Astronaut Families: A review of their characteristics, impact on families and implications for practice in New Zealand

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The astronaut family represents an arrangement found in migrant Asian households in New Zealand. These families are characterised by the head of the household living and working in the country of origin while the remaining family members reside in the host country (New Zealand). Such arrangements impact on family members and on family and martial relationships, with members often reporting loneliness and social isolation. The aim of this review is to introduce the concept of the astronaut family, present the psychological impact of the astronaut arrangement on each family member, and to outline some implications of the findings of this review for psychological practice.

The number of Asian families migrating to New Zealand has increased dramatically over the last twenty years (Ho, 1998). Reasons for immigrating range from a more stable political environment to a smaller population density and a perceived higher quality of life in New Zealand. Among these Asian migrant families, a specific type of family arrangement called the 'astronaut family' has become common. An astronaut family is an arrangement whereby some of the migrant family members return to their country of origin to work while the remaining family members, usually the women and children, continue to reside in the host country (Ho, Bedford, & Goodwin, 1997a, b). The 'astronaut' is most often the head of the household but it is also possible to have both parents residing in their home country while the children (sometimes called 'parachute kids') are left in the host country (Ho & Farmer, 1994; Mak & Chan, 1995; Pe-Pua, Mitchell, Iredale, & Castles, 1996; Skeldon, 1994).

The purpose of this review is to introduce the concept of the astronaut family to psychologists, present the psychological impact of the astronaut arrangement on each family member, and to outline the implications of the findings for psychological practice. The phenomenon of the astronaut family will be restricted to Asian migrant families with one parent in New Zealand and exclude those in which both parents are absent. This is done because there is almost no literature on families with both parents absent, and the effects are likely to differ when there is one parent in New Zealand than when the children are left with no parental supervision here.

There are two main reasons why it is important to understand the astronaut phenomenon. First, it is an arrangement that is not well understood and in the past has even been abused by politicians. During the parliamentary elections of 1995, for example, politicians used the phenomenon to accuse migrants of not being 'committed' to New Zealand and therefore as a reason why the number of Asian migrants should be reduced (Boyer, 1996; Friesen & Ip, 1997; Lidgard, 1996; Lidgard, Ho, Chen, Goodwin, & Bedford, 1998). Second, such arrangements produce extra stress for the families and can be the cause of mental and physical illness (Abbott, Wong, Williams, Au, & Young, 1999). Psychologists and school personnel are likely to be faced with treating family members and need to know something about the stresses these family members live with.

The basis for this review is both demographic data and some limited psychological literature on astronaut families and parenting in Asian families. The astronaut literature is based on a small number of studies on astronaut research that were conducted in Canada, Australia and New Zealand. The applicability of findings from the Canadian and Australian studies to the New Zealand population needs to be taken into consideration. Asian communities in those countries have more established communities and therefore more access to social support, which could have consequences for how well migrant family members adapt to the host country. Additionally, the astronaut literature that is available tends to be based on studies with small sample sizes, and so the generalisability of the findings can be questioned. While these problems mean the findings to be presented are limited in various ways, part of our aim is

to encourage further research in New Zealand of the impact of the astronaut arrangement on families.

The most extensive study on astronaut families in Australasia was conducted by Pe-Pua et al. (1996). Since it is typical of research in this area and we draw heavily upon it, some methodological details will be given here. Sixty Hong Kong Chinese families residing in Sydney participated in the study. Three main research methods were used: in-depth family-household interviews, focus group discussions, and key informant interviews. For the in-depth family-household interviews, fourteen families were interviewed with family members present, while forty-six families were interviewed in the absence of other family members. For the focus group discussions, separate discussion groups were held for the astronaut spouses (sixteen participants) and their children (fifteen participants). Topics covered in these discussions ranged from the benefits of the astronaut arrangement to the problems and the ways in which family members cope with this living arrangement. For the key informant interviews, thirty-five interviews were conducted with representatives from religious, community, government, educational, ethnic, and youth organisations. As Pe-Pua et al.'s (1996) study is one of the few intensive studies on astronaut families in Australasia, it will be used extensively throughout this review. While we do not know how different the results would be in New Zealand, there is likely to be less difference than with the studies done in North America.

