The Relationship of Socioeconomic Status and Counseling Outcomes

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The Relationship Between Socioeconomic Status and Counseling Outcomes

Lisa D. Hawley
Todd W. Leibert
Joel A. Lane

In this study, we examined the relationship between various indices of socioeconomic status (SES) and counseling outcomes among clients at a university counseling center. We also explored links between SES and three factors that are generally regarded as facilitative of client change in counseling: motivation, treatment expectancy and social support. Regression analyses showed that, overall, SES predicted positive changes in symptom checklists over the course of treatment. Individual SES variables predicting positive change were educational attainment and whether the client had health insurance. SES was not associated with motivation, treatment expectancy or social support. Implications for SES research and counseling are discussed.

Keywords: socioeconomic status, counseling outcomes, social support, motivation, treatment expectancy, university counseling center

There is a robust relationship between socioeconomic status (SES) and mental health (Goodman & Huang, 2001; Strohschein, 2005), a finding that researchers have consistently replicated (Adler, Epel, Castellazzo, & Ickovics, 2000; Kraus, Adler, & Chen, 2012; Muntaner, Eaton, Miech, & O’Campo, 2004; von Soest, Bramness, Pedersen, & Wichström, 2012). Furthermore, researchers have linked SES to important outcomes in a number of domains, including academic achievement and employability (Blustein et al., 2002) and health service utilization (Goodman & Huang, 2001). Pope-Davis and Coleman (2001) argued that SES is an important cultural variable that is closely aligned with race and gender. Despite the risk factor that SES poses for mental health and well-being, the current literature does not empirically represent SES as much as other cultural variables, especially with regard to counseling outcome research (Falconnier, 2009; Liu, 2011). To respond to this shortcoming, we investigated potential links between SES and counseling outcome.

SES and Mental Health

SES as a Variable of Study

In the last 20 years, two content analyses have reviewed cultural variables and SES within counseling (Liu, Soleck, Hopps, Dunston, & Pickett, 2004; Pope-Davis, Ligiero, Liang, & Codrington, 2001). Liu et al. (2004) reviewed three journals from 1981–2000 and concluded that SES was mainly studied post hoc, and used primarily to account for unexplained variance. Similarly, focusing on the Journal of Multicultural Counseling between the years of 1985 and 1999, Pope-Davis et al. (2001) analyzed the content of articles for prominent multicultural variables and found that SES was underexamined as a primary variable of study. Taken together, both content analyses pointed to an overall lack of attention to SES in mental health counseling literature.

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There is agreement regarding the multicultural and social justice relevance of economic empowerment and SES in the field of counseling (Ratts, Toporek, & Lewis, 2010); however, available SES counseling literature is predominantly conceptual and not empirical. There are several possibilities for the overall lack of empirical investigations into SES and counseling outcomes. First, only recently have mental health counselors made a concerted effort to empirically demonstrate counseling outcomes (Hays, 2010). In addition, Smith, Chambers, and Bratini (2009) opined that, while research on the pathogenic impact of poverty on emotional well-being is robust and logical, the development of practitioner-based interventions has been limited. The counseling profession has not been a leader in empirically studying this complex variable, which further limits the profession’s contributions to research-based interventions. Moreover, SES is complex (Liu et al., 2004); its etiology is often interconnected with mental health risk factors. One challenge of SES research, then, is effectively conceptualizing which aspect of the variable to address first. This challenge is best expressed in the old adage “Which came first, the chicken or the egg?” In other words, do lower SES levels lead to higher rates of mental health disorders or do higher rates of mental health disorders lead to lower SES levels? Eaton, Muntaner, Bovasso, and Smith (2001) identified four possible answers: (a) Lower SES raises the risk of developing a mental health disorder, (b) lower SES prolongs the duration of a mental health disorder episode, (c) mental health disorders lead to downward social mobility or (d) mental health disorders hinder attainment of upward SES status. It also is plausible that these answers are not mutually exclusive, further complicating the role of SES in mental health.

Objective Versus Subjective Indicators of SES

Another possible reason for the limited pursuit of SES research is the difficulty in operationalizing SES. As a construct, SES is multifaceted, impeding the use of discrete variables (Liu et al., 2004). Frequently it is measured using objective, actuarial data such as household income, occupation, zip code and healthcare coverage. However, Braveman et al. (2005) demonstrated that objective indicators of SES, such as education and income, are inadequate because they are not interchangeable with other SES indicators of wealth, education and neighborhood (e.g., zip code clusters). Braveman et al. (2005) concluded that better measures were needed, especially subjective SES measures, such as perceptions of financial security and broad, culturally driven definitions such as lower-, middle- and upper-class SES levels (Adler et al., 2000; Dennis et al., 2012). Other researchers have reached similar conclusions after using both subjective and objective markers of SES (Adler et al., 2000; Hillerbrand, 1988). Even formal measures of SES, including the Hollingshead’s SES indicator (Hollingshead, 2011) and the Duncan Socioeconomic Index (Duncan, 1961), make limited use of subjective measurement strategies. Liu, a leading advocate for the study of SES in counseling, emphasized the need for a multidimensional approach for data collection to best capture contemporary client experiences (Liu, 2011; Liu et al., 2004). In this article, we integrate subjective and objective variables and examine their impact on clinical outcomes.

SES and Clinical Outcomes

In general, psychotherapy reviews show that higher SES is associated with greater therapy retention (Clarkin & Levy, 2004; Petry, Tenen, & Affleck, 2000). However, SES is not consistently related to symptom reduction (Petry et al., 2000). On the other hand, SES does relate to counselor perceptions of the client. For example, in one study at a university counseling center, 163 case files were randomly selected to evaluate the association between the Hollingshead SES rating scale and therapy outcome (Hillerbrand, 1988). According to the results, counselors rated clients with lower SES levels as having greater dysfunction, greater goal disagreement about treatment and less successful counseling outcomes. Mental health practitioners have perceived clients as less motivated when they have lower SES levels (Leeder, 1996) and lack similar social support (Beatty, Kamarck, Matthews, & Shiffman, 2011). In another study, counselors and counselor trainees rated case vignettes and videos of presenting problems featuring clients from either lower or higher SES (Dougall & Schwartz, 2011).
Again, counselors rated lower-SES clients as having more severe problems than higher-SES clients. These results reflect other research investigating perceptions and attitudes about lower-SES populations. Historically, clinicians have tended to view poorer clients as lacking in effort (Feagin, 1975; Kluegel & Smith, 1986) and motivation (Seccombe, James, & Walters, 1998), and as being apathetic and passive (Leeder, 1996). Although these studies provide some useful information regarding the present line of inquiry, studies related to clinical outcome and SES as a main variable of study are sparse (Liu, 2011). There is a need to better refine and understand the relationship between SES and mental health.

**Present Study**

To address the dearth of counseling outcome studies examining SES, the primary purpose of the present study was to prospectively explore the relationship between SES indicators and counseling outcome. In light of the aforementioned SES literature (e.g., Braveman et al., 2005; Adler et al., 2000), we conceptualized SES as including a combination of objective data and subjective self-perceptions regarding class. Thus, in operationalizing SES as a variable of study, we collected commonly researched objective indices—namely educational attainment, household income and health insurance status, as well as subjective data including client perceptions of financial security and class level.

In the present study, we also examined potential links between SES and three psychological variables thought to facilitate positive change through counseling: client motivation, treatment expectancy and social support. Also of interest was the degree to which the expectation of positive outcome through therapy was linked to SES and counseling outcome. If lower-SES clients indeed fit the perception of increased apathy, we conjectured that these clients would report lower levels of expectation for improvement. Lastly, social support was relevant to this study because it can minimize the impact of lower SES on mental health (Beatty et al., 2011). For example, in a recent study of homeless individuals, social support mediated everyday stressors (Irwin, LaGory, Richey, & Fitzpatrick, 2008). Additionally, Beatty et al. (2011) showed that lower childhood SES was related to less perceived social support. In summary, lower SES level is potentially related to reduced client motivation, treatment expectancy and social support.

Thus, we tested two main hypotheses. First, we hypothesized that lower SES levels were linked to lower levels of client motivation, treatment expectancy and subjective social support. Second, we hypothesized that objective SES variables (e.g., education level, income, health insurance status) and subjective SES variables (e.g., perceived financial security, perceived SES) predicted counseling outcome. Because results have been inconclusive about the primacy of objective versus subjective SES variables, as well as the most predictive combination of SES variables, we entered both sets of predictors into one block of a regression analysis to explore which variables uniquely accounted for variance in outcome. Finally, we tested whether psychological variables (e.g., client motivation, treatment expectancy, social support) explained outcome variance beyond that accounted for by SES variables.

**Method**

**Participants and Procedure**

Study participants were adult clients starting counseling at an on-campus university training center. The center, located in a Midwestern suburban area, serves both university students and individuals from surrounding communities at no cost, and is staffed by students enrolled in a CACREP-accredited counseling program.

Between January and April 2010, front desk staff at the training center provided new adult clients with the consent form and study measures, which included the Outcome Questionnaire-45.2 (OQ; Lambert et al., 2003),
one item from the Social Adjustment Scale—Self Report (SAS-SR; Weissman & Bothwell, 1976), the Subjective Social Support (SSS) subscale of the Duke Social Support Index (DSSI; Blazer, Hybels, & Hughes, 1990), the Treatment Expectancy Scale (TES; Sotsky et al., 1991), and numerous demographic questions including gender, race, age, relationship status, reasons for entering counseling, income, educational attainment and health insurance status. Clients who consented to participate completed all forms and returned them to the front desk before beginning their initial counseling session. Participants completed the OQ prior to each subsequent counseling session. The method of asking participants to complete OQs prior to each session offers at least two advantages for outcome researchers (Ogles, Lambert, & Fields, 2002): (a) It reduces confusion over when to administer outcome measures, and (b) it reduces potential data loss from unexpected dropout because the last available measure serves as the posttest (Ogles et al., 2002). In the current study, 54 clients consented to participate and completed an initial OQ, at least one additional OQ (posttest) and the other study measures.

The clients reported coming to counseling to address various personal and career-related issues such as relationship difficulties, anxiety, depression, job loss and career transition. The majority estimated that their presenting concern had lasted on and off for the last few years (38.8%). The ages of the participating clients ranged from 19–79 years old ($M = 38.76$, $SD = 12.41$) and most (61.2%) were female. The majority of the sample described themselves as Caucasian (91.8%) and married/partnered (30.6%). Others reported being unmarried (24.5%), divorced/widowed/separated (22.4%) or dating (22.4%). The majority of the sample reported being employed (65.3%), with 16.3% indicating no job and 18.4% leaving the response blank. One participant was a university student.

Measures

Outcome Questionnaire—45.2. The OQ is a standardized, 45-item self-report instrument that is commonly used as a general “index of mental health” (Lambert et al., 2003, p. 10). The items utilize 5-point Likert scale responses ranging from 0 (never) to 4 (almost always) to determine the severity of various symptoms and psychosocial stressors, resulting in a score ranging from 0–180. Concurrent validity has been established between the OQ Total Score and various other measures of symptomology (e.g., Behavior and Symptom Identification Scale [BASIS-32] Depression and Anxiety subscale; Doerfler, Addis, & Moran, 2002). Construct validity is demonstrated by the OQ’s sensitivity to client change and ability to discriminate between clinical and non-clinical populations (Lambert et al., 2003). The manual (Lambert et al., 2003) reports high internal consistency ($\alpha = .93$) and 10-week test-retest reliability (.66–.86).

Objective SES. Objective SES was operationalized using three indicators: education level, income and health insurance. For education level, participants indicated their educational attainment, with answer choices ranging from 1 (some high school) to 8 (Ph.D. or equivalent). Income level was assessed by asking participants to indicate their yearly household income, with a continuum of choices ranging from 1 (under $10,000) to 8 (over $100,000) in $10,000–$20,000 increments. Health insurance was dichotomously assessed by asking participants to indicate whether they were receiving health insurance benefits—either through an employer, Medicaid or other source—or were uninsured (see Table 1 for descriptive statistics regarding the SES variables).

Subjective SES. Subjective SES was operationalized using two indicators: perceived financial security and perceived SES. Perceived financial security was measured using one item from the SAS-SR (Weissman & Bothwell, 1976). Participants were asked if they had had enough money for their financial needs in the past 2 weeks. The item was rated on a 5-point scale ranging from 1 (I had great financial difficulty) to 5 (I had enough money for needs). Regarding perceived SES, participants were asked to choose “the economic class that best describes you” on a three-point scale corresponding to either 1 (lower), 2 (middle) or 3 (upper economic class). With each subjective variable, we did not analyze differences between financially independent versus dependent clients since only one participant was a university student.
### Table 1

