

*Loneliness and life satisfaction amongst three cultural groups*

*In Personal Relationships*

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Abstract

Studies into loneliness and life satisfaction have rarely assessed the role of culture in moderating the relationship between these variables. The present study examined the relationship between loneliness and life satisfaction using data from three non-student samples collected from Italian, Anglo-Canadian and Chinese Canadian populations. 206 Respondents completed the Revised UCLA Loneliness Scale (Russell, Peplau & Cutrona, 1980) and the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985). Two contrasting hypotheses were compared: one, a 'post-modern' hypothesis, predicting that the relationship between life satisfaction and loneliness would be stronger in our individualist sample of Anglo Canadians, and a second, 'relational' hypothesis predicting this association to be strongest in our collectivist, Chinese Canadian sample. Our findings demonstrated that culture has a small but significant impact on the relationship between loneliness and life satisfaction, and, consistent with the relational hypothesis, the relationship between the two concepts was strongest amongst our Chinese Canadian respondents and weakest amongst our Anglo Canadian participants. This finding is discussed in the context of the strong expectations of social cohesion in collectivist societies.

## Loneliness and life satisfaction amongst three cultural groups

The study of life satisfaction has become a major topic of social psychological research over the last three decades (Diener, Suh, Lucas & Smith, 1999; Staudinger, Fleeson & Baltes, 1999). Recently, a small portion of this literature has examined cross-cultural variations in the prediction of life satisfaction (e.g. Diener & Diener, 1995; Kwan, Bond & Singelis, 1997; Staudinger et al., 1999; Suh, Diener, Oishi & Triandis, 1998). Suh et al. (1998) suggest that individualists and collectivists rely on different types of information when making life satisfaction judgements. Whilst internal attributes such as emotions may be important for the prediction of life satisfaction in individualist countries, they argue that these internal characteristics may be less important in countries where collective and social factors are more significant. Diener & Diener (1995) demonstrated that the influence of self-esteem on life satisfaction increases with the individualism of a country while Kwan, Bond & Singelis (1997) claim that the more socially-orientated dimension of relationship harmony may be more important for determining life satisfaction in collectivist cultures.

One important indicator of life satisfaction is loneliness. In general, lonely people report lower rates of life-satisfaction (e.g. Gray, Ventis & Hayslip, 1992; Kim, 1997; Neto, 1995). However the relationship between culture, loneliness and life satisfaction is complex, and reflects not only the ‘reality’ of experienced social contacts but the cultural standards within a society (Perlman & Peplau, 1982; Van Tilburg, De Jong Gierveld, Lecchini & Marsiglia, 1998). From one perspective, which we term ‘the post-modern’ hypothesis, loneliness represents an intense and private emotional experience, and given the importance of such ‘emotional’ ‘internal’

experiences in individualistic countries (Suh et al., 1998) loneliness might be a better predictor of life satisfaction in individualist nations, where ecological factors and economic developments have ‘freed’ individuals to concentrate on the more emotional, less material, facets of their existence (see Inglehart, 1997 and Tornstam, 1992, for an extended discussion of this argument). Some research in (collectivist) Japan and (more individualist) Australia supports this hypothesis by finding a stronger link between loneliness and life satisfaction in the latter nation (Schumaker, Shea, Monfries & Groth, 1993). A corollary to this hypothesis is that loneliness should be greatest amongst the younger (usually more ‘individualist’) respondents in our samples, as older populations have traditionally been less attuned to such ‘emotional’ requirements (Tornstam, 1992). Alternatively, however, loneliness can be seen as an indicator of relational status and, like relationship harmony, may also have its basis in an ‘external’ social order where strong roots within the broader social environment are fundamental (Diener & Diener, 1995). From this perspective (which we term the ‘relational status’ hypothesis), loneliness might be expected to be a major determinant of life satisfaction in more collectivist societies (Kwan et al., 1997), where interpersonal relationships are central to subjective well-being (Kagitcibasi, 1995; Perlman & Peplau, 1982; Triandis, 1995). From this perspective, loneliness should be most frequently experienced by our older, more ‘collectivist’ respondents, particularly in collectivist communities where sensitivity to social exclusion is strongest (Van Tilberg et al., 1998).