Definition and Terminology

The term astronaut family (or 'astronaut household', Ho & Farmer, 1994) is a derivative of the Chinese word 'taikongren', which can mean 'a person who spends time in space' (such as in an airplane), an 'empty wife', a 'home without a wife' (in the home country), or a 'house without a husband' (Skeldon, 1994). The term 'astronaut' refers to the returnees, or the absent parents, who frequently fly back and forth to visit their family in New Zealand (Ho et al., 1997a; Mak & Chan, 1995). Astronaut families are those in which one or both of the parents return to their country of origin to work, while the remainder of the family resides in New Zealand (Ho et al., 1997a, b).

The phenomenon of astronaut families has been observed in a number of different Asian migrant groups, the only difference being in the label of the same phenomenon. For Hong Kong Chinese migrants, the astronaut arrangement is also known as 'satellite families', or 'split families' (Lam, 1994; Lidgard et al., 1998; Mak & Chan, 1995). For Taiwanese migrants, astronaut families are known as 'flying trapeze', 'semigrants' or 'haven seekers' (Boyer, 1996; Hsiao, 1995; Ip, Wu, & Inglis, 1998; Trlin & Kang, 1992). The word 'semigrants' is used to refer to the heads of the household who have gained residence in New Zealand but have returned to Taiwan, whereas 'haven seekers' refers to families who have been physically removed from the perceived instabilities in Taiwan but without completely relocating (Boyer, 1996; Hsiao, 1995; Trlin & Kang, 1992). For female migrants from Korea, astronaut spouses are also referred to as 'grass widows' (Lidgard et al., 1998).

Characteristics of Astronaut Families

There are few reliable estimates of the number of astronaut families in New Zealand, although the numbers are believed to be substantial (Ho et al., 1997b; Skeldon, 1994). There is, however, good indirect evidence for the existence of astronaut households (Ho & Farmer, 1994). An examination of the age-sex structure of the Hong Kong Chinese population in the 1991 New Zealand Census found a strong dominance of females in the 20-49 years age groups, and significant numbers of female-headed households in New Zealand (Ho & Farmer, 1994).

Studies of astronaut families in New Zealand found that the majority of astronauts were males within the age group of 40-49 years, and that the majority of astronaut spouses were females (Ho et al., 1997b; Ho, 1998). Another study of Taiwanese, Korean and Hong Kong Chinese migrants in New Zealand found that the majority of Taiwanese astronauts had a university education, whereas only 11% of Hong Kong Chinese astronauts had university education (Ho et al., 1997b). Astronaut spouses tended to be younger and were less qualified than the astronauts (Ho et al., 1997b). Migrants from Taiwan and Hong Kong were more likely to be living in an astronaut arrangement, whereas a high proportion of Korean migrants lived in nuclear families (Lidgard, 1996).

The labour-force participation, particularly among females, was higher for migrants from China and Korea, whereas the participation rates of Hong Kong Chinese and Taiwanese migrants were quite low, with nearly three-quarters of these astronaut spouses not in the labour force (Ho et al., 1997b; Ho, 1998). The Hong Kong Chinese astronauts were more likely to be self-employed, while there were almost equal numbers of self-employed business people and salary earners for migrants from Taiwan (Ho et al., 1997b). Astronaut families also tended to retain some economic interest in their home country, in the form of investments, business dealings, or properties (Boyer, 1996). Astronaut families, therefore, spread their economic risk by having access to the business and job markets in two locations (Skeldon, 1994), but then increase their financial risk by having to maintain two households.

The demographic literature suggests two explanations for the adoption of the astronaut arrangement by some families. First, migrants are able to minimise their political risk in that they have residency in a country which is perceived as more stable, while still holding onto the option of returning to their home country (Skeldon, 1994). The second reason is that migrants often face unemployment, underemployment, and difficulties in setting up businesses in New Zealand (Ho, Bedford, Goodwin, Lidgard, & Spragg, 1998; Lidgard, 1996) and so it is necessary for the head of the household to return to the country of origin to earn a living. Migrants face unemployment and underemployment because although their qualifications gain them 'points' on the 'points-system' for the purposes of immigration, their qualifications are not necessarily recognised by New Zealand's professional organisations (Lidgard et al., 1998).

As a result, migrants are sometimes either unable to work or if they are working they are unable to work in their chosen profession (Lidgard et al., 1988). Migrants might also face difficulties in establishing and maintaining their businesses because of the different business practices in their home and host country, and, according to Manying Ip (Gamble, 2000), because of the lack of Government programmes to assist migrants in establishing businesses in New Zealand.

