Are Counseling Students Stressed?
A Cross-cultural Comparison of Burnout in Australian, Singaporean and Hong Kong Counseling Students

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Little is known about the level of burnout in counseling trainees and factors that may mediate burnout such as nationality and social support. To further our understanding, trainee counselors enrolled in a postgraduate counseling program taught in Australia, Singapore and Hong Kong completed demographic and social support measures (Miller Social Intimacy Scale and the University of California Los Angeles Loneliness Scale) and the three subscales of the Maslach Burnout Inventory (Emotional Exhaustion, Depersonalization, and Personal Accomplishment). Overall, while burnout scores were within the normal range, Hong Kong trainees reported higher scores than Australian and Singaporean trainees. Regression analyses revealed that loneliness and younger age were significant but weak predictors of emotional exhaustion and personal accomplishment while loneliness was a significant but weak predictor of depersonalization. Based on the findings, the need for supportive strategies to reduce loneliness, such as trainee peer support groups, was discussed.

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Introduction

In their seminal work, Maslach and Jackson (1981) describe a tripartite set of symptoms arising from prolonged workplace exposure to chronic interpersonal stressors: emotional exhaustion (feelings of emotional overextension and depletion of emotional resources), depersonalization (loss of idealism and negative, cynical attitude and feelings about others), and reduced personal accomplishment (feelings of reduced competency and self-efficacy). The term “burnout” has been used to describe the extreme end of the symptom spectrum (Freudenberger, 1974). The prevalence rate of burnout is especially high in occupations where the likelihood of chronic interpersonal stress is elevated such as human service work. As a consequence, burnout has been extensively examined in several human service occupations including teaching, nursing, and social work, and to a lesser extent psychology and counseling (for reviews see Maslach, 1982; Maslach & Jackson, 1982; Maslach & Leiter, 1997). However, several gaps remain in the literature; in particular, few works have examined burnout in trainees and no work, to date, has examined trainee counselors. Counseling is an emerging profession but currently little is known about the stresses faced by those in training and the level of burnout. In Australia and elsewhere, counseling trainees are typically mature-aged and face the competing demands of family, work, and study. These factors may place them at special risk for burnout. In comparable groups such as psychology, trainees are reported to be more stressed than qualified practitioners (Cushway & Tyler, 1994). Information about the prevalence rate of burnout in trainee counselors would address the present shortcomings in the literature and more specifically allow educators to monitor the current impact of programs.

A further issue for educators regards the identification of factors that may moderate burnout. A well-described factor that is proposed to act as “buffer” against burnout is social support (Cohen & Wills, 1985). A variety of social supports have been examined including supervisor, work peer, spousal, family, and friend support. As buffers of burnout, some types of
Burnout in Counseling Trainees

Social support appears to be more effective than others. In general, supervisor and work peer support are associated with lower levels of burnout (for review see Dollard, Winefield, & Winefield, 2001). By contrast, the findings for family support are equivocal. Family support is associated with lower levels of burnout in some (e.g., Davis-Sacks, Jayaratne, & Chess, 1985; Greenglass, Fiksenbaum, & Burke, 1994; Peeters & Le Blanc, 2001) but not all studies (e.g., Cheuk & Wong, 1995; Koniarek & Dudek, 1996; Ogus, 1990), while some report that it is associated with increased burnout (e.g., Ray & Miller, 1994; Sand & Miyazaki, 2000). A limitation in our present understanding is that studies have generally relied on global assessments of family support and little attention has been paid to the psychological significance of family support. That is, most studies have simply tabulated the presence of family support rather than examined the psychological significance of family support. A promising area of investigation regarding this possibility is a person’s closeness with others. In stressful life events which an individual faces, closeness with others is reported to be predictive of healthy functioning (Berkman & Syme, 1979; Medalie & Goldbourt, 1976). This raises the possibility that the buffering effects of family support on burnout may be mediated by an individual’s level of closeness with others.

Two related constructs, intimacy and loneliness, have been proposed as measures of closeness with others (Miller & Lefcourt, 1982; Russell, Peplau, & Cutrona, 1980). These constructs clearly overlap with participants who report high levels of loneliness and also tended to report lower levels of intimacy (Miller & Lefcourt, 1982). They both reflect the need for meaningful communication with others but can be differentiated with intimacy reflecting the closeness of a personal relationship and loneliness the distress that can arise from reduced interpersonal contact. Emerging evidence suggests that loneliness is predictive of burnout. For example, Warner and Carter (1984) found that pastors and pastors’ wives compared to laypersons reported higher Revised University of California at Los Angeles (UCLA) Loneliness Scale scores and higher Maslach Burnout Inventory (BMI) scores. Although
intimacy has not been directly examined in burnout, it is reported to buffer the effects of life-stress on emotional disturbance — a measure previously identified by Maslach (1982) as symptomatic of burnout. Miller and Lefcourt (1983) found in participants with low Miller Social intimacy Scale (MSIS) scores that previous negative or few positive life-change events were strongly predictive of higher levels of emotional disturbance. Taken together, these findings suggest that loneliness and intimacy are predictive of burnout but it remains to be established whether loneliness and intimacy alone or in combination are predictive of burnout.

