



PERGAMON

International Journal of Intercultural Relations  
25 (2001) 73–88

---

---

International Journal of  
INTERCULTURAL  
RELATIONS

---

---

www.elsevier.com/locate/ijintrel

# Individualism–collectivism and depressive sensitivity to life events: the case of Malaysian sojourners

Romin W. Tafarodi<sup>a,\*</sup>, Alyson J. Smith<sup>b</sup>

<sup>a</sup> *Department of Psychology, University of Toronto, 100 St. George Street, Toronto Ont., Canada M5S 3G3*

<sup>b</sup> *School of Psychology, Cardiff University, P.O. Box 901, Cardiff CF10 3Y6, UK*

---

## Abstract

In addressing the mental health of international students, individualism–collectivism is treated as a dimension of cultural distance that produces differential sensitivity to life events. A collectivist cultural orientation is hypothesized to promote depressive dysphoria in response to negative social events and to increase the inhibitory effect of positive social events. An individualist cultural orientation is hypothesized to promote depressive dysphoria in response to negative achievement-related events and to increase the inhibitory effect of positive achievement-related events. A prospective study comparing Malaysian and British students at the same university confirmed the predicted cultural differences in sensitivity to social events. Predicted differences for achievement-related events were partially confirmed. Malaysian students were also considerably more dysphoric than their British counterparts, as expected. © 2001 Elsevier Science Ltd. All rights reserved.

*Keywords:* Individualism–collectivism; Depression; Sojourners; Malaysian; International students

---

## 1. Introduction

Increased cross-national mobility and the liberalization of tertiary education over the last half-century has produced a dramatic rise in the numbers of students choosing to pursue academic degrees in countries other than their own. The resulting prominence of international students on Western campuses has expanded opportunities for cross-cultural contact, cooperation, and mutual enrichment within

---

\*Corresponding author. Tel.: +1-416-946-3024; fax: +1-416-978-4811.

*E-mail address:* tafarodi@psych.utoronto.ca (R.W. Tafarodi).

the academic community. The accommodation of migrant students has not, however, been without challenge. Adaptation to life in an unfamiliar setting is often marked by confusion, self-doubt, loneliness, and considerable distress. Accordingly, international students often suffer greater psychological disturbance than do their native peers (Furnham, 1988). Adverse reaction to cultural transplantation, or “culture shock” (Oberg, 1960), is so common as to be considered a normal aspect of adjustment. The intensity of culture shock has been found to vary in proportion to the “cultural distance” between the sojourner and the host community (Babiker, Cox, & Miller, 1980; Furnham & Bochner, 1986; Hull, 1978; Ward & Searle, 1991). There is little consensus, however, on how specific forms of psychological disturbance are promoted by distinct dimensions of distance, owing to a paucity of relevant research (Stening, 1979). One approach to redressing this gap in understanding is focusing on cultural constructs with known nomological relations. Such constructs can be used to generate informed predictions about the nature of adjustment difficulties experienced by different groups of international students. By examining the significance of a cultural dimension for interaction with the host environment, specific hypotheses can be derived concerning mental health. We adopt this approach here, focusing on the construct of individualism–collectivism (I–C) and its relevance for how social feedback is experienced. Hypotheses are derived concerning vulnerability to depressive dysphoria. These hypotheses are then tested by examining a sample of Malaysians studying in Britain.

### *1.1. Individualism–collectivism and social sensitivity*

Best conceptualized as a cultural “syndrome” (Triandis, 1994, 1995), I–C incorporates a number of valuative and behavioral dimensions that define self–other relations. Some of these dimensions are bipolar in relation to I–C; others are aspects of either individualism or collectivism. Some appear to be transcultural, others culture-specific. Many of the dimensions interpreted as etic by researchers are based upon basic relational differences in collectivist vs. individualist self-construal.

The self in collectivist cultures has been characterized as enmeshed, ensembled, interdependent, and contextualized, emphasizing its socially contingent nature. In contrast, the self in individualist cultures has been described as self-contained, isolated, independent, and clearly bounded (Markus & Kitayama, 1991; Sampson, 1989; Shweder & Bourne, 1984), suggesting a greater degree of social separation and autonomy. The primacy of social identity for collectivist self-understanding entails a commitment to fulfilling ingroup expectations. Self-acceptance is largely a reflection of social acceptance, and is therefore heavily dependent on fidelity to normative prescriptions and proscriptions for personal behavior. Accordingly, collectivist enculturation promotes enhanced sensitivity to social evaluation (Okazaki, 1997). Heightened evaluative sensitivity enables the collectivist to be responsive to shifting social demands and to rapidly correct for any inadvertent deviations or transgressions that threaten to produce discord and friction (Kitayama, Markus, & Lieberman, 1995; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). The ability to accurately perceive even implicit or muted valuative signals is further

necessitated by normative constraints on overt criticism or rejection of those with whom one is interacting. The importance of decorum and avoiding ingroup conflict in collectivist societies demands sensitivity to the subtlest expressions of negativity, as such signs may betoken intense disapproval.

