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Trauma, time and mental health: a study of temporal reintegration and Depressive Disorder among Southeast Asian refugees

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ABSTRACT

Background. Prior research suggested that time splitting – suppressing the past and dissociating it from present and future – protected refugee mental health in the aftermath of catastrophe. The current study investigates temporal reintegration, defined as cognitive recapture of the past and reconnecting it with present and future, the mental health effects of temporal reintegration, and factors moderating the associated risk for Depressive Disorder.

Method. A community sample of 608 Southeast Asian refugees, resettled in Vancouver British Columbia between 1979 and 1981, were interviewed on three separate occasions over a 10-year period. Participants performed a temporal orientation task and responded to questions about employment, social relations and mental health. Depressive Disorder, measured by a typology derived from Grade of Membership analysis of symptoms, constituted the dependent variable. Latent Growth Curve Analysis was used to examine both levels and rates of change in the probability of Depressive Disorder as predicted by changes in temporal reintegration, as well as the contribution of putative social and psychological moderators to explaining variations in growth parameters.

Results. Time relatedness increased over the duration of the study. Temporal reintegration jeopardized mental health. Employment and relational stability each moderated the mental health effects of temporal reintegration.

Conclusions. Although time splitting may be effective in coping with adversity over the short-term, eventual temporal reintegration is probably ineluctable. Stability in love and work are protective factors, mitigating the mental health vicissitudes of temporal reintegration. Implications for optimal timing of clinical interventions are discussed.

INTRODUCTION

'For the living, things have to connect. At least, seem to.' These sentences from Joyce Marshall's (1996) novel recall the concept of 'time binding', advanced almost 40 years earlier by the psychologist, H. Mowrer (1958). Both artist and scientist speak of a universal human need to recognize past, present and future and to connect them psychologically (see also Getsinger & Leon, 1979).

In seeming contradiction, reports from the University of Toronto Refugee Resettlement Project (RRP) suggest that time splitting – suppressing the past and dissociating it from present and future – is a coping mechanism that protects psychological well-being in the immediate and mid-term aftermath of catastrophe (Beiser, 1987, 1999; Beiser & Hyman, 1997). The current report focuses on the phenomenon and mental health consequences of temporal

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reintegration, conceptualized as recapture of the past and reconnecting it with present and future. Using data from a 10-year study of Southeast Asian refugees in Canada, the study explores the premise that time splitting can be psychologically adaptive, but that temporal reintegration will, as Marshall and Mowrer suggest, prove ultimately ineluctable (see also Friedlander, 1979; Ellenberger, 1993; Antze & Lambek, 1996; Kirmayer, 1996). The study also examines personal and contextual factors that mitigate mental health hazard attendant on temporal reintegration.

Study background

Thomas Cottle (1967, 1969, 1976) described two dimensions of time perception: (1) time dominance, the relative importance attributed to past, present and future, and (2) time relatedness, the interconnectedness among the three temporal spheres.

Shortly after they arrived in Canada, the time perspective of most Southeast Asians was characterized by the dominance of present and future perceptions, and a disconnection between the past and the other two temporal spheres. The small minority who were temporally integrated were also suffering a high risk of Depressive Disorder, and the data suggested that temporal reintegration preceded the onset of depression, but not vice versa (Beiser, 1987, 1999; Beiser & Hyman, 1997). These findings raise further questions. Since the importance of the past increases with advancing age (Cottle, 1976), is temporal reintegration after catastrophe inevitable? If the answer to the first question is 'yes', it prompts a further question: since all survivors of catastrophe do not become mental health casualties, what protects mental health during the process of temporal reintegration?

Based on the premise that time binding is a universal human impulse, the present study investigates temporal reintegration, its effects on psychological well-being, and personal and social factors that may moderate mental health risk.

There are three specific study hypotheses.

(1) Since safety and predictability decrease the need for time splitting, the longer the period of resettlement, the greater the likelihood that temporal reintegration will occur.

(2) Temporal reintegration creates risk for the development of Depressive Disorder.

(3) Occupational and relational stability, work satisfaction and perceived social support each moderate the depressive risk attendant on temporal reintegration.

Context of the study

By the time Saigon collapsed in 1975, the Vietnam war had claimed more than five million lives, deprived more than 50% of the population of their homes, stripped the country of one fifth of its farmlands and forests, and emptied the country's treasury.

To divert attention from the country's internal problems, Hanoi government forces invaded Cambodia in 1978. When an annoyed China responded by invading Vietnam's northern border, Hanoi retaliated by expelling the country's 745 000 ethnic Chinese residents. An almost equal number of ethnic Vietnamese chose to flee the country at the same time, rather than live under the new communist.

The turmoil in Vietnam spilled over into Laos and Cambodia.