**Frequencies of Participant Responses for SES Variables (N = 49)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
<th>%</th>
<th>(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education level</strong></td>
<td>1.80 (1.08)</td>
<td>0.0%</td>
<td>(0)</td>
</tr>
<tr>
<td>Did not finish high school</td>
<td>0.0%</td>
<td>(0)</td>
<td></td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>4.1%</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>40.8%</td>
<td>(20)</td>
<td></td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>40.8%</td>
<td>(20)</td>
<td></td>
</tr>
<tr>
<td>In master’s program</td>
<td>2.0%</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>10.2%</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>In doctoral program</td>
<td>2.0%</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>0.0%</td>
<td>(0)</td>
<td></td>
</tr>
<tr>
<td><strong>Income level</strong></td>
<td>4.04 (1.99)</td>
<td>4.1%</td>
<td>(2)</td>
</tr>
<tr>
<td>$0–$10,000</td>
<td>4.1%</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>$10,000–$20,000</td>
<td>22.4%</td>
<td>(11)</td>
<td></td>
</tr>
<tr>
<td>$20,000–$30,000</td>
<td>26.5%</td>
<td>(13)</td>
<td></td>
</tr>
<tr>
<td>$30,000–$40,000</td>
<td>8.2%</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>$40,000–$60,000</td>
<td>8.2%</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>$60,000–$80,000</td>
<td>18.4%</td>
<td>(9)</td>
<td></td>
</tr>
<tr>
<td>$80,000–$100,000</td>
<td>6.1%</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>&gt; $100,000</td>
<td>6.1%</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td><strong>Health insurance status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td>46.9%</td>
<td>(23)</td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>53.1%</td>
<td>(26)</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived financial security</strong></td>
<td>3.45 (1.57)</td>
<td>20.4%</td>
<td>(10)</td>
</tr>
<tr>
<td>Great financial difficulty</td>
<td>20.4%</td>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>Usually not enough money</td>
<td>10.2%</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Enough money half the time</td>
<td>10.2%</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Usually enough money</td>
<td>22.4%</td>
<td>(11)</td>
<td></td>
</tr>
<tr>
<td>Enough money for needs</td>
<td>36.7%</td>
<td>(18)</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived SES</strong></td>
<td>1.73 (0.49)</td>
<td>28.6%</td>
<td>(14)</td>
</tr>
<tr>
<td>Lower economic class</td>
<td>28.6%</td>
<td>(14)</td>
<td></td>
</tr>
<tr>
<td>Middle economic class</td>
<td>69.4%</td>
<td>(34)</td>
<td></td>
</tr>
<tr>
<td>Upper economic class</td>
<td>2.0%</td>
<td>(1)</td>
<td></td>
</tr>
</tbody>
</table>

**Subjective Social Support.** Social support was measured using the SSS subscale of the DSSI (Blazer et al., 1990). The SSS consists of 10 items rated on a 3-point scale; for this study, however, a 5-point Likert-type scale was used, resulting in a possible range of 10–50. Prior studies incorporating the 5-point scale have demonstrated enhanced internal consistency compared to the 3-point scale of the original version, and comparable scale correlations indicative of concurrent validity (Leibert, 2010). Items pertain either to the perceived frequency of positive, fulfilling family and peer interactions (1 = none of the time, 5 = all of the time) or to the degree of satisfaction with family and peer relationships (1 = extremely dissatisfied, 5 = extremely satisfied). Internal consistency was good in the present study ($\alpha = .82$).
Client Motivation for Therapy Scale. Motivation, conceptualized using self-determination theory (Ryan & Deci, 2000), postulates six types of motivation along a continuum from intrinsic to external to no motivation (i.e., amotivation). The 24-item Client Motivation for Therapy Scale (CMOTS; Pelletier, Tuson, & Haddad, 1997) has six 4-item subscales that measure each type of motivation while one is receiving therapy. We were interested in two CMOTS subscales that could be used before counseling began in order to assess pretreatment motivation levels potentially associated with SES variables. Those subscales included identified motivation (e.g., attending counseling “because I would like to make changes to my current situation”) and external motivation (e.g., attending counseling “because other people think that it’s a good idea for me to be in therapy”). Participants rated their reasons for participating in counseling on a 7-point scale (1 = does not correspond at all, 7 = corresponds exactly). A summary score for each subscale was created using its arithmetic mean. The CMOTS was validated on 138 inpatient and outpatient clients seeking help for a variety of mental health concerns (e.g., self-esteem, interpersonal problems; Pelletier et al., 1997). Internal reliability coefficients in the present study were acceptable for identified motivation ($\alpha = .76$) and external motivation ($\alpha = .80$).