A final issue that may be of importance is the presence of cross-cultural factors that may impact on loneliness and intimacy and, hence, burnout. Compared to students from individualistic cultures (e.g., America and Australia), students from collectivist cultures (e.g., China, Korea, and Japan) are reported to show lower levels of intimacy and higher levels of loneliness (Anderson, 1999; Pearl, Klopf, & Ishii, 1990; Schumaker, Shea, Monfries, & Groth-Marnat, 1993; Simmons, Klopf, & Park, 1991; Xie, 1997; You & Malley-Morrison, 2000). As an illustration, Anderson (1999) found that Chinese (n = 198) compared to American (n = 193) college students reported higher Revised UCLA Loneliness Scale scores while You and Malley-Morrison (2000) found that Korean (n = 105) compared to American (n = 62) college students reported lower MSIS scores. These findings raise the possibility that cultural factors such as collectivism and individualism may mediate the relationship between “closeness to others” and burnout.

In summary, the primary aim of the present study was to investigate the prevalence rate of burnout in trainee counselors and to explore the possible moderating effects of intimacy and loneliness. A further aim was to explore for possible cross-cultural differences in these measures between trainees enrolled in the same postgraduate counseling program delivered contemporaneously in purportedly one individualistic culture, Australia, and two collectivist cultures, Hong Kong and Singapore.
Method

Participants

Potential participants were recruited from students enrolled over the period February 2000 to June 2001 in a postgraduate master’s program in counseling taught in Australia (Adelaide), Hong Kong, and Singapore. The master’s program consists of twelve courses taught over 18–24 months and is delivered in English. Entry into the program is based on students having completed a four-year undergraduate degree program or equivalent, with two-year experience of human service work either in a paid (e.g., teacher, nurse, pastor, social worker, etc.) or unpaid (e.g., chaplain, volunteer, etc.) capacity, and demonstrated English proficiency. The program averages one intake per year in Australia, two intakes per year in Singapore, and three intakes per year in Hong Kong. To achieve sufficient sample size, data was collected from three cohorts (two within one year) of Australian, two cohorts of Singaporean (all within one year), and five cohorts of Hong Kong (over eighteen months) trainees. Participants were recruited from trainees attending the first class of a research project course in counseling and students completed the study as partial fulfillment of course requirements. The course is scheduled at the end of the counseling program, as such participants were surveyed after completing the majority of their studies. All trainees attending class were approached as potential participants and participation was voluntary. The Human Ethics Committee of the University of South Australia approved the study.

Most trainees attending class (total $n = 316$) participated in the study with a 98% ($n = 310$) response rate across the combined trainee sample. Class attendance was lower than course enrollment; nevertheless, based on enrollment figures ($n = 417$) a good response rate of 74% was obtained ($n = 310$) (Australia 68%, Hong Kong 72%, and Singapore 86%).

The following demographic variables were collected from trainees: age,
total number of years in the workforce, gender, primary occupation, and partner status. The primary occupation variable was divided into three groupings: health and welfare (e.g., hospital-volunteer, counselor, nurse, occupational therapist, medical doctor, physiotherapist, social worker, and other therapists); teacher (e.g., primary, secondary, and tertiary teacher); and others (e.g., business consultant, human resource personnel, pastor/priest/chaplain, police services, etc.). The partner status variable was divided into partnered (e.g., married or living with partner) and non-partnered (e.g., divorced, single or widowed). Four trainees failed to include demographic details (three Australian and one Hong Kong students) and were omitted from the study. Thirteen trainees returned partially completed demographic data, of whom eleven did not report age, two occupational status, three the number of years in the workforce, and one their partner status. These trainees were included in the study with a consequence that cell size varies according to the respective demographic variable.