Currently, there is no psychological literature that accounts for the astronaut phenomenon occurring in some families but not in others. It would be of interest to know, for example, whether certain families are more or less likely to enter into astronaut arrangements. Are those families with fewer or weaker family and community ties in the country of origin the ones who become astronaut families? Are those with weaker spousal relationships the ones who decide to separate for a time? Is it a choice of placing economic and educational interests ahead of family and community involvement? Unfortunately, these are questions we cannot answer at present but the answers would help clarify the treatment of astronaut family problems. Research comparing Asian astronaut arrangements with people from the Pacific Islands would also be of interest, because in the latter it is usually the younger males who go elsewhere to work while the family remains in the country of origin.

In summary, for Asian migrants the astronaut family is seen as a temporary arrangement whereby the wife and children first settle in New Zealand with the husbands visiting during the holidays (Boyer, 1996; Lidgard, 1996). Family separation is reported to be an involuntary option that is considered a better alternative than the father not working and being forced to live on welfare payments (Boyer, 1996; Lidgard, 1996). The psychological basis for these chiefly demographic reports remains to be gathered.

The Impact of the Astronaut Arrangement on Families

The astronaut arrangement is supposedly a temporary arrangement but it is one that places great strain on the family unit (Lidgard, 1996). It impacts on individuals in the family as well as on the family and marital relationships. An outline of the effects of the astronaut arrangement on each family member and on the family and marital relations will be presented. As mentioned above, the psychological literature on astronaut families is nonexistent in New Zealand and extremely limited elsewhere, so findings from Pe-Pua et al.'s (1996) study will be used extensively because it was based on astronaut families in Australia which is the closest to the New Zealand situation.

Astronauts

The astronauts of the astronaut families are typically the male heads of the household who return to the home country to work and live. Although they play an important role in the management of an astronaut family, there is very little research anywhere on what effects the astronaut arrangement has on them. This is no doubt partly due to the difficulty in conducting research on astronauts because the researcher must either interview them during their short visits to the host country, or arrange for an interview in their home country. Due to these difficulties, findings based on astronaut spouses' reports of their husbands are typically presented in research although once again, one must be cautious of such results until more research is carried out.

Most astronaut spouses in Pe-Pua et al.'s (1996) study reported that their husbands felt lonely and missed the family, were concerned about their family's safety, had difficulty coping with the domestic arrangements, and relied on the mother or mother-in-law for the cooking and cleaning in the country of origin. The astronauts were also reportedly concerned about the future and how much longer they would have to shuttle between countries before they could permanently be with their families (Pe-Pua et al., 1996).

For some men, however, it was reported that the astronaut arrangement had no effect on them (Pe-Pua et al., 1996). The reason given for this was that they were too busy to notice the difference in family arrangements (Pe-Pua et al., 1996). The astronaut arrangement was also reported to have increased the productivity of some astronauts, who were said to have enjoyed the arrangement. The occurrence of extra-marital affairs were also reported for men from Hong Kong who were said to be vulnerable because they were lonely and were targeted by young women who were attracted to the 'foreign passport' (Pe-Pua et al., 1996). This way of viewing the problem, of course, has to be taken in the context of being reported by their wives who might have been saving 'family face' by putting the blame solely on the young women. Until more psychological research is carried out with the husbands, and how they behaved before the migration, we will not know the full story.

Astronaut Spouses

The women are typically the astronaut spouses who are left in the host country with the children while their husbands continue to earn a living in the home country. For these women, the migration is not just an adjustment to a new culture and country but also an adaptation to new roles in the family (Lam, 1994; Lidgard, 1996; Pe-Pua et al., 1996). These new roles often require a transformation in lifestyle from professional career women to becoming housebound housewives in the new country (Lidgard, 1996). Research suggests that most migrants from Hong Kong have to learn how to cook, clean, garden and care for the children, since they previously had domestic help or relatives to assist them in their home country (Lam, 1994; Lidgard, 1996; Pe-Pua et al., 1996).

The astronaut spouses often reported that they could never be completely satisfied with their life in the host country until their spouses permanently migrated to the country of destination (Lidgard, 1996; Lidgard et al., 1998; Pe-Pua et al., 1996). The women felt the burden of not having the support of their husbands and reported finding it difficult to make all the decisions for the family (Pe-Pua et al., 1996). They also felt that they were expected to fulfil a dual role of both father and mother, without having anyone to share their problems, and they were frustrated by the perceived lack of pragmatic and emotional support

(Lidgard, 1996; Pe-Pua et al., 1996).

A recurrent theme across this research is that the women reported homesickness, frustration, boredom, isolation, and depression (Boyer, 1996; Pe-Pua et al., 1996), although the severity of these symptoms and whether they warrant a clinical diagnosis was not pursued. Life in the host country was reported to be particularly isolating for those who were not proficient in English, unable to drive, and with few friends (Lidgard, 1996; Lidgard et al., 1998; Pe-Pua et al., 1996). Limitations in astronaut spouses' English ability meant that they could neither watch television nor read the newspaper, were afraid of answering the phone, and became housebound, seldom venturing outside the home alone (Boyer, 1996; Lidgard, 1996). The women were sometimes reliant on their children's academic achievement to feel good about themselves (Lidgard et al., 1998), and with some of them becoming dependent on their children who were the sole drivers, translators and subsequent 'spokesperson' for these women. In addition, the women risked further isolating themselves by not openly talking about their problems due to their fear of 'losing face' and being the target of gossip (Pe-Pua et al., 1996). The extent to which women would act to 'save face' and to keep the family unit together is exemplified by some cases in which they turned a 'blind eye' to the husband's extra-marital affairs (Pe-Pau et al., 1996).

Despite the negative psychological impact of the astronaut arrangement on some women, others reported that it enabled them to become more assertive, independent, capable of decision-making, and less tolerant of their husband's faults, and some became accustomed to the separation (Lidgard, 1996; Pe-Pua et al., 1996). Astronaut spouses who led active social lives in the host country reported that their lifestyle was not greatly different from that in their home country (Pe-Pau et al., 1996). Coping strategies used by astronaut spouses were to confide in friends, ministers, priests, doctors, and to join support or church groups (Lidgard et al., 1998; Pe-Pua et al., 1996).

Astronaut Children

For the children of the astronaut arrangement, the absence of the father was often reported as a distressing experience. Children were left to feel isolated, disappointed that the family was not 'complete', missing the father, and longing for the missing father figure and role model in the family (Boyer, 1996; Pe-Pua et al.; 1996). As with other members of astronaut families, the children also reported experiencing homesickness, loneliness, frustration, and boredom (Boyer, 1996). Like the astronaut spouses, the children's frustration and boredom could be compounded by the lack of friends in the host country and not having learned how to drive.

Like their mothers, the roles of the children in astronaut families also changed. For migrants from Hong Kong, for example, the children were often expected to assume responsibility for household chores previously done by the father, grandparents or domestic help (Pe-Pua et al., 1996). In addition to household chores, the children might also be expected for the first time to look after siblings, manage the family finance, contribute to the family decision-making, and do repairs around the house (Ho et al., 1997b). If the mother was not proficient in English or did not know how to drive, she might become heavily dependent on the older children whose responsibilities might then also include being her interpreter and communicator with the 'outside world', as well as being the family chauffeur (Boyer, 1996). Like the astronaut mothers, astronaut children not only have to adjust to a new culture and country but also have to shoulder the responsibilities from an astronaut arrangement, which could hinder their social integration into their new environment (E. Ho, 1995). Some sons also reported feeling resentful for being expected to assume the roles of the father (Pe-Pua et al., 1996).

In terms of personal development, astronaut children could become more self-confident, independent, mature, and assertive than in the country of origin (Pe-Pua et al., 1996). However, although these may be regarded as 'positive' qualities, to which a child in a Western society might strive, these traits are not as easily accepted in Asian culture. Children who assert their opinion or whose behaviour is against the wishes of the parents are perceived as behaving disrespectfully towards them and bringing shame to the family (Ho, 1992; C. Ho, 1995; Nakanishi & Ritter, 1996; Pe-Pua et al., 1996). According to Pe-Pua et al. (1996), children in Hong Kong are not permitted to answer back or assert their 'rights' to their parents, which is something that is accepted and sometimes encouraged in Western society.