Treatment Expectancy Scale. Client expectation for positive treatment outcome was measured using the TES (Sotsky et al., 1991). The TES consists of a single item: “Which of the following best describes your expectations about what is likely to happen as a result of your treatment?”, with responses ranging from “I don’t expect to feel any different” (1) to “I expect to feel completely better” (5). Although reliability data was not reported, the TES was one of the strongest client predictors of outcome in the National Institute of Mental Health Treatment of Depression Collaborative Research Program, a large randomized control trial (Meyer et al., 2002; Sotsky et al., 1991).

Analyses

Data analyses followed the guidelines for outcome research that Ogles et al. (2002) outlined. Primary analyses included correlation and multiple regression techniques, beginning with tests of the assumptions of regression (Cohen, Cohen, West, & Aiken, 2003). A repeated measures $t$ test was used to evaluate pre-post change, and ANCOVAs were used to test the need to include various covariates as control variables in the regression analyses. For each participant, the initial OQ total score was considered the pretest score and the last OQ completed was used as the posttest. Because computing a simple difference score between pretest and posttest is subject to regression to the mean (i.e., highest initial scores change the most), we analyzed outcome by partialing out the OQ pretest scores from OQ posttest scores in the first step of the hierarchical multiple regression analysis (Hill & Lambert, 2004). Before conducting hypothesis tests, we inspected data for potential violations of univariate and multivariate assumptions in multiple regression analyses, including outliers, atypical scores, multicollinearity and assumptions of linearity, normality and homoscedasticity (Cohen et al., 2003). Five cases showed highly atypical scores according to recommended cutoff guidelines (Cohen et al., 2003) in small data sets (i.e., $DFFITS > 1$) and were removed before hypothesis testing. No further problems were evident.

Initial analyses were conducted to determine whether any demographic variables should be included as covariates in the regression model. Aside from age and length of time in counseling, demographic variables were categorical: gender, marital status (unmarried versus married) and employment status (unemployed versus employed). These variables were dummy coded for the analysis. Separate ANCOVAs were run for the three categorical variables with OQ pretest scores entered as the covariate. The three categorical variables were not significantly related to outcome ($p$s ranged from .29 to .84). A simple regression evaluating age on outcome with OQ pretest scores partialed out showed no significance ($p = .77$). Because the amount of time in counseling may have affected how much change had occurred at posttest, we regressed OQ posttest scores on length of time in counseling, controlling for OQ pretest scores. The regression showed no effect of length of
time in counseling on amount of change \( (p = .12) \). Therefore, no demographic variables were included in the hierarchical multiple regression.

**Results**

A repeated measures \( t \) test showed that client OQ’s significantly improved from pretreatment \((M = 72.6, SD = 19.1)\) to the final session of counseling \((M = 64.0, SD = 20.0)\), \( t(48) = 5.42, p < .001 \). To test our first hypothesis that lower SES levels would be linked to lower levels of client motivation, treatment expectancy and subjective social support, we conducted zero-order correlations for continuous variables. Table 2 displays the results, starting with objective SES variables (e.g., education level, income) and subjective SES variables (e.g., perceived financial security, perceived SES), followed by the two indicators of motivation (identified and external), as well as treatment expectancy and social support. For the dichotomously coded objective SES variable, health insurance status, independent samples \( t \) tests were conducted on the four dependent variables of identified motivation, external motivation, treatment expectancy and subjective social support. Reported effect sizes adhered to Cohen’s (1992) conventions for correlations, with small, medium and large effect sizes corresponding to \( r = .10, r = .30, \) and \( r = .50 \), respectively.

**Table 2**

*Summary of Intercorrelations for Continuous SES Indicators with Social Support, Treatment Expectancy and Motivation Scores*

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Education level</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Income level</td>
<td>.15</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Financial security</td>
<td>.31*</td>
<td>.10</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived SES</td>
<td>.25</td>
<td>.48**</td>
<td>.27</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Identified motivation</td>
<td>.10</td>
<td>–.05</td>
<td>–.19</td>
<td>–.18</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. External motivation</td>
<td>–.11</td>
<td>–.01</td>
<td>–.13</td>
<td>–.08</td>
<td>–.11</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Treatment expectancy</td>
<td>.01</td>
<td>–.17</td>
<td>.27</td>
<td>–.22</td>
<td>.14</td>
<td>.19</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>8. Social support</td>
<td>.21</td>
<td>.00</td>
<td>.40**</td>
<td>–.03</td>
<td>.08</td>
<td>–.08</td>
<td>.14</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. \( N = 49 \); financial security = perceived financial security; social support = Subjective Social Support; treatment expectancy = Treatment Expectancy Scale. Health insurance status is a categorical variable and is not included in this table. \( * p < .05, ** p < .01 \).*