The demographic details are summarized in Table 1. A total of 306 trainees were included in the study. For the sample combined across nationality, the majority was female (69%, \( n = 210 \)) and most participants were partnered (55%, \( n = 169 \)) with a higher percentage of women (50%, \( n = 104 \)) reporting that they were partnered compared to men (31%, \( n = 30 \)). Ninety-seven percent (\( n = 295 \)) of the participants were in paid employment with most working in health and welfare-related occupations (50%, \( n = 151 \)) followed by teacher (22%, \( n = 68 \)). The remainder (28%, \( n = 85 \)) of participants worked in a variety of occupations with small numbers in each of the “Others” occupational sub-groupings. Comparing between nationalities, the Australian cohorts included a high proportion of female trainees, the Hong Kong cohorts included a greater number of younger trainees who, correspondingly, reported less years in the workforce, while the Singaporean cohorts included a higher number of partnered trainees with a higher percentage of them working in the “Others” occupational sub-groupings.
Table 1 Demographic Details of Participants

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Australia</th>
<th>Hong Kong</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>55</td>
<td>194</td>
<td>57</td>
</tr>
<tr>
<td>Mean of age (SD)</td>
<td>45.2 (9.4)</td>
<td>33.3 (6.9)</td>
<td>45.2 (9.4)</td>
</tr>
<tr>
<td>Mean of years in the</td>
<td>18.6 (10.7)</td>
<td>10.1 (6.6)</td>
<td>19.2 (10.4)</td>
</tr>
<tr>
<td>workforce (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>61</td>
<td>23</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>133</td>
<td>34</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and welfare</td>
<td>25</td>
<td>102</td>
<td>24</td>
</tr>
<tr>
<td>Teacher</td>
<td>15</td>
<td>43</td>
<td>10</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>48</td>
<td>23</td>
</tr>
<tr>
<td>Partner status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnered</td>
<td>28</td>
<td>90</td>
<td>51</td>
</tr>
<tr>
<td>Non-partnered</td>
<td>26</td>
<td>104</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Because of incomplete demographic data, the cell numbers differ between variables: for age, n = 295; years in the workforce, n = 303; gender, n = 306; occupation, n = 304; and partner status, n = 305.

Instruments

Miller Social Intimacy Scale (MSIS)

The MSIS is a 17-item questionnaire consisting of self-relevant statements assessing the frequency and intensity of a subject’s relationship with their closest companion. Six of the statements ask respondents to rate how often the statements are true on a ten-point scale (1 = “very rarely” and 10 = “almost always”; e.g., “How often do you show him/her affection?”), and the other eleven statements ask how true are the statements on a ten-point scale (1 = “not much” and 10 = “a great deal”; e.g., “How affectionate do you feel towards him/her?”). The MSIS is reported to show good reliability with high construct validity (Cronbach’s coefficient alpha = .86 and .91 in
n = 25 and n = 20 American college students, respectively) and good test-retest reliability ($r = .96$ over a two-month interval and $r = .84$ over a one-month interval) (Miller & Lefcourt, 1982). Miller and Lefcourt (1982) also report that the MSIS shows high convergent and construct validity with the MSIS significantly correlating with related constructs such as loneliness (i.e., UCLA Loneliness Scale, $r = -.71$) but not with dissimilar constructs such as need for approval (Marlowe-Crowne Need for Approval Scale; $r = .36$ for males and $r = .02$ for females). The MSIS is also reported to show high discriminant validity. Miller and Lefcourt (1982) found that MSIS scores discriminated married from unmarried students with unmarried students reporting lower mean scores. Similarly, Martin (1995) found that MSIS scores discriminated between children of alcoholic and non-alcoholic parents with children of non-alcoholic parents reporting higher MSIS scores. Scores on the MSIS can vary between 17–170 with high scores indicating a high level of social intimacy. Miller and Lefcourt (1982) in their normative sample of American college students report a mean (SD) MSIS for unmarried students = 137.5 (19.1) and married students = 154.3 (9.3).

**Revised UCLA Loneliness Scale**

The Revised UCLA Loneliness Scale is a 20-item questionnaire consisting of self-relevant statements that ask respondents to rate the extent to which statements are true of them on a four-point scale (1 = “not all” and 4 = “frequently”; e.g., “I lack companionship.”). It is reported to show good construct validity with questionnaire items intercorrelating highly (all $r > .50$) and the scale demonstrates high internal consistency (Cronbach’s coefficient alpha = .94) (Russell, 1982; Russell et al., 1980). Convergent validity is also reported to be good with scale scores correlating highly with related constructs such as depression (Beck Depression Inventory, $r = .62$ and Costello-Comfrey Depression, $r = .55$) and self-esteem (Texas Social Behaviour Inventory, $r = .50$) but not with unrelated constructs such as social desirability (Marlowe-Crowne Social Desirability Scale, $r = .20$) and lying (Eysenck Personality Questionnaire, $r = .01$) (Russell, 1982; Russell et al.,
the Revised UCLA loneliness scale is reported to show good
criterion validity with scale scores correlating highly with the Belcher
Extended Loneliness Scale \( r = .74 \) (Solano, 1980) and self-reported
loneliness \( r = .72 \) (Russell et al., 1980). Scores on the Revised UCLA
Loneliness Scale range from 20–80 with high scores indicating a high level
of loneliness. Russell et al. (1980) in their normative sample of American
college students report a mean (SD) Revised UCLA Loneliness Scale score
for males = 37.06 (10.91) \( n = 102 \) and for females 36.06 (10.11) \( n = 128 \).