The emphasis on independence and confident self-assertion in individualist, especially Western, cultures promotes a somewhat different approach to social relations. Acute sensitivity to social feedback is taken as a reflection of weakness, neuroticism, and dependency. It is therefore inhibited through socialization beginning in middle to late childhood. Similarly, habitual adjustment of personal behavior to fit the expectations or wishes of others conveys an undesirable conformity and is seen as undermining stable self-identity. Individualist self-acceptance requires the preservation of autonomy. Whereas maintaining a self-chosen course of action in the face of public censure is viewed harshly by the collectivist, it becomes a celebrated virtue for the individualist. Likewise, principled criticism and frank argument during encounters with ingroup members are more often taken to reflect forthrightness and integrity than social immaturity. The relative lack of cultural constraint on face-to-face expressions of disapproval engenders a considerable amount of negative social feedback with which to contend. In response, a broad repertoire of deflective, attributional, and compensatory defences develops to reduce injury to self-esteem. Thus, whereas the collectivist responds to criticism by sympathetically modifying behavior, the individualist is more likely to ignore, dismiss, or offset its self-relevance.

The starkness of the above cultural contrast is intended for explanatory clarity only. In reality, all cultures have both individualist and collectivist elements and therefore fall somewhere between the two extremes described. Nonetheless, the foregoing provides a theoretical basis for predicting the reactions of those from collectivist cultures studying in individualist, Western countries. To begin with, we assume that these sojourners will have more undisguised disapproval directed at them in social interaction than encountered in their home countries. The increase would be due to marked normative differences in the expression of criticism across cultures. Compounding factors would include racial, ethnic, and religious prejudice experienced during their stay and derision targeting their lack of facility with the host culture and language. The resulting interpersonal stress may have considerable impact on the mental health of collectivist sojourners, as suggested by examining the significance of I–C for depressive sensitivity.

### *1.2. Individualism–collectivism, life events, and depression*

Stressful negative life events are known to increase the likelihood of suffering depression (Brown & Harris, 1986; Cui & Vaillant, 1996; Klocek, Oliver, & Ross, 1997; Monroe & Depue, 1991). Though less is known about the significance of *positive* life events for the onset of depression, evidence that they ameliorate symptoms during morbidity (e.g., Greene, 1989; Johnson, Crofton, & Feinstein, 1996; Needles & Abramson, 1990) hints at a likely preventative role. Generally, both positive and negative experiences influence how sojourners and immigrants adapt to

their new environments (Berry, Kim, & Boski, 1988; Church, 1982; Furnham, 1988). The specific relevance of life events for depressive disturbance in international students, however, is expected to vary as a function of cultural background. This follows from evidence pointing to cultural differences in the syndromic expression of depression and its precipitating factors (Jenkins, Kleinman, & Good, 1991; Manson, 1995; Marsella, 1980). Given the collectivist emphasis on maintaining social harmony, it is unsurprising that life events that threaten this harmony figure prominently as precursors of psychiatric disorder in these cultures (Leong, Tseng, & Wu, 1985). Extending from this, we suggest that collectivist sojourners are especially vulnerable to depressive dysphoria in response to negative social events. Their vulnerability stems from a tendency to amplify the diagnosticity of negative interpersonal feedback and its implications for social regulation (Yamaguchi, Kuhlman, & Sugimori, 1995). Such a tendency is not a liability in itself, but becomes one when combined with limited social and communicative competence in the host culture. The inability to successfully dissolve conflicts and problems that arise during social interaction, thus fulfilling the collectivist imperative of surface complaisance, would over time leave these sojourners prone to distress and increased depressive dysphoria. A symmetric sensitivity to positive social events is also expected. Insofar as positive life events are inversely related to depression, collectivists should benefit most from experiences that convey social acceptance, approval, and fitting in with others.

Individualists, much more than collectivists, are invested in maximizing self-determination, primary control, and personal attainment. Self-worth and self-identity are contingent upon individual, often competitive, performance. As regards depressive sensitivity, then, individualists should be especially prone to depressive dysphoria in response to negative achievement-related events, especially those involving failure to reach a desired personal goal. Similarly, positive achievement-related events should best serve individualists in protecting against depressive disturbance.

Specific hypotheses concerning the comparative adjustment of collectivists studying at Western universities can now be stated. First, because of increased exposure to overt social criticism, and a tendency to internalize such criticism, these sojourners will be more depressed than are native (individualist) students at the same institution. Second, social experiences should be more strongly associated with depression for collectivist sojourners than for native students, with negative events predicting greater increase and positive events less increase. Third, achievement-related experiences should be more strongly associated with depression for native students than for collectivist sojourners, with negative and positive events oppositely related as before.

Psychosocial aspects of cultural orientation are held to be responsible for the hypothesized differences in sensitivity to life events. Alternatively, the challenges and vulnerabilities associated with sojourner status, irrespective of cultural origin, may themselves result in differential sensitivity. Any such “stranger in a strange land” account, however, cannot easily accommodate the prediction that collectivist sojourners should be *less* sensitive than native students to achievement-related

experiences. The confounding of sojourner status and cultural orientation is therefore not especially problematic in the present context.

We sought to confirm the predictions in a prospective study of depressive dysphoria in Malaysian sojourners and home students at Cardiff University in Britain. As Malaysia represents a collectivist culture (Bochner, 1994; Burns & Brady, 1992) and Britain an individualist one (Hofstede, 1984, 1991), the study provided appropriate comparative tests of the hypotheses. Supporting the validity of the cultural comparison at the individual level of measurement, past research has confirmed Malaysian sojourners at Cardiff University to be clearly higher in collectivism than their British counterparts (Tafarodi, Lang, & Smith, 1999).

