Assessing Knowledge of Professional Burnout in College Students Entering Helping Professions: A Pilot Study Addressing the Need for Inclusion of Burnout Information in Undergraduate Curricula.

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Many Web sites and professional journal articles address professional burnout in helping professions. Professional organizations in social work, psychology, and medicine have identified stressors and developed effective coping strategies, allowing helping professionals to alleviate stress and burnout via a reactive approach. This pilot study assessed knowledge of burnout in 72 undergraduates majoring in social work, psychology, and premedicine. The relationships between this knowledge and self-efficacy, provision of social support, and self-esteem were also assessed. Results reveal that students had high self-esteem, efficacy, and good social relationship skills, yet lacked the necessary understanding and appreciation of burnout and its possible effects on their future work environments. Faculty may use these data to promote more proactive curricula in the area of professional burnout. (Contains 6 tables and 18 references.) (Author/SLD)

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Assessing Knowledge of Professional Burnout in College Students Entering Helping Professions: A Pilot Study Addressing the Need for Inclusion of Burnout Information in Undergraduate Curricula

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Presented at the Mid-South Educational Research Association

November 7, 2002, Chattanooga, TN
Abstract

Many websites and professional journal articles address professional burnout in helping professions. Professional organizations in social work, psychology, and medicine have identified stressors and developed effective coping strategies, allowing helping professionals to alleviate stress and burnout via a reactive approach. This pilot study assessed knowledge of burnout in 72 undergraduates majoring in social work, psychology, and pre-medicine. The relationships between this knowledge and self-efficacy, provision of social support, and self-esteem were also assessed. Results revealed that students had high self-esteem, efficacy, and good social relationship skills, yet lacked the necessary understanding and appreciation of burnout and its possible effects on their future work environments. Faculty may use these data to promote more proactive curricula in the area of professional burnout.
Assessing Knowledge of Professional Burnout in College Students Entering Helping Professions: A Pilot Study Addressing the Need for Inclusion of Burnout Information in Undergraduate Curricula

To get an idea of the scope of the problem of professional burnout as perceived in helping fields, one need only do a simple search using any Internet search engine with the words "professional burnout." A search on www.google.com yielded 48,500 hits and included professional advice from the American Psychological Association (http://helping.apa.org/work/stress6.html); from nursing professionals (http://www.nurseweek.com/features/97-2/burn.html); from social workers (http://friedsocialworker.com); from pastoral counselors (http://www.churchlink.com.au/churchlink/forum/r_croucher/stress_burnout.html); from physicians (http://www.webcom.com/pgi/docstres.html); humorous suggestions from mental health workers/psychologists (http://webpages.charter.net/stortnking/topten.html); to sage and bitingly funny advice from the Massachusetts of Technology for its employees (http://web.mit.edu/afs/athena.mit.edu/user/w/c/wchuang/News/college/MIT-views.html).

Professional burnout is obviously a problem that affects individuals in various types of helping careers. In their book, The Truth about Burnout, Maslach and Leiter (1997) comment on the insidious spread of the consequences of burnout in a helping professional's life:

Burnout is the index of the dislocation between what people are and what they have to do. It represents an erosion in values, dignity, spirit, and will—aerosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it's hard to recover ... What might happen if you begin to
burn out? Actually three things happen: you become chronically exhausted; you become cynical and detached from your work; and you feel increasingly ineffective on the job. (p. 17)

These results of burnout rob the individual helping professional of self-esteem, belief in his or her self-efficacy, and enjoyment of a long-trained-for profession. Persons who are in the helping professions must often deal with clients/patients who are less than cooperative; who demand instant gratification of their needs or wants, when that is an impossibility; who expect the professional to be on call 24 hours a day, 7 days per week; who do not, themselves, seek information on or practice good coping skills; who are many times non-compliant with directions and advice given by the professional; and who may sue for professional malpractice with increasing frequency. It is no wonder that professionals in various helping fields find themselves at increased risk for both psychological and physiological problems, which can be traced directly to the high pressures they face in their daily professional lives.

