from the Institutional Review Board (IRB) at one of the SouthEastern Universities in the US. Each participant received a nominal financial incentive for which the amount was decided by the market research company.

**Sample Demographics:** A total of 312 usable completed responses were obtained within a one-week period. The majority of the respondents were female (71%), white (82%), and with household income less than $50K (58%). See Table 1 for the detailed demographic profile of the sample. Participants were U.S. nationals above 18 years (mean age = 54 years, SD = 1.49, range 18 to 84 years).

**Instrument:** Existing valid scales for measuring materialism, life satisfaction, and loneliness were used. The online survey devised for collecting data, consisted of four
parts. Part 1 measured life satisfaction, using 5-item life satisfaction scale developed by Diener et al. (1985); Part 2 measured 20-items loneliness scale developed by Russell (1996); Part 3 consisted of 9-items materialism short scale developed by Richins (2004); and part 4 of the survey questionnaire included demographic items (e.g., gender, ethnicity, age group, education level, and household income).

### Table 1: Demographic profile of the sample (n = 312)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28.8</td>
</tr>
<tr>
<td>Female</td>
<td>71.2</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>81.7</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>3.8</td>
</tr>
<tr>
<td>Black/African American</td>
<td>10.6</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>2.6</td>
</tr>
<tr>
<td>25-34</td>
<td>9.3</td>
</tr>
<tr>
<td>35-44</td>
<td>15.4</td>
</tr>
<tr>
<td>45-54</td>
<td>20.2</td>
</tr>
<tr>
<td>55-64</td>
<td>22.1</td>
</tr>
<tr>
<td>65-74</td>
<td>25.3</td>
</tr>
<tr>
<td>&gt; 75</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>High school degree</td>
<td>34.3</td>
</tr>
<tr>
<td>Associate degree</td>
<td>23.1</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>24.4</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>6.7</td>
</tr>
<tr>
<td>Professional or doctorate degree</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; $50,000</td>
<td>57.7</td>
</tr>
<tr>
<td>$50,000-$100,000</td>
<td>24.0</td>
</tr>
<tr>
<td>$100,001-$150,000</td>
<td>12.2</td>
</tr>
<tr>
<td>$150,001-$200,000</td>
<td>4.2</td>
</tr>
<tr>
<td>&gt; 200,000</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Life satisfaction (Diener et al., 1985), as well as materialism (Richins, 2004) measure, used seven points Likert-type scale capturing the intensity of agreement with the statements with 1 representing “strongly disagree” and 7 representing “strongly agree.” For example, one of the items measuring life satisfaction was, “In most ways, my life is close to
my ideal."Also, participants were asked to respond to materialism items (e.g., "I admire people who own expensive homes, cars, and clothes"). Loneliness (Russell, 1996) scale used seven points Likert type scale capturing the intensity of the feeling of loneliness with 1 representing "never" and 7 representing "daily." For example, one of the items measuring loneliness was, "How often do you feel that you lack companionship?"

**Data Analysis:** The present study examined the relationships among research variables such as loneliness, materialism, and life satisfaction. A variety of statistical techniques were used to analyze the data. The descriptive analyses were performed to study the respondents’ profile and characteristics in terms of the three constructs under study. Furthermore, all the scales employed in the study demonstrated adequate internal consistency. The proposed model was tested using structural equation modeling (SEM) to test the proposed hypotheses.

SPSS 22.0 was used to perform descriptive statistics, reliability analysis, whereas MPlus 7.0 was used to run CFA and SEM in order to test the hypotheses H1-H3 (see Figure 1). In order to test the mediation (H4) and moderation (H5) hypotheses, Hayes’ (2012) process tool (as a part of SPSS 22.0) was used.

4. Results

**Preliminary Analysis:** Cronbach’s alpha for life satisfaction, loneliness, and materialism were .93, .94, and .88 respectively, demonstrating the required (i.e., α > .70) internal consistency (Hair, Anderson, Tatham, & Black, 1998). The value of alpha indicates that the items in all the measures are closely related to each other, and scales are reliable for conducting the present study.