## 2. Method

### 2.1. Overview

Malaysian and British students completed a depression measure and a record of life events on two occasions four months apart. Change in depressive dysphoria from first to second measurement was examined as a function of intervening life events. The differential depressive sensitivity of the cultural groups to positive and negative social, achievement, and other events was assessed. Intervening social events were expected to produce greater change in Malaysians than Britons. Intervening achievement events, in contrast, were expected to produce greater change in Britons than Malaysians. No differential sensitivity to other events was expected.

### 2.2. Participants

Participants were 35 (11 women, 24 men) students of British and 30 (10 women, 20 men) students of Malaysian nationality<sup>1</sup>, all full-time students at Cardiff University. Gender ratio was similar in the two groups,  $\chi^2 < 1$ , as was age,  $t < 1$  ( $M = 22.54$  and  $M = 23.13$  for British and Malaysians, respectively). The Malaysians were sojourners with plans to return home after completing their programs of study. They had been in Britain an average of 4.3 months at the outset of the study.

### 2.3. Materials and procedure

Participants completed two questionnaires, the second administered four months after the first. Questionnaires were completed at participants' Cardiff homes and

---

<sup>1</sup>The *ethnic* identity of the Malaysian participants was not recorded. The composition of the sample, however, is assumed to reflect the student population from which it was drawn — approximately one-half Malay, one-quarter Chinese, and one-quarter Indian.

returned in postage-paid envelopes. Both consisted of nine measures, only three of which are relevant here.

### 2.3.1. *Individualism–collectivism scale (INDCOL)*

This measure was included in the first questionnaire to confirm the cultural premise that the Malaysian students are generally more collectivistic than their British counterparts. The INDCOL (Hui, 1988) is a widely used measure of feelings, beliefs, intentions, and behaviors at the *individual* level that are consistent with an individualist or collectivist cultural orientation. Hui (1988) reports a consistent pattern of construct validation (see also Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis, Leung, Villareal, & Clack, 1985). To accommodate intraindividual variability in I–C across social domains, the INDCOL consists of subscales addressing relations with one’s spouse, parents, kin, friends, co-workers, and neighbors. Two subscales — co-workers and neighbors — were omitted in the present application. The Co-workers subscale includes items addressing relations with colleagues and classmates. We feared that the Malaysian students, most of whom were temporary residents in a foreign country, would feel somewhat detached and distant from their mainly British colleagues and classmates. The detachment would likely obscure collectivist tendencies in the domain represented by these items. The same concern justified leaving out the Neighbors subscale. Finally, three items (1 Parents, 2 Friends) were omitted because they did not conform to the 5-point, Likert-scale format common to all other items.

All items representing the individualist orientation were reverse-scored so that the summated score reflected overall degree of collectivism. As expected, the Malaysians were higher than the British in overall collectivism,  $t(63) = 2.81$ ,  $p = 0.007$ ,  $M = 139.27$  and  $M = 130.94$ , respectively.

### 2.3.2. *Beck depression inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961)*

The BDI is a widely used self-report depression inventory. It consists of 21 items representing various depressive “symptom-attitude categories” (Beck, 1976). Each item describes a behavior, thought or feeling generally associated with depression and consists of 3–5 statements of graduated severity. Respondents indicate which of the statements corresponds to the way they have been feeling lately. Higher aggregate scores represent greater levels of depressive dysphoria. The reliability, validity, and cross-cultural stability of the BDI have been shown to be adequate (see Beck, Steer, & Garbin, 1988; Steer, Beck, & Garrison, 1986, for reviews).

### 2.3.3. *Life events record (LER; Tafarodi & Walters, 1999)*

The LER is a retrospective measure of life events. Respondents recall any personally significant events that occurred during a specified time period, marking each as either positive or negative. Each event is briefly described in writing and the subjective intensity of its positive or negative impact is rated on a 9-point scale anchored by mild (1) and very strong (9). Space is provided for up to 10 events.

Frequencies for negative and positive events, optionally weighted by intensity ratings, are computed. Given its reliance on active recall, the LER is best used for relatively short retrospective periods (i.e., up to six months prior to administration). In contrast to standard life event inventories (checklists), its open-endedness provides a personalized record of what the *respondent* experienced as significant, irrespective of how notable these events would have been for others.

For the first (T1) questionnaire, participants reported events that occurred during the preceding six months. The wide interval was chosen to provide maximal accounting of any life experiences responsible for level of depression at T1, while respecting the recall limitations of the average participant. For the second (T2) questionnaire, participants reported events that occurred during the four-month interim.

### 3. Results

Two subjects were eliminated as univariate or multivariate outliers on the variables analysed below.

Responses on the LER were categorically differentiated to create domain-specific life event scores. Specifically, a pair of judges independently classified all events reported by participants using a three-category scheme. Events of primarily interpersonal significance (e.g., starting a romantic relationship, conflict with a parent or classmate) were placed in the Social category. Events with primary significance for ability or competence (e.g., winning a short story competition, failing an exam) were placed in the Achievement category. Remaining events (e.g., one's dog having puppies, suffering the flu) were placed in the Other category. The judges concurred on 90% of the events. Cohen's (1960)  $\kappa$  was 0.83, an acceptable chance-corrected level of agreement. Disagreements were resolved through discussion.