The parents also reported difficulty disciplining their children in the host country. This was attributed to the absence of the father whose traditional role in the family was as an authority figure and disciplinarian, whereas the mother was usually 'softer' and 'kinder' to the children (Nakanishi & Rittner, 1996; Pe-Pua et al., 1996). With the astronaut arrangement, however, the father's role of disciplinarian has altered to that of a 'bringer of gifts', a label which refers to the fact that he always arrives with presents during each visit (Lam, 1994; Pe-Pua et al., 1996).

One positive aspect reported in some of the astronaut arrangements was that it could improve the quality of family relationships and brought family members closer together, particularly the mother-daughter relationship (Pe-Pua et al., 1996). The relationships between siblings also improved sometimes because the children were more limited in their social interactions with other children and had more exposure to their siblings (Pe-Pua et al., 1996). In terms of adjusting to the absence of the father, Pe-Pua et al. (1996) found high levels of acceptance among parachute children. For other children, the astronaut arrangement reportedly did not affect them since they previously had very limited interaction in the country of origin with their father, who was often busy and did not have time for the family (Pe-Pua et al., 1996).

Family Disruption

The astronaut arrangement compounds other stresses associated with migration (Lam, 1994; Lidgard, 1996). Not only do the family members have to adjust to a change of culture, language and environment, but they also have to adapt to the splitting of the nuclear family, and the scattering

of extended families (Ho, 1987; Lidgard, 1996; Mak & Chan, 1995). The women and children of astronaut families also face having to build the foundations of a new life in a new country without the head of the household who is traditionally the decision-maker in the family. The scattering of extended families also means that family members are separated from relatives and close friends who traditionally would have provided them with emotional and material support (Ho, 1992; Ho, 1987).

Marital Relations

The impact of the astronaut arrangement on marital relations as reported is varied (Pe-Pua et al., 1996). For the couples reporting little effect of the separation, it was regarded as nothing more than an opportunity to miss the spouse. For couples who reported that relationships improved, fewer arguments and greater respect for the spouse were given as reasons. For couples who reported a weakening of the relationship, participants reported that they no longer trusted their partners nor shared any commonalties with them.

In addition to the difficulties associated with being separated from the spouse, problems can also occur once the astronaut member re-joins the family permanently in the host country. This can occur because during the time that the husband was away, the wife might have integrated into the host society and acquired a new group of friends, and might have had other experiences to which the husband cannot relate (Boyer, 1996). The women might also now be mobile, able to communicate in English, and have obtained employment (Boyer, 1996). Problems can also arise because of conflicting attitudes and perceptions about the way things should be done, the husband feeling threatened by the wife's ability to control her own life, and feeling uncomfortable having the wife as the breadwinner of the family (Boyer, 1996; Ho, 1987; Pe-Pua et al., 1996). This role reversal could compound the astronaut's difficulty in adjusting to life in the country of destination and their own frustrations in either being unemployed or underemployed (Mak & Chan, 1995). At the same time, the wife might be resentful for having to forego her independence, self-assertiveness, and the disruption of her current lifestyle on the return of her husband if he expects to return to the status quo (Boyer, 1996; Pe-Pua et al., 1996).

Perhaps as a reflection of these difficulties in reuniting couples, in Australia it was found that the divorce rates of Chinese semigrants was the highest for any ethnic group and that it was three times higher than the rate for local residents (Teng, 1994). Pe-Pua et al. (1996) predicted that divorce rates would increase as women become more self-confident, independent, and more receptive to the idea of living alone, whereas the men might opt to find another partner. The astronaut arrangement increases the likelihood of divorce since not only do migrants have to adjust and adapt to a new country but they also face shifts in the dynamics of family function and structure. However, it should be pointed out that the causality for this correlation could go either way. It is possible that the formation of an astronaut arrangement itself is a precursor to divorce since the arrangement is inconsistent with the Chinese tradition of family cohesiveness, and is perhaps a lifestyle only opted for by those already in unstable marriages. Further research could clarify such ambiguities.

Practising Psychology with Asian Migrant Astronaut Families

When working with Asian migrant families in psychological practice there are a number of considerations that are different from the majority of the population, and most are not specific to astronaut families (Chin, 1998; Ho, 1987, 1992). For example, health professionals need to be aware of the stresses that all migrants face in addition to the specific stresses we have reviewed for astronaut families. There are not only direct stresses associated with migration such as moving itself or unemployment, but also post-migration stresses of prejudice and discrimination especially for highly visible minorities in New Zealand such as Asians and Africans (Abbott, 1997; Aye & Guerin, 1999; Clark, Anderson, Clark, & Williams, 1999; Hyman, Vu, & Beiser, 2000; Kessler, Mickelson, & Williams, 1999; Liebkind & Jasinskaja-Lahti, 2000; Pernice & Brook, 1996).