During the war, the Pathet Lao had collaborated with North Vietnam by allowing guerrillas freedom of movement along Laos's Ho Chi Minh Trail. After its victory, Hanoi repaid the favour by helping the Pathet Lao Communists gain control of Laos. Right-wing Laotian politicians, leaders and frightened citizens subsequently fled to refugee camps in neighbouring Thailand.

Meanwhile, left-wing forces in Cambodia had toppled the country's military government and installed a new leader named Pol Pot. Using torture, extermination and the virtual elimination of religious and intellectual life, Pol Pot relentlessly pursued his vision of Cambodia as a nationwide agricultural commune. Two million people died during the 4 years of Pol Pot's terror.

Vietnam invaded Cambodia in 1979, defeated Pol Pot, and created enough confusion to make escape from Cambodia possible.

The masses of Cambodians, Laotians, Vietnamese and ethnic Chinese fleeing the Southeast Asian peninsula created the 'Boat People' crisis. In the early days of the mass exodus, Hong Kong, the Philippines, Malaysia and Indonesia received refugees and put them in refugee camps.

As the crisis wore on, these countries became increasingly afraid that the housing and feeding of refugees would become a permanent responsibility. They began turning refugees away from their land borders and their shores.

To help resolve the crisis, a consortium of UN member states agreed to resettle Southeast Asian refugees. Between 1979 and 1981, Canada admitted 60 000 Boat People and dispersed them to large and small communities across the country.

Since 1981, the principal author has directed the RRP (Beiser, 1987, 1999; Beiser & Hyman, 1997), a longitudinal study of the resettlement experiences of a community sample of refugees who were resettled in Vancouver, British Columbia.

METHOD

Although primarily a large-scale longitudinal epidemiological study, the RRP has also used qualitative interviews to help develop hypotheses, to identify risk-modifying circumstances and personal strengths, and to aid in the interpretation of survey data (Beiser, 1999; see also Babbie, 2001).

Study samples

As described in more detail elsewhere (Beiser, 1999), the inception cohort of 1348 adults was assembled using a combination of snow-ball and probability sampling (Mendenhall & Shaffer, 1971). With an acceptance rate of 95%, the sample accounted for slightly more than one in four of the 5000 Southeast Asian refugees resettled in Vancouver, British Columbia. The sample's demographic profile, including youthfulness (three-quarters under the age of 35), ethnic composition (approximately 50% ethnic Chinese from Vietnam, the remainder Vietnamese, Laotian and Cambodian) and slight preponderance of males (58%) over females (42%), closely approximated federal government figures for the total group of refugees resettled in Vancouver. When interviewing began in 1981, the refugees had been in Canada an average of 16 months.

The RRP Principal Investigator (M.B.) also conducted intensive case studies with 60 Southeast Asian refugees, 30 of whom were suffering a diagnosable psychiatric disorder and 30 who were adapting exceptionally well. The psychiatrically ill group consisted of referrals from a network of mental health service agencies in Vancouver, most of whom had received a diagnosis of Major Depressive Disorder, Posttraumatic Stress Disorder or both (see Beiser, 1999). In order to recruit a group of high functioning interviewees, the research team asked settlement and community agencies to nominate refugees who appeared to be adapting exceptionally well. Because the community sample had been chosen using a probability framework, 12 people taking part in the intensive case interviews also fell into the survey sample. Each member of the case study group, as well all the survey respondents signed informed consent forms after listening to an explanation of the study.

In 1983, the study team located and re-interviewed 1169 persons, and, in 1991, 648 persons who had taken part in the initial 1981 study. RRP retention rates compare favorably with other longitudinal investigations of Southeast Asian refugees (Burwell *et al.* 1986; Lewis *et al.* 1988). Furthermore, formal statistical testing revealed negligible attrition-related bias. The investigative team used a two-stage estimation procedure proposed by Heckman (1979) to examine possible selection bias due to sample attrition. In stage one, a probit model was constructed to estimate the propensity to remain in the follow-up survey. The results of the probit models indicated that at wave 2, only being married was significantly associated with lower probabilities of attrition. At wave 3, younger age at immigration, being married, and higher levels of initial English proficiency were significantly associated with lower probabilities of attrition. In stage two, a correction factor, the so-called hazard rate (the inverse Mills ratio), was computed for each observation based on the probit estimates. The hazard rate was then entered as an explanatory variable in multivariate models for selected outcome variables, including depression. The results indicated that the correction factor was not significant and had no substantial influence on the parameter estimates of other variables in the models.

With the help of bilingual interpreters, interviewing with the case study sample continued over the 10-year study period, with no set interval between meetings.

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The current report uses information from the qualitative interviews as well data from the 608 cases with complete records for all three waves.

Study measures

RRP interviews supplied data about sociodemographic characteristics, pre-migration and post-migration stressors, employment and marital history, language fluency, time perspective and psychiatric symptoms. Bilingual interviewers, many of them refugees themselves, administered either Cantonese, Vietnamese or Laotian versions of the schedules, which had been prepared using standard translation and back-translation procedures (Brislin *et al*. 1973).

The time perspective measure, a simple, easy to administer, readily understood procedure with appealing face validity and apparent cross-cultural utility, has been extensively described in previous publications (Beiser, 1987, 1999; Beiser & Hyman, 1997). Briefly, interviewers present each respondent with three sets of paper circles, one labelled past, one present and one future. Each set contains three circles, one large, one medium-sized and one small. Respondents signify the importance of past, present and future by choosing circles of different sizes, a large circle to indicate that a particular temporal dimension is important, and so forth. After choosing a circle for each time dimension, respondents describe temporal connections by arranging the circles on a blank page. The interviewers record the choice of circle sizes and their patterns of interrelatedness by tracing and labelling the outline of the circles on the page. Time dominance is determined by the choice of circle size: when the circle chosen for the past is larger than either present or future, or equivalent in size to the present, the pattern is coded as 'nostalgia' and all other patterns as 'other'. Using predetermined guidelines to classify time relatedness according to measured distances among the circles, the coders categorize individual responses as either 'atomistic' (no relationship among past, present and future) or 'other' (non-atomistic). (Inter-rater reliability for both time dominance and time relatedness = 98%.) The 'other' categories for both Time Dominance and Time Relatedness subsume a number of different patterns of response. Because previous research (Beiser, 1987, 1999; Beiser & Hyman 1997) identified 'nostalgia' and 'non-atomism' as conditions of risk for Depressive Disorder, the current report retains this simplified coding scheme. Temporal reintegration, recapturing the past and reconnecting it with present and future, was operationalized as the product of an increase in past dominance (i.e. a shift from 'other' to 'nostalgia') together with an increase in time relatedness (i.e. a shift from temporal atomism to 'other') during the period 1981–1991. An increase in past dominance combined with an increase in non-atomistic perspective is the hypothesized condition of maximum mental health risk, while a decrease in past non-dominance combined with increased atomism is the condition of least risk. A change to dominance/non atomistic by 1983 received a value of 1·5, a change to dominance non/atomistic by 1991 a value of 1·0. A change from a past dominance/non atomistic endorsement pattern to past non-dominance/atomistic (hypothetically associated with decreased mental health risk) between 1981 and 1983 was assigned a value of (−1·5), and a change from past dominance/non-atomistic to past non-dominance/atomistic by 1991 a value of (−1·0). Stability – no change in either time dominance or time relatedness – received a score of 0.

Sociodemographic data included gender (male = 0, female = 1), and age in years.

Although PTSD is often considered the signature psychopathological consequence of exposure to traumatic events, trauma may also be a risk factor for depression (Shalev *et al*. 1998; Breslau, 2002; Galea, 2002; McNally *et al*. 2003), the dependent variable for the current study. As reported in previous publications (Beiser *et al*. 1994; Beiser, 1999), the RRP measure of Depression is the probability of belonging to a Grade of Membership (GOM)-derived Depressive Disorder category based on typological analysis of 45 items derived from both etic and emic-orientated mental health measures (Beiser *et al*. 1976; Radloff, 1977; Kinzie *et al*. 1982; Robins *et al*. 1985). Fixed choice item responses were 'often', 'sometimes' or 'never'.

GOM analysis is a multivariate clustering technique that derives fuzzy categories or profiles called 'pure types' from empirical data (George *et al*. 1989). The RRP Depressive Disorder pure type consists of an aggregation of 'often' or 'sometimes' responses to questions such as 'During the past few weeks, have you

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felt: (*a*) discouraged; (*b*) lonely even with others; (*c*) unhappy; (*d*) that you had lost your appetite; (*e*) tired all the time?' 'Never' responses to these and other symptom questions dominate other pure type clusters that describe good health (see Beiser *et al*. 1994; Beiser, 1999, for a description of the construct validity and cross-cultural invariance of the Depressive Disorder measure).

After deriving typologies, GOM assigns each individual in the study sample a series of scores, referred to as g_{ik}'s, which measure the similarity between a respondent's particular profile and each of the pure types. These scores run from 0 to 1·0, with a score of 0 signifying complete lack of membership in a particular group. The closer the g_{ik} approaches 1·0, the more likely the individual is to belong to the pure type in question. An individual described exactly by a single pure type such as Major Depressive Disorder – the elusive 'classic case' – would have a g_{ik} of 1·0 for this pure type and 0·0 for each of the other pure types. Scores less than 1·0 indicate the probability of membership in two or more groups. In contrast with measures of psychopathology used in other epidemiological surveys, which treat diagnoses as hard and fast categories, GOM-derived measures are based on the assumption that a diagnosis is a statement of probability, not an assertion of certainty (see Frances *et al*. 1990). Although grounded in psychiatric diagnosis, GOM is a continuous, rather than a categorical measure of the probability of caseness.