Because “bad hair days” are not professionally sanctioned when dealing with clients/patients, helping professionals often are unable to vent frustration and anger at the workplace. Instead, many professionals find that they take their burnout problems home with them resulting in a deteriorating home life (Greenberg, 1997; Skelly, 1994a, 1994b, 1994c). These individuals are more prone to exhaustion and anxiety; are less able to deal with crises on the home front; argue about “nothing and everything” with their partner/spouse; withdraw from family and social activities; and often engage in blaming others for their own inadequacies or mistakes (Skelly, 1994a, 1994b, 1994c). Since their home lives are often less than pleasant, they find themselves in a negative morass both on the job and at home. When faced with so much negativity in thoughts, emotions, and responses, many helping professionals find that they dread
the activities, responsibilities, and relationships of their profession. Their stress-related coping skills are insufficient and many of these professionals refuse to seek therapy for their burnout problems (Myths, Expectations and Characteristics Contributing to Burnout, 2001, Retrieved October 5, 2002 from http://www.texmed.org/cme/phn/psb/myths.asp). Their professional performance begins to deteriorate, and the burnout cycle grows worse.

Burnout has potentially severe costs in the helping professions, from client/patient dissatisfaction to lawsuits for malpractice. Social workers suffering from burnout are more likely to exhibit faulty decision-making and a cognitive rigidity against later revising their decisions (McGee, 1989). Their clients may very well receive improper and insufficient care because of this type and level of burnout. Physicians may emotionally distance themselves more than usual from their patients, may make wrong diagnoses, and may prescribe inaccurate treatment protocols (Myths, Expectations and Characteristics Contributing to Burnout, 2001, Retrieved October 5, 2002 from http://www.texmed.org/cme/phn/psb/myths.asp). Psychologists, counselors, and other mental health professionals may find that their listening skills are impaired, thus their responses to clients may be inadequate and ill phrased, thereby placing them in jeopardy of litigious action from their clients. Alternatively, these professionals may find that the boundaries between client and therapist dangerously erode as the mental health professional becomes too emotionally dependent on the client (Rabasca, 1999).

The preponderance of the literature available on professional burnout in the helping professions deals with defining burnout, listing its causes and correlates, discussing potential family/work problems that the professional may have because of burnout, and making suggestions to the professional about seeking therapeutic help, or developing leisure/relaxation skills to help the professional overcome burnout. All of this research and writing can be
categorized as reactive. Little found in the literature, which focuses on the proactive need for
information on burnout and its concomitant results to be included as a required element in the
undergraduate curricula of individuals preparing to enter the helping professions. The purpose of
the current study is to determine what levels of understanding undergraduates preparing for
careers in psychology, social work, and medicine have of the phenomenon of burnout at a
professional level. Since there is little to no formal instruction about burnout in their current
curricula, it is hypothesized that their knowledge of burnout may be inadequate and inaccurate. If
that hypothesis is supported, then further study should be done on the inclusion of substantial
information on professional burnout in the respective undergraduate curricula. In addition,
several other traits such as self-efficacy, self-motivation, self-esteem, and social motivation will
be assessed in their relationships to potential burnout.

Method

Participants

Seventy-two students participated in this study. The students represented three majors:
psychology (22) social work (24) at the University of Montevallo and pre-medicine (26) at the
University of South Alabama. The age of the students ranged from 18 to 50 with a mean age of
23.3. There were 39 females and 7 males in the psychology and social work majors, and 15 females and
11 males in the pre-medicine major.

Materials

In order to assess the knowledge and understanding of burnout in college students
preparing to work in three helping professions, we asked them to respond to five separate
instruments.
The Frequency of Self Reinforcement Questionnaire (FSRQ) (Heiby, 1983) is a 30-item measure with a Likert scale (0 = never descriptive of me to 3 = most of the time descriptive of me). The FQRS assesses the extent to which individuals encourage and value their own efforts in solving problems. Examples of questions are “The way I keep up my self-confidence is by remembering any successes I have had” and “I should be upset if I make a mistake.”

The 30-item Generalized Expectancy for Success Scale (GESS) (Fibel & Hale, 1978) contains three subscales: General Efficacy (GE), Long Range Career Oriented Expectancy (LRCOE), and Personal Problem Solving (PPS). Participants were asked to indicate the probability with which they feel that statements apply to them (1 = highly improbable to 5 = highly probable). Examples are as follows: “In the future I expect that I will not make any contributions to society” and “In the future I expect that I will attain the career goals I have set for myself.”