To avoid any distortion of results due to metric disparity between groups on the event intensity scale (see Hui & Triandis, 1985), only the *unweighted* or simple event frequencies were used in hypothesis testing. For each participant, frequencies were computed for Positive Social (S+), Negative Social (S-), Positive Achievement (A+), Negative Achievement (A-), Positive Other (O+), and Negative Other (O-) events. Twelve frequencies were computed in total: six representing the six-month period preceding T1 measurement and six representing the four-month interval between T1 and T2 measurements.

Malaysian and British means on the variables used in the following analyses are compared in Table 1. As indicated, Malaysians were more depressed than Britons at both T1 and T2, confirming the first hypothesis. Interestingly, Malaysians also experienced more A- events at both T1 and T2 and more O+ events at T2 than did Britons. ANOVA revealed a modest but reliable decrease in depressive dysphoria from T1 to T2,  $F(1, 61) = 8.20$ ,  $p = 0.008$ , as well as equivalence in this decrease across groups,  $F < 1$ .

Table 1

Mean level of depressive dysphoria and life event frequencies for Malaysian ( $n=28$ ) and British ( $n=35$ ) students

Variable	Cultural group	
	Malaysian	British
T1		
Depressive dysphoria	12.61a (9.98)	6.25b (5.68)
S+ events	1.36a (1.19)	1.00a (0.84)
S–events	1.64a (1.47)	1.40a (1.24)
A+ events	2.18a (1.42)	2.06a (1.28)
A–events	1.61a (1.62)	0.40b (0.50)
O+ events	0.71a (1.05)	0.46a (0.70)
O–events	0.29a (0.53)	0.34a (0.48)
T2		
Depressive dysphoria	10.50a (8.61)	4.97b (6.48)
S+ events	1.39a (1.10)	1.17a (0.92)
S–events	0.79a (0.92)	1.14a (1.03)
A+ events	1.50a (1.26)	1.11a (0.87)
A–events	1.68a (1.47)	0.37b (0.55)
O+ events	0.82a (0.90)	0.23b (0.49)
O–events	0.25a (0.44)	0.14a (0.36)

Note. Means in the same row but with different letters (a,b) differ at  $p < 0.004$  (Bonferroni-corrected for overall  $\alpha = 0.05$ ).

### 3.1. Testing differential sensitivity

Simultaneous multiple regression was used to test for group differences in the associations of life events with change in depressive dysphoria. Three regressions were conducted.<sup>2</sup> The first was aimed at testing differential sensitivity to social events. T2 depression was regressed on the following predictors: T1 depression, T1 S+ and S–, T2 S+ and S–, a dummy variable representing cultural group, and multiplicative terms representing the T2 S+  $\times$  group and T2 S–  $\times$  group interactions. Inclusion of T1 depression allowed life event frequencies to be selectively associated with unique (residualized) variance in T2 depression. This is tantamount to associating life events with T1  $\rightarrow$  T2 change in depression (Cronbach & Furby, 1970). T1 S+ and S– were included as covariates to control for: (1) variance in life events during the six-month period immediately prior to T1 measurement and (2) response style factors similarly influencing the LER at T1 and T2. T2 S+ and S– were the primary predictors, gauging the unique associations of positive and negative social events with change in depression. Finally, the interaction terms provided

<sup>2</sup>To enhance linearity of associations in regression analyses (see Tabachnik & Fidell, 1996), the following variables were subject to square-root transformation: T1 and T2 depression, T1 S+, T2 A+, T1 and T2 A–, T1 and T2 O+, and T1 and T2 O–. Also, gender and both gender  $\times$  life events and gender  $\times$  life events  $\times$  group interaction terms were included in preliminary models for all regressions reported. As none of these predictors were significant, they were dropped from the models to preserve degrees of freedom and focus testing.



critical tests of the hypothesis that both positive and negative social events would more strongly predict change in depression for Malaysian than British students. Significance of their coefficients would reflect differential sensitivity. The sample size, though modest, was adequate for the form of analysis, clearly satisfying Darlington’s (1990) prescription that  $N$  minus the number of predictors be greater than 40.

The results revealed both interactions to be significant:  $\beta = -0.36, p = 0.04$  and  $\beta = 0.38, p = 0.04$ , for T2 S+  $\times$  group and T2 S-  $\times$  group, respectively. Simple slope testing confirmed the form of differential sensitivity to be in line with expectation. T2 S+ was found to be negatively associated with increase in depression for Malaysians,  $\beta = -0.30, p = 0.02$ , but not Britons,  $\beta = 0.06, p = 0.65$  (see Fig. 1). T2 S- was found to be positively associated with increase in depression for Malaysians,  $\beta = 0.35, p = 0.02$ , but not Britons  $\beta = -0.04, p = 0.76$  (see Fig. 2).

A second, parallel regression was conducted to examine the impact of achievement events. T2 depression was regressed on T1 depression, T1 A+ and A-, T2 A+ and A-, group, and the T2 A+  $\times$  group and T2 A-  $\times$  group interactions. Neither interaction was significant:  $\beta = -0.24, p = 0.19$  and  $\beta = -0.08, p = 0.71$ , for T2 A+  $\times$  group and T2 A-  $\times$  group, respectively. There was, however, a significant association for T2 A+,  $\beta = -0.29, p = 0.03$ . The dummy coding used identifies this as the conditional effect for the British group, in the form of a significant negative association of T2 A+ with increase in depression. Given the inadvisability of interpreting a significant conditional effect as an average effect when there is even a hint of interaction within a modest sample (Cohen & Cohen, 1983), simple slope testing was conducted on the T2 A+ association for the Malaysian group. In contrast to the conditional effect for the British group, there was no association,  $\beta = -0.05, p = 0.71$ , consistent with the expected differential sensitivity (see Fig. 3).

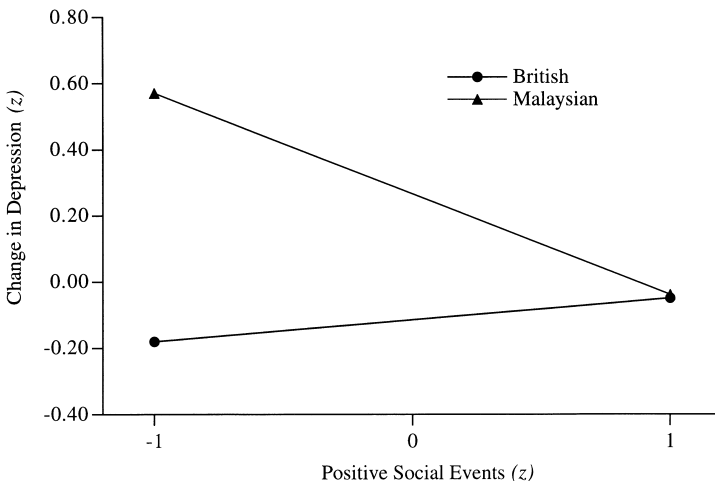


Fig. 1. Differential association of positive social events with change in depressive dysphoria for Malaysian and British students.

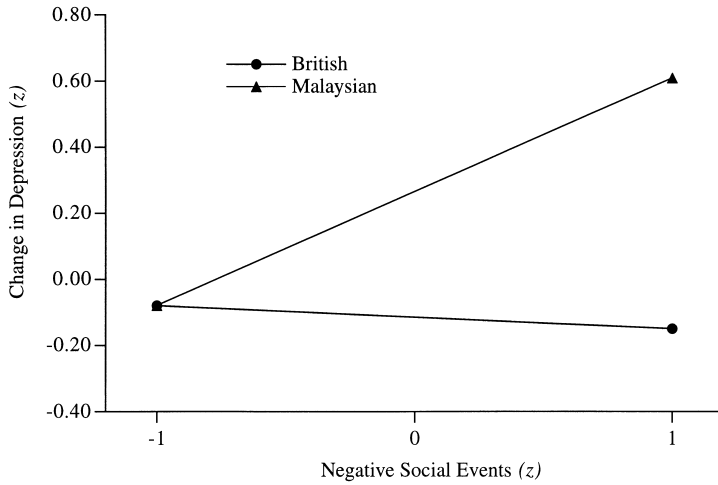


Fig. 2. Differential association of negative social events with change in depressive dysphoria for Malaysian and British students.

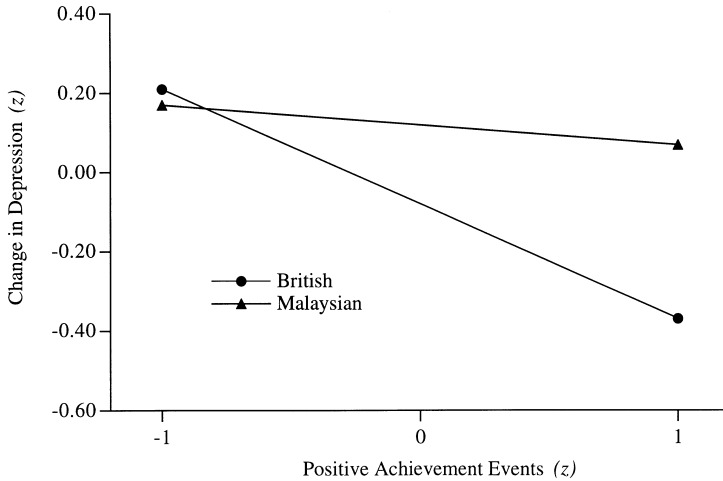


Fig. 3. Differential association of positive achievement events with change in depressive dysphoria for Malaysian and British students.

Finally, a third regression was conducted to examine the impact of events that did not have clear relevance for either social or achievement concerns. T2 depression was regressed on T1 depression, T1 O+ and O-, T2 O+ and O-, group, and the T2 O+  $\times$  group and T2 O-  $\times$  group interactions. The results revealed that neither the

interactions nor T2 O+ and T2 O– were significantly associated with change in depression.

#### **4. Discussion**

As collectivist sojourners in an individualist culture, Malaysian students were expected to exhibit higher levels of depressive disturbance than their British counterparts. This was found, with the mean depression score of Malaysians placing them near the high end of the range for mild depression, according to Western norms (Steer, Beck, & Garrison, 1986). Though the application of scalar norms across cultures is problematic at best, the findings minimally suggest that Malaysians studying in Western countries suffer a considerable degree of dysphoria. This converges with past research pointing to the adjustment problems experienced by this population (e.g., Furnham & Trezise, 1983; Ward & Kennedy, 1993). The finding that both Malaysian and British students experienced, on average, a small but significant decrease in depressive disturbance across time fits with the well-known tendency for students to find the fall term of study more stressful than the spring term (T1 and T2 fell within the fall and spring terms, respectively). This can be attributed to the dramatic life changes involved in moving from summer vacation to fall study.

In regard to differential sensitivity, we predicted that the association of social life events with depressive dysphoria would be stronger for Malaysian than British students. This was clearly confirmed, with positive events inversely related and negative events directly related to increased depression over a four-month interval for Malaysians only. The finding that social events were unrelated to change in depression for British students, however, should not be taken as suggesting that this category of experience is irrelevant for depression among individualists. In contrast, significant social loss has been identified as a primary predictor of clinical depression in Western countries (Brown & Harris, 1978). Moreover, high ego-investment in interpersonal relationships has been extensively discussed in Western theory as a personality factor associated with vulnerability to depressive disorder (Blatt & Zuroff, 1992; Nietzel & Harris, 1990; Robins, 1995). Beck's (1983) "sociotropic" depression, for example, characterized by preoccupation with social loss or rejection, is often triggered by interpersonal stressors. Hence, the lack of association found here may be largely attributable to the workaday nature of events experienced by the participants during a relatively short time interval. No major stressful events were reported in most cases and average change in depressive dysphoria was quite modest.

The prediction that achievement-related events would be more influential for depression in British than Malaysian students received weaker support. Positive events predicted less increase in depression for British students only, as expected, but no association was found for negative events in either group. The reason for this partial confirmation is not immediately apparent. Negative achievement and social events received similar intensity ratings, dismissing the speculation that negative

achievement events were subjectively trivial. One possibility is that differential sensitivity to negative achievement events is a much weaker cultural effect that is harder to discern. Another possibility relates to the characteristics of the participants. Students at Cardiff University can be assumed to possess a fair degree of confidence in their ability to meet goals, having already accomplished much in gaining admittance to a reputable university. Their high self-competence, relative to that of the general population, may guard against self-doubt and distress in response to minor failures. This may explain why commonplace negative experiences related to achievement failed to produce appreciable change in dysphoria in both groups. Research on non-student populations, using more refined tests of sensitivity, are needed to address this possibility. The greater incidence of negative achievements events for Malaysian than British students may have also been problematic for testing differential sensitivity, insofar as non-linearity of association was present. Regrettably, the sample size precluded reliable testing of higher order, curvilinear associations.

The clear absence of differential sensitivity for other kinds of events underscores the domain-specific nature of the demonstrated cultural phenomenon, in accord with theory. Malaysian students do not appear to be at more or less *overall* risk than are home students for depressive response to adversity. Rather, their specific vulnerabilities align with the psychosocial implications of collectivism, with its prescriptive emphasis on social harmonization.

Several concerns about causal interpretation warrant discussion. First, reliance on simple event frequencies in this study raises the possibility that the two groups experienced different sorts of events *within* the same category. For example, Malaysians may have experienced more objectively stressful negative social events than did Britons, irrespective of frequency. If so, their greater depressive response to these events would be neither surprising nor due to cultural differences in social sensitivity. This possibility is contradicted, however, by the finding that the two groups did not significantly differ in their average intensity ratings for any of the six categories of events. Moreover, supplementary analyses using intensity-weighted frequencies produced results parallel to those reported.

A second concern pertains to interpreting the association of life events and depressive dysphoria. Our respondent-based approach to life events measurement relies on active recall. Ideally, it should not be biased by response factors. Depression, however, is known to produce *negative* bias in recall (see Mineka & Nugent, 1995, for a review). This raises the possibility that even relatively mild levels of depressive dysphoria led participants in the present study to recall more negative and fewer positive events than they would have in happier times. Such distortion would necessarily inflate the life events-depression associations tested. The frequency with which lack of association was found, however, suggests that such inflation could not have been considerable. More importantly, the predictors critical to testing differential sensitivity were the events  $\times$  group interactions. Because the magnitude and significance of these interactions is unaffected by simple inflation of their constituent terms, exaggerated events-depression associations could not account for the differential sensitivity observed.

Depression can itself generate negative life events (Cui & Vaillant, 1997; Hammen, 1991). This suggests a second possible source of distortion, if increase in depression across the 4-month period contributed to the incidence of stressful events. Again, however, tests of the cultural hypotheses (interactions) should be insensitive to such distortion. Moreover, no significant intercorrelations were found among negative social, achievement, and other events, suggesting that depressive dysphoria was not breeding negative experiences in a general, pronounced manner.

A third ambiguity addresses the role of social support, which has been found to buffer the psychological impact of life's adversities (Cohen & Wills, 1985; Flannery & Wieman, 1989). As sojourners in a foreign country, Malaysian participants may have lacked the social support enjoyed by their British counterparts, leaving them more susceptible to psychological harm when things went wrong. A general difference in social coping resources, however, could not easily explain the *lower* sensitivity of Malaysians to achievement-related events, nor the greater sensitivity of Malaysians to *positive* social events. Furthermore, Malaysians studying in Britain do not appear to be wanting in social life (Furnham & Trezise, 1983), due perhaps to the strength of their co-national student organizations. A major function of these organizations is in fact social support.

Finally, the possibility remains that culture-level differences independent of I–C were responsible for the findings. What these could be, however, and just how they would account for the complex pattern of differences found, is not obvious. Thus, an I–C interpretation appears to be the most plausible and parsimonious. Nonetheless, evidence for the mediational role of I–C is needed to provide stronger confirmation of the theory.

In summary, the findings provide a moderate degree of evidence for the expected cultural differences in depressive sensitivity to life events. In line with the interpersonal implications of I–C, a collectivist orientation appears to be associated with greater sensitivity to social experiences, whereas an individualist orientation is, at least weakly, associated with greater sensitivity to experiences pertaining to personal achievement. This identifies I–C as a potentially important dimension of cultural distance and provides a theoretical basis for anticipating the specific adjustment problems experienced by different groups of international students. Understanding the nature and basis of culturally determined susceptibilities is critical for creating academic environments that support the well-being of all students, and provide effective advising and counseling services when problems arise (Hammer, 1992; Khoo, Abu-Rasain, & Hornby, 1994; Paige, 1990). The growing number of international students passing through our corridors each year recommends that this become a research priority.

## **Acknowledgements**

This research was supported in part by a Cardiff Research Initiative grant from the University of Wales Cardiff to the first author. We are grateful to Alan Cain and

Pam Rowlands at the International Office of Cardiff University for their assistance in data collection.

## References

- Babiker, I., Cox, J., & Miller, P. (1980). The measurement of culture distance and its relationship to medical consultations, symptomatology and examination performance of overseas students at Edinburgh University. *Social Psychiatry, 15*, 109–116.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
- Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton, & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265–290). New York: Raven.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years later. *Clinical Psychology Review, 8*, 77–100.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.
- Berry, J. W., Kim, U., & Boski, P. (1988). Psychological acculturation of immigrants. In Y. Y. Kim, & W. B. Gudykunst (Eds.), *Cross-cultural adaptation: Current approaches* (pp. 62–89). Newbury Park, CA: Sage.
- Blatt, S. J., & Zuroff, D. C. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review, 12*, 527–562.
- Bochner, S. (1994). Cross-cultural differences in the self-concept: A test of Hofstede's individualism/collectivism distinction. *Journal of Cross-Cultural Psychology, 25*, 273–283.
- Brown, G. W., & Harris, T. (1978). *Social origins of depression*. New York: Free Press.
- Brown, G. W., & Harris, T. (1986). Establishing causal links: The Bedford College studies of depression. In H. Katschnig (Ed.), *Life events and psychiatric disorders: Controversial issues* (pp. 107–187). Cambridge, England: Cambridge University Press.
- Burns, D. J., & Brady, J. (1992). A cross-cultural comparison of the need for uniqueness in Malaysia and the United States. *Journal of Social Psychology, 132*, 487–495.
- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin, 91*, 540–572.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37–46.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310–357.
- Cronbach, L. J., & Furby, L. (1970). How should we measure change — or should we?. *Psychological Bulletin, 74*, 68–80.
- Cui, X., & Vaillant, G. E. (1996). The antecedents and consequences of negative life events in adulthood: A longitudinal study. *American Journal of Psychiatry, 153*, 21–26.
- Cui, X., & Vaillant, G. E. (1997). Does depression generate negative life events?. *Journal of Nervous and Mental Disease, 185*, 145–150.
- Darlington, R. B. (1990). *Regression and linear models*. New York: McGraw-Hill.
- Flannery, R. B., & Wieman, D. (1989). Social support, life stress, and psychological distress: An empirical assessment. *Journal of Clinical Psychology, 45*, 867–872.
- Furnham, A. (1988). The adjustment of sojourners. In Y. Y. Kim, & W. B. Gudykunst (Eds.), *Cross-cultural adaptation: Current approaches* (pp. 42–61). Newbury Park, CA: Sage.
- Furnham, A., & Bochner, S. (1986). *Culture shock: Psychological reactions to unfamiliar environments*. London: Methuen.
- Furnham, A., & Trezise, L. (1983). The mental health of foreign students. *Social Science and Medicine, 17*, 365–370.