The dependent variable for the current study is g_{ik} Depressive Disorder scores. Changes in g_{ik} scores over time measure changes in individual risk for Depressive Disorder.

Refugees who were employed during the year preceding the 1983 interview and during the 5 years prior to the 1991 resurvey were called the 'stable employed', the remainder the 'unstable' or 'non-employed'. In accordance with the hypothesis that structural conditions would moderate the influence of temporal reintegration on depression, the measure captured the stability of occupational status, not stability of occupation. Thus, refugees who changed jobs but remained employed throughout the period under question were classified as stably employed. Job satisfaction, a rating derived from the 1991 interviews, was created by summing the employed group's responses to four items: (*a*) the kind of work; (*b*) pay and work supervision; (*c*) co-workers; and (*d*) opportunities for promotion. Item scores ranged from 1 ('satisfied') to 3 ('dissatisfied'). The scale had a reliability coefficient of 0·76.

Based on 1981 and 1991 data, two groups of refugees were identified: those married or in a common law relationship at both points in time were classified as 'stable married', the remainder as 'unmarried'.

Eighteen items from the 1991 survey were summed to create a measure of perceived social support. On a scale of 1 (very unlikely) to 6 (very likely), respondents reported the degree of comfort they would expect from their social network if they were to be faced by illness, emergency, family, conflict, work problem and financial hardship. The scale's reliability coefficient was 0·80.

Latent growth curve (LGC) analysis was used (*a*) to estimate means and variances of individual growth parameters, i.e. both levels and rates of change in the probability of caseness, and (*b*) to examine the contribution of social and psychological resources to explaining variations in those growth parameters (Joerskog & Sorbom, 1993; Wickrama *et al*. 1997).

RESULTS

Sample characteristics

The final survey sample contained more males (57·3%) than females. The age range was 26–88 years, with a mean of 41. Approximately 80% were married, and most (71·7%) had been continuously employed during the period 1986–1991. Of the retained sample 43% was ethnic Chinese, the rest either Vietnamese or Laotian. The mean g_{ik} for the sample as a whole was 0·066 in 1981, 0·041 in 1983 and 0·022 in 1991 (see Fig. 2 and the section entitled 'Time perspective and depression' for more discussion of these results).

Resettlement and time perspective

As illustrated in Fig. 1*a*, patterns of time relatedness accorded with study hypothesis 1: the longer the refugees remained in Canada, the greater the tendency to reconnect the past with present and future. Fig. 1*b* is, however, not consistent with hypothesis 1. Rather than the expected pattern, in which past perceptions would have either gained equality with, or

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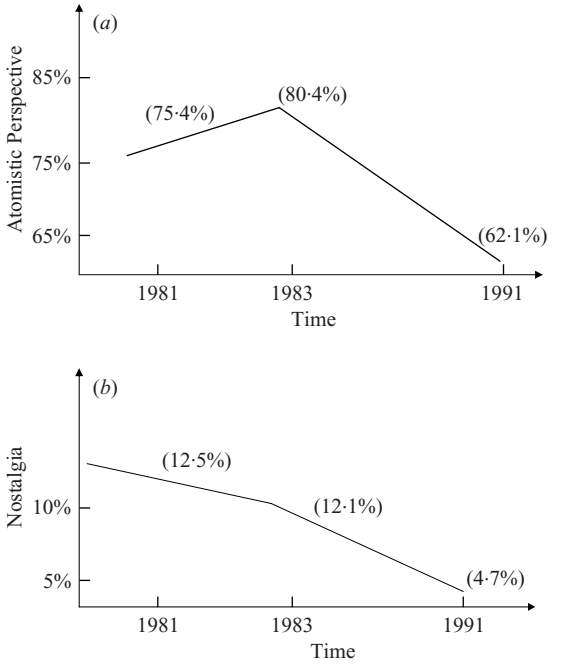

FIG. 1. Changes in temporal integration, 1981–1991. (*a*) Proportion of refugees reporting atomistic perspective: 1981, 1983, 1991; (*b*) Proportion of refugees endorsing nostalgia: 1981, 1983, 1991.