This study therefore had three aims. First we examined differential rates of loneliness in three cultural groups: one anticipated to be high on individualism (an Anglo-Canadian sample), a second to be moderately individualist and collectivist (an Italian sample) and a third expected to be high on collectivism (a Chinese sample

recruited in Canada: see Hofstede, 1980; Triandis, 1995 and Schwartz, 1994 for cultural level scores on individualism/ collectivism in Italian, Chinese and Canadian populations and related indices). We also considered the extent to which age was a predictor of loneliness in our three samples, contrasting a hypothesis that suggested an overall negative correlation between age and loneliness with one that would anticipate a positive correlation between age and loneliness in collectivist communities. Finally, we explored the relationship between loneliness and life satisfaction in our three samples, contrasting a post-modern hypothesis (predicting the strongest relationship between loneliness and life satisfaction to be in our individualist, Anglo-Canadian group) with a 'relational' hypothesis (predicting this relationship to be strongest in our collectivist, Chinese-Canadian sample).

## Method

### Participants

Two hundred and six participants participated in this study, sixty-five from Southern Italy and sixty-four Anglo-Canadians and seventy-seven Chinese Canadians recruited in Vancouver, Canada. Respondents participated in face to face interviews with the second and third authors in their native language, with items back-translated and 'de-centred' to ensure suitability for the cultural environment (Brislin, 1980). In order to attract a wide sample of respondents, participants were recruited from public transport in both countries (in Italy on a daily boat service, in Canada on mainline rail services and at the airports), with these services chosen for their accessibility to the wider population and the wide age range of those available for questioning. 41% of the Anglo Canadians, 49% of Italians and 62% of the Chinese Canadians were male. Respondents' ages ranged from 18 to 78 in the Italian sample ( $M_{age} = 35.8$ ;  $SD = 15.4$ ),

from 19 to 65 amongst the Canadian Chinese ( $M$  age 33.3;  $SD = 11.8$ ) and from 21 to 62 amongst the Anglo Canadians ( $M$  age 39.1;  $SD 11.6$ ). Approximately 85% of those approached in Italy, and 80% of those approached in Canada, agreed to participate.

### Materials

Respondents completed the Revised UCLA Loneliness Scale (Russell, Peplau & Cutrona, 1980), a four-point interval scale which consists of 20 items, half of which reflected satisfaction with social relationships (e.g. “There are people who really understand me”) and half dissatisfaction with such relationships (e.g. I feel isolated from others”). Reliability for the loneliness scale was acceptable for each sample: ( $\alpha = .79$  for Italy;  $.80$  for the Anglo-Canadians and  $.83$  for the Chinese Canadians).

Respondents also completed the Satisfaction with Life Scale (SWLS: Diener, Emmons, Larsen & Griffin, 1985: 5 items) which is presented as five, five-point Likert scales, with scale end-points ranging from ‘absolutely not true’ to ‘absolutely true’. A typical item assesses responses to the statement “So far I have got the most important things I want in life”. This scale has been used extensively and proven reliable in large cross-cultural analyses of life-satisfaction (Pavot & Diener, 1993; Kwan et al., 1997; Suh et al., 1998). Here reliability was good for all three samples ( $\alpha = .82$  for Italy;  $.90$  Anglo-Canadian;  $.95$ , Chinese Canadian).

### Results

We first conducted a preliminary analysis of the impact of age, sex and nation on loneliness (see table 1). Overall, age showed a small, significant positive correlation with loneliness (overall  $r(210) = .14$   $p < .04$ ;  $r(65) = .25$   $p < .01$  in Italy,  $r$

(64) = .09  $p > .05$  for the Anglo-Canadians and  $r(77) = .01$   $p > .05$  for the Chinese Canadians). An analysis of variance (with nation and sex as the independent variables) showed a significant interaction between sex and nationality ( $F(2, 200) = 11.54$   $p < .001$ ), with loneliness highest amongst Italian female respondents ( $M = 2.19$   $SD = .42$ ) and lowest amongst Chinese Canadian females ( $M = 1.86$   $SD = .28$ ). There were no other nationality or sex effects on loneliness in this analysis.

We then conducted a hierarchical multiple regression using SPSS to determine if additional information on cultural group membership would improve the prediction of life satisfaction beyond that afforded by scores on loneliness alone. To do this we followed a procedure described by Van de Vijver & Leung (1997 p. 117f). In the first step of this analysis we examined the impact of just loneliness on life satisfaction entering data from all our samples. The adjusted  $R^2$  for this regression equation was .195. We then dummy coded culture (creating two new sets of dummy codes to represent the three cultures) and in the second stage of the regression entered loneliness scores, the dummy codes for culture, and two new variables representing the interaction between these dummy codes and loneliness. There was a small but significant increment in the variance explained ( $R^2$  change = .06  $p < .01$ ) suggesting a significant effect for the impact of culture on the relationship between loneliness and life satisfaction. Raw correlations revealed a significant negative relationship between loneliness and life satisfaction for all three cultural groups ( $p < .01$ ) with this relationship strongest amongst the Chinese Canadians ( $r(77) = -.54$ ) followed by the Italian sample ( $r(65) = -.48$ ) and the Anglo-Canadians ( $r(64) = -.34$ ). However, Baron & Kenny (1986) note that such correlational analyses assume equal variance at each level of the moderator and similar levels of measurement error for each sample. Although scale reliability was similar across all three samples, Levine's test of