**Maslach Burnout Inventory (MBI)**

The MBI is a widely used instrument that consists of 22 statements of
job-related feelings covering three aspects of burnout, namely emotional
exhaustion (e.g., “I feel frustrated by my job.”), depersonalization (e.g.,
“I worry that this job is hardening me emotionally.”), and personal
accomplishment (e.g., “I feel very energetic.”). Respondents were asked to
rate the frequency of job-related feelings using a seven-point scale (0 =
“never”, 3 = “a few times a month”, and 6 = “always”). As a corollary, the
MBI can be rated using both intensity and frequency dimensions; however,
previous research has indicated that these dimensions are highly correlated.
Therefore, in the present study participants were only asked to rate frequency
(Iwanicki & Schwab, 1981). The MBI has been demonstrated to be a reliable
and valid instrument for measuring burnout with proven construct validity
(Maslach & Jackson, 1981; Meier, 1984). Cronbach’s coefficient alpha is
reported as .90 for the emotional exhaustion subscale, .79 for the
depersonalization subscale, and .71 for the personal accomplishment subscale
(Maslach & Jackson, 1981). Burnout scores have been shown to increase in
stressful job settings and to predict absenteeism and turnover (Maslach,
1982). The emotional exhaustion subscales can vary between 0–54,
depersonalization 0–30, and personal accomplishment 0–48. High emotional
exhaustion and depersonalization but low personal accomplishment scores
are indicative of burnout. Maslach and Jackson (1986) in their normative
sample of 1,104 American health professionals report a mean (SD) emotional
exhaustion = 22.2 (9.6), depersonalization = 7.1 (5.2), and personal accomplishment = 36.6 (7.3).

The MBI was modified for use in the present study with the term “recipient” replaced by “client” (which was defined as “those people that as part of your work you counsel or provide with a human service”) and the term “job” by “work.”

As per convention according to the obtained sample range, a total MBI score (i.e., emotional exhaustion + depersonalization + [48 – personal accomplishment]) in the lower third of the range is considered to be indicative of low burnout, those in the middle third indicative of moderate burnout, and those in the top third indicative of high burnout. As such, the ranking of participants is dependent on the range of scores obtained in a specific sample and not relative to a predetermined cut-off score. A similar convention applies to the rating of low, moderate and high burnout for the individual MBI subscales (Maslach & Jackson, 1981, 1986).

Procedure

The questionnaires were administered to all students attending class in the following order: MSIS, Revised UCLA Loneliness Scale, and MBI.

Results

The mean (SD) questionnaire scores for the group as a whole and for each nationality are given in Table 2. In general, Hong Kong compared to Australian and Singaporean trainees reported lower levels of intimacy, higher levels of loneliness, and higher levels of burnout while Australian and Singaporean trainees reported comparable levels of intimacy, loneliness, and burnout. Regarding the percentage of trainees with MBI scores in the top third or “high burnout” range, individual scores were ranked and then counted. For the sample as a whole, we found that 13.4% ($n = 41$; 2 Australian, 36 Hong Kong and 3 Singaporean trainees) had total MBI scores
indicative of high burnout (i.e., > 65), 10.7% \( (n = 33) \); 2 Australian, 29 Hong Kong and 2 Singaporean trainees) had high emotional exhaustion scores (i.e., > 33), 7.8% \( (n = 24) \); 2 Australian, 19 Hong Kong and 3 Singaporean trainees) had high depersonalization scores (i.e., > 18), and 9.8% \( (n = 30) \); 3 Australian, 22 Hong Kong and 5 Singaporean trainees) had high reduced personal accomplishment scores (i.e., < 27; scores reversed). Cross-tabulation revealed that no individual trainee reported “high” burnout scores on all three MBI subscales.