This review has raised a number of more specific points to consider when practising psychology with Asian migrant astronaut families. When working with such clients, it is crucial to know the family's living arrangement and the impact of this on family functioning, because the family's living arrangement could be responsible for the client's problems rather than any pre-migration problems or stresses from migration. All family members in the research outlined here commonly reported feeling lonely, isolated, and lacking in social support. This can further hinder and delay migrants' adjustment and integration into New Zealand society, which can then cause them to feel even more lonely and isolated. It is thus not surprising to find that married women living with children and having an absent spouse are more likely to suffer from mental illness than those with their spouses in New Zealand (Abbott et al., 1999). For intervening in such cases, the research by Lidgard et al. (1998) and Pe-Pua et al. (1996) found that astronaut spouses often found social support from friends, ministers, priests, doctors, and church groups and this could be suggested to them. The findings reported in this review also suggest that even directing spouses and their children to driving lessons and English classes could be of clinical benefit. Psychological practitioners could encourage all these avenues. While it may be clinically productive to include the fathers in therapy, the reasons outlined earlier in this review suggest that this is likely to be difficult and could perhaps amplify the problem.

We have also seen that psychological problems can arise for astronaut families through changes in roles. This applies to role changes for both spouses and children who are mainly involved in replacing or substituting the fathers' typical roles. When working with astronaut families, therefore, it is likely to be important for the therapist to inquire and counsel about role decisions within the families as this could be a source of problem. Given the reality of the father's physical absence, it may be difficult to find other substitutes for the missing roles. What may be useful is

to encourage discussions with family members about any major role problems, such as who makes the major household decisions, how disciplining takes place, practical roles such as who does the driving, and how to ensure that each family member has 'time-out' from the many household roles that need replacing.

The above implications highlight the need to develop culturally specific treatments and mental service provisions. Chin (1998) reports that in the United States the predominant perception is that Asian Americans experience few mental health problems and that there is little need for mental health services for them. This viewpoint also appears to hold true in New Zealand, where there are very few services that cater specifically for Asian clients and that are culturally appropriate, despite a long history of people of Chinese origin in this country. The lack of ethnic-specific services might also discourage migrants from using the available services, since the likelihood of ethnic minority groups using mental health services increases with the provision of ethnicity-specific programmes (Ball, Mustafa, & Moselle, 1994; Blais & Maïga, 1999; Sue, 1998; Snowden & Hu, 1997; Takeuchi, Sue, & Yeh, 1998; Ying & Miller, 1992).

Other culturally specific implications for psychological practice have been mentioned in passing. First, it might be difficult to establish rapport with clients because of the 'face saving' aspect of Asian culture. Understanding, or even getting a full report of the family circumstances, is hindered by clients denying that there is a problem at all and being reluctant to seek help from professionals or to follow up referrals. It is even reported that some Asian Americans see dysfunction or suffering as a punishment or as a result of 'immoral behaviour', and social, moral, or somatic explanations are sought rather than psychiatric or psychological ones (Ho, 1987, 1992). Second, difficulties in getting access to health professionals may also be compounded by the client's lack of proficiency in communicating in English and their inability to drive. The lack of English also highlights the need for more specialist mental health services for those of Asian origin. Finally, because most astronaut families report that theirs is a temporary arrangement, they might put off seeking help, believing that the problems will disappear when the astronaut family member finally returns for good. This can exacerbate the problem, however, and the return is no guarantee that problems brought about by the family arrangement will then clear up when the family is reunited. Indeed, we have seen that there are often further problems when the families reunite.

Conclusions

This review has introduced the concept of astronaut families, provided an outline of their demographic characteristics, and presented an overview of the impact of the astronaut arrangement on each of the family members and on the family and marital relations.

Astronaut families are a type of family arrangement found in migrant Asian families whereby one or both parents reside and work in their home country while the remainder of the family lives in the host country. The astronaut arrangement is not a preferred option but an involuntary and temporary arrangement that is considered a better alternative than unemployment and underemployment. The arrangement impacts on each family member and on the whole family functioning, as it alters the role of each member of the family and their relationships. It is a phenomenon that is misunderstood, a topic for which there is little psychological research, and an area that has some serious implications for psychological practice.

It is hoped that this review can help to dispel some misconceptions about astronaut families and that it highlights some of the difficulties that immigrants face when migrating to New Zealand. We also hope that this can lead to more research on the situations in which such families are embedded, through their own choice or through situations that force such an arrangement upon them. Most importantly, we hope that this review makes psychological practitioners more aware of the situations that might lead to mental illness problems in Asian immigrants and a greater ability to treat them or to refer them to more specialised treatment services.

References

Abbott, M. (1997). Refugees and immigrants. In P. M. Ellis, & S. C. D. Collings (Eds.), *Mental health in New Zealand from a public health perspective* (pp. 250-264). Wellington, New Zealand: Ministry of Health.

Abbott, M. W., Wong, S., Williams, M., Au, M., & Young, W. (1999). Chinese migrants' mental health and adjustment to life in New Zealand. *Australian and New Zealand Journal of Psychiatry, 33,* 13-21.

Aye, A. M. M. M. T., & Guerin, B. (1999, September). *Race of interviewer and challenging questions as social contexts for making prejudicial statements.* Paper presented at the 1999 Annual Conference of the New Zealand Psychological Society, Dunedin, New Zealand.

Ball, J., Mustafa, S. M. B., & Moselle, K. A. (1994). Cultural influences on help-seeking for emotional problems: A study of Malay young adults. In G. Davison (Ed.), *Applying psychology: Lessons from Asian-Oceania* (pp. 97-112). Melbourne: Australian Psychological Society.

Blais, R., & Maïga, A. (1999). Do ethnic groups use health services like the majority of the population? A study from Quebec, Canada. *Social Science & Medicine, 48,* 1237-1245.

Boyer, T. (1996). Problems in paradise: Taiwanese immigrants to Auckland, New Zealand. *Asia Pacific Viewpoint, 37,* 59-79.

Chin, J. L. (1998). Mental health services and treatment. In L. C. Lee & N. W. S. Zane (Eds.), *Handbook of Asian American psychology* (pp. 485-504). London: Sage Publications.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychological model. *American Psychologist, 54,* 805-816.

Friesen, W., & Ip., M. (1997). New Chinese New Zealanders: Profile of a transnational community in Auckland. In W. Friesen, M. Ip, E. Ho, R. Bedford, & J. Goodwin (Eds.), *East Asian New Zealanders: Research on new migrants* (pp. 3-19). Auckland: Department of Sociology, Massey University.

Gamble, W. (2000, March 28). 'Few lures' for Asian migrants: Business talent stifled. *The New Zealand Herald,* p. A5.

Ho, C. K. (1995). An analysis of domestic violence in Asian-American communities: A multicultural approach to counselling. In K. P. Monterio (Ed.), *Ethnicity and psychology: African-, Asian-, Latino-, and Native-American Psychologies*. Dubuque, IO:Kendall/ Hunt Publishing Company.

Ho, E. S. (1995). Chinese or New Zealander? Differential paths of adaptation of Hong Kong Chinese adolescent immigrants in New Zealand. *New Zealand Population Review, 21,* 27-49.

Ho, E. S. (1998). Growth of the Asian population. In R. E. Ranny (Ed.), *People, people, people* (pp 57-59). Christchurch: New Zealand Federation of Ethnic Councils.

Ho, E. S., Bedford, R., & Goodwin, J. (1997a). Linking migrants into their family contexts: Methodological considerations. *Population Studies Centre: Discussion paper no.23.* Hamilton, New Zealand: Population Studies Centre, University of Waikato.

Ho, E. S., Bedford, R., & Goodwin, J. (1997b). "Astronaut" families: A contemporary migration phenomenon. In W. Friesen, M. Ip, E. Ho, R. Bedford, & J. Goodwin (Eds.), *East Asian New Zealanders: Research on new migrants* (pp. 20-41). Auckland: Department of Sociology, Massey University.

Ho, E. S., Bedford, R., Goodwin, J., Lidgard, J., & Spragg, B. (1998). Employment experiences of Chinese and Korean recent immigrants in 1991 and 1996: Some preliminary observations. In R. E. Ranny (Ed.), *People, people, people* (pp. 259-272). Christchurch: New Zealand Federation of Ethnic Councils.