homogeneity of variance revealed significant differences between the samples in variance on the independent variable, loneliness ( $F(2, 203) = 6.41$   $p < .002$ ), leading to a restriction in range. We therefore compared unstandardised regression coefficients in a linear regression analysis of the impact of loneliness, age and sex on life satisfaction, using a test of difference provided by Cohen & Cohen (1983 p. 56). The relationship between loneliness and life satisfaction was strongest amongst the Canadian Chinese respondents ( $b = -.172$ ), followed by the Italian respondents ( $b = -1.06$ ) then the Anglo-Canadians ( $b = -.81$ ), with significant differences between all three pairs of samples ( $t > 2.36$   $p < .01$ ). In this equation, age was an additional predictor of life satisfaction for the Anglo-Canadian sample only ( $t = -4.38$   $p < .001$ ), with older respondents reporting less life satisfaction. There were no sex effects for the impact of loneliness on life satisfaction for any of three samples.

## Discussion

Studies across a range of cultures have found a considerable proportion of adults to suffer from loneliness, with such loneliness correlated with suicide, poor health and alcohol abuse (Tornstam, 1992). In this study we sought to examine the extent to which culture acted as a moderator of the relationship between loneliness and life satisfaction, with respondents from 'real world', non-student samples from three cultural groups. Although we found a significant raw (negative) correlation between loneliness and life satisfaction in all three of our samples, the significant differences in these correlations between samples support a 'relational status' hypothesis which underlines the significance of social inclusion to life satisfaction in collectivist societies.

Overall we found no significant differences across the samples in their levels of loneliness, although the higher levels of loneliness experienced by the Italian female sample is consistent with the findings of Van Tilburg and his colleagues (1998) in Italy, who report that a subjective feeling of loneliness is most prevalent in regions where living alone is rare and community bonds their strongest. In addition, we failed to find a consistent relationship between age and loneliness in our samples, with a weak positive correlation between age and loneliness across the samples ( $r = .14$ ) challenging the suggestion by Tornstam (1992) that loneliness would more evident amongst a younger, more 'self-centred' community. Taken together these findings strongly question a 'post-modern' hypothesis that predicts greater loneliness amongst the young and the greater significance of life satisfaction for respondents from individualist cultures.

There were, of course, a number of important limitations to the present study. We were working with small samples, and larger cohorts are needed to conduct the more sophisticated interactions between loneliness and other possible predictors of life satisfaction. Such research should ideally provide longitudinal data to allow for the examination of feedback loops between loneliness and life satisfaction (see Diener et al., 1999). Subjective well-being is likely to be composed of a combination of socio-cultural characteristics as well as subjective evaluations of circumstances (Staudinger et al., 1999) and data on a far wider range of demographic indicators is needed in an area of research dominated by student samples. Finally, more direct indicators of individualism-collectivism are required that will allow for a more extensive assessment of the impact of both individual and cultural level values and beliefs on loneliness and life satisfaction.

These results have potentially important implications for the successful integration of migrant communities, particularly those from a collectivist cultural

background. The stronger relationship between loneliness and life satisfaction in our Chinese sample we believe reflects the strong sense of group expectation in collectivist societies (Diener & Diener, 1995) and the considerable interpersonal costs of social exclusion in collectivistic migrant communities (see Berry, 1997, for an overview of the outcomes of acculturation strategies amongst migrant populations). Recent Canadian Census data (Statistics Canada, 1996) reports that there are now more than three-quarters of a million Chinese Canadians in Canada, making them one of the largest minority groups in this country. Given the likely negative implications of social marginalisation for both psychological and physiological health amongst such groups (Berry, 1997), interventions aimed at promoting social inclusion amongst this population are urgently required to ensure the successful acculturation of this important cultural community.

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Table 1:

Unadjusted means for loneliness and life satisfaction by gender and cultural group

	Italy		Anglo- Canadians		Chinese- Canadians	
	Male	Female	Male	Female	Male	Female
Loneliness	1.89 (32)	2.19 (32)	2.12 (33)	2.03 (38)	2.12 (48)	1.86 (29)
Life Satisfaction	3.39 (32)	3.11 (33)	3.36 (26)	3.45 (38)	2.84 (48)	3.30 (29)

Note. Numbers in parentheses indicate sub-sample size