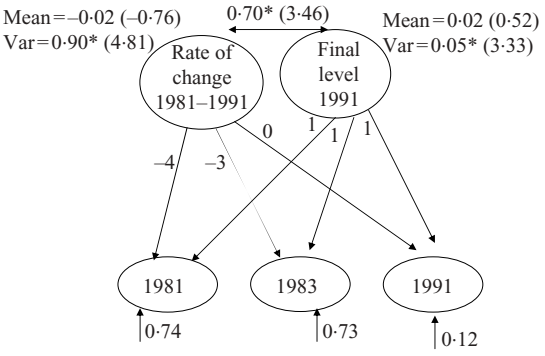

FIG. 2. Univariate growth curve of likelihood of Major Depressive Disorder, 1981–1991 ($n=608$) (* $p<0·05$).

ascendance over present and future, the salience of the past actually diminished during the first decade of resettlement.

Young refugees (<35) were more likely than their older counterparts to avoid 'nostalgia'. The percentage of young refugees endorsing 'nostalgia' was 11·36 in 1981, 8·31 in 1983 and 3·36 in 1991; for older refugees, the corresponding percentages were 12·42, 21·83 and 10·00. Neither gender nor ethnicity had statistically reliable associations with either time dominance or time relatedness.

Time perspective and depression

In the latent growth curve model presented in Fig. 2, the growth parameters of final level and rate of change are represented by two latent variables. The latent variable corresponding to rate of change (for a linear change) was estimated by assigning appropriate loadings of −4, −3 and 0 for three measurements (indicators) in 1981, 1983 and 1991. The latent variable corresponding to the final level was estimated by assigning factor loadings of 1 for all three measurements.

The Adjusted Goodness of Fit index value indicates a respectable fit with the data (Adjusted Goodness of Fit index = 0·92). The significant variance for the final measure of Depressive Disorder in 1991 suggests considerable variation in final levels of likelihood of caseness. Although the overall mean score for Major Depression remained constant over time (average rate of change was not significant ($-0·02$, $t=0·76$, N.S.), the significant inter-individual variation in rates of change suggests that, from 1981 to 1991, mental health risk increased for some refugees, decreased for others, and, in some cases, remained relatively constant. The high correlation between rate of change in depression and final level indicates that a high rate of change in depressive symptoms tended to be associated with elevated levels of depression in 1991, and vice versa.

Study hypothesis 2 predicted an association between temporal reintegration and elevated risk for Major Depressive Disorder. According to Fig. 3, changes in temporal integration were statistically reliable predictors of both rates of change in depression levels between 1981 and 1991, and of final levels of depression in 1991. The pattern combining increases in both 'nostalgia' and 'non-atomism' was associated with the highest probability of Depressive Disorder, while the low 'nostalgia'/high 'atomism' pattern had the lowest associated risk.

The pattern combining increases in both 'nostalgia' and 'non-atomism' from 1981 to 1991 contributed to the subsequent level of Depressive Disorder measured in 1991, a finding which suggests that temporal reintegration

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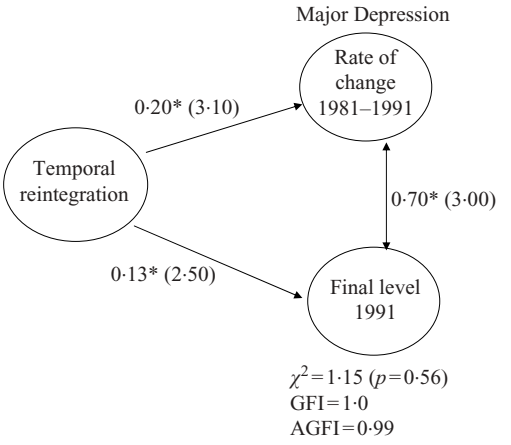

FIG. 3. The influence of temporal reintegration on rate and change in, and final level of likelihood of Major Depressive Disorder (maximum likelihood estimates) (n=608) (* p<0·05).

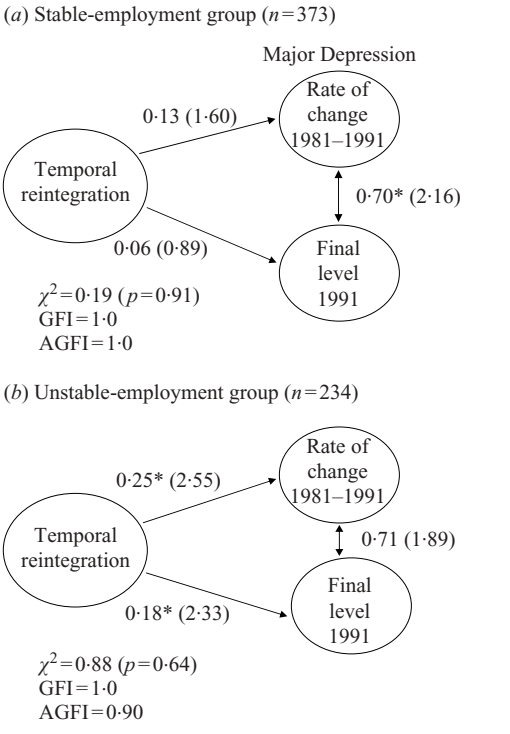

FIG. 4. Moderating effect of stable employment status on the relationship between temporal reintegration and the level and growth of likelihood of Major Depression Disorder. (*a*) Stable employment group (n=373); (*b*) unstable employment group (n=234) (* p<0·05).

preceded Depressive Disorder. The alternate hypothesis is that temporal reintegration is a highly probable consequence of Depressive Disorder. However, analyses showing no statistically reliable association 1981 levels of risk for Depressive Disorder and subsequent temporal integration (1981–1991), failed to support this hypothesis.