Table 2  Means (SD) Questionnaire Scores and Ranges According to Nationality

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Australian ( (n = 55) )</th>
<th>Hong Kong ( (n = 194) )</th>
<th>Singapore ( (n = 57) )</th>
<th>Total Sample ( (n = 306) )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Range</td>
<td>Mean (SD)</td>
<td>Range</td>
</tr>
<tr>
<td>MSIS</td>
<td>131.3 (21.6)</td>
<td>55–165</td>
<td>119.5 (23.8)</td>
<td>42–168</td>
</tr>
<tr>
<td>UCLA LS</td>
<td>35.2 (9.0)</td>
<td>21–58</td>
<td>40.6 (9.7)</td>
<td>22–69</td>
</tr>
<tr>
<td>MBI EE</td>
<td>15.4 (9.1)</td>
<td>0–42</td>
<td>22.2 (10.0)</td>
<td>0–50</td>
</tr>
<tr>
<td>MBI DP</td>
<td>6.4 (4.5)</td>
<td>0–18</td>
<td>10.6 (5.3)</td>
<td>0–27</td>
</tr>
<tr>
<td>MBI PA</td>
<td>34.5 (7.2)</td>
<td>16–47</td>
<td>31.3 (7.3)</td>
<td>10–48</td>
</tr>
<tr>
<td>MBI total</td>
<td>35.2 (16.6)</td>
<td>7–70</td>
<td>49.6 (17.4)</td>
<td>9–95</td>
</tr>
</tbody>
</table>

Note:  MSIS = Miller Social Intimacy Scale;  UCLA LS = UCLA Loneliness Scale;  MBI EE = MBI Emotional exhaustion; MBI DP = MBI Depersonalization;  MBI PA = MBI Personal accomplishment;  MBI total = MBI EE + MBI DP + (48 – MBI PA).
Pearson-r correlations were used to test the relationship between predictor variables (i.e., age, years in the workforce, Miller Social Intimacy, and Revised UCLA Loneliness) and MBI criterion variables. The correlational results are reported in Table 3. Apart from two exceptions, examination of the correlation matrix indicated relatively modest correlations among most pairs of predictor variables. The two exceptions were the high correlation between age and years in the workforce, and emotional exhaustion and depersonalization scores. A significant correlation was observed between the following set of variables (age, years in workforce, intimacy, and loneliness) with all MBI scale scores. In summary, trainees who were older with a longer history of workforce participation and those reporting higher levels of intimacy and lower levels of loneliness tended to report less emotional exhaustion, less depersonalization, and more personal

**Table 3 Correlational Matrix of the Relationship Between Demographic, Intimacy, Loneliness and MBI Scale Scores.**

<table>
<thead>
<tr>
<th>Age</th>
<th>Yrs in the workforce</th>
<th>MSIS</th>
<th>UCLA LS</th>
<th>MBI EE</th>
<th>MBI DP</th>
<th>MBI PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yrs in the workforce</td>
<td>.79↑↑</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSIS</td>
<td>.11</td>
<td>.11</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCLA LS</td>
<td>–.14*</td>
<td>–.10</td>
<td>–.39↑</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBI EE</td>
<td>–.34↑↑</td>
<td>–.31↑↑</td>
<td>–.23↑↑</td>
<td>.41↑↑</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>MBI DP</td>
<td>–.29↑↑</td>
<td>–.26↑↑</td>
<td>–.24↑↑</td>
<td>.28↑↑</td>
<td>.72↑↑</td>
<td>–</td>
</tr>
<tr>
<td>MBI PA</td>
<td>.23↑↑</td>
<td>.18#</td>
<td>.20↑</td>
<td>–.27↑↑</td>
<td>–.19##</td>
<td>–.15*</td>
</tr>
</tbody>
</table>

Notes: 1. MSIS = Miller Social Intimacy Scale; UCLA LS = UCLA Loneliness Scale; MBI EE = MBI Emotional exhaustion; MBI DP = MBI Depersonalization; MBI PA = MBI Personal accomplishment.

2. Fisher r-z transformations were used to test for significance. * denotes p < .05, ** p < .01, # p < .005, ## p < .001, † p < .0005, and †† p < .0001. For all comparisons, n = 292.
accomplishment. As well, trainees who were older tended to report a longer
time in the workplace and lower levels of loneliness. Finally, trainees
reporting higher levels of intimacy tended to report lower levels of loneliness.
By contrast, no significant correlation was observed between age and
intimacy nor between years in the workforce and either loneliness or
intimacy. The MBI subscale scores were also significantly intercorrelated.
Trainees reporting higher levels of emotional exhaustion tended to report
higher levels of depersonalization and lower levels of personal
accomplishment while trainees reporting higher levels of depersonalization
tended to report lower levels of personal accomplishment.

