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Voices of migrant women: The mediating role of resilience on the relationship between acculturation and psychological distress

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The total number of international migrants has increased from an estimated 150 million ten years ago to an estimated 214 million (United Nations, 2009). With the increase in migrant numbers, the Australian government has established numerous laws, legislations and policies to monitor the labour market outcomes of migrants. However, many of these laws and policies are either inadequate or inadequately utilised. For example, prejudices and discriminations toward asylum seekers, skilled or unskilled workers from overseas and anyone with ‘a Middle Eastern appearance’ demonstrate the perpetual xenophobia among Australians (Poynting & Noble, 2004, Jupp, Nieuwenhuysen, & Dawson, 2007). Likewise, the Equal Employment Opportunity (EEO) legislation which focuses on the equal employment of women does not have a policy to adequately address the concerns of migrants or migrant women. Thus, many migrant women continued to be employed in low paying and low status gender segregated occupations (Martin 1984; Parr & Guo, 2005). This policy also treats women as a single homogeneous group and fails to consider their multiple and intersecting identities. As a result, issues and challenges faced by ethnic minority women remain largely ignored (Syed & Ali, 2005). This is a considerable issue when you consider that a large proportion of migrants to Australia in recent years are women (Australian Bureau of Statistics, 2006). Previous international migration research has also tended to focus explicitly on men and neglected migrant women’s acculturation experiences (Kofman, 2000; Pedraza, 1991; Zlotnik, 2003).

**Acculturation**

Acculturation has been conceptualised as an ongoing process of adjustment in which migrants adapt to the cultural values and life styles of the new society or culture (Bhugra, 2004). According to Bhugra (2004), the adaptation process consists of four stages: Pre-migration, beginning, middle and final
stages. Each stage requires different skills or abilities that affect adjustment. Individuals who possess the requisite skills and who are motivated to migrate will adjust better compared to those who are unwilling to migrate or who do not have the necessary skills for new adjustment. Another model of acculturation is the model proposed by Berry (1980, 2001) who posits that acculturation occurs when individuals are exposed to a prolonged, continuous and first-hand contact with a new culture with consequential psychological as well as cultural changes. This bi-dimensional model hypothesises that acculturation entails two orthogonal behavioural changes, namely: (1) losing customs, beliefs and values specific to their minority culture, and simultaneously (2) gaining customs, beliefs, and values of the host culture (Berry, 1980, 1997; Birman, 1994). Therefore, acculturating individuals can adopt one of four acculturation strategies. The most positive outcome is integration when individuals adopt the new culture and retain the old (Tartakovsky, 2007). Assimilation occurs when individuals relinquish the practices of their original culture and adopt the culture of the host society. If a person decides to retain the practices of his or her original culture and reject the new culture, that person is selecting the separation strategy. Finally, some individuals may choose marginalisation from both original and new culture.

Despite its widespread popularity, some theorists have argued that this model underemphasised the influences of contextual and individual factors. Recent evidence suggests that demographic factors may affect migrants’ acculturation experiences and acculturation strategies (Aroian & Norris, 2000; Bakker, Van der Zee, & Van Oudenhaven, 2006; Berry, 1997; Dion & Dion, 2001; Phinney, 1990). Previous studies have found that migrant women undergo comparatively different acculturation experiences when compared to their male counterparts (Ho & Alcorso, 2004; Sam & Berry, 2006). Migrant women experienced fewer employment opportunities. Ho and Alcorso (2004) reported that, after three and a half years in Australia, 61% of male migrants were successfully employed compared to only a third of migrant women. Once in the workforce, migrant men tended to be employed in higher status occupations and earned a higher salary than migrant women. Migrant women who were employed often worked in low status, low pay and gender segregated work such as care-giving, nursing, restaurant, hotel services, and domestic work. These jobs are widely perceived to be an extension of women’s unpaid work in the family (Dustmann & Schmidt, 2001) and thus not valued as an economic activity. Indeed, many migrant women experienced significant occupational downgrading because their overseas qualifications were not recognised or because of their poor proficiency in writing and speaking English (Driedger & Hallis, 2000). Furthermore, migrant women who work experience a “double burden” or “role overload” which can lead to negative psychological outcomes (Dion & Dion, 2001; Noh, Wu, Speechley, & Kaspar, 1992). According to this hypothesis, migrant women are more susceptible to psychological distress because of the compounded pressures from employment work, household and child-care responsibilities (Dion & Dion, 2001). Power hypothesis argues that the psychological distress experienced by migrant women is in part due to the unequal allocation of power (e.g., decision marking) in the family (Dion & Dion, 2001).

Similarly, Itzigsohn and Giorguli-Saucedo (2005) found that men and women adopted different acculturation strategies with women more likely to identify with the receiving host country than men. According to Berry (1997), changes in psychological distress among migrants vary across the adoption of the four strategies. Berry (1997) argues that integration provides the best form
of adaptation to psychological distress as opposed to assimilation, separation or marginalization. However, there are mixed results on this: some studies found psychological distress to be lower in migrants who adopted integration as their adaptive strategy (Tartakovsky, 2007; Ward & Rana-Deuba, 1999) while others reported that integration was negatively associated with migrants’ self esteem and psychological health (Phinney, Chavira, & Williamson, 1992). Given these contradictory findings, Berry’s (1997) model may be limited in its ability to fully explain the relationships between the experiences of acculturation and psychological distress.

Psychological Distress

Psychological distress refers to a range of feelings experienced by people who may have identifiable mental health problems such as anxiety or mood disorders, or who may be highly stressed for situational reasons (Goldberg, Gater, Sartorius, & Ustun, 1997). Previous studies have reported that migrant women are highly susceptible to psychological distress (Aroian, Norris, & Chiang, 2003; Aroian, Norris, González de Chávez Fernández, & Averasturi, 2008). For example, Jirojwong and Manderson (2001) found high levels of psychological distress in a group of unemployed Thai women in Australia. Female migrants from the former Soviet Union reported greater psychological distress than male migrants (Aroian et al., 2003). Similarly, a meta-analysis of published research from the 1990s, which compared gender differences in migration responses, found that 83% of papers reported greater levels of stress among migrant women than in migrant men (Aroian, 2001). These findings suggest that the acculturation experiences of male and female migrants differ with more migrant women than migrant men reporting psychological distress. Psychological stress is also positively associated with strokes and suicides in the migrant/migrant women population (Bhugra, 2004; Carney & Freedland, 2002). Given this positive association, psychological distress is an important factor to consider when investigating female migrant populations. Additionally, there are contradictory findings about the impact of acculturation on the psychological health of migrants. For instance, while several studies have found that acculturation led migrants to experience ill health and psychological distress (Fitinger & Schwartz, 1981; Sue & Marishima, 1982), other studies have found that acculturation actually contributed to better health and social outcomes (Fitinger & Schwartz, 1981; Ortega, Roseheck, Alegria, & Desai, 2000). Ferguson (1999) and Michael (1996) both found that despite suffering from tremendous migration difficulties with little or no support afforded to them, a group of female Vietnamese refugees in Australia and a group of migrant girls in New York City had better than expected health outcomes. These studies suggest that migrant women may be more resilient than often portrayed in the literature (Trueba & Spindler, 1999).

Resilience

Rutter (1985) defined resilience as the display of self-confidence and social competence that increases through mastery and meeting responsibilities. Resilience is most often identified as a response to adversity. Adversity is the catalyst for the development of resilience (Rutter, 1987, 2007). According to Gordon (1995), resilience is the ability to thrive, mature, and enhance one’s competence in the face of adversity, whether biological or environmental, chronic or once-off, or consistent or infrequent. Resilience requires that individuals draw upon all their resources - biological, psychological, cultural, economic, social or environmental - in order to overcome adversity. Resilience is thus an ordinary, long-term process of adjustment to adversity that all individuals experience (Masten, 2001) but some have more resources on which to draw than others.
Resilience has been found to have a positive effect on mental health (Campbell-Sills, Cohan, & Stein, 2006) and to be a significant predictor of migrant women’s psychological health (Christopher & Kulig, 2000). However, it has rarely been directly measured (Gillespie, Chaboyer, Wallis, & Grimbeek, 2007; McAllister & McKinnon, 2009) or investigated as a mediating factor in migrant women’s adjustment to a new culture or society.

To address this gap in the literature, the present mixed-methods study is conducted to firstly explore the acculturation experiences of a group of migrant women in Australia, and secondly, to investigate the mediating role of resilience in the relationship between acculturation and psychological distress.

Method

Research Design

The methodology applied in this study included both qualitative (semi-structured interviews) and quantitative (survey) methods. This is to ensure concurrent triangulation which aims to result in “well-validated and substantial findings” (Creswell, 2003, p. 217). The quantitative part of the study is conducted with a survey, whereas the qualitative part of the study is conducted with semi-structured interviews. Semi-structured interview was considered the most appropriate method of data collection because it allowed participants the freedom to express their personal views which may be highly sensitive (e.g., they may have encountered upsetting racist comments). The structured interview guide also provides a clear set of instructions for interviewers and can provide reliable and comparable qualitative data. The survey was then conducted to quantify the issues identified in the interviews and to understand how prevalent they may be in a larger population.

The study was conducted after gaining approval from the University of Queensland’s Human Research and Ethics Committee. Participants in the interview were assured that no identifiable personal information would appear on any work resulting from this research. Survey participants were asked to sign a consent form indicating that their participation was entirely voluntarily and were likewise assured that no identifiable personal information would appear in any work as a result of the research.

Participants and Procedures

Participants were recruited via respondent driven sampling, a form of snowball sampling which produces estimates that are “asymptotically unbiased” (Heckathorn, 2007). Specifically, the researchers elicited co-workers, friends and acquaintances for the interview. These initial friends and acquaintances then in turn asked three of their co-workers, acquaintances, or friends if they would be willing to participate in the interview. Recruiters were also contacted two weeks later by the researchers to ascertain the recruiters’ relationship to the successful recruits. The criteria set for the study was that participants must all be female aged 18 years or above and who have migrated to Australia after the age of 15. They must have high school level English proficiency, had engaged in permanent work at some point in their life and were not suffering from a mental disorder as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Refugee women were excluded since prior research indicated that their pre-migration experience was significantly different from that of other migrants (Sam & Berry, 2006).

Part 1: Semi structured interview

Prior to participating in the interview, interviewees were provided with a brief information sheet that outlined the purposes of the interview and the confidential and voluntary nature of their participation. An interview guide was also used for the semi-structured interview. The semi-structured interview instrument consisted of questions...
about participants’ demographic background (e.g., age, country of birth, age they came to Australia etc), current/past employment status and acculturation experiences. At the start of the interview, participants were told that the researchers were interested in their migration experiences and were asked to describe some of the challenges they faced when they migrated to Australia such as, “Can you describe to me some of the major challenges you faced when you moved to Australia (for example, social, work and personal challenges)?” Questions were framed in an open-ended manner to facilitate dialogue and, when necessary, follow-up questions were used to clarify ambiguous responses. The interviews were all held at venues convenient to the participants, most commonly being at their homes or workplaces. Interviews were all conducted in English and taped recorded. On average, each interview lasted between 60 to 90 minutes. A total of 30 migrant women were recruited for the interviews. All agreed to participate which corresponded to a 100% response rate. The mean age of the interviewees was 47.83 years and on average they have lived in Australia for 20.22 years. Interviewed participants migrated from a variety of regions, including Africa, Europe, North America, Scotland, and South East Asia.

**Part 2: Survey.** After the interview, participants were asked to recruit one subject for the survey. Each participant was given a survey package containing a uniquely coded questionnaire, consent form, basic information about the study which outlined the purpose of the research and emphasised that participation was voluntarily as well as confidential, and a return paid self-addressed envelope. The survey was uniquely coded so that only one respondent could answer the survey. The successfully recruited participants were then asked to recruit one other participant. Out of a total of 185 questionnaires distributed, 108 questionnaires were returned, representing a 58% response rate. Participants comprised 108 female migrant women recruited from Brisbane and Sydney in Australia. Inclusion criteria were the same as for Part 1 of the study. The mean age of participants was 48.98 years (SD = 16.23). The average length of residence in Australia was 20.87 (SD = 15.89). Eighty percent of the participants lived in Brisbane and the remaining 20% lived in Sydney. Participants migrated from a variety of regions, including Southern Africa (23%), Europe (50%), Asia (12%), the Americas (7%), Middle East (3%) and New Zealand (4%). Eighty-three percent of participants completed high school with 51% of participants also receiving tertiary qualifications (i.e., trade certificate, diploma, undergraduate degree, postgraduate degree, masters or doctorates).

According to the 2006 Census data, 23.9 per cent of Australia’s female population was overseas-born (ABS, 2006). The largest group of overseas-born female migrants came from Europe (i.e., mostly from the United Kingdom), followed by New Zealand, China, and South East Asia (e.g., Vietnam, Philippines, & India). Although the majority of migrant women arrived in Australia through the family migration scheme, there has been an increase in the number of migrant women arriving in Australia as principle visa applicants (Iredale, 2005, p. 161) with many having tertiary level educations (ABS, 2006). This suggests an increase in the educational status of migrant women. Migrant women are also older than Australian born women. In 2005, the median age of Australian overseas born women was 47.1 years compared to the median age of 36 years for Australian women (ABS, 2006). The demographic profile of migrant women in our sample reflected the demographic profile of Australian migrant women as a whole especially in terms of age and educational level. However, we also have migrant women from South Africa and the Middle East in our sample. This may be
explained by the fact that there are more South African and Middle Eastern migrants living in Brisbane and Sydney respectively. Indeed, according to the 2006 census, the top five countries of birth of overseas born Australians in Brisbane were England (4.5%), New Zealand (4.1%), South Africa (3.7%), Scotland (3.2%) and Germany (2.9%) while the top five countries of birth of overseas born Australians in Sydney were England (4%), China (2%), New Zealand (1%), Lebanon (1%) and Vietnam (1%) (ABS, 2006).

Measures

Demographic Information. At the start of the survey, participants were asked to provide their demographics such as age, age at migration, length of residence, marital status, educational background, reason for migration, and country of origin.

The Connor Davidson Resilience Scale (CD-RISC). The CD-RISC (Connor & Davidson, 2003) is a 25-item scale used to measure resilience. Items in the CD-RISC are based on a 5-point Likert scale rating system ranging from 1 (Rarely true) to 4 (True nearly all of the time). Example items include: “I am able to adapt when changes occur” and “I tend to bounce back after illness, injury, or other hardships.” The questions are rated based on how the participants feel over the past month. The CD-RISC has been tested in general populations and patient samples and has been found to have adequate internal consistency with Cronbach’s alpha for the full scale being reported as .89. In the current study, Cronbach’s alpha for the full scale was .89.

Asian American Multidimensional Acculturation Scale (AAMAS). The AAMAS (Chung, Kim, & Abreu, 2004) is a 15-item measure of acculturation based on orthogonal assessment of three cultural dimensions. In other words, participants were asked to respond to the items based on three referent groups: 1) their culture of origin, 2) their culture of original within the majority host nation, and 3) the mainstream majority host culture. These items are scored on a 6-point Likert scale ranging from 1 (Not very much) to 6 (Very much). AAMAS also consists of four specific acculturation domains, namely language, food consumption, cultural knowledge, and cultural identity. The items were reworded slightly to facilitate administration across different ethnicities. For example, “How much do you identify with your own culture?”, “How much do you identify with others like yourself in Australia,” and “How much do you identify with Australians?” Previous research using migrants from Asian, American and European have found the AAMAS to be a reliable measure with high alpha reliabilities ranging from .76 to .91 (Chung et al., 2004). Cronbach’s alpha for the total score on the AAMAS in the current study was .74.

General Health Questionnaire (GHQ). The GHQ-28 (Goldberg & Hillier, 1979) measures general psychological distress across three areas: somatic symptoms, anxiety and insomnia, social dysfunction and depression. The GHQ-28 contains 28 items using a 4-point Likert scale ranging from 1 (Not at all) to 4 (Much more than usual). Example items include: “Been feeling run down and out of sorts” and “Felt that life is entirely hopeless.” Scores on the GHQ-28 range from zero to three, with higher scores indicating higher levels of psychological distress. Previous research has found the GHQ-28 to be a reliable scale with reliability coefficients ranging from .78 to .95 (Goldberg et al., 1997; Jackson, 2006). Cronbach’s alpha in the current study was .89.

Results

Grounded theory was used to analyse the data from the semi-structured interview using constant comparison, aiming for methodically coded data (Glaser & Strauss, 1967; Strauss & Corbin, 1990) in three stages: theoretical sampling, where decisions about which data should be collected next are
determined by the theory that is being constructed; constant comparison; and composition of theoretical elements.

Based on this process, preliminary categories were generated to organise the data. Two decision criteria were used to extract potential categories: The word ‘migration’ or ‘acculturation’ or words similar in meanings, such as moving to a new country were examined and noted. Secondly, phrases used to describe the challenges encountered by participants were also noted. These initial categories were then refined by eliminating some and adding others as more information was gleaned from the interviews. When data collection had been completed, each interview transcript was re-analysed to identify common themes. Several core categories were thus identified: Job opportunities, better political opportunities, safety, egalitarian country, democratic, freedom, housekeeping, juggling work, and juggling family responsibilities. These themes were constantly compared across the transcripts and then grouped in terms of similar meanings or themes. For example, themes such as housekeeping and juggling work and family responsibilities were categorised as acculturation challenges. Thereafter, interrelationships between the themes and statements within each category were analysed (Glaser & Strauss, 1967). The relevance of each category to the core issues under investigation, namely, migration, acculturation process, and migration challenges was also compared. This process was repeated until saturation was reached and all of the categories were labelled and distinguished as recommended by Glaser and Strauss (1967). To check for the accuracy of coding, two independent raters who were not associated with the research were used as raters. Results indicated a Kappa coefficient of .88. Disagreements were discussed until they were resolved.

Three distinct but related categories emerged from the qualitative analysis.

Migrant women in our sample experienced acculturation experiences specific to their status as migrants and as women. More importantly, many women reported that they have become more resilient as a result of all these acculturation experiences. The following sections provide a detailed discussion of the experiences of some of these women. Quotes are coded with the participants personal information, for example, the code (A1, F, South Africa, 52) indicates the participants ID number, gender, country migrated from and age.

**Acculturation challenges.** Acculturation challenges refer to the difficulties migrant women face as they try to adopt the cultural values and life styles of the host population. While many of these challenges were specific to their status as women and as migrants, there were also common acculturation difficulties that all migrants faced. For example, loss of family support and friends, work-family conflicts, downgrading of professional qualifications, and language difficulties. The following excerpts demonstrate some of these challenges:

*I think the biggest challenge was having no family here, particularly when we had children. At times, I felt really alone and isolated (A17, F, Canada, 21).*

*The biggest thing is that you lost your family, friendships and connections back home- all the backup systems that you used to be able to fall back on. You don’t have any support and this can be very isolating (A1, F, South Africa, 52)*

*If you do not work, you do not have any money and we needed the money. It was not easy and I had to juggle between work and family. I had to work most of the nights, take care of the kids, look after the*
housekeeping and helped my brother out at the cake shop. I also had to do my husband’s paper work because my husband has his own hand man business. I have so many roles and I am always busy (A11, F, China, 37).

It is difficult to balance between work and family. I think it is more difficult for women because you have to deal with work, the home, the kids and then a husband. My husband has been a good support to me but I have had to deal with all the work, family and children issues on every level (A12, F, Switzerland, 49).

I had a nursing degree from England but I found it very hard to get a job. But I pushed and pushed and then I finally got a job at Meyers (A30, F, England, 38).

My professional identity was completely lost because my medical degree was not recognised in Australia. So, I ended up in a position as head of a laboratory that includes much more administration and management responsibilities (A7, F, Italy, 51).

The biggest challenge for me was the language. I spoke Russian and my English was almost non-existent. I could not communicate with people in Australia (A19, F, Russia, 44).

I was born in Korea so I could not communicate in English in the beginning. I had to go to an English school for six months and even now English is still difficult for me (A16, F, Korea, 50).

Psychological health. Statements about psychological health were present across all interviews. In this study, we refer to psychological health of migrant women as the experiences of emotional illnesses since migrating to Australia. Fifty-seven per cent (57%) of participants stated that they had experienced some psychological health problems since migrating to Australia. In contrast, 43% of the participants did not experience any significant health problems since their migration to Australia. The following quotations illustrate participants’ perceptions of their mental health.

I had days and times when I was a bit depressed. I was very anxious. I still am anxious about the family (A2, F, Czechoslovakia, 82).

I became really depressed and anxious after I migrated to Australia. I think it has been brewing my whole life. But the stress of migration I think triggered it. The adaptation, the family life, and work life all became too much (A7, F, Italy, 51).

I believe my worst period of anxiety was directly as a result of the family problems I had after the migration (A14, F, South Africa, 57).

The first six months (after migrating to Australia) was really difficult and I was really anxious and at time depressed too, I think. (A19, F, Russia, 44).

No, I have not experienced any anxiety or depression since migrating to Australia (A20, F, Canada, 23).

No changes in my health since migrating here (A6, F, Israel, 48).

I would say that my anxiety levels have decreased since migrating here, due to the safety of Australia in comparison to South Africa. Not just the increased
safety though, but knowing that if something goes wrong, your government looks after you and that’s always been in the background of my mind (A13, F, South Africa, 46).

Resilience. Despite all the hardships they experienced, ninety percent (90%) of the women in our study reported that the process of acculturation has made them more resilient. This conceptualisation aptly describes many of the migrant women we interviewed in our study. Furthermore, many of the migrant women reported that they were highly flexible and open to adopting different coping strategies and accessing resources (e.g., step back from stressful situation, write down solutions, develop coping skills for big and small issues etc). This suggests that many of the migrant women interviewed were proactive in adopting different coping styles to make the required psychosocial adjustments when faced with adversity (Gordon, 1995; Rutter, 1987, 2007; Masten, 2001).

I would say that the challenges I faced during the migration have made me more resilient because we had to adapt to a new society, find a job and prove that we could do it. We probably had to manage more difficult situations than a normal Australian would have to. You carry these things and experiences for the rest of your life. These things change how you think about things and they will also change your personality (A19, F, Russia, 44).

I think my resilience comes from migrating to England as a child and having to leave Nazi Germany. I had one suitcase and 10 shillings and flung into a fairly difficult English household. There was just something in me that could take it (A29, F, Germany, 83).

Being put in a situation where you have to be adaptable and have to focus on the end game and not the small hold ups of every day life I think made me more resilient. I had to make the best of things and consider myself lucky (A20, F, Canada, 23).

Migration made me stronger. You have to cope more because you have more problems and difficulties when you migrated compared to when you living in your home country (A18, F, Hungary, 35).

I am a very forceful and persistent individual. You can say I have a very strong character and I think I have cope rather well since coming to Australia (A13, F, South Africa, 46).

Yes I am resilient. I think it’s the whole experience of migration and all the emotional things that are tied to the migration like family issues and everything make me more resilience. I don’t think I was resilient in the beginning, but we did have to be very flexible. (A17, F, Canada, 21).

I think I am more able to deal with the smaller things now because of the difficult things I have had to deal with in the past. I think the stress related to migration definitely added to my level of resilience (A10, F, South Africa, 43).

The data analysis approach adopted for the survey questionnaire was based on Baron and Kenny’s (1986) procedure for testing mediation. According to Baron and Kenny (1986), certain criteria are necessary to support a mediation model: Firstly, the independent variable (acculturation) must have a significant effect on the mediator
(resilience); secondly the independent variable (acculturation) must have a significant effect on the dependent variable (psychological distress) in the absence of the mediator (resilience); thirdly, the mediator (resilience) must have a significant unique effect on the dependent variable (psychological distress); finally, the effect of the independent variable (acculturation) on the dependent variable (psychological distress or depressive symptom) must be significantly reduced (partial mediation) or become non-significant (full mediation) upon the addition of the mediator variable (resilience) (Baron & Kenny, 1986).

Participant’s age and length of residence in Australia were controlled for by including them as predictors in all the multiple regression analyses conducted. The means, standard deviations and bivariate correlations for all the variables are provided in Table 1.

The first stage of data analysis involved testing the direct relationships between the focal variables in order to test the first three hypotheses and determine whether the criteria for mediation were met (Baron & Kenny, 1986). To test Hypotheses 1, 2, and 3, standard multiple regressions were conducted. To test Hypothesis 1, acculturation was entered into the regression equation as the predictor and resilience was entered as the criterion variable. In support of Hypothesis 1, acculturation was significantly positively related to resilience, \( \beta = .36, t(92) = 3.61, p < .001 \) and uniquely accounted for 12.39% of the variance in resilience, \( F(3, 92) = 4.36, p < .01 \). This indicates that high levels of acculturation are related to high levels of resilience.

To test Hypothesis 2, acculturation was entered into the regression equation as the predictor and psychological distress was entered as the criterion variable. As hypothesised, acculturation was significantly negatively related to psychological distress, \( \beta = -.27, t(91) = -2.69, p < .01 \) and uniquely accounted for 6.97% of the variance in psychological distress, \( F(3, 91) = 4.36, p < .01 \). This indicates that high levels of acculturation are related to low levels of psychological distress.

To test Hypothesis 3, resilience was entered into the regression equation as the predictor, while psychological distress was entered as the criterion. Again, as predicted, resilience was significantly negatively related to psychological distress, \( \beta = -.36, t(94) = -3.79, p < .001 \) and uniquely accounted for 12.53% of the variance in psychological distress, \( F(3, 94) = 6.77, p < .001 \). This result suggests that high levels of resilience are

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Note. * \( p < .05 \), ** \( p < .01 \)
related low levels of psychological distress. Thus, Hypothesis 3 was supported.

The next stage of analysis involved testing the mediating role of resilience on the relationship between acculturation and psychological distress. As demonstrated in the previous multiple regression analyses, the first three conditions necessary to conduct mediation were present (Baron & Kenny, 1986). To establish whether the final conditions needed for mediation were present, a standard multiple regression analysis was conducted (Baron & Kenny, 1986). Specifically, in order to test for mediation, resilience and acculturation were entered into the regression equation as predictors and psychological distress was entered as the criterion (see Table 2). Resilience was found to be a significant unique predictor of psychological distress $\beta = -.30$, $t(87) = -2.86$, $p < .01$, and uniquely contributed 7.62% of the variance in psychological distress. However, acculturation was not a significant predictor of psychological distress, $\beta = -.16$, $t(87) = 1.52$, $p = .13$, and did not contribute uniquely to the variance in psychological distress ($sr^2 = .02$). These findings represent a full mediation, as the direct effect between acculturation and psychological distress was non-significant when resilience was included as a mediator. This effect is summarised in Figure 1.

Consistent with this pattern of results, application of the Sobel test indicated that this was a significant mediation, $z = -2.24$, $p < .05$. Therefore, in support of Hypothesis 4, these findings demonstrate that the relationship between acculturation and psychological distress is fully mediated by resilience.

**Discussion**

In part 1 of our study, we conducted an exploration of the acculturation experiences of migrant women in Australia, many of whom lived in Brisbane and Sydney. Consistent with other migration studies, the results indicated that most of them encountered acculturation challenges specific to their status as migrants and as women. For example, ninety-seven per cent (97%) of migrant women reported that the loss of family support and friends to be particularly difficult for them. A number of past studies have found that the loss of kinship support was one of the major causes of isolation and loneliness in migrant women (Ahmad, Shik, Vanza, Cheung, George & Stewart, 2005; Berger, 2004; Remennick, 2003). The loss of social and family support networks have also been found to contribute to high levels of

### Table 2

**Standard Multiple Regression Testing the Direct Effects of Acculturation and Resilience on Psychological Distress (Controlling for Age and Length of Residence)**

<table>
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<td>Length of Residence</td>
<td>.00</td>
<td>.05</td>
<td>-.22</td>
<td>.32</td>
<td>.00</td>
</tr>
<tr>
<td>Acculturation</td>
<td>-.09</td>
<td>-.16</td>
<td>-.37</td>
<td>.05</td>
<td>.02</td>
</tr>
<tr>
<td>Resilience</td>
<td>-.29</td>
<td>-.30**</td>
<td>-.50</td>
<td>-.09</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$
depression in migrant women (Lipson & Miller, 1994). If this problem is not dealt with appropriately, it can adversely affect the ability of migrants to partake in and contribute to the new culture.

Eighty-seven (87%) of migrant women reported that work-family conflicts, downgrading of their professional qualifications (63%) and language difficulties (53%) to be the next three stressful challenges since their migration to Australia. Work-family role conflict generally refers to the extend when simultaneous pressures from the work and family domains interfere with each other and is typically defined as, “a type of inter-role conflict that occurs as a result of incompatible role pressures from the work and family domains” (Greenhaus & Beutell, 1985, p. 77). A review of work family conflict found that work family conflict is associated with negative outcomes such as stress (Lee, Um, & Kim, 2004; Matsui, Oshawa, & Onglato, 1995), depression (Lee et al., 2004), lowered job satisfaction (Noor, 2002), as well as physical and emotional well being in women (Matjasko & Feldman, 2006).

Previous migration studies have found that migrant women experienced significant occupational downgrading either because their overseas qualifications were not recognised or because they could not speak or write fluently in the language of their adoptive country (Driedger & Hallis, 2000). This is consistent with the findings in our present study where women reported occupational downgrading and language difficulties. Although many migrant men also experienced the problem of downward mobility in the workplace, studies have shown that migrant women's lives were made much more complicated by the demands of children and family life (Ng & Ramirez, 1981; Seller, 1981). In addition to significant occupational downgrading, migrant women earn less than their male counterparts (Ho & Alcorso, 2004). This reflects not the migrants' skill compositions, but processes of exclusion and labour market segmentation operating in the Australian industry and labour market institutions (Gray & Agllias, 2010; Islam & Fausten, 2008). According to these theorists, this can be attributed to pure discrimination (e.g., unwillingness on employers’ part to recognise qualifications obtained from migrants’ original countries) and gender barriers (Martin 1984; Parr & Guo, 2005).

There are inconsistent findings on migrants’ health with a number of studies suggesting that some migrant groups may actually be healthier than the host population, while other studies suggest that migrants generally suffer poorer health (Aroian, 2001;
The results from Part 1 of our study confirmed this with 57% of migrant women reporting that they had experienced some psychological health problems since migrating to Australia and 43% of migrant women reporting that they had no significant psychological health problems. Similarly, there are also mixed findings regarding the protective effect of length of residence in host country for migrants (Burvill, 1998; Wong, 2002). For example, Dunn and Dyck (1998) found that as length of residence increased, migrants were more likely than the Canadian born population to report poor health status in the host country. Similarly, Vissandjee, Desmeules, Cao, Abdool, and Kazanjian (2004) found that although recent immigrant women (2 years or less in Canada) were likely to report poor health than Canadian-born women, immigrant women who have been in Canada 10 years and over were more likely to report poor health than Canadian-born women. These studies suggest that duration of stay in host countries does not guarantee good health in migrants. More pertinent to our current study is a recent study by Cakir and Guneri (2011) of Turkish migrant women in the UK. In this study, Cakir and Guneri (2011) found that length of stay was not a significant predictor of empowerment or resilience. In other words, length of stay in host country did not contribute to the resilience in this group of migrant women.

The aim of Part 2 was to investigate the potential mediating role of resilience on the relationship between acculturation and psychological distress. Resilience research over the past three decades has shown that poor psychological outcomes or adjustments are not inevitable in high risk or vulnerable populations. Luthar, Cicchetti, and Becker (2000) for example, found that individuals with a resilient personality were able to actively resist or overcome adversities such as life challenges or stressful conditions (e.g., acculturation). In doing so, these individuals were able to effectively maintain healthy psychological functioning (Grothberg, 2003; Luther et al., 2000). Graham and Thurston (2005) interviewed migrant women in Canada and found that despite experiencing stress, guilt and frustration associated with acculturation, these migrant women demonstrated resilience which enabled them to develop effective coping strategies. Similarly, Berger (2004) in her book, Immigrant Women Tell their Stories, found that the one thing that bound all the women she interviewed was their strong sense of resilience especially after their migration. As argued by Rutter (1987, 2007), exposure to stressful situations (e.g., acculturation) may be beneficial for personal growth in that it enabled individuals to develop new competencies and resilience in order to survive. This is particularly important for many migrant women who shared the belief that they are ‘the backbone of the family’ and have the responsibility to help their children and family cope in the new country. According to Rutter (1987), psychological toughening can occur through exposure to stress; suggesting the possibility that exposure to acculturation may strengthen migrant women’s resistance to poor mental health. Therefore, as predicted in Hypothesis 1, results indicated that there was a significant positive relationship between acculturation and resilience.

Numerous studies have found that acculturation contributed negatively to migrants’ psychological health (Falcon & Tucker, 2000; Oh et al., 2002). In particular, studies have found that migrant women were especially susceptible to psychological distress (Aroian et al., 2003; Aroian et al., 2008). We therefore proposed in Hypothesis 2 that acculturation is negatively related to psychological distress. This hypothesis was supported in our study and confirmed that acculturation to the new culture is negatively
related to psychological distress in the migrant population (Falcon & Tucker, 2000; Oh et al., 2002).

More pertinent to our present study is previous research which found a negative relationship between resilience and psychological health outcomes (Campbell-Sills et al., 2006; Connor & Davidson, 2003). For instance, Aroian and Norris (2000) and Christopher and Kulig (2000) have shown that resilience is negatively associated with psychological health problems in migrant populations. In other words, the higher the levels of resilience, the less likely it is that migrants will experience poor psychological well being. Given these theoretical and empirical considerations, we speculate that resilience is negatively related to psychological distress (Hypothesis 3). Again, our findings support this prediction.