As shown in Table 2, neither of the continuous objective SES variables (e.g., educational attainment, income level) significantly related to identified motivation, external motivation, treatment expectancy or subjective social support. The independent samples \( t \) tests indicated no significant effect regarding insurance status \( (p > .05) \). The subjective SES variable, perceived financial security, significantly and positively correlated with subjective social support \((r = .40, p < .01)\), with a medium to large effect size. Consistent with our hypothesis, clients who reported feeling more secure financially also felt more supported by their social network;
conversely, clients feeling less supported by their social network felt less secure financially. The other subjective SES variable, perceived SES, did not significantly correlate with motivation, treatment expectancy or subjective social support. Therefore, the overall pattern of findings did not support the first hypothesis.

Hierarchical Multiple Regression Analysis

We used hierarchical multiple regression to test the second hypothesis that objective SES variables (e.g., education level, income, health insurance status) and subjective SES variables (e.g., perceived financial security, perceived SES) predicted counseling outcome. In the first step of the hierarchy, we entered OQ pretest scores to control for initial differences in symptoms. In the second step, we entered objective and subjective SES variables. In the third step, we entered psychological variables (subjective social support, treatment expectancy and client motivation) to test whether these variables accounted for additional outcome variance beyond that which SES variables explained. Because we did not have hypotheses about the primacy of specific individual variables’ effects on counseling outcome, we examined semipartial correlations (sr) to identify which predictors within each step had the greatest impact on outcome.

Results of the hierarchical regression analysis appear in Table 3. Controlling for OQ pretest scores in the first step, results supported the hypothesis that SES variables significantly predicted counseling outcome, \( \Delta R^2 = .05, F(5, 42) = 2.93, p < .05 \), a small to medium size effect. Taking into account the other predictors, the following two of the six SES variables significantly predicted outcome: education level and health insurance status. The semipartial correlations indicated that education level and health insurance status accounted for 3% and 4% of outcome variance, respectively, small to medium effect sizes. The beta coefficient for education indicated that for every unit increase in education, clients had, on average, a 3.6-point reduction in their final OQ scores relative to their initial level (\( t = -2.49, p < .05 \)). Similarly, clients who had health insurance reported an average 8.7 OQ points greater positive change than those who did not have insurance (\( t = -2.60, p < .05 \)).

Table 3

Hierarchical Multiple Regression Analyses Predicting OQ Posttest Score

<table>
<thead>
<tr>
<th>Predictor</th>
<th>( r_{sp} )</th>
<th>( B )</th>
<th>SE ( B )</th>
<th>( \beta )</th>
<th>( R^2 )</th>
<th>( F )</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline – OQ pretest</td>
<td>.84**</td>
<td>0.88</td>
<td>0.08</td>
<td>0.84</td>
<td>0.70</td>
<td>111.2</td>
<td>1, 47</td>
</tr>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education level</td>
<td>-.18*</td>
<td>-.63</td>
<td>1.46</td>
<td>-.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>.12</td>
<td>1.54</td>
<td>0.93</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insurance</td>
<td>-.19*</td>
<td>-8.67</td>
<td>3.34</td>
<td>-.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial security</td>
<td>-.01</td>
<td>-0.12</td>
<td>1.05</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived SES</td>
<td>-.01</td>
<td>-0.36</td>
<td>3.58</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td>0.90</td>
<td>5, 37</td>
</tr>
<tr>
<td>Social support</td>
<td>.01</td>
<td>0.71</td>
<td>4.22</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment expectancy</td>
<td>-0.10</td>
<td>-3.30</td>
<td>2.47</td>
<td>-.12</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Identified regulation</td>
<td>-.06</td>
<td>-3.22</td>
<td>3.84</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>External motivation</td>
<td>.13</td>
<td>4.06</td>
<td>2.28</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Amotivation</td>
<td>-.09</td>
<td>-3.42</td>
<td>2.79</td>
<td>-.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. \( r_{sp} \) = semipartial correlation coefficient. Initial covariate in the first step was Outcome Questionnaire-45 pretest score. Negative signs indicate lower posttreatment symptoms. OQ = Outcome Questionnaire-45; financial security = perceived financial security; perceived SES = perceived socioeconomic status; social support = Subjective Social Support; treatment expectancy = Treatment Expectancy Scale; health insurance = Health Insurance Status; coding: no = 0, yes = 1.