To further investigate what factors were predictive of burnout, a series
of multiple regressions analyses were conducted with the age, years in the
workforce, gender, partner status, intimacy, and loneliness as independent
variables and MBI subscale scores as dependent variables. For the group as
a whole, regression results are given in Table 4. No multicollinearity was
evident between predictor variables, all conditioning indexes were less than
30 and no variance proportions were higher than .5. Incidentally, the latter
also suggests that multicollinearity did not adversely affect the stability of
the correlation matrix reported in Table 3. Analyses revealed that R for
regression was significantly different from zero for emotional exhaustion
(adjusted $r^2 = 25\%$), depersonalization (adjusted $r^2 = 13\%$), and personal
accomplishment (adjusted $r^2 = 10\%$). Loneliness was found to explain a small percentage of the variance in emotional exhaustion ($\Delta r^2 = 10\%$),
personal accomplishment ($\Delta r^2 = 3\%$), and depersonalization ($\Delta r^2 = 3\%$).
Age was found to explain a small percentage of the variance in personal
accomplishment ($\Delta r^2 = 1\%$) and depersonalization ($\Delta r^2 = 2\%$).

The sample was also divided according to nationality and the regression
analyses repeated. For the Hong Kong analyses, R for regression was
significantly different from zero for emotional exhaustion, $R = .43,$
$F(6, 179) = 6.7, \ p < .0001$; depersonalization, $R = .31, F(6, 179) = 3.2,$
and personal accomplishment, $R = .32, F(6, 179) = 3.2, p < .003$.
Loneliness was found to explain a small percentage of the variance in emotional exhaustion ($\Delta r^2 = 10\%$), personal accomplishment ($\Delta r^2 = 5\%$),

Table 4  Regression Analysis Summary for Variables Predicting MBI Subscale Scores

<table>
<thead>
<tr>
<th>MBI Emotional exhaustion</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$-value</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.22</td>
<td>.09</td>
<td>-.20</td>
<td>-2.4</td>
<td>.02</td>
</tr>
<tr>
<td>Years in the workforce</td>
<td>-.10</td>
<td>.09</td>
<td>-.09</td>
<td>-1.1</td>
<td>.28</td>
</tr>
<tr>
<td>Gender</td>
<td>1.34</td>
<td>.17</td>
<td>.06</td>
<td>1.1</td>
<td>.25</td>
</tr>
<tr>
<td>Partner status</td>
<td>.77</td>
<td>.18</td>
<td>.04</td>
<td>0.5</td>
<td>.52</td>
</tr>
<tr>
<td>Miller Social Intimacy Scale</td>
<td>-.00</td>
<td>.02</td>
<td>-.05</td>
<td>-0.9</td>
<td>.40</td>
</tr>
<tr>
<td>UCLA Loneliness Scale</td>
<td>.39</td>
<td>.06</td>
<td>.35</td>
<td>6.3</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MBI Depersonalization</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$-value</th>
<th>$p$-value</th>
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<td>.01</td>
<td>-.11</td>
<td>-1.9</td>
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<td>.04</td>
<td>.18</td>
<td>3.0</td>
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<th>$\beta$</th>
<th>$t$-value</th>
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<td>.07</td>
<td>.18</td>
<td>2.0</td>
<td>.05</td>
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<td>.05</td>
<td>-.2</td>
<td>-3.3</td>
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Note: $R^2$ emotional exhaustion = .26, $F(6, 286) = 17.1, p < .0001$;
$R^2$ depersonalization = .15, $F(6, 286) = 8.5, p < .0001$;
$R^2$ personal accomplishment = .12, $F(6, 286) = 6.5, p < .0001$.
For all analyses, $n = 292$. 

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and depersonalization ($\Delta r^2 = 2\%$). Age was found to explain a small percentage of the variance in emotional exhaustion ($\Delta r^2 = 2\%$). The remaining variables were not predictive.

For the Singaporean analyses, R for regression was significantly different from zero for emotional exhaustion, $R = .49$, $F(6, 48) = 2.5$, $p < .04$, but not for depersonalization, $R = .34$, $F(6, 48) = 1.0$, ns and personal accomplishment, $R = .37$, $F(6, 48) = 1.2$, ns. Loneliness explained a small percentage of the variance in emotional exhaustion ($\Delta r^2 = 13\%$).

For the Australian analyses, R for regression was not significantly different from zero for neither emotional exhaustion, $R = .47$, $F(6, 45) = 2.1$, ns; depersonalization, $R = .45$, $F(6, 45) = 1.9$, ns; nor personal accomplishment, $R = .37$, $F(6, 45) = 1.2$, ns.

A Multivariate Analysis of Covariance (ANCOVA) was performed to test for the effect of nationality on intimacy, loneliness, and MBI burnout scale scores. Age was entered as a covariate because of the large group age difference, as it was a significant predictor of burnout, and because of the significant correlation observed between age and the remaining questionnaire variables. A significant omnibus $F$ was observed, $F(10, 574) = 2.6$, $p < .005$, Wilks lambda = .91. The subsequent univariate F-tests and post-hoc test results are reported in Table 5. After covarying for age, a significant main effect for nationality was observed for those analyses involving intimacy, loneliness, emotional exhaustion, and depersonalization but not personal accomplishment. Post-hoc testing indicated that Hong Kong compared to Australian and Singaporean trainees reported significantly lower levels of intimacy and higher levels of loneliness, emotional exhaustion, and depersonalization.