**Hypotheses Testing:** A measurement model was tested through structural equation modeling using maximum-likelihood (ML) estimation procedure in order to test H1-H3 (see Figure 1). Because each construct had many items, the present study employed a parceling technique. In the parceling technique, parcels are formed by averaging the scores of two or more items. Parceling items into indicators increase the fit of the model and decreases the chances of biasedness while estimating the structural parameters. Chi–square statistics and Comparative Fit Index (CFI) are reported to assess goodness of fit. The non–significant value of chi–square represents a close fit between the observed and expected values variance–covariance matrices. The value of CFI exceeding .90 constitute acceptable model fit, which means that the model accounts for 90% or more of the covariance among the variables.

<table>
<thead>
<tr>
<th>Model with parcelled items</th>
<th>χ²</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model with parcelled items</td>
<td>86.62*</td>
<td>17</td>
<td>.96</td>
<td>.12</td>
<td>.08</td>
</tr>
</tbody>
</table>

*p<.001

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As shown in the table 2 the measurement model with parceled items resulted in a good model fit. Subsequent structural model resulted in an acceptable fit as well ($\chi^2 = 86.62, df = 17, p < .001$; CFI = .96; TLI = .93; SRMR = .08) based on the comparison with the established model fit indices. See Figure 1 for standardized path coefficients.

Path coefficients revealed that loneliness was negatively related to life satisfaction ($\beta = -.63, p < .0001$) and positively related to materialism ($\beta = .20, p = .001$), thus supporting $H1$ and $H2$. Contrary to the expectation, materialism was positively related to life satisfaction ($\beta = .23, p < .0001$). Thus, $H3$ was not supported. This model explained 38.9% of the variance in the life satisfaction ($R^2 = .389, p < .0001$).

![Diagram](image)

**Figure 1: Hypothesized Research Model**

*Note: * Standardized path coefficients at $p<.01$

Separate analysis was conducted in SPSS to test $H4$ (mediation) and $H5$ (moderation) hypotheses. To test the indirect effects, the mediation model ($H4$) was run using Hayes' tool (2002), where materialism was used as a mediating variable. This model was significant ($F = 68.11, p < .0001$) explaining 30.6% variance in life satisfaction. These results support the mediational hypothesis $H4$ (see Table 3). Thus, mediation analysis revealed that materialism fully mediated the relationship between loneliness and life satisfaction.

**Table 3: Materialism as a mediator between loneliness and life satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>se</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>28.11</td>
<td>1.21</td>
<td>23.11</td>
<td>.000</td>
<td>25.72</td>
<td>30.51</td>
</tr>
<tr>
<td>Loneliness</td>
<td>-.15</td>
<td>.01</td>
<td>-11.67</td>
<td>.000</td>
<td>-.1750</td>
<td>-.1245</td>
</tr>
<tr>
<td>Materialism</td>
<td>.10</td>
<td>.03</td>
<td>2.76</td>
<td>.0061</td>
<td>.0262</td>
<td>.1560</td>
</tr>
</tbody>
</table>

To test the moderation effect of gender (see Figure 2) between loneliness and materialism ($H5a$) as well as materialism and life satisfaction ($H5b$), Hayes' (2012) moderation models were analyzed. This analysis revealed that gender did not moderate the relationship between loneliness and materialism ($t = .87, p = .387$), whereas gender did moderate the relationship between materialism and life satisfaction ($t = -2.10, p = .036$).
Thus, $H5a$ was not supported, but $H5b$ was supported. More specifically, the relationship between materialism and life satisfaction became stronger for male participants than female participants.

**Table 4: Gender moderation results between loneliness and materialism**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
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<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>32.35</td>
<td>.63</td>
<td>51.09</td>
<td>.000</td>
<td>31.1096</td>
<td>33.6016</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.23</td>
<td>1.37</td>
<td>-.90</td>
<td>.37</td>
<td>-3.9246</td>
<td>1.4563</td>
</tr>
<tr>
<td>Loneliness</td>
<td>.09</td>
<td>.02</td>
<td>4.13</td>
<td>.000</td>
<td>.0490</td>
<td>.1383</td>
</tr>
<tr>
<td>Gender X Loneliness</td>
<td>.04</td>
<td>.05</td>
<td>.87</td>
<td>.387</td>
<td>-.0565</td>
<td>.1455</td>
</tr>
</tbody>
</table>

**Table 5: Gender moderation results between materialism and life satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>se</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>21.86</td>
<td>.44</td>
<td>49.64</td>
<td>.000</td>
<td>20.9928</td>
<td>22.7258</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.19</td>
<td>.98</td>
<td>-1.21</td>
<td>.2254</td>
<td>-3.1126</td>
<td>.7364</td>
</tr>
<tr>
<td>Materialism</td>
<td>.004</td>
<td>.04</td>
<td>.09</td>
<td>.93</td>
<td>-.0839</td>
<td>.0915</td>
</tr>
<tr>
<td>Gender X Materialism</td>
<td>-2.23</td>
<td>.11</td>
<td>-2.10</td>
<td>.036</td>
<td>-.4364</td>
<td>-.0143</td>
</tr>
</tbody>
</table>

![Diagram](image)

**Figure 2: Hypothesized Research Model with Gender as a moderator.**

*Note:* *t*-values at $p < .01$.