To investigate the possible influence of pre-existing depression on the association between temporal reintegration and depression, we repeated the analyses on two subsamples (high risk *v*. low risk) created by performing a median split of the total sample according to 1981 g_{ik} scores. Correlations were stronger for those at high risk than those at low risk (r=0·26 and r=0·08 respectively; the authors wish to express their gratitude to the anonymous reviewer who suggested this analysis), a finding which suggests that refugees at high risk for depression in 1981 benefited more from avoiding temporal reintegration over the subsequent 10-year period than those who were at low risk at the beginning of the study.

Employment and social resources as moderators of risk

Fig. 4 addresses the third hypothesis, namely that occupational success and social resources protect the psyche from the mental health threat associated with temporal reintegration. Panel (*a*) in this figure illustrates that temporal reintegration did not jeopardize the mental health of the consistently employed. However, according to panel (*b*), temporal reintegration affected both rates of change in depression and the final level of Depressive Disorder among the unstable employment group.

According to Fig. 5, relational stability attenuates the relationship between temporal reintegration and rate of change in depression levels as well as 1991 depression levels.

Similar analyses failed to demonstrate significant moderating effects for either perceived social support or job satisfaction.

The content of the disconnected past

Previous RRP reports (Beiser, 1987, 1999; Beiser & Hyman, 1997) suggest that, in order to get on with life, it may be possible to leave dreadful things behind, at least in the short and medium-term aftermath of catastrophe. However, the

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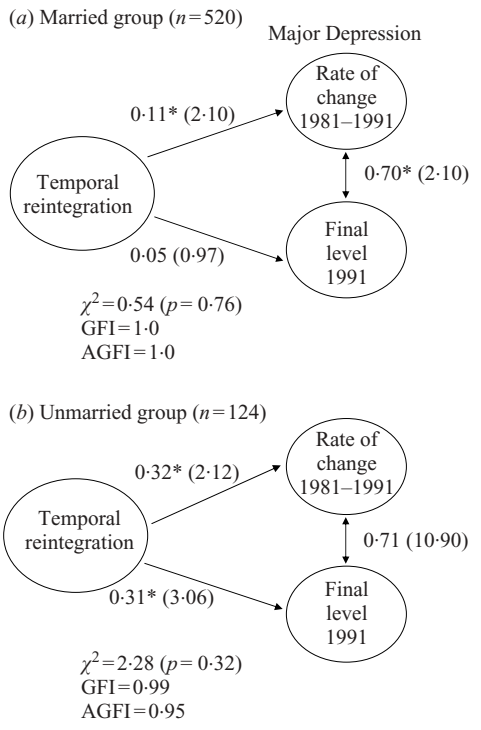

FIG. 5. Moderating effect of stable marriage on the relationship between temporal reintegration and the level and growth of Major Depression Disorder. (*a*) Married group ($n=520$); (*b*) unmarried group ($n=124$) (* $p<0·05$).

quantitative data in the current report suggest the ultimate ineluctability of temporal reintegration. RRP case studies complement these quantitative data by helping to reveal the content of the disconnected past. These interviews suggest that it may not be just isolated incidents involving suffering which are kept out of awareness but large swatches of personal history, many dealing with loss. In order to protect confidentiality, the case histories in this report are fictionalized composites based on multiple interviews with multiple informants.

Li Wuchin, a dignified 50-year-old Chinese, was a wealthy, prominent industrialist in pre-1975 Vietnam. After the fall of Saigon, he was sent to an ideological re-education camp to cleanse him of capitalist leanings. One morning, waking to the noise of an incessant creaking, Wuchin discovered his cell-mate dangling from the ceiling at the end of a noose made from bedsheets. After Wuchin's release, he and his family made a hair-raising escape across the Mekong River, following which they were interned for 12 months in a refugee camp in Thailand. The family came to Canada in 1979, and Li quickly found work as a church janitor. His wife supplemented their income by working as a seamstress. About 1 year later, disillusioned about his prospects, and disheartened by his children's refusal to respect his authority as he felt they should, Mr Li began to reminisce about his factories, his fine houses and his servants in pre-war Vietnam. Reverie turned to despair, and he eventually tried to kill himself by slashing his neck with an ice-pick. After Li Wuchin's release from hospital, the principal author and an excitable interpreter interviewed him in a mental health clinic. 'Why', the interpreter blurted out, 'after all you have been through – all the suffering and the fear – did you do this. Why would you try to kill yourself?' Mr Li replied: 'I have been thinking about my past just as you are now. I still do. But when I consider the past, I don't think of myself only in the camp or in the middle of the Mekong River. I think about life when it was at its best. Compared to that, I have nothing now, and I probably never will.'

