THE INTERMITTENT HUSBAND -

IMPACT OF HOME AND AWAY OCCUPATIONS ON WIVES/ PARTNERS

L Hubinger ¹AW Parker ¹ A Clavarino ²

Abstract

Working and living away from home is common in many occupations including the military, sales, construction, mining and transportation. Frequent partings and separations place strain on those leaving as well as those staying at home.

In Australia, particularly in Queensland, the expansion of fly in/fly out mining operations has increased the incidence of this type of work-related absence.

This paper will examine the impact of home and away occupations across various industries with particular emphasis on the experiences of Great Barrier Reef (GBR) pilots. These pilots spend three weeks or more away from home at any one time while guiding ships through the Barrier Reef region.

Thus an investigation was designed to examine the impact of these work practices on wives and families.

Analysis of a survey of quantitative and qualitative data from 35 wives (response rate 60 percent) indicated respondents were relatively older (> 51 percent aged more than 50 years), welleducated and generally well-satisfied with married life. Of the respondents, 68 percent were currently employed and 22 percent had children under18 years. Concern regarding the impact of the physical risks and fatigue of pilotage work on their husbands was reported by 70 percent of respondents.

The home and away nature of pilotage work was linked to the experience of stress by the majority of participants at least some of the time. For instance, 60 percent of the sample reported difficulties coping with stress - with altered eating habits being predominantly used as a coping mechanism.

From the two measures of psychological well being used in this study, approximately 14 percent of the sample was anxious at the time of the study.

Nine percent of respondents were considered to be depressed. In comparison, normative data indicates approximately 3 percent of the adult population suffers major depression.

A substantial number of wives perceived a lack of emotional or informational support. Recommendations from the study included the use of the email system for contact with absent husbands/fathers and for the establishment of a support group for wives/families of pilots. The mode of operation in mining is changing in favour of fly in/fly out or drive in/drive out work practices.

However, there is currently little information, specific to the mining industry, on the impact of home and away work practices on family. Consequently, inferences will be made from these results to fly in/fly out mining operations as a basis for further examination of this problem in future research.

Key words: home-and-away occupations, workrelated family separation wives, anxiety and depression

1.0 Introduction

Research involving the impact of home and away occupations has tended to focus on those who leave, rather than those who stay at home. Thus, the effects of regular partings and reunions on wives and family members left at home has been less frequently acknowledged.

81

Riggs (1990) suggested that families experiencing work-related absences fall into three categories: military, corporate (white collar executives) and non-corporate (workers in transportation, sales, construction, exploration, mining and fishing industries). The literature has only dealt briefly with the impact of home and away work practices on families and not surprisingly, more is known about the effects of separation in military settings than in other sectors.

The occurrence of work-related absence from home is difficult to determine from official data sources. Australian census data indicates that approximately 1 million workers are employed in mining, transportation, construction and, military sectors.

A sizeable number of these workers are potentially involved in regular/irregular work-related absences (Australian Bureau of Statistics, 1998). In the United States, Riggs (1990) estimated that 34 percent of the civilian labour force in the United States was involved in work situations involving absences from home. It is likely that a similar percentage of Australian workers would be involved in home and away occupations, particularly given the relative international isolation and the vast physical size of the country.

According to Morrice and Taylor (1978) home and away occupations are characterised by a parting and reunion cycle providing a recurring crisis and a uniform pattern of feelings. This recurring cycle includes tension and tearfulness on a husband's departure, return to normal, followed by feelings of depression, sadness, anger and recrimination towards a husband during the cycle and on his return.

These authors were one of the first groups to document the impact of home and away work patterns on the family. Morrice and Taylor were attracted by what appeared to be a recurrent pattern of clinical symptoms of anxiety and depression in women whose husbands were employed in the off-shore oil industry.

Study results indicated that while the general health profiles were similar in on-shore and offshore wives, the off-shore wives experienced increased levels of anxiety and depression related to frequent separations from their husbands. In most situations, the wives were able to successfully cope with their husband's absence and thus, the anxiety and depression were not significantly problematic.

However, approximately 10 percent of off-shore wives exhibited ineffective coping strategies and were classified as suffering from 'Intermittent Husband Syndrome' (IHS). This term was coined by Morrice and Taylor (1978) and describes a triad of symptoms: anxiety, depression and sexual difficulties, which occur as a result of frequent partings and reunions between a wife and husband.

Australian mining is moving from the traditional 'company' to home and away operation. Information from the Australian mining industry shows that over past three decades mining companies have moved towards long distance commuting (LDC) and fly in and flyout (FIFO) workforces rather than building 'company' towns close to mine sites.

82

A total of 41 FIFO mines opened between the periods of 1980-1991, with 30 since 1987 (Storey & Shrimption, 1991). Currently, 63 FIFO mining sites are operating in Australia. LDC has been coined as employment where work is so isolated from the homes of the workers that employees spend a fixed number of days working at the site, and a fixed number at home.

In addition, all food and lodging are provided at the worksite (Storey & Shrimption, 1991). A mine is classified as LDC if 50 percent of the employees are accommodated at the work site for the duration of their rotation (Hogan & Berry, 2000).

The use of LDC in the mining industry is the result of trends that have increasingly favoured its use over the construction of new mining towns. These include relative costs of LDC operation compared to conventional mine towns; the social economic and political limitation of mining towns and technological changes that have made commuting safe.

Furthermore, changes in the regulatory environments tend to make LDC more attractive than new town construction for companies, indigenous people, and governments alike (Storey & Shrimption, 1991). Changes in regional mining employment in Australia have been highlighted by ABS census data (ABS, 2000).

Between 1986 and 1996, mining employment increased in capital cities and coastal regions, and

decreased in other metropolitan, inland remote regions. The 10 percent rise in coastal employment was partly due to the shift towards LDC.

Results of mining studies in Canada and Australia have identified that little is known about the social impact of LDC on wives and families (La Forte, 1991; Houghton, 1993). Some evidence from mining indicates that stress in wives of miners who travel long distances has been reported to be greatest with short rotations (seven days on, seven days off; compared to 14 days on and 14 days off).

Burnout in this situation can occur at twice the speed. After a seven day separation, time is needed to adjust to one another. It can take up to two to three days to bond again. The days before departure are often filled with heightened emotions. Thus, a large proportion of the husband's time spent at home is lost due to readjustment issues (La Forte, 1991).

Difficulties with the upbringing of children have also been noted. In a review of long distance commuting in the mining industry: a wife's point of view, La Forte (1991) highlighted that discipline is responsibility of the wife while the husband is away.

When the husband returns he wants to maintain a hero's image and deters from disciplining children. This can create behaviour management problems with children and conflict between wife and husband.

The in/out lifestyle of LDC can impact heavily on the wife/partner. Issues such as working outside the home, social mingling, and sexual needs being met have been raised. These problems are largely due to living in a cycle (seven days, nine days, and 14 days) as opposed to normal day to day patterns.

Working outside the home is nearly impossible for some wives. For instance, the additional work load and the upbringing of the children places restrictions on the wife that can lead to resentment and marital conflict. LDC has been associated with changes in sleeping patterns, stress related hair loss, increase in minor illnesses such as colds, headaches, flu and mood-swings (La Forte, 1991).

Although work related travel does have drawbacks towards family life, in some situations it is seen as advantageous. For example, miners who choose to commute long distances enables their wives and children to continue living in urban centres instead of being uprooted and shifted to remote mining communities.

'Spouses do not have to give up their own existing careers, friends or activities; children do not have their education disrupted; a worker losing his job does not have to automatically move house (as is customary in a company town); and wives do not have to put up with the boredom and loneliness of remote locations (Jackson, 1987).

Additionally, the blocked work schedules of LDC allow for more extensive periods of recreation time, thus a greater amount of time (and quality of time) that can be spent with family than in 'normal' family situations (Houghton, 1993). When the LDC spouse is away, children develop more outside interests, helping them to cope when one parent is away (La Forte, 1991).

Most of the evidence relating to work-related absences comes from the military literature.

Military families are regularly separated with absences of six months not uncommon. In a typical military family, the major responsibility for normalising a family's physical, social and emotional behaviour frequently becomes the responsibility of the wife.

Evidence from the military literature indicates that 'waiting military wives' report increased demands of caring for the family, increased number of illnesses, loneliness, sexual frustration, anger and frustrations at their husbands departure (Riggs, 1990, review article).

A study examining the role of organisational support in army life during periods of separation revealed that lower ranking officers reported lower family adjustment than older, higher ranking officers. Additionally, the study identified several organisational resources which were effective in alleviating the negative effects of family separation.

These included: the level of soldier's morale, satisfaction with available resources to communicate with home and perceptions of leader support for family difficulties (Rohall et al 1999). The impact of family separations on divorce rates has been inconclusive.

However, a recent study exploring the impact on divorce rate of military deployment during the Gulf War revealed that deployment of male soldiers had no significant effect on marital dissolution. In contrast, the deployment of female soldiers led to a large and statistically significant increase in divorce rates suggesting deployment of women placed a marked strain on marriages (Angrist & Johnson 2000).

There is some evidence of the impact of workrelated absence on children available from the military literature. In a review of some of the studies Riggs (1990) indicated that the parental absences seem to result in feelings of tension and anxiety prior to the departure or arrival home of the parent, a variety of behavioural problems and somatic complaints that mirror the departure of a parent had the potential for poor parent child relationships due to the intermittent periods of absence.

Information from transportation sectors supports the experiences of mining and military wives. Studies have shown significantly lower levels of well being and a higher incidence of depressive mood in aircrew wives compared with ground crew wives (Rigg & Cosgrove, 1994).

For instance, increased domestic role overload (including being like a one parent family, difficulty in involving the husband in things he has missed while away, isolation and feeling rejected when the husband returns home tired) were identified as the greatest source of stress on aircrew wives (Cooper & Sloan, 1985).

Similarly, studies of seafaring groups have revealed increased domestic stress on wives and families due to the husbands/fathers home and away work (Foster & Cacioppe, 1986; Parker et al., 1997; Shipley & Cook, 1980; Sutherland & Flin, 1989).

Levels of stress and tension appear to heighten particularly in the first seven to10 days during the transition between home and sea and vice versa. One of these studies involving a survey of 52 wives of Australian seafarers indicated that 83 percent of the wives experienced stress when their partner was either due to return home or to sea.

Moreover, 79 percent of children were perceived by their mothers to experience stress prior to and after the arrival home of their father (Foster & Cacioppe 1986). Hence, it is apparent that the home and away nature of seafaring work impacts on all family members.

Home and away patterns associated with marine pilotage also appear to be disruptive to family life. For instance, previous studies investigating English (Shipley & Cook, 1980), Dutch (de Vries-Griever, 1982) and Australian marine pilots operating in the Port Phillip region (Berger, 1984) have acknowledged the disruptive effects pilotage work can have on the lifestyle and family life of pilots, and the importance of a stable family situation on pilotage performance.

The work practices of Great Barrier Reef pilots frequently require pilots to spend considerable blocks of time away from home. These periods of separation may last anywhere up to several weeks. The pilots' wives input was considered highly relevant since anecdotal information from the industry suggested the uncertainty of pilotage work placed additional strain on wives and families. Moreover, previous data on Australian seafarers raised concern over the pressure on wives of having responsibility for the household and family for extended periods during a husband's absence (Parker et al., 1997).

The present paper provides data on the experiences of the wives of Great Barrier Reef pilots. The data is based on an investigation of the impact of home and away work patterns of pilots on wives and families including an examination of the degree of marital satisfaction, anxiety and depression.

83

2.0 Methodology

Sample

The wives/partners of 58 Great Barrier Reef pilots were surveyed to examine the impact of the home and away nature of marine pilotage work on wives/partners. Participation in the study was voluntary and anonymous. The study was conducted with approval from the Queensland University of Technology Research Ethics Committee.

Questionnaire development and distribution

A questionnaire was developed consisting of 17 questions (100 items). This paper addresses the following issues:

- (i) demographic characteristics
- (ii) marital satisfaction (dyadic adjustment)
- (iii) social support

(iv) psychological well-being (particularly the experience of anxiety and depression).

The item content was based on studies of the wives of other situations of work-related absences (Cooper & Sloan, 1985; Rigg & Cosgrove, 1985; Taylor et al., 1985), with study specific measures based on previous maritime investigations (Shipley & Cook, 1980; Berger, 1984; Parker et al., 1997).

Pilot testing of the questionnaire was undertaken on a convenience group of four women with husbands in

home and away occupations: their comments were incorporated into the final questionnaire.

Questionnaire distribution and reminders

Questionnaires (including an information page to explain the purpose of the study and a stampedaddressed envelope for returns) were distributed through the pilotage companies and posted to the home addresses of participants. A reminder system was implemented consisting of two individual reminders to each participant.

Measures

84

Demographics

Items in this section included information on age, marital status, education, number and ages of children and employment status.

Marital satisfaction: Spanier Dyadic Adjustment Scale

The Spanier Dyadic Adjustment Scale (Spanier, 1976) is designed to assess the quality of the relationship of either married or cohabiting couples and comprises four interrelated sub-scales (Dyadic Consensus, Dyadic Cohesion, Dyadic Satisfaction and Affection Expression). Seven items assessing Dyadic Satisfaction were used.

Previous reports indicate sub-scales can be used independently without losing confidence in either the reliability or the validity of the measure. Using Cronbach's alpha as the reliability estimate Spanier (1976) reports an overall scale reliability of 0.96 with a reliability score of 0.94 for the Dyadic Satisfaction. Respondents were asked to rate their responses on a five point Likert scale ranging from 'all of the time' (scale = 1) to 'never' (scale = 5). The reliability of the scale was determined using Cronbach's alpha. This was a very acceptable 0.83.

Social support – emotional or informational

There are two broad categories of social support: structural and functional support. The 19 measures used to assess the levels of functional support covered four categories: tangible support, affectionate support, positive social interaction and emotional or informational support (Vaux, 1988). In addition single items provided an estimate of structural support or the perceived size of the social network. For all scales, responses were coded on a five-point Likert scale ranging from 'never' to 'all of the time'. In this paper the measures for emotional or informational support are reported.

Psychological well-being: anxiety and depression

The Delusions Symptoms States Inventory (DSSI) (Foulds and Bedford, 1978) was used to measure levels of anxiety and depression. This is a brief, 14 item measure which contains two seven item sub-scales assessing levels of anxiety and depression. This measure was selected because it provides a clinically relevant measure of both anxiety and depression. The DSSI has been validated in adult Australian populations (Boyle, 1993; Henderson et al. 1981; Keeping et al.1989).

Respondents were asked to rate their feelings, during the last week, on each of the items on a five point Likert scale ranging from 'all of the time' (scale = 1) to 'never' (scale = 5).

Additional comments

The questionnaire also provided space for additional comments to enable wives/partners to elaborate on issues in the structured questions or to raise other pertinent points not covered in the questionnaire.

Data analysis

The quantitative data was analysed using SAS-PC. Standard univariate statistics were used to describe the responses. Factor analysis, using the principal components method to extract the initial factors and a promax (oblique) rotation method, was used to help identify constructs underlying a series of questions dealing with knowledge, attitudes and beliefs. Further item analysis involving assessment of the reliability of scales and the interpretability, was undertaken before the scales were finalised.

Cronbach's alpha coefficients were calculated to determine the reliability of each of the aggregate scores used in the report. Scales showed a high level of reliability with Cronbach's alpha coefficients for marital satisfaