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Impact of Life Events and Difficulties on the Mental Health of Chinese Immigrant Women

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### Abstract

Over the last decade Chinese migrants have constituted the largest ethno-cultural group to arrive in Canada, with the highest concentration among the economic class, that is, business people and skilled workers selected to benefit the Canadian economy. Social science research, both theoretical and policy-driven, has not kept pace with this rapidly expanding population. Moreover, the experiences of women are often obscured by broad-stroke statistics reflective of the principal migrants only, the majority of whom tend to be men. This study examined the events and difficulties in Chinese women's lives inherent to the immigration process and the sources of social support that influenced mental health. A six-month longitudinal study, utilizing a semi-structured interview protocol and standardized questionnaires, was conducted with a group of Chinese women who had migrated with their spouses in the past decade. Analyses are based on a sample of 43 middle-class women from mainland China, Hong Kong, and Taiwan over two time points within a half year interval. All of the women and all of their spouses experienced major downward mobility in Canada. Correspondingly, the most frequent negative life event was employment-related and the most frequent difficulty was the financial strain of living below the poverty line, factors which significantly predicted symptoms of psychological distress and negative affect among these women. Social support, in the form of dyadic functioning between the women and their spouses, and relationship harmony within the women's broader interpersonal network had neither a main effect on psychological distress and negative affect nor a buffer effect on the relationship between life events and difficulties and the mental health outcome measures. Results have implications for immigration and settlement policy within the Canadian context.

## Impact of Life Events and Difficulties on the Mental Health of Chinese Immigrant Women

Immigration is a life changing event with implications for mental health and well-being. The consequences of the immigration and settlement processes have relevance for both the individual immigrant and the host country. A successful settlement process contributes to individual well-being and adjustment which can, in turn, yield tremendous gains for the receiving society as immigrants become contributing members. An unsuccessful settlement process that overtaxes individual resources can burden rather than benefit the receiving society.

According to recent analyses Canada ranks as the country with the 5<sup>th</sup> highest level of immigration, after Germany, Rwanda, the Russian Federation, and the United States (United Nations, 2000). Despite a long history of immigration in Canada, there is a dearth of information about how a major change in the environment, such as that of immigration, influences mental health at the level of the individual. Furthermore, social science research has not kept pace with the ever changing new immigrant population. For more than a decade Chinese migrants have constituted the largest ethno-cultural group to arrive in Canada, with the highest concentration among the highly educated and skilled *economic migrants* (CIC, 2002). Not only does this group bring different social and cultural characteristics to the new environment than the predominantly working class, white, European immigrants who arrived 20 or 30 years ago, they also confront a different social, political, and economic reality in Canada.

The goal of this study, therefore, is to redress this gap by investigating the interplay of external life events and internal psychological processes among recent Chinese immigrants. In particular, we were interested in examining relationships between social circumstances after migration, sources of social support, and mental health outcomes among a sample of married Chinese immigrant women living in Toronto, Canada.

*Canadian Immigration Context*

Canada's immigration program makes a distinction between regular immigrants and refugees in that members of the first group are seen in terms of how Canada will benefit from their presence (CIC, 2002). Immigrants comprise two categories: *family class*, which are foreign nationals sponsored by family members in Canada and *economic class*, which are skilled workers and business people selected for their skills and ability to contribute to Canada's economy. Economic class migrants are assessed on a points system which takes into account education, proficiency in official languages, employment experience, age, arranged employment in Canada, and adaptability.

Since the early 1990s Hong Kong and the People's Republic of China (PRC) have consistently been the top ranked source countries of immigrants arriving in Canada (CIC, 2002). While migrants from Hong Kong declined drastically after 1997, those from the PRC nearly doubled from 17,549 in 1996 to 33,231 in 2002. Over recent years all migrants entering Canada, Chinese in particular, have tended to be wealthy, educated professionals with highly marketable skills. In 1996, 58% of all principal migrants and their dependents from the PRC arrived in Canada as economic migrants; in 2002 it was 69% (CIC, 2002).

These figures suggest that Chinese migrants who have arrived in Canada over the last decade are the elite in their home countries and the chosen few of an elitist immigration system; the figures are not illustrative of what happens to these migrants after settling in Canada. Moreover, the figures are even less telling of Chinese women's circumstances as they are more often the dependents rather than the principal migrants in which these statistics are based.

*Life Events and Difficulties and Mental Health*

It is well-known that depressive illness is significantly more common among women than men in both community and clinic samples (Kessler, 2003). Some of the strongest evidence that has emerged over the last 30 years to explain gender differences in distress and depression has involved psychosocial factors, in particular people's social and interpersonal circumstances, the roles that get enacted, and the ways in which self in relation to others come to be viewed (Harris, 2003; Brown, 2002; Brown & Harris, 1978). Brown and Harris' (1978) seminal study, *The Social Origins of Depression*, was the first to demonstrate the now widely accepted proposition that severe negative life events and difficulties lead to anxiety and depression among women. Their work was made possible with the innovation of a detailed semi-structured interview protocol designed to capture rich, contextual information about people's lives to explain the onset and maintenance of depression. Prior to this methodology the majority of life stress measures were event checklists that not only failed to incorporate the social context surrounding a given stressor but also did not account for the different subjective meanings in which participants would inevitably approach checklist items.

More recent work has also found that the lives of women who are depressed are chronically more stressful, often characterized by negative relationships with spouses and children and more frequent negative life events, compared to women who have never been depressed (Hammen, 2003a; Hammen, 2003b). It has also been suggested that gender differences in overall rate of depression and psychological distress may be due to gender differences in the exposure to stressful events, with women reporting more events occurring to significant others than men (Turner & Avison, 1989), and response to stressful events, with women more sensitive to a wider range of events than men (Maciejewski, Prigerson, & Mazure, 2001; Mazure & Maciejewski, 2003).

These studies have not considered immigrant samples and have rarely considered the ethno-cultural background of the participants. Within the context of immigration, newcomers face life events and difficulties that may differ in nature and scope compared to native-born participants or even less recent migrants. Ethnicity and culture further contextualize immigrant experiences.

According to the Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees (1988), the factors most likely to place an immigrant at risk for mental illnesses include failure to find suitable employment, poor English skills, separation from family and community, and negative public attitudes. Although these variables can affect the mental health of all immigrants, the Task Force (1988) and others (e.g., Kim & Rew, 1994; Salvendy, 1983) suggest that women may be in a more vulnerable position than men. In some traditional Asian societies the cultural expectations to embody deference, acceptance of suffering and personal sacrifice may be magnified for women. Thus, immigrant women may be relegated to looking after the home and children, a situation that provides little opportunity to seek employment, increase knowledge of the new environment and integrate into the larger community.

Franks and Faux (1990) found high scores on a measure of depression, which were comparable to clinical populations, among their sample of Chinese, Vietnamese, Portuguese, and Latin American immigrant women living in Canada. Among the subgroup of female Chinese immigrants 35% reported clinical-level symptoms compared to a community female distribution of 20%. In a study of Russian-born Jewish immigrants to Israel, women reported higher rates of psychological distress than men (Ritsner, Ponizovsky, Nechamkin, & Modai, 2001). It was suggested that the higher levels of symptoms reported by women were a function of scoring lower on several protective factors (the number of reasons for migrating, commitment to the host

country, and job adequacy) and endorsing sources of distress more frequently (inappropriate climate, poor health status, family problems, uncertainty in the present life situation, and anxiety about the future) compared to men.

### *Social Support and Mental Health*

An extensive amount of theoretical and empirical work has highlighted the role of social support on the physical and psychological health of individuals, with the evidence converging to suggest that lack of social support is associated with increased risk for distress and mental illness (Cohen & Wills, 1985; Thoits, 1995). What researchers and theorists have disagreed on is the nature of the relationship between social support and mental health. Some contend that social support is not an independent causal agent, but rather, a buffer or moderator on the impact of stressful circumstances (Brown, Adler, & Bifulco, 1988; Brown, Andrews, Harris, Adler, & Bridge, 1986; Cohen & Wills, 1985; O'Connor & Brown, 1984; Vega, Kolody, & Valle, 1986). Others argue that social support can have a main or direct beneficial effect on well-being, and is positively related to psychological or physical health regardless of stress level (Ensel & Lin, 1991; Wade & Kendler, 2000; Vilhjalmsson, 1993). What little research is available on Chinese populations is inconclusive about the influence of social support on well-being, with most suggesting lack of a consistent buffering relationship (Chan, 1987; Liang & Bogat, 1994; Short & Johnston, 1997).

Because it is within the nuclear family that many Chinese women migrate to Canada, familial relationships likely have a major impact on mental health. Furthermore, Chinese culture values strong and cohesive family ties. However, newcomer immigrant women likely do not have extended family living in Canada and, thus, may be forced to rely solely on spouses for instrumental and social support. In this study we explored two forms of social support – dyadic

adjustment and relationship harmony – in the lives of Chinese immigrant women with regard to their mental health.

Dyadic adjustment refers to the quality of the marital or cohabiting relationship. Some of the strongest evidence for the importance of social support is found from research on the presence of support from confidants (Brown et al., 1988; Brown et al., 1986; Cohen & Wills, 1985; O'Connor et al., 1984; Vega et al., 1986). This research suggests that having an intimate, confiding relationship with another person, particularly one's spouse, is the most effective way to buffer risk of developing mental illness during stressful situations.

Kwan, Bond, and Singelis (1997) suggest that “a satisfying relationship” is not a commonly understood term for describing relationships in Chinese cultures and that relationship harmony may be a better construct in which to understand the quality of one's relationship with others. These researchers developed a measure of relationship harmony, a concept that refers to the balance achieved in one's relationships and within oneself, to tap an interpersonally oriented construct of relationships.

We adapted Brown and Harris' (1978) theoretical and methodological underpinnings by using extensive interviewing over two time points to identify life events and difficulties among a group of Chinese immigrant women. Consistent with previous research we predicted that the presence of negative life events and difficulties would lead to poor mental health. Employment issues were thought to have particular relevance for this sample. We also investigated the role of two forms of social support – dyadic adjustment and relationship harmony – both as direct predictors of mental health and as moderating predictors on the relationship between negative life events and difficulties and mental health. We hypothesized that both dyadic adjustment and relationship harmony would lead to better mental health. Due to the inconclusive nature of

previous research on social support, predictions were not made about the nature of the relationship (direct or moderating) between social support and mental health.

## Method

### *Participants*

The sample was recruited through community agencies throughout Toronto. Flyers were posted at several educational, community and social service organizations and representatives at these organizations were encouraged to bring attention to our study. After completion of the study each participant was given a flyer and asked to refer other prospective participants.

Fifty women participated in both time points of this study; after all follow-up interviews were conducted the final inclusion criteria were applied. Only women who had lived in Canada 10 years or less and who had migrated to Canada with their spouses were included in data analysis. This rationale was consistent with the major objectives of this study, to explore the negative life events occurring in the lives of recent Chinese immigrant women and to investigate the influence of interpersonal social support as a possible protective factor against poor mental health. Based on these inclusion criteria data from seven women were excluded from analysis. Two of these women had met their common-law partners after migrating to Canada and five women had lived in Canada for over 10 years at the time of the first interview. There were 43 women in the final sample.

Demographic information was obtained at the Time 1 interview. Participants' mean age was 37.98 ( $SD = 5.77$ ) and they had lived in Canada 3.81 ( $SD = 2.29$ ) years on average. Thirty-seven women (86%) were born in mainland China, 5 (12%) in Hong Kong, and 1 (2%) in Taiwan. On average the women had been married or living common-law for 11.63 ( $SD = 4.49$ ) years. Although all of the women immigrated to Canada with their spouses, 5 (12%) were

currently living in Canada without their spouses the majority of the time.<sup>1</sup> Thirty-one of the women (72%) had 1 child; 7 women (16%) had 2 children; one woman (2%) had 4 children; and four women (9%) did not have any children. The mean age of children was 10.55 ( $SD = 7.84$ ) years and the range was 4 months to 29 years. Participants reported their total annual household income on a range given by the interviewer. Nine women (21%) stated that their household income fell below \$20,000 (Canadian) per annum, 15 (35%) were in the \$20,000 to \$39,999 range, 11 (25%) were in the \$40,000 to \$59,999 range, 5 (12%) were in the \$60,000 to \$79,999 range, 1 (2%) was in the \$80,000 to \$99,999 range, and 2 women (5%) had household incomes over \$100,000.

All the women were university graduates and a substantial number had post-graduate education, obtained from their home countries. The Hollingshead (1975) occupational index was used to categorize employment status of the women in their countries of origin and in Canada. Figure 1 compares the women's occupational status pre-migration and post-migration at the Time 1 interview. Before immigrating to Canada not a single woman in this sample had an occupation that could be categorized below the 7<sup>th</sup> Hollingshead occupational index. After immigrating to Canada, however, 95% of the sample fell below the 7<sup>th</sup> occupational index.

### *Procedure*

All participants were interviewed twice, approximately 6 to 8 months apart. At Time 1 questionnaires were administered after the face-to-face interview was conducted. In pilot work conducted for this study a semi-structured interview schedule was developed and refined in order to elicit information about participants' negative life events and difficulties as well as demographic information. All participants were given a \$25 honorarium at the end of the first interview.

At Time 2 the follow-up interview was conducted via telephone. The purpose of this second interview was to assess the types of changes that occurred in the women's lives since the first interview and to document the presence of new life events or the continuation of ongoing difficulties. Questions for the follow-up interview were finalized following preliminary analysis of the Time 1 interview. Immediately following the second interview the same negative affect and psychological distress outcome questionnaires administered at Time 1 were mailed to participants to be completed a second time.

### *Measures*

*Provoking agent.* Ratings of severe life events and major difficulties were generated from the semi-structured interview schedules at Time 1 and Time 2. A summary of each woman's life events and difficulties reported in the interviews was created, including as much contextual and biographical information as possible in order to perform the ratings. Once created, these summaries were read to a rater trained by Brown and Harris in the original life events and difficulties methodology. The rater, who was blind to the participants' scores on the psychological outcome measures, referred to extensive dictionaries of ratings developed by Brown and Harris (1978; 1989) that provided strict definitions of what could be counted as events, and directories with more than 2000 examples of precedents rated on various scale-points of the ratings that have been collected from hundreds of interviewees over the past two decades.

The rater followed the procedure of Brown and Harris (1978; 1989) to assess life events and difficulties. Only life events occurring between the first and second interview (approximately 6 to 8 months) were rated. Difficulties were rated if they lasted at least six months and if they overlapped into the time span covered by the second interview. Life events were rated on a 4-point scale of contextual threat, labeled 1 – *marked*, 2 – *moderate*, 3 – *some*, 4

– *little or none*. Difficulties were rated on a 6-point scale of unpleasantness, with a rating of 1 being the most unpleasant. According to Brown and Harris (1978), only *severe life events* (rated 1 or 2 on the 4-point scale) and *major difficulties* (rated 1, 2, or 3 on the 6-point scale) have etiological importance for depression and anxiety. Consistent with these guidelines participants who had either a severe life event or major difficulty were categorized dichotomously as either having a *provoking agent* or *no provoking agent*.

*Social support.* There were two assessments of social support. The Dyadic Adjustment Scale (DAS; Spanier, 1976) was used to measure the traditional notion of support as deriving from a significant other with which an intimate, confiding relationship exists. The DAS is a 32-item instrument that measures the quality of the marital or cohabiting relationship. An overall dyadic adjustment score can be computed as well as four subscales reflecting dyadic consensus, satisfaction, cohesion, and affectional expression. The DAS has been translated into Chinese and found to be reliable and factorially robust among large samples of married adults residing in China (Shek, 1993b; 1995; 1999). It has also been used with Chinese-Americans and found to have high internal consistency, convergent validity, and divergent validity (Lim & Ivey, 2000). In our study an overall mean score of dyadic adjustment was calculated for each participant with higher scores representing higher quality of relationships with spouses. The DAS was measured at Time 1 only. Cronbach's alpha was 0.94.

The Relationship Harmony scale (Kwan et al., 1997) provided an assessment of the degree of mutuality and balance that is achieved in relationships. Consistent with Kwan et al. (1997), participants in this study were asked to indicate the name, gender, and relation for each of the five most important two-person relationships in their lives and to rate the degree of harmony in each relationship on a 7-point Likert scale ranging from 1 (*very low*) to 7 (*very high*).

A relationship harmony index was calculated for each individual by averaging the five relationship harmony scores. Higher scores indicated greater relationship harmony in one's life. Relationship Harmony was measured at Time 1 only.

*Psychological distress and symptom threshold.* The General Health Questionnaire (GHQ; Goldberg, 1978) measures interruptions in normal functioning and the appearance of new distressing phenomena. Five subscales can be computed from the 30-item GHQ as different indicators of distress: anxiety, depression, inadequate coping, interpersonal dysfunction, and sleep disturbance. The GHQ has been adapted and translated for use in Chinese populations in previous studies, demonstrating high internal consistency as a scale and adequate representation of the five dimensions (Chan & Chan, 1983; Chan, 1985; Shek, 1987; 1989; 1993a).

The GHQ was administered at both time points in this study. Respondents rated each item on a 4-point scale, ranging from better than usual to much worse than usual, based on how they had been feeling over the past few weeks. Following manual guidelines (Goldberg, 1978) two types of scoring were used to calculate participants' responses. A continuous score can be derived, indicating general psychological distress, wherein weights ranging from 0 to 3 are assigned to each response. A mean score was calculated for each participant by summing all responses and dividing by 30 with higher scores representing more psychological distress. A bimodal response scale can also be derived wherein the first two responses are each given a score of 0 and the last two responses are each given a score of 1. Participants' scores on the bimodal method were summed and a threshold cut-off applied. Consistent with recommended guidelines overall scores of 4 and lower were categorized as *below threshold* and scores of 5 and higher were categorized as *above threshold* for psychiatric case identification. The threshold score is not synonymous with meeting diagnostic criteria for a psychiatric disorder and should, instead,

be treated as an indicator of potentially serious mental health problems at a clinical level.

Cronbach's alpha for the GHQ was 0.87 at Time 1 and 0.92 at Time 2.

*Negative Affect.* Negative affect was assessed using one dimension of Bradburn's (1969) Affect Balance Scale (ABS). This 5-item scale has been adapted and translated for use among Chinese speakers in Canada and demonstrated cultural equivalence (Devins, Morton, Dion, Pelletier, & Edwards, 1997). A mean score was derived by summing the responses and dividing by 5; higher scores indicate higher negative affect. The ABS was administered at both time points in this study. Cronbach's alpha was 0.79 at Time 1 and 0.72 at Time 2.

## Results

### *Provoking Agent and Symptom Threshold*

Each participant was categorized in a dichotomous manner consistent with Brown and Harris' rating system as to whether she had experienced a provoking agent (i.e., a severe life event or major difficulty). Fourteen women (33%) were categorized as having a provoking agent and 29 women (67%) were categorized as no provoking agent in the 6 to 8 months between the first and second interview.

Participants were also categorized as to whether they met symptom threshold on the GHQ. Following the suggestion of the GHQ manual (Goldberg, 1978) we used the threshold score of 4/5 to dichotomize the sample on psychological distress symptoms. In this sample 15 women (36%) met symptom threshold and 28 women (64%) did not meet symptom threshold at the second interview.

A chi-square analysis was conducted to test the hypothesis that meeting symptom threshold for psychological distress was associated with having experienced a provoking agent. Among the 14 women who experienced a provoking agent, 10 (71%) met symptom threshold,

whereas among the 28 women who did not experience a provoking agent, only 5 (18%) met symptom threshold. As predicted, the association between symptom threshold and provoking agent was highly significant,  $\chi^2(1, 42) = 11.67, p < .001$ .

### *Provoking Agent, Social Support, and Mental Health*

We performed a series of regression analyses to assess the impact of experiencing a provoking agent on the two indicators of mental health. We also examined the influence of social support, both as a direct effect on the women's mental health and as an indirect effect on the relationship between provoking agent and mental health.

Four hierarchical multiple regression analyses were conducted to predict the Time 2 outcome variables of psychological distress and negative affect. Due to sample size limitations and our interest in testing interaction effects the two social support variables, dyadic adjustment and relationship harmony, were assessed in separate equations in order to adhere to recommended subject to item ratio guidelines (Tabachnik & Fidell, 2001). Accordingly, it was also necessary to derive a proxy variable that could act as a stand-in for important demographic characteristics of the sample that may be related to predictor variables and/or outcome variables. Annual household income was chosen.<sup>2</sup>

A hierarchical procedure was used wherein theory rather than a computer algorithm determined the selection of variables and their order of entry. Thus, in all regression analyses the Time 1 scores of the appropriate outcome measure was entered as a control variable in the first step. Annual household income, also a control variable, entered the equations in the second step. This was followed by the predictor variable, provoking agent, in step three. Social support (either dyadic functioning or relationship harmony) entered the models in the fourth step. In the fifth and final step the interaction term of each index of social support and provoking agent was

entered into each equation. To reduce multicollinearity scores for the two social support measures were centered.

Results of the four multiple regression analyses are shown in Table 1. For brevity only the standardized regression coefficients ( $\beta$ ) and increment in multiple regression coefficients ( $R^2$  change) for steps three to five of the regression equations are displayed. All equations, however, included the two control variables, Time 1 outcome scores and annual household income, in previous steps. As displayed in Table 1 the results consistently demonstrate that experiencing a provoking agent affected the women's mental health. As predicted, having a provoking agent significantly increased the women's psychological distress and negative affect, accounting for 10% to 20% of the variance, after controlling for the effects Time 1 outcome scores, annual household income, and social support. Findings also consistently show that dyadic adjustment and relationship harmony did not influence the women's well-being, neither directly nor indirectly as an interaction term with provoking agent. Neither form of social support accounted for more than 1% of the variance in predicting any index of mental health, after Time 1 outcome scores, income, and provoking agent were controlled. The interaction terms independently accounted for 1% to 6% of the variance in mental health.