Although the elderly are at particular risk for nostalgia (Beiser, 1987, 1999), youth does not confer immunity. Lan, the youngest and very spoiled daughter of a wealthy Vietnamese family, escaped with her brothers in a small fishing boat. Despite pirate raids during the boat crossing, the young woman somehow managed to hold onto a small packet of family jewels her mother had given her when they said goodbye. After coming to Canada, Lan's two brothers took dishwashing jobs and enrolled in the free English language classes offered by federal government. The brothers had little time left over to take notice of Lan. Although they offered to take her out with them, she told them she was afraid that, if she were to leave, someone might steal the jewels. Today, the brothers wonder if they could have done something to prevent the breakdown Lan later suffered, an episode that required her to be hospitalized for what they were told was a mental disorder. Ten years after their arrival in Canada, Lan is still apathetic and she still talks continually about the past. Her brothers wonder if the pills she takes every day might be at least partly responsible.

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When she first came to Canada, Le Quyen was like Lan in her longing for home. The two women's circumstances and outcome, however, were very different. Like Lan, Le Quyen was a favoured child, not, however, because of her position in the family, but rather because she had always conformed to her parents' expectations for competence, industriousness and self-reliance. In 1979, Le's family bought one of the few spots available in a fishing boat that was leaving Vietnam, and assigned it to her. Le had to leave family, memories of medical school studies which had been aborted by the war, and a handsome young lawyer. In order to get out of the Malaysian refugee camp in which she ended up after fleeing Vietnam, Le pretended to be a member of a Chinese family who had been already selected for resettlement in Canada. She didn't realize that, in return for the favour, the family expected her to work as an unpaid servant with no time off for English classes, or any other activity, for that matter. The threat of deportation for lying to the immigration authorities was enough to keep Le silent for a year or more. She stopped thinking about how to get anywhere in Canada. Instead, she spent the rare moments she had to herself reminiscing about the life she had left behind. Finally, she cut her wrists, not deeply enough to kill herself, as she is quick to admit, but as a desperate attempt to get out. With the help of counselling at the hospital, and a good post-discharge placement, Le regained her ambition. She says that she put the past behind her, got a job making Vietnamese rolls in a take-away shop, took English classes and moved into her own small apartment. By 1983, she was able to bring her mother and her fiancé to Canada. Working hard and applying a shrewd business sense, the young couple eventually opened a chain of Vietnamese fast food outlets. By 1991, they had a small family, a luxurious suburban home and Le was being invited to sit on the boards of various community organizations. At this point, Le found herself sometimes missing Vietnam and thinking about how nice it would be to show her children where she had come from. However, opposing thoughts that nothing much would be left of her former life made her sad, and she kept postponing her plans to go back.

DISCUSSION

The literature on trauma has tended to focus on suppression of recall in the immediate aftermath of horrific experience, and on what role, if any, psychological intervention can play to alleviate suffering (Deahl, 2000; Galea *et al.* 2002; McNally *et al.* 2003). Opinion is sharply divided. Clinicians on one side of the argument advocate debriefing, compulsory if necessary, in the aftermath of catastrophe, while experts on the other side question whether psychological intervention may do more harm than good (McNally *et al.* 2003). In the absence of definitive data about what types of intervention (if any) may be helpful, to whom, and under what circumstances, McNally *et al.*'s cautious view has much to recommend it: '… in the immediate aftermath of trauma, professionals should take their lead from the survivors and provide the help they want, rather than tell survivors how they will get better' (McNally *et al.* 2003). McNally *et al.*'s caution is supported by previous RRP publications suggesting that, in the immediate and medium-term aftermath of catastrophe, suppression of the past and its connection to present and future can be adaptive. Data in the current report demonstrate that, for people at high risk for Depressive Disorder – as Le Quyen was at the end of her first year in Canada – suppression of the past may be even more effective than for persons at low risk of depression.

McNally *et al.* (2003) also state: 'Given present knowledge, it is impossible … to tell which survivors will later need psychological treatment'. Although these authors do not explain what they mean by 'later', a reading of their work suggests that, for them, 'later' refers to months or perhaps a year or two after a disaster. For refugees who have endured multiple traumas and multiple losses, however, 'later' may mean the rest of their lives. Health and social service providers should be aware that depression-inducing recapture of the past can take place years and even decades after refugees arrive in a resettlement country. Suppressing and disconnecting the past may be effective strategies for coping with overwhelming stress over the relatively short-term, but they may be impossible to maintain forever (see also Bauskakos, 1981).