- Greene, S. M. (1989). The relationship between depression and hopelessness: Implications for current theories of depression. *British Journal of Psychiatry*, 154, 650–659.
- Hammen, C. (1991). Generation of stress in the course of unipolar depression. *Journal of Abnormal Psychology*, 100, 555–561.
- Hammer, M. R. (1992). Research, mission statements, and international student advising offices. *International Journal of Intercultural Relations*, 16, 217–236.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Abridged Ed.). Newbury Park, CA: Sage.
- Hofstede, G. (1991). *Culture and organizations*. London: Macgraw-Hill.
- Hui, C. H. (1988). Measurement of individualism-collectivism. *Journal of Research in Personality*, 22, 17–36.
- Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology: A review and comparison of strategies. *Journal of Cross-Cultural Psychology*, 16, 131–152.
- Hull, W. F. (1978). *Foreign students in the United States of America: Coping behavior within the educational environment*. New York: Praeger.
- Jenkins, J. H., Kleinman, A., & Good, B. J. (1991). Cross-cultural studies of depression. In J. Becker, & A. Kleinman (Eds.), *Psychosocial aspects of depression* (pp. 67–99). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Johnson, J. G., Crofton, A., & Feinstein, S. B. (1996). Enhancing attributional style and positive life events predict increased hopefulness among depressed psychiatric patients. *Motivation and Emotion*, 20, 285–297.
- Khoo, P. L. S., Abu-Rasain, M. H., & Hornby, G. (1994). Counselling foreign students: A review of strategies. *Counselling Psychology Quarterly*, 7, 117–131.
- Kitayama, S., Markus, H. R., & Lieberman, C. (1995). The collective construction of self-esteem: Implications for culture, self, and emotion. In J. A. Russell, J. Fernández-Dols, A. S. R. Manstead, & J. C. Wellencamp (Eds.), *Everyday conceptions of emotions: An introduction to the psychology, anthropology, and linguistics of emotion* (pp. 523–550). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245–1267.
- Klocek, J. W., Oliver, J. M., & Ross, M. J. (1997). The role of dysfunctional attitudes, negative life events, and social support in the prediction of depressive dysphoria: A prospective longitudinal study. *Social Behavior and Personality*, 25, 123–136.
- Leong, F. T. L., Tseng, W., & Wu, D. Y. H. (1985). Cross-cultural variation in stressful life events: A preliminary study. *American Mental Health Counselors Association Journal*, 7, 72–77.
- Manson, S. M. (1995). Culture and major depression: Current challenges in the diagnosis of mood disorders. *Cultural Psychiatry*, 18, 487–501.
- Markus, H., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Marsella, A. J. (1980). Depressive experience and disorder across cultures. In H. C. Triandis, & J. G. Draguns (Eds.), *Handbook of cross-cultural psychology*, vol. 6 (pp. 237–289). Boston: Allyn & Bacon.
- Mineka, S., & Nugent, K. (1995). Mood-congruent memory biases in anxiety and depression. In D. L. Schacter (Ed.), *Memory distortions: How minds, brains, and societies reconstruct the past* (pp. 173–193). Cambridge, MA: Harvard University Press.
- Monroe, S. M., & Depue, R. A. (1991). Life stress and depression. In J. Becker, & A. Kleinman (Eds.), *Psychosocial aspects of depression* (pp. 101–130). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Needles, D. J., & Abramson, L. Y. (1990). Positive life events, attributional style, and hopefulness: Testing a model of recovery from depression. *Journal of Abnormal Psychology*, 99, 156–165.
- Nietzel, M. T., & Harris, M. J. (1990). Relationship of dependency and achievement/autonomy to depression. *Clinical Psychology Review*, 10, 279–297.
- Oberg, K. (1960). Culture shock: Adjustment to new cultural environments. *Practical Anthropology*, 7, 177–182.

- Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology, 106*, 52–60.
- Paige, R. M. (1990). International students: Cross-cultural psychological perspectives. In R. W. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 161–185). Newbury Park, CA: Sage.
- Robins, C. J. (1995). Personality–event interaction models of depression. *European Journal of Personality, 9*, 367–378.
- Sampson, E. E. (1989). The challenge of social change for psychology: Globalization and psychology's theory of the person. *American Psychologist, 44*, 914–921.
- Shweder, R. A., & Bourne, E. J. (1984). Does the concept of the person vary cross-culturally?. In R. A. Shweder, & R. A. LeVine (Eds.), *Culture theory: Essays on mind, self, and emotion* (pp. 158–199). New York: Cambridge University Press.
- Stening, B. W. (1979). Problems in cross-cultural contact: A literature review. *International Journal of Intercultural Relations, 3*, 269–313.
- Steer, R. A., Beck, A. T., & Garrison, B. (1986). Applications of the Beck Depression Inventory. In N. Sartorius, & T. A. Ban (Eds.), *Assessment of depression* (pp. 121–142). Geneva, Switzerland: World Health Organization.
- Tabachnik, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: HarperCollins.
- Tafarodi, R. W., Lang, J. M., & Smith, A. J. (1999). Self-esteem and the cultural trade-off: Evidence for the role of individualism-collectivism. *Journal of Cross-Cultural Psychology, 30*, 626–640.
- Tafarodi, R. W., & Walters, P. (1999). Individualism – collectivism, life events and self-esteem: A test of two trade-offs. *European Journal of Social Psychology, 29*, 797–814.
- Triandis, H. C. (1994). Theoretical and methodological approaches to the study of collectivism and individualism. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 41–51). Thousand Oaks, CA: Sage.
- Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology, 54*, 323–338.
- Triandis, H. C., Leung, K., Villareal, M. J., & Clack, F. L. (1985). Allocentric versus idiocentric tendencies: Convergent and discriminant validation. *Journal of Research in Personality, 19*, 395–415.
- Ward, C., & Kennedy, A. (1993). Where's the “culture” in cross-cultural transition? Comparative studies of sojourner adjustment. *Journal of Cross-Cultural Psychology, 24*, 221–249.
- Ward, C., & Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and sociocultural adjustment of sojourners. *International Journal of Intercultural Relations, 15*, 209–225.
- Yamaguchi, S., Kuhlman, D. M., & Sugimori, S. (1995). Personality correlates of allocentric tendencies in individualist and collectivist cultures. *Journal of Cross-Cultural Psychology, 26*, 658–672.