Ho, E. S. & Farmer, R. (1994). The Hong Kong Chinese in Auckland. In R. Skeldon (Ed.), *Reluctant exiles: Migration from Hong Kong and the new overseas Chinese* (pp. 215-232). London: M. E. Sharpe.

Ho, M. K. (1987). *Family therapy with ethnic minorities.* London: Sage Publications.

Ho, M. K. (1992). *Minority children and adolescents in therapy.* London: Sage Publications.

Hsiao, S. (1995). How many emigrants are turning back? *Sinorama,* 20, 2-3.

Hyman. I., Vu, N., & Beiser, M. (2000). Post-migration stresses among Southeast Asian refugee youth in Canada: A research note. *Journal of Comparative Family Studies, 31,* 281-293.

Ip, D., Wu, C.-T., & Inglis, C. (1998). Settlement experiences of Taiwanese immigrants in Australia. *Asian Studies Review, 22,* 1-25.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40,* 208-230.

Lam, L. (1994). Searching for a safe haven: The migration and settlement of Hong Kong Chinese immigrants in Toronto. In R. Skeldon (Ed.), *Reluctant exiles: Migration from Hong Kong and the new overseas Chinese* (pp. 163-182). London: M. E. Sharpe.

Lidgard, M. (1996). East Asian migration to Aotearoa/ New Zealand: Perspectives of some new arrivals. *Population Studies Centre: Discussion paper no.12.* Hamilton, New Zealand: Population Studies Centre, University of Waikato.

Lidgard, J., Ho, E. S., Chen, Y-Y., Goodwin, J., & Bedford, R. (1998). Immigrants from Korean,Taiwan and Hong Kong in New Zealand in the mid-1990s: Macro and micro perspectives. *Population Studies Centre: Discussion paper no.29.* Hamilton, New Zealand: Population Studies Centre, University of Waikato.

Liebkind, K., & Jasinskaja-Lahti, I. (2000). The influence of experiences of discrimination on psychological stress: A comparison of seven immigrant groups. *Journal of Community and Applied Social Psychology, 10,* 1-16.

Mak, A. S. & Chan, H. (1995). Chinese family values in Australia. In R. Hartley (Ed.), *Families & cultural diversity in Australia* (pp. 70-95). Sydney: Allen & Unwin.

Nakanishi, M., & Ritter, B. (1996). Social work practice with Asian Americans. In D. F. Harrison, B. A. Thyer, & J. S. Wodarski (Eds.), *Cultural diversity and socialwork practice* (2nd ed., pp. 87-111). Chicago, IL: Charles C. Thomas.

Pe-Pua, R., Mitchell, C., Iredale, R., Castles, S. (1996). *Astronaut families and parachute children: The cycle of migration between Hong Kong and Australia.* Canberra: Australian Government Publishing Service.

Pernice, R., & Brook, J. (1996). Refugees' and immigrants' mental health: Association of demographic and post-immigration factors. *The Journal of Social Psychology, 136,* 511-519.

Skeldon, R. (1994). Reluctant exiles or bold pioneers: An introduction to migration from Hong Kong. In R. Skeldon (Ed.), *Reluctant exiles: Migration from Hong Kong and the new overseas Chinese* (pp. 3-20). London: M. E. Sharpe.

Snowden, L. R., & Hum T.-H. (1997). Ethnic differences in mental health service use among the severely mentally ill. *Journal of Community Psychology, 25,* 235-247.

Sue, S. (1998). In search of cultural competence in psychotherapy and counseling. *American Psychologist, 53,* 440-448.

Takeuchi, D. T., Sue, S., & Yeh, M. (1998). Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles. In P. B. Orgnista, K. M. Chun, & G. Marin (Eds.), *Readings in ethnic psychology* (pp. 324-334). New York: Routledge.

Teng, S. F. (1994). Home away from home: Families divided by the future. *Sinorama, 19,* 42-46.

Trlin, A. D., & Kang, J (1992). The business immigration policy and the characteristics of approved Hong Kong and Taiwanese applicants, 1986-1988. In A. D. Trlin & P. Spoonley (Eds.), *New Zealand and international migration: A digest and bibliography, volume 2.* Palmerston North, New Zealand: Department of Sociology, Massey University.

Ying, Y.-W., & Miller, L. S. (1992). Help-seeking behavior and attitude of Chinese Americans regarding psychological problems. *American Journal of Community Psychology, 20,* 549-556.

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