**Discussion**

The primary aim of the present study was to investigate burnout in trainee
Table 5  One-way Analyses of Covariance for the Effects of Nationality on Questionnaire Scores with Age as a Covariate

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F-value</th>
<th>Fisher PLSD post-hoc test results</th>
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<td>Nationality</td>
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<td>8,462.5</td>
<td>4,231.3</td>
<td>7.4##</td>
<td>HK&lt;A## &amp; HK&lt;S##</td>
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<td>293</td>
<td>167,215.8</td>
<td>570.7</td>
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<tr>
<td><strong>Revised UCLA Loneliness Scale‡</strong></td>
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<tr>
<td>Nationality</td>
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<td>931.6</td>
<td>465.8</td>
<td>5.4#</td>
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<td>25,259.5</td>
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<td><strong>MBI Emotional exhaustion</strong></td>
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<td></td>
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<td>Nationality</td>
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<td>762.2</td>
<td>8.2##</td>
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<td>26,947.2</td>
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<td><strong>MBI Depersonalization</strong></td>
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<tr>
<td>Nationality</td>
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<td>508.2</td>
<td>254.1</td>
<td>9.1††</td>
<td>HK&gt;S†† &amp; HK&gt;A††</td>
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<td>Residual</td>
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<td>8,196.7</td>
<td>27.9</td>
<td></td>
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<tr>
<td><strong>MBI Personal accomplishment</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nationality</td>
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<td>136.9</td>
<td>68.5</td>
<td>1.2</td>
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<tr>
<td>Residual</td>
<td>291</td>
<td>16,164.4</td>
<td>55.2</td>
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</table>

Notes:  
1. HK = Hong Kong, S = Singapore, A = Australia.  
2. * denotes $p < .05$, ** $p < .01$, # $p < .005$, ## $p < .001$, † $p < .0005$, and †† $p < .0001$.  
3. Fisher PLSD post-hoc test results are reported for those analyses with a significant main effect for nationality.  
4. ‡ Higher Revised UCLA Loneliness Scale scores indicate higher levels of self-reported loneliness.

counselors. We found only a small percentage of trainees reported individual MBI subscale scores indicative of high burnout and no trainee reported high scores on all three subscales. Besides, for the group as a whole, we found similar MBI subscale scores to those reported in a normative sample of
health service providers (Maslach & Jackson, 1981, 1986). However, the high correlation observed between emotional exhaustion and depersonalization suggests that while these two constructs were discriminable, they were not clearly separated in our sample of counseling trainees. Similar findings are reported in Chan and Hui’s (1995) study of burnout in Hong Kong secondary school teachers and they similarly conclude that these two constructs may not be distinct dimensions. In summary, while some individual trainees reported elevated MBI subscale scores, the present data suggests that no trainee was burnt out, and as a group, the trainees had similar MBI profiles to that observed in a comparable group of health professionals.

A second area of investigation in the present study was the effect of culture on burnout. A significant cross-cultural difference was observed for emotional exhaustion and depersonalization but not personal accomplishment. Specifically, the Hong Kong compared to Australian and Singaporean trainees reported slightly higher levels of emotional exhaustion and depersonalization whereas all three groups reported comparable levels of personal accomplishment. These findings suggest that while Hong Kong trainees are relatively more stressed than their Australian and Singaporean peers, this is not reflected in reduced self-efficacy.

Reasons for the higher burnout scores in Hong Kong trainees remain unclear. Age is an unlikely explanation as this was covaried for in the analyses. Likewise gender balance is an unlikely explanation as the gender balance for Hong Kong trainees fell between those for Australian and Singaporean trainees. Similarly, partner status is an unlikely explanation as it was comparable between Hong Kong and Australian trainees. We suggest that local issues may explain the relatively higher burnout scores reported by Hong Kong trainees. These may include the uncertainty surrounding the recent reunification with the China mainland, and the recent deterioration in the global economy and subsequent pressures on the Hong Kong economy.
Alternatively, the relatively lower burnout scores reported by the generally older Australian and Singaporean trainees might be the result of self-selection; that is, these older trainees might be a group of survivors who because they can tolerate stress have remained in human service work, thus explaining their lower burnout scores.

In the present study we also collected two measures of “closeness with others,” namely intimacy and loneliness. We found that intimacy and loneliness were modestly correlated. This suggests that while the constructs do overlap they are discriminable. Regarding students at risk, extreme scores were observed in individual cases. This suggests that some trainees are experiencing high levels of loneliness and/or low levels of intimacy. However, mean scores were well within the normal limits and comparable to other student groups (Miller & Lefcourt, 1982; Russell et al., 1980).