#### *Types of Provoking Agents*

The preceding analyses supported the hypothesis that experiencing a provoking agent (either a severe event or a major difficulty) contributed to negative psychological outcomes for Chinese immigrant women in this study. Given the magnitude of influence on participants' mental health we explored further the types of provoking agents that the women in this sample experienced.

Events and difficulties were considered provoking agents only if they were participant-focused or, if focused on someone else, had a joint impact on the participant. The Time 2 interview took place 6 to 8 months after the Time 1 interview and 14 women (33%) reported having experienced 15 provoking agents between the two time points. Provoking agents in order of frequency included: 8 job-related (53%), 4 financial difficulties (27%), 2 serious marital strife (13%), and 1 serious problem with other family members (7%).

Job-related events were the most frequently reported provoking agents and included repeated job rejections and job loss of the principal wage earner. Having a financial difficulty was the second most frequent provoking agent; participants were categorized as having a financial difficulty only when it was clear that household income was under \$20,000 per annum. This was a conservative estimate of the poverty line based on Statistics Canada's Low Income Cut-offs (LICOs)— an index which takes into account family size within communities of various sizes (Statistics Canada, 2004). For example, the 2003 before-tax LICO for a family of three living in a community with a population over 500,000 was \$30,774; for a family size of two it was \$24,745.

It was often the case that a financial difficulty was tied to a job-related event. When this occurred participants were coded as either having a job-related event or a financial difficulty. Where there was a job-related event that resulted in financial hardship it was categorized as a job-related event. Participants were categorized as having a financial difficulty when there was no evidence of a job-related event contributing to circumstances. However, among the women in this sample, the provoking agent that was most frequently associated with symptom threshold was either participants or their spouses losing a job resulting in a financial difficulty. Therefore,

among the Chinese immigrant women in this sample, socioeconomic events and difficulties accounted for 80% of the provoking agents.

### Discussion

While immigration may unsettle the external and internal worlds of the individual, it does not always lead to maladjustment. This study demonstrated that it was the adverse life circumstances in which women found themselves after migration that contributed to psychological ill health, a finding comparable to that of Brown and Harris (1978). However, although it was not the act of immigrating itself that was inherently stressful, nearly all the severe life events and major difficulties that led to distress – namely job loss and financial difficulty – were brought on by the women's status as newcomers to Canada. This was a highly educated and skilled group of women, selected for their ability to contribute to the Canadian economy, for whom the greatest challenges were in the work domain.

The external life circumstances of a newcomer group such as the women in this study are particularly important in light of the finding that social support was neither related to the women's mental health (direct effects) nor to the relationship with provoking agent on mental health (moderator effects). It is possible that the emotional support captured by dyadic adjustment and relationship harmony did not match the kinds of provoking agents – mostly job-related events and financial difficulties – experienced by this sample of Chinese immigrant women. Some evidence for the need to match social support to the stressful life event is suggested in a study of psychiatric morbidity among New Zealand Cambodian refugees (Cheung & Spears, 1995). These researchers found that psychiatric symptoms were associated with crisis support and perceived support but not with indices of received support from close and diffuse

networks. Moreover, there was no evidence that social support moderated the relationship between life events and symptom level.

Another study with a community sample of Vietnamese immigrants found that ethnic kin support was associated with greater psychological distress whereas non-ethnic, non-kin support was associated with less psychological distress, a finding interpreted as indication that high levels of distress may elicit more support from kin and more avoidance from non-kin (Gellis, 2003). Moreover, familial ties may not be supportive if the ties are more obligatory than voluntary in nature. Finally, it is possible that intimacy with one's partner and interpersonal harmony with significant others are luxuries that can only have appreciable benefits once lower-order needs, such as financial security and stable employment, are satisfied.

It has been suggested elsewhere that losing one's job ranks in the upper quartile of unpleasant events that generate life stress and leads to other events that exacerbate the negative effects of unemployment (Grant & Barling, 1994). However, the relationship between employment and mental health may not be a straightforward one for migrants. For example, while duration of employment and current employment status have been shown to have an influence on the health and well-being of immigrants (Aycaan & Berry, 1996; Schwarzer, Hahn, & Fuchs, 1994) the relationship likely depends on the particular characteristics of the migrant group and the social conditions of the country of origin and the host country. Employed migrants who are underemployed or suffer occupational stress may not show better mental health than unemployed migrants (Pernice, Trlin, Henderson, & North, 2000). The majority of women and their spouses in this study experienced a drastic decline in social mobility after migrating to Canada. Thus, for a sample such as this highly educated, previously middle-class group merely being employed may be an over-simplistic predictor of well-being.

Turning to the ratings of financial difficulty, it is important to note that this was only coded as such if it was not the direct result of an employment event within the same timeframe. This coding rule suggests that the level of poverty within this sample may be underrepresented. Other researchers have found that immigrants are over-represented among Canada's poor. An analysis of Canadian census data revealed a consistent pattern in which immigrants had higher poverty rates than non-immigrants of the same ethnic origin (Kazemipur & Halli, 2001). Moreover, the magnitude of poverty was greatly aggravated by race; visible minorities had much higher rates of poverty compared to European groups among both immigrants and non-immigrants. Among the Chinese in Toronto 33% of immigrants lived in poverty compared to 22% of non-immigrants whereas among the British 15% of immigrants and non-immigrants were below the poverty line. The odds of poverty among immigrants were increased because there were lower levels of returns on human capital factors such as age, education, and knowledge of official languages, a finding that matched the observations of the women in our study.

Other Canadian studies have highlighted the growing problem of lower returns to human capital endowments of immigrants (e.g., Basran & Zong, 1998; Li, 2000). Except for a few participants most were not utilizing their educational and professional skills to full capacity, the same skills, ironically, which helped them to migrate to Canada under the current points system.

The effects of poverty are wide ranging and the links to mental health have been underscored by research on immigrants and non-immigrants alike. Serious financial difficulty has been shown to be a risk factor for a chain of life circumstances leading to negative mental health (Beiser, Hou, Hyman, & Tousignant, 2002; Brown & Moran, 1997; Bruce, Takeuchi, & Leaf, 1991). In a large epidemiological survey using the 12-item GHQ, researchers found strong relationships between indices of social disadvantage, among them lack of amenities,

overcrowding, lone-parent families, unemployment, unskilled workers, ethnic minority composition, and social mobility, and prevalence of psychological morbidity (Harrison, Barrow, & Creed, 1998). Brown and Moran (1997) found that financial hardship was associated with a twofold risk for developing depression among women in South London. In a national study of 23,000 children in Canada, Beiser et al. (2002) concluded that for immigrant children poverty exerted its deleterious effects on mental health simply through material deprivation.

The findings in this study have implications for policy decisions on immigration and settlement. Poverty, unemployment and underemployment were major issues for this sample of Chinese women and their spouses. Consistent with other research on immigrants and non-immigrants, we found a strong relationship between these risk factors and psychological ill health. Left unattended it can be a slippery slope from job loss leading to financial strain on the family to systemic poverty and a general decline in the physical and psychological health of every member. The effects we found no doubt increased dependency on public resources, such as health care, a situation that the points system for immigration is designed to avoid.

Immigrants need concrete assistance in the form of retraining programs so that they will have the appropriate “Canadian” qualifications and experience in order to become gainfully employed. The women in this study and their spouses were a highly educated and skilled group with enough credentials to be accepted by a fastidious immigration system. That most were working well below their potential and had experienced major downward mobility suggests an enormous pool of untapped and wasted human resources.

This also points to a disparity between the ideals of policy – one which aims to recruit wealthy and skilled immigrants for the economic benefit of Canada – and the lived reality – that of inadequate social and structural support systems to ease the transition in order to allow new

immigrants to make meaningful contributions to society. Moreover, it becomes clear that the system by which economic immigrants are treated in Canada is inherently unfair, in that the same foreign education and work experience that are judged to be sufficient to permit migration are insufficient to access professional work. Therefore, it is imperative that policy makers recognize the systemic barriers encountered by foreign-trained professional immigrants in attempting to re-establish themselves and ensure that foreign credentials are evaluated fairly and appropriate assistance provided.

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## Footnotes

<sup>1</sup> One spouse was completing his Ph.D. in China and was expected to join the family within the next several months. Two others had returned to living and working full-time in China, commuting to Canada a few times a year to visit their families. Two spouses were living and working in the United States indefinitely.

<sup>2</sup> Annual household income correlated significantly with a number of demographic variables within the sample including length of time in Canada ( $r = .57$ ), English language fluency ( $r = .38$ ), likelihood of spouse being employed ( $r = .31$ ), participants' occupational status ( $r = .44$ ), spouses' occupational status ( $r = .71$ ), and GHQ psychological distress scores at Time 1 ( $r = -.31$ ), all  $ps < .05$ .

Table 1

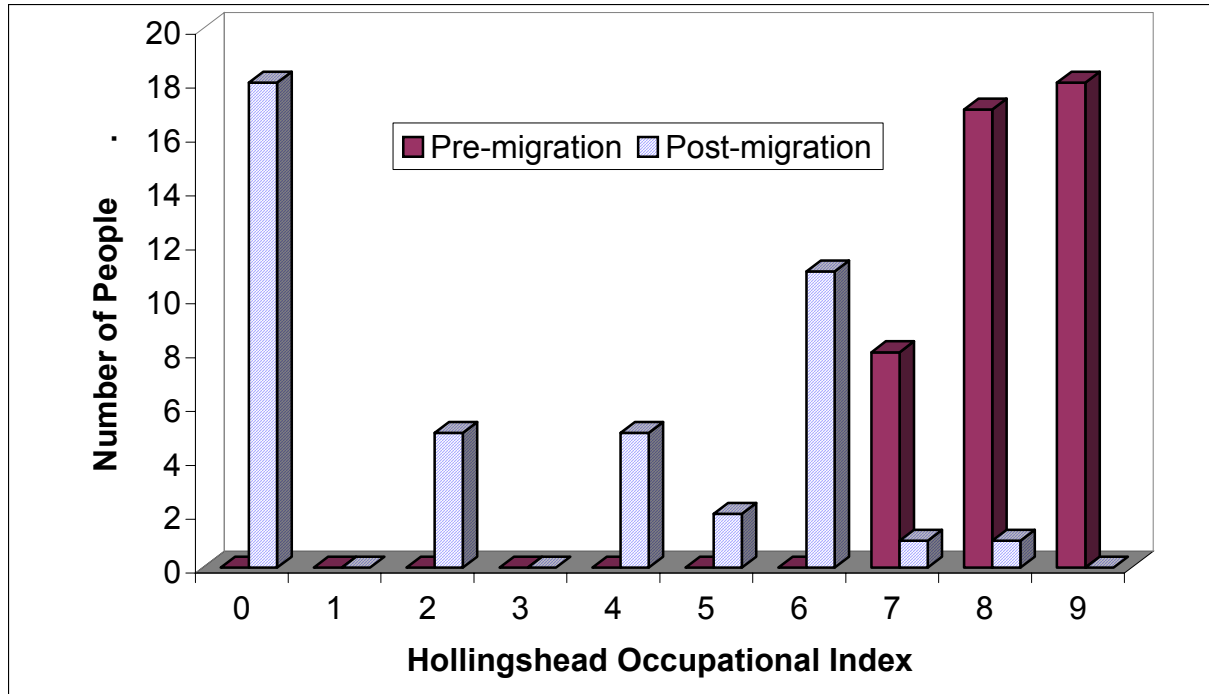
Hierarchical Regression Analyses for Variables Predicting Psychological Distress and Negative Affect

Predictor Variable	Outcome Variable	
	Psychological Distress	Negative Affect
Dyadic Adjustment Analyses		
Provoking Agent		
$\beta$	.33*	.44**
R <sup>2</sup> Change	.10*	.18**
Dyadic Adjustment		
$\beta$	-.06	-.02
R <sup>2</sup> Change	.00	.00
Interaction Term		
$\beta$	-.20	-.13
R <sup>2</sup> Change	.02	.01
Relationship Harmony Analyses		
Provoking Agent		
$\beta$	.34*	.46**
R <sup>2</sup> Change	.11*	.20**
Relationship Harmony		
$\beta$	.09	.10
R <sup>2</sup> Change	.01	.01

Table 1 (continued)

Predictor Variable	Outcome Variable	
	Psychological Distress	Negative Affect
Relationship Harmony Analyses		
Interaction Term		
$\beta$	-.38	-.42
R <sup>2</sup> Change	.05	.06

\* $p < .05$ . \*\* $p < .01$ .



*Figure 1.* Participants' occupational status pre-migration and post-migration. Higher numbers represent higher occupational status on the Hollingshead Index, with 0 representing not having paid employment.