An alternate mediation model (see Figure 3) was also tested, where loneliness was considered as a mediator. This model was significant ($F = 19.73$, $p = .000$) explaining 5.9% variance in life satisfaction. Mediation analysis revealed that loneliness mediated the relationship between materialism and life satisfaction.
Table 6: Loneliness as a mediator between materialism and life satisfaction

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>se</th>
<th>t</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>28.11</td>
<td>1.21</td>
<td>23.12</td>
<td>.000</td>
<td>25.7197</td>
<td>30.5050</td>
</tr>
<tr>
<td>Materialism</td>
<td>.09</td>
<td>.03</td>
<td>2.76</td>
<td>.006</td>
<td>.0262</td>
<td>.1560</td>
</tr>
<tr>
<td>Loneliness</td>
<td>-.15</td>
<td>.01</td>
<td>-11.67</td>
<td>.000</td>
<td>-.1750</td>
<td>-.1245</td>
</tr>
</tbody>
</table>

Figure 3. Alternate Mediation Model

5. Discussion

The primary goal of the present study was to investigate the relationships between loneliness-materialism-life satisfaction in a western individualistic cultural context. Therefore, the present study was conducted among the US participants who were recruited via a market research company. Consistent with our proposition, H1, H2, H4, and H5 (b) were supported. Per H1, loneliness is negatively related to life satisfaction. The aforementioned finding is consistent with previous literature (e.g., Ang et al., 2014). Likewise, H2 posited that materialism is positively related to loneliness. This hypothesis support is consistent with the literature (e.g., Pieters, 2013). H4 proposed that materialism mediates the relationship between loneliness and life-satisfaction. The aforementioned relationship has not been explored in at least western cultural context using a non-student sample. However, the finding is consistent with Ang et al. (2014) findings, which employed Malaysian college students. They found that materialism mediated the relationship between loneliness and life satisfaction. In other words, even in the context of the US, it is a valid proposition that lonely individuals strive for materialistic possession, which in turn leads to decrement in one’s level of life satisfaction. Pieters (2013) noted that the bidirectional relationship between loneliness and materialism—materialism leads to social isolation, and social isolation leads to materialism. This bidirectional nature of the materialism-loneliness relationship was also captured in the alternate model proposed in the present study. Furthermore, loneliness has been associated with the host of other problems, such as shyness and inferiority complex (Kasser, 2002). Finally, gender moderated the relationship between materialism and life satisfaction. Contrary to previous
findings in a collectivistic cultural context (e.g., Malaysia; Ang et al., 2014) where male
gender moderation was significant, in the present study in an individualistic cultural context
(i.e., the USA) found that the female gender moderation was significant, but not males.

The aforementioned contrary finding could be attributed to the conceptualization of
loneliness construct. There has been debated whether loneliness should be conceived as
a uni-dimensional or multi-dimensional in nature (Schumaker, Shea, Monfries & Groth-
Marnat, 1993). For instance, the UCLA loneliness scale that was employed in the present
study principally measures emotional loneliness (Schumaker et al., 1993). However, it has
been noted that other aspects (e.g., cultural context) should be considered in the
loneliness construct (Scalise, Ginter, & Gerstein, 1984). Consistently, Schumaker et al.
(1993) noted that the loneliness scale employed in the present study capture negative
affect in a western cultural context. Thereby, in the present study since the sample was
drawn from a strongly individualistic culture (i.e., the USA), where women tend to report
higher negative affect than men (e.g., Fujita, Diener, & Sandvik, 1991), it is not surprising
to find a significant relationship among the involved constructs in the context of the former.
From a practical perspective, the findings of the present study are useful in psychological
intervention programs and the development of cause-related marketing campaigns. The
study has several short-comings, which include social desirability bias and causal linkage
between loneliness-life satisfaction relationships, among others.

6. References

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