Finally, it was hypothesised that resilience would mediate the relationship between acculturation and psychological distress (Hypotheses 4). As predicted, our result indicated that resilience fully mediated the relationship between acculturation and psychological distress. This finding is consistent with Rutter’s (1987) resilience model which reflects the protective role of resilience and is consistent with the conceptualisation of resilience as a facilitating (or mediating) factor in the relationship between acculturation and psychological distress.

Limitations and Future Research Directions

A number of limitations associated with the overall current research must be acknowledged. First, although the use of a qualitative approach provided rich and detailed information about the acculturation experiences of migrant women in Australia, a limitation of this study is that the data was obtained from a relatively small sample (N=30). Therefore, the findings of this study may not be generalisable to the greater population. However, it should be noted that previous studies using grounded theory tended to have a small sample size (Chaudhury & Miller, 2008; Khan & Watson, 2005). In addition, the cross-sectional design of both Part 1 and Part 2 meant that the causality of these findings could not be inferred. Therefore, future research would benefit from the use of a longitudinal research design and a larger sample size.

Second, resilience as currently measured is a western concept based on the value of autonomy. This suggests that resilient individuals have the ability to solve and tackle problems independently without the help of others (Cohler, Stott, & Musick, 1995). It should be pointed out that migrants from collectivist societies (e.g., Japan, China etc.) may place higher value on interdependence and to be resilient may involve facing problems as a group or as a community (Cohler et al., 1995). Therefore, resilience, as currently defined and measured may not be applicable to all types of migrants and future research should consider investigating resilience across cultures.

Third, many of the migrant women we surveyed have been in Australia for a number of years. As considered in our discussion, length of residence should not necessarily be construed as a limitation. Rather, migrants who have stayed for a period of time in Australia captured the very essence of what being resilience is all about. That is, the idea that, despite adversities, these individuals continued to thrive, mature and increase their competencies over time (Gordon, 1995). To do so would mean that individuals have spent some time in the host country. However, we do acknowledge the role of selectivity and diverse sample in our study as limitations of our study. Thus, caution is needed in interpreting our findings.

Fourth, the fact that many of the migrant women were from professional and/or middle social economical class may also be a variable which mediated psychological distress. In future studies, investigation should control for social class. For example, the issue of being a visible minority should be attended to. This is because according to
Bourhis, Moise, Perreault, and Senécal (1997), the context of acculturation such as immigration policy and economic situations of the receiving society can provide or restrict possibilities in which identities and acculturation strategies are developed. In other words, a host country which discriminates against its visible minorities may make them feel so uncomfortable that they not want to integrate or assimilate with the host country. Indeed, low perceived permeability of the receiving culture predicted (depending on self-prototypicality) either separation or marginalization in migrants (Piontkowski, Florack, Hölker, & Obdrzálek, 2000).

Fifth, while we have tried to control for as many confounding variables as possible (e.g., participants must be able to speak and write in English of up to high school level, be in a permanent work position at some point in their life, non-refugees and not suffering from any mental disorder as defined in the DSM-IV), we could not control for all variables. In our defence, we would like to suggest that our aim is to preserve as much of the diverse characteristics of modern migrant women to Australia as possible. Thus, the commonalities of the migration experience and as women merit having a heterogeneous sample of migrant women.

Despite these limitations, this research has contributed to the literature in three important ways. First, it added to the literature in positive psychology by identifying resilience as a form of human strength in tackling life’s adversities. In doing so, it may encourage researchers to adopt a more positive line of inquiry. Second, we added to past acculturation research which has tended to focus on migrant men and neglected the experiences of migrant women. Even when they did focus on migrant women, they have tended to use a vulnerability-deficit model, therefore depicting migrant women as victims of acculturation. The current research addressed both of these gaps through investigating the acculturation experiences of Australian migrant women (Part 1) and directly testing resilience as a mediator between acculturation and psychological distress in a group of Australian migrant women (Part 2). Finally, the use of both qualitative and quantitative research methods is highly beneficial as it can validate data and produce a more complete and coherent picture of the investigated domain (Udo, 2006).

Practical Implications

Whilst the current research has found that migrant women are resilient in the face of acculturation, it is important to note that many migrant women do face high levels of stress in their daily lives. For example, many of the migrant women we interviewed faced labour market barriers, such as the loss of their professional qualifications which have reduced their overall earning capacity. At the same time, many of the women interviewed were fully responsible for household and child-care responsibilities with very little support. It is therefore important to provide migrant women with resources necessary to help them cope with both work and home conflicts. This is especially true for migrant women who are contributing to the social and economic fabrics of Australia in the longer terms. For instance, governmental agencies should try to provide this group of migrant women with better access to child care services and support groups. Other governmental programs such as social support, friendship networks, information on medical health access, and workers’ rights should be disseminated to permanent migrant women so that they are provided not only with the information but also skills they would need to build a productive live for themselves as well as their families in Australia. These programs should enable migrant women to reduce their sense of isolation and to lead a more socially productive live.
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