The current paper builds on previous RRP investigations (Beiser, 1987, 1999; Beiser & Hyman, 1997) which suggested that, in the early stages of resettlement, most refugees were using suppression of the past as an effective coping strategy. According to the results from the current study, the longer the refugees remained in Canada, the more pronounced the tendency towards temporal reintegration, with its associated risk for the development of Depressive Disorder.

Why does the push for temporal reintegration occur after years, and sometimes decades, of apparent quiescence? Identity theory suggests one possible reason. The concept that personal identity depends upon reminiscence remains an important tenet of the science of memory, its influence discernible in the works of many of the field's leading authorities (Friedlander, 1979; Ellenberger, 1993; Erikson, 1994; van der Kolk, 1994). In order to protect confidentiality, the case histories in this report are fictionalized composites based on multiple interviews with multiple informants (Antze & Lambek, 1996; Kirmayer, 1996; Korn, 2001). Le Quyen began to long for home when visiting Vietnam became possible, and when her children were old enough to be told something about their mother's past. At the time of the last interview in 1991, Le was in her late thirties, and ambivalent about going back, physically, emotionally or metaphorically. For her, as for the majority of the Southeast Asian refugees who were still relatively young when last visited in 1991, the push to reintegrate the past with present and future could be resisted.

The experiences of holocaust survivors – refugees from a much older generation – leads to the plausible prediction that the impulse towards temporal reintegration will increase in urgency with the passage of time (see also Cottle, 1976). The finding that nostalgia was more salient for older, than for younger refugees lends credibility to this speculation. After her mother died, a personal friend of the principal author, began, in her early fifties, to speak for the first time about her experiences as a child survivor of the holocaust: 'The first thought I had was, if I don't talk about it, nobody's going to know me anymore. Not the way it was' (Ruth Sigal, personal communication, July 2001).

Why, as the quantitative data in this study suggest, is temporal reintegration a condition of risk for depression? Self-discrepancy theory (Higgins, 1999) illuminates a potential challenge set in motion by temporal reintegration. According to the theory, self-concept includes the perception of an actual self, an ideal self (what one would like to be) and an 'ought' self (what one thinks he or she should be). For unfortunate people like Mr Li, seemingly unbridgeable gaps can evoke despondency and hopelessness (Higgins, 1999). The study data demonstrate, however, that occupational success and relational stability can buffer the mental health risk attendant on temporal reintegration. Le Quyen and others like her, who have achieved success in countries of resettlement and who have at least one stable relationship, can be saddened when temporal reintegration begins, but not overwhelmed by its challenge.

Time heals, according to the ever-popular apothegm. RRP data suggest this is only partly true. Temporal reintegration created a risk for the development of Depressive Disorder, a finding that bears testimony to the continuing power of a disturbing past.

Whether time heals or not depends on the conditions of its passage. Stable work and a stable relationship helped protect individual mental health during the process of temporal reintegration. Interestingly, as moderators of mental health risk, job stability appeared to trump satisfaction, and relational durability the expectation of comfort. These study data have implications for clinical practice. They suggest that the question, 'Does psychological intervention mitigate distress or impede recovery from the effects of trauma?' (Deahl, 2000) is too simplistic. Evidence suggests that interventions based on the premise that it is always better for survivors of trauma to reveal than to conceal their experiences are either not effective or can be harmful (Deahl, 2000; McNally *et al*. 2003). In addition to individual needs, which can vary from survivor to survivor, approaches to care should take timing and context into account. For example, in the immediate or medium-term aftermath of catastrophe, it may prove most effective to support individual attempts to suppress the past and focus on the present and future. Health care providers should, however, be vigilant about the possibility that years, or

even decades after refugees have resettled and apparently effected a satisfactory adjustment, mental health risk based on past experience may resurface, and that resurfacing may be tied to significant adult developmental periods. Context probably affects mental health risk. Failure to achieve occupational success and to establish and maintain an enduring relationship increase mental health risk. Conversely, the presence of these critical factors in an individual's life may provide a supportive context for mental health intervention.

According to holocaust author S. Friedlander (1979), 'Memory must come, for memory is knowledge'. For survivors of catastrophe, the past most likely includes not only traumatic and shame-inducing memories, but memories of loss which may invoke nostalgia for a never-to-be-regained past. Context helps determine whether temporal reintegration will evoke the fearfulness and shame of some memories, or the self-destructive regret of others. A sense of stability and of present-day successes probably helps individuals reconcile memories of what they have been, and hopes for what they might have been with the people that, despite and because of adversity, they have become.

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