Comparing across nationalities and after controlling for age, Hong Kong trainees tended to report relatively lower levels of intimacy and higher levels of loneliness than either Australian or Singaporean trainees. The loneliness findings for the Australian and Hong Kong trainees are consistent with previous works that have compared students from individualistic and collectivist cultures (Anderson, 1999; Pearl et al., 1990; Schumaker et al., 1993; Simmons et al., 1991; Xie, 1997; You & Malley-Morrison, 2000). By contrast, the loneliness scores for the Singaporean trainees were more suggestive of those reported for students from an individualistic rather than collectivist culture. Previous work suggests that a student’s cultural heritage and, hence, position on the individualistic-collectivist continuum may be an important predictor of loneliness and, possibly, intimacy. It is possible that Singapore, following its recent economic development and alignment with Western practices, is better considered an individualistic culture. This remains to be determined in future works. Alternatively, because the questionnaires selected for the present study were normed and constructed for use in a Western-oriented population, the meaning and value of “closeness with
others” may be culturally biased and not a true reflection of loneliness and intimacy in less Westernized cultures such as Hong Kong.

Regarding which factors were predictive of burnout, regression analyses performed on the group as a whole revealed that loneliness was a modest predictor of emotional exhaustion, depersonalization, and reduced personal accomplishment while younger age was a weak predictor of emotional exhaustion and reduced personal accomplishment. By contrast, years in the workforce, gender, partner status, and intimacy were not predictive of burnout. The present findings are consistent with work in the clergy suggesting that loneliness is a modest predictor of burnout (Warner & Carter, 1984) and findings in counselors that younger age is a modest predictor of burnout (Jupp & Shaul, 1991; Ross, Altmaier, & Russell, 1989; Vredenburgh, Carlozzi, & Stein, 1999). Intimacy or the closeness of a personal relationship was not found to be predictive of burnout. Arguably, interpersonal contact is antecedent to establishing close personal relationships, which may explain why loneliness is a stronger predictor of burnout than intimacy when both variables are entered into regression analyses. The generally low predictive power of loneliness (and intimacy) suggests that the psychological significance of social support may not underlie the efficacy of social support in buffering burnout. Although other measures of the psychological significance of social support may prove to be more informative, the present findings suggest that loneliness and intimacy are of limited explanatory value.

Regression analyses were also performed separately for each nationality. For the analyses involving Hong Kong trainees, loneliness was found to be a significant but modest predictor of emotional exhaustion and a weak predictor of depersonalization and personal accomplishment while age was a weak predictor of emotional exhaustion. For the Singaporean trainees, loneliness was the only significant predictor explaining a modest percentage of the variance in emotional exhaustion. For Australian trainees, no significant predictors of burnout were observed. Although the regression analyses for
the Australian and Singaporean trainees need to be treated with caution because of the small number of subjects per independent variable, the present findings nevertheless suggest that loneliness may play a greater role in burnout for Hong Kong and Singaporean than Australian trainees.

In summary, the trainees in the present study reported low levels of burnout. In addition, although the relationship is likely to be bi-directional, we found support, albeit weak, for loneliness as a factor in the etiology of burnout. We suggest that increased loneliness might partly explain the relatively higher levels of burnout reported by Hong Kong compared to Australian and Singaporean trainees. We further suggest that educators responsible for counseling programs might usefully consider strategies for decreasing loneliness and, hence, burnout among susceptible individuals in trainee programs. In particular, there may be a role for peer support groups to strengthen social alliances and promote friendships among trainees.

References


輔導學員是否感到壓力？——澳洲、新加坡及香港
輔導學員枯竭程度的跨文化比較

現時，我們對輔導學員的枯竭程度，以及引致枯竭情況的可能因素（例如國籍、社會支持等），仍然所知甚少。本研究以在澳洲、新加坡及香港修讀輔導碩士課程的學員為對象，透過填寫米勒氏「社交親密量表」和加州大學洛杉磯分校「寂寞量表」，了解學員的背景特徵及社會狀況。此外，學員亦需填寫梅姿萊絲「枯竭量表」中關於「情緒耗竭」、「非人化」及「個人成就」等三個部分。整體來說，三地學員的枯竭程度均在正常水平。此外，回歸分析顯示，「寂寞」和「年齡」這兩個因素雖然與「情緒耗竭」和「個人成就」關係密切，但前者並不能作為後者的有力預測；同樣，「寂寞」和「非人化」的關係亦如是。基於以上結果，本文討論到是否需要在輔導課程中安排一些支持和紓解學員寂寞情緒的元素（例如朋輩支援小組）。