*\( p < .05 \). **\( p < .01 \).
In the third step of the regression, after controlling for both OQ pretest scores and SES variables, the psychological variables (subjective social support, treatment expectancy and client motivation) did not predict significantly more variance in outcome, $\Delta R^2 = .02$, $F(5, 37) = 0.90$, $p > .05$.

**Discussion**

Overall, SES variables significantly predicted counseling outcome. In particular, two of the objective SES variables—education level and health insurance status—each individually predicted greater improvement in counseling, explaining 3% and 4% of the outcome variance, respectively. Contrary to expectations, income level and the subjective SES variables did not predict outcome. Overall, our hypothesis that SES variables would relate to social support, treatment expectancy and motivation was not supported. However, the subjective SES variable—perceived financial security—significantly and positively related to subjective social support.

Surprisingly, as a whole, SES variables did not correlate with clients’ subjective sense of social support. The only exception was a significant positive link between subjective social support and perceived financial security. It may be that the perception of having sufficient funds to meet recent individual or family needs aligns with the perception of having a supportive social network. However, the finding that income level did not correlate with social support was interesting given the common perception among mental health workers that low-income clients lack social support (Krause & Borawski-Clark, 1995). In this study, from the perspectives of lower-income clients, there were no perceptions of support system deficits. The degree and frequency with which one experiences positive interactions with peers is the basis of the SSS instrument. Within SES research, social support measures may include community social support, as well as family and peers. The definition of social support may differ from participant to participant. One of the challenges of social support within SES is that lower-SES individuals often experience similar increased economic stressors to others in their social support network (Mickelson & Kubzansky, 2003). Therefore, a more limited study using multiple social support measures is a possible direction for future research.

Though the first hypothesis was not supported, the results indicate a trend in the hypothesized direction, with higher perceived financial security being marginally related to treatment expectancy, accounting for 7% of the variance, a medium-sized effect. In other words, before counseling began, clients who reported a greater sense of financial security also had greater expectation of a positive treatment outcome. There was, however, no significant relationship between all other SES indicators and either motivation type. Given that this hypothesis was based on studies of perceptions among mental health professionals working with low-income clients (e.g., Dougall & Schwartz, 2011; Hillerbrand, 1988; Krause & Borawski-Clark, 1995; Leeder, 1996; Seccombe et al., 1998), it is possible that the findings are indicative of SES-related biases in the helping professions. That is, the overall findings of the present study did not reveal significant relationships between SES and social support, treatment expectancy or client motivation, even though clinicians have frequently reported beliefs that such relationships exist.

Of the three objective SES variables, education level and health insurance status each predicted greater improvement in counseling. Education level is commonly used in poverty research, which shows that lower education is associated with decreased physical and mental health. For example, Goodman, Slap, and Huang (2003) found that lower household income and parental education were associated with depression and obesity. Similarly, SES studies using neighborhood indices such as zip code or concentrated populations with similar income levels often find lower-income communities facing challenges such as lack of quality education, lower education levels and fewer employment opportunities, with these chronic stressors impacting depressive symptoms (Groh, 2007).
The second finding of health insurance status contributing to improvements through counseling is particularly intriguing given that counseling services in the present study were offered at no cost. Arguably, access to health insurance provided a safety net, a positive external resource that allowed low- and high-income clients alike to focus on the internal work of change in counseling. That is, health insurance fulfilled a basic need, which in turn seemed to aid clients in benefiting from counseling. This finding is important given the recent attempts to obtain mental health parity. The Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act (2008) was passed in an effort to reduce costs of mental health services by offering treatment continuously. Recent research highlights the political and societal complexity of mental health parity (Hernandez & Uggen, 2012). Within counseling, there is a lack of research focused on client outcomes and perceptions of healthcare. And in the present study, the finding of a relationship between perceptions of healthcare and outcomes was unexpected. Outside the counseling literature, recent studies focused on parity at the macro level have found disconnects between providers and consumers related to education. In a 2009 study in California, many consumers stated a need for increased education about parity (Rosenbach, Lake, Williams, & Buck, 2009). The current research direction focuses more on utilization and access issues and less on the impact on outcomes. The implications for counselors lie in the ability to provide individuals with easy access to mental healthcare and to reduce or remove the stigmatization often associated with receiving mental health services. Furthermore, current research suggests the need for service providers to educate clients on mental healthcare options. The myriad of choices, rules and requirements can be overwhelming for clients already experiencing elevated distress. In conclusion, counselors benefit the profession by advocating for clients and not being silent stakeholders. Further research is necessary to understand this finding and its implications for policy and service provisions.

The present results show that subjective and objective measures collectively predicted outcomes. Within the counseling literature, there are few studies that both empirically study subjective and objective measures, as well as examine SES measures with clinical outcomes in counseling. The results also support the premise that SES is a complex variable warranting further empirical inquiry in counseling research (Liu, 2011). If SES is predictive of client outcomes in a counseling training program, then further research to investigate discrete variables and causal relationships is necessary. Current trends in SES health research involve the inclusion of subjective measures. Studies have shown that subjective low SES is linked to poorer health outcomes (Adler et al., 2000). Professional counselors can both emulate the current health research already using both subjective and objective measures in clinical outcomes and forge their own SES research agenda.

**Limitations**

Several methodological limitations warrant attention. First, the small sample size, comprised mostly of Caucasian and female clients, limits the generalizability of this study. Given that SES is linked with race and gender (Pope-Davis & Coleman, 2001), a heterogeneous sample would enrich the study’s findings. Along those lines, it is conceivable that the health insurance–outcome link in this study was a spurious correlation that might be accounted for by a third unmeasured variable. In short, the sample of convenience and the naturalistic correlational design reduces internal validity. Though each counselor had similar coursework prior to practicum, counselor trainees were not the same. We made no attempt to control variables such as counseling approach, counselor competence or client diagnosis; each of these variables may have changed the results of this study. Finally, a possible confounding contextual factor was that this study occurred within a time of significant economic challenge. Similar to mandated healthcare and parity, the economic contexts in which SES studies occur are important areas for further study. Despite these limitations, the study provides important contributions and has implications for further research.
Implications and Future Research

The results of the present study are consistent with the work of researchers who have argued that SES variables have complex relationships with one another and with mental health (Liu, 2011). When measured together, subjective and objective SES measures impacted clinical outcomes. As individual variables, however, only educational level and health insurance status predicted improved outcome. Indices of SES have not evolved to the point that they can be measured with discrete variables. Counseling SES research would benefit from further development of SES indices, as well as comprehensive studies using measures as a whole within broader contextual issues to fully understand the utility in mental health counseling research.

Results also show that clients who had access to health insurance experienced greater amelioration of symptoms even though counseling services in the present study were provided at no cost. This result was unexpected and must be studied further. Future research might examine whether access to insurance satisfies a basic need of security, which, in turn, improves counseling outcomes. Increasingly, states are incorporating mental health parity (Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act, 2008); therefore, studies must review the long-term effects associated with clinical outcomes and cost-effectiveness. Regarding short-term findings, Lang (2013) found that suicide rates were significantly reduced when states required parity between physical and mental health benefits. Also, studies controlling for counselor and client differences are needed. For example, an experimental design might examine counselor countertransference regarding lower-SES clients. Results might show how much counselor perceptions could be altered on the one hand, and biased on the other. This study also indicates a further need for counselors to understand the contextual influences of SES with regard to counseling outcome. It is important for counselors to embody the full characteristics of their professional identity—including that of mental health advocate—to address SES issues involving both misconceptions and gaps in SES research.

Conclusion

The present study contributes to the body of knowledge regarding the effect of client SES on counseling outcome. Results show that higher education and access to health insurance—even at a free counseling clinic—may improve counseling outcome. For all clients, possession of health insurance augmented the amount of improvement. Although these findings should be regarded as tentative, SES appears to be an important client variable affecting the success of counseling and meriting further research. The results also underscore the need for a comprehensive SES measure to gain a more complete picture of how SES influences counseling outcome. Finally, we found no links between lower SES levels and motivation, treatment expectancy and perceived social support. An important implication for the practicing counselor is to value the nuances of SES as potential influences on client outcome. Counselors would benefit from exploring potential SES stressors with clients and accessible resources to minimize mental health stressors and improve counseling outcomes.

Conflict of Interest and Funding Disclosure

The authors reported no conflict of interest or funding contributions for the development of this manuscript.

References