The third measure was the Rosenberg Self-esteem Scale (RSE) (Rosenberg, 1979), which is a ten-item instrument containing a Likert scale (from 1 = strongly agree to 4 = strongly disagree). This measure contains items such as “On the whole, I am satisfied with myself” and “I wish I could have more respect for myself.”

The Provision of Social Relations (PSR) (Turner, Frankel, & Levin, 1983) is a 15-item scale with a Likert format (1 = very much like me to 5 = not at all like me). The PSR measures an individual’s assessment of family support and friend support when there are problems to be solved. The PSR contains items such as “Even when I am with my friends I feel alone” and “People in my family have confidence in me.”

Our primary and fifth scale was the 22-item Maslach Burnout Inventory-Human Services Survey (Maslach, Jackson & Leiter, 1996). This scale utilizes a Likert format (0 = never to
6 = every day), which the participants used to indicate how often each item affected them. Examples of items are “I feel frustrated by my job” and “I don’t really care what happens to some recipients.” This scale was originally designed to assess the level of burnout of people in the helping professions. Because college students in our sample are in training to become professionals in helping fields and are not currently employed in these fields, the researchers instructed the students to imagine that they had been in their prospective jobs for a year. This modification of the instructions allowed us to measure our subjects’ knowledge/expectation of burnout as a significant and probable occurrence in their future occupations.

Results

A factor analysis of the Maslach Burnout Inventory-Human Services Survey (MBI) was performed. Orthogonal rotation of factors yielded three meaningful factors. The researchers used the Maslach et al. (1996) categories for naming our factors. Factor I accounted for 5.33% of the variance and contained seven items. It was named Emotional Exhaustion, and contained items indicating that the college students in the sample expected some emotional stress to be present in healthcare positions. Factor II accounted for 4.175% of the variance and contained seven items. It was named Personal Accomplishment, and contained items indicating that the college students in the sample expected a positive and active outlook on their work as healthcare professionals. Factor III accounted for 3.189% of the variance and contained five items. It was named Depersonalization, and contained items indicating that the college students in the sample expected some potential negative emotions and stress in a healthcare position. See Table 1.

Only three Maslach Burnout Inventory-Human Services Survey items loaded at the 0.4 level or above on more than one factor. As demonstrated in Table 2, these items were not included in the identification of the factors.
Pearson product-moment correlation analyses were also conducted revealing several interesting results. Several statistically significant correlations were found between the GESS and its subscales and self-esteem (RSE), the factors of the Maslach scale, the Provision of Social Relations scale (PSR), and Frequency of Self Reinforcement Questionnaire (FSRQ). Positive correlations were found among self-esteem (RSE) and the General-Efficacy subscale of the GESS \( (r = 0.499, p < 0.0001) \), the Long Range Career Oriented Expectancy subscale of the GESS \( (r = 0.396, p < 0.0006) \), and the Personal Problem Solving skills subscale of the GESS \( (r = 0.468, p < 0.0001) \). Positive correlations were found between the Frequency of Self Reinforcement Questionnaire and the General Efficacy subscale of the GESS \( (r = 0.326, p < 0.0058) \), the Long Range Career Oriented Expectancy subscale of the GESS \( (r = 0.317, p < 0.0075) \), and self-esteem (RSE) \( (r = 0.528, p < 0.0001) \). See Table 3.

Statistically significant negative correlations were found between the Emotional Exhaustion factor of the Maslach scale and the General Efficacy subscale of the GESS \( (r = -0.289, p < 0.016) \), the Long Range Career Oriented Expectancy subscale of the GESS \( (r = -0.291, p < 0.0153) \), self-esteem (RSE) \( (r = -0.31, p < 0.0096) \), and with the Frequency Self Reinforcement Questionnaire \( (r = -0.331, p < 0.0063) \). Negative correlations were also found between the Personal Accomplishment factor of the Maslach scale and General Efficacy subscale of the GESS \( (r = -0.259, p < 0.0305) \), the Personal Problem Solving skills subscale of the GESS \( (r = -0.249, p < 0.0373) \), and self-esteem (RSE) \( (r = -0.282, p < 0.0180) \). Negative correlations were also found between the Depersonalization factor of the Maslach scale and the General Efficacy subscale of the GESS \( (r = -0.248, p < 0.0412) \), the Long Range Career Oriented Expectancy subscale of the GESS \( (r = -0.313, p < 0.0092) \), the Personal Problem Solving skills subscale of the GESS \( (r = -0.306, p < 0.0112) \), and the Provision of Social Relations \( (r = -0.286, \)
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$p < 0.0180$; however, a positive correlation was found between the Depersonalization factor and Emotional Exhaustion factor of the Maslach scale. Positive correlations were found between the Provision of Social Relations and the General Efficacy subscale of the GESS ($r = 0.333$, $p < 0.0043$), the Long Range Career Oriented Expectancy subscale of the GESS ($r = 0.552$, $p < 0.0001$), and the Personal Problem Solving skills subscale of the GESS ($r = 0.254$, $p < 0.0312$), and self-esteem (RSE) ($r = 0.283$, $p < 0.0160$). See Table 4.

It is interesting to note the marginal trends found in this pilot study between the Emotional Exhaustion factor of the Maslach scale and the Personal Problem Solving skills subscale of the GESS ($r = -0.228$, $p < 0.059$), as well as, between the Provision of Social Relations and the Frequency Self-Reinforcement Questionnaire ($r = 0.228$, $p < 0.0572$). The researchers will note any possible changes in these trends toward significant significance as this study continues. See Table 5.

A one-way analysis of variance (ANOVA) that assessed differences on dependent variables as a function of major was also performed. A couple of interesting findings emerged. There was a significant difference on the Personal Problem Solving Skills subscale of the GESS as a function of major $F(3, 68) = 4.56$, $p < 0.0057$. There was also a significant difference on the Personal Accomplishment factor of the Maslach scale as a function of major $F(3, 66) = 3.86$, $p < 0.0131$. Means are presented in Table 6.

Discussion

Due to the debilitating effects of burnout on professionals in the helping fields, the researchers wanted to assess the level of understanding and appreciation of burnout in current undergraduates preparing for careers in psychology, social work and medicine. We predicted that the students would have an incomplete and naive understanding of both burnout and its
impact on their future jobs and work environments. To assess the students’ knowledge of burnout, we asked the students to imagine that they had been employed in their prospective careers for one year and to answer the Maslach items accordingly.

In addition to the Maslach Burnout Inventory – Human Services Survey (MBI), we also included a Provision of Social Relations (PSR) scale, a Frequency of Self Reinforcement Questionnaire (FSRQ), a self-esteem scale and a general-efficacy scale to evaluate significant correlation relationships. The researchers felt that the characteristics measured by these scales were important components in assessing the coping and relationship skills of future helping professionals. As expected, FSRQ had a significant positive correlation with efficacy and self-esteem, indicating that those who have a higher self-esteem and efficacy also encourage and value themselves (a low FSQR is considered to be a causative factor of depression). Those who scored high on the PSR also scored higher on efficacy and self-esteem, indicating that students who have strong components of social support (reassurance of worth, guidance, attachment, reliable alliance, and social integration) also tend to have positive self-esteem and efficacy. In addition, a strong trend toward significance was noted between the PSR and the FSRQ.

Our primary assessment, the MBI yielded some important and statistically significant results. The first factor, Emotional Exhaustion, was negatively correlated with efficacy, self-esteem, and the FSQR. Our second factor, the Personal Accomplishment Factor, correlated positively with efficacy and self-esteem. And finally, our third factor, the Depersonalization Factor, correlated negatively with efficacy, the PSR, and positively with the first factor. Interestingly, this third factor did not reach statistical correlational significance with self-esteem. As this would appear to be an expected correlation, the researchers will be interested in noting any change in this relationship as the study progresses. These correlations with and among the
MBI factors reveal that students who anticipate low levels of burnout after their first year of working in their prospective field, measured by expectations of high levels of personal accomplishment and low levels of emotional exhaustion and depersonalization of their clients, currently have higher levels of self-esteem, efficacy and may tend to over-value themselves and their efforts (FSQR).

In naming the Maslach factors for the sample during factor analysis, it was noted that other than our Factor Two, Personal Accomplishment, and Factor Three, Depersonalization, being reversed in comparison to the original MBI test design, many of the items loaded in the appropriate factors according to the MBI Manual. The researchers speculate that the cause of Factor Two and Factor Three being reversed from the original MBI research (Maslach et al., 1996) was due to the mindset of student sample. Whereas professionals already in the job may feel the implications of depersonalization more forcefully than those of personal accomplishment, the current students find themselves in the midst of the rigors of college life, focusing on “achieving” good grades and wanting to enter the helping professions to fulfill their personal goal of “helping people.”

However, because a few items were not identical to those in the MBI, a comparison between the two sets of means cannot be made. The factor analysis of the Maslach Burnout Inventory- Human Services Survey (1996) revealed that the MBI may be used for the researchers’ intended purpose of assessing college students’ knowledge of burnout in helping professions. We intend to perform further analyses in the future, which will allow us to compare our data with that of Maslach et al. (1996) for a more thorough assessment of the level of knowledge and understanding of college students concerning professional burnout.
Preliminary results revealed that students in our sample do indeed have a very naive and simplified set of expectations of burnout and its impact on their future jobs. This finding was especially noted in students’ judgments of their somewhat unrealistic perceptions of personal accomplishment and personal problem solving skills (GESS). Our students appear to assume that they will feel great success and satisfaction in their prospective jobs at the end of their first year. Unfortunately these assumptions predispose these students to the development of professional burnout.

The implications of this research are that students preparing for the helping fields need more curricular and applied exposure to the characteristics of professional burnout and effective coping strategies before entering the work place. A more realistic sense of the difficulties and disappointments inherent in the workplace will better prepare our students for the future. Effective coping strategies and stress management skills may help alleviate some future symptoms of burnout allowing our future helping professionals to perform better in both the workplace and in their private lives. The curricula for students in social work, psychology and medicine need to incorporate materials into classes that proactively address the pressures of working in helping fields, recognizing characteristics of burnout, coping with the job/client pressures, and avoiding total burnout. The curricula also need to address procedures for aiding the future professionals who find themselves in the midst of a burnout.

Since this is a pilot study, there should be caution exercised in generalizing the results to other situations and populations. A possible limitation of the study is the researchers’ instructions asking the students to imagine that they had been working for a year. This direction could have influenced the students’ responses to the MBI. It would be interesting to assess these students’ actual experiences after they had been employed in helping professions for a year.
References


Table 1

*Factor Loadings* of Maslach Items

<table>
<thead>
<tr>
<th>Items</th>
<th>F 1</th>
<th>F 2</th>
<th>F 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Emotional Exhaustion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I feel emotionally drained from my work.</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel fatigued when I get up in the morning and have to face another day on the job.</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I feel like I'm at the end of my rope.</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I feel frustrated by my job.</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel used up at the end of the workday.</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I feel I'm working too hard on my job.</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Personal Accomplishment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I can easily create a relaxed atmosphere with my recipients.</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I deal very effectively with the problems of my recipients.</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I feel exhilarated after working closely with my recipients.</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. In my work, I deal with emotional problems very calmly.</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I have accomplished many worthwhile things in this job.</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I feel I'm positively influencing other peoples' lives through my work.</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I can easily understand how my recipients feel about things.</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3: Depersonalization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I feel I treat some recipients as if they were impersonal objects.</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Working with people all day is really a strain for me.</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I've become more callous toward people since I took this job.</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Working with people directly puts too much stress on me.</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I feel recipients blame me for some of their problems.</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

° Loaded at 0.4 level or above
Table 2

_Maslach Items Loading on More Than One Factor_

<table>
<thead>
<tr>
<th>Items</th>
<th>F 1</th>
<th>F 2</th>
<th>F 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I worry that this job is hardening me emotionally.</td>
<td>0.65</td>
<td></td>
<td>0.44</td>
</tr>
<tr>
<td>12. I feel energetic.</td>
<td>-0.65</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>15. I don't really care what happens to some recipients.</td>
<td>-0.44</td>
<td></td>
<td>0.68</td>
</tr>
</tbody>
</table>
Table 3

Significant Correlations of the Generalized Expectancy for Success Scale (GESS) with Other Measures

<table>
<thead>
<tr>
<th>Other Scales</th>
<th>GESS Subscales</th>
<th>GE</th>
<th>LRCOE</th>
<th>PPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td><strong>0.50</strong></td>
<td>***0.40</td>
<td>***0.47</td>
<td></td>
</tr>
<tr>
<td>FSRQ</td>
<td><strong>0.33</strong></td>
<td>**0.32</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Factor I</td>
<td><em>-0.29</em>*</td>
<td>*-0.29</td>
<td>-0.23</td>
<td></td>
</tr>
<tr>
<td>Factor II</td>
<td><em>-0.26</em>*</td>
<td>----</td>
<td>*-0.28</td>
<td></td>
</tr>
<tr>
<td>Factor III</td>
<td><em>-0.25</em>*</td>
<td>**-0.31</td>
<td>**-0.30</td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td><strong>0.33</strong></td>
<td>***0.55</td>
<td>*0.25</td>
<td></td>
</tr>
</tbody>
</table>

Note. GE = General Efficacy; LRCOE = Long Range Career Oriented Expectancy; PPS = Personal Problem Solving Skills; SE = self-esteem; FQSR = Frequency of Self-Reinforcement Questionnaire; Factor I = Emotional Exhaustion; Factor 2 = Personal Accomplishment; Factor 3 = Depersonalization; PSR = Provision of Social Relations. *p < 0.05. **p < 0.01. ***p < 0.001.
Table 4

**Significant Correlations of the Factors of the Maslach Burnout Assessment with Other Measures**

<table>
<thead>
<tr>
<th>Factors</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Scales:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE</td>
<td>-0.29*</td>
<td>-0.26*</td>
<td>-0.25*</td>
</tr>
<tr>
<td>LROCE</td>
<td>-0.29*</td>
<td>----</td>
<td>-0.31**</td>
</tr>
<tr>
<td>PPS</td>
<td>-0.23</td>
<td>-0.25*</td>
<td>-0.30*</td>
</tr>
<tr>
<td>SE</td>
<td>-0.31**</td>
<td>-0.28*</td>
<td>----</td>
</tr>
<tr>
<td>FSRQ</td>
<td>-0.33**</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

*Note. Factor I = Emotional Exhaustion; Factor 2 = Personal Accomplishment; Factor 3 = Depersonalization; GE = General Efficacy; LRCOE = Long Range Career Oriented Expectancy; PPS = Personal Problem Solving Skills; SE = self-esteem; FQSR = Frequency of Self-Reinforcement Questionnaire; *p < 0.05. **p < 0.01. ***p < 0.001.*
### Table 5

*Significant Correlations of the Provision of Social Relations Scale with Other Measures*

<table>
<thead>
<tr>
<th>Other Scales</th>
<th>GE</th>
<th>LRCOE</th>
<th>PPS</th>
<th>SE</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.33**</td>
<td>0.55***</td>
<td>0.25*</td>
<td>0.28*</td>
<td>-0.27*</td>
</tr>
</tbody>
</table>

Note. GE = General Efficacy; LRCOE = Long Range Career Oriented Expectancy; PPS = Personal Problem Solving Skills; SE = self-esteem; Factor 3 = depersonalization of Maslach scale. *p < 0.05. **p < 0.01. ***p < 0.001.
Table 6

ANOVA Means: Dependent Variables as a Function of Major

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<th>Social Work</th>
<th>Social Work/Psychology</th>
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<td>PPS</td>
<td>29.954</td>
<td>30.105</td>
<td>32.200</td>
<td>32.808</td>
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<tr>
<td>Factor 2</td>
<td>10.364</td>
<td>15.294</td>
<td>15.800</td>
<td>10.038</td>
</tr>
</tbody>
</table>

*Note.* PPS = Personal Problem Solving Skills; Factor 2 = Personal Accomplishment.
I. DOCUMENT IDENTIFICATION:

Title: Assessing knowledge of professional burnout in college students entering helping professions: A pilot study addressing the need for inclusion of burnout information in undergraduate curricula.

Author(s): Lesley A. Ross, Tracey L. Attaway, Irene M. Shaik, Fred D. Harwell, John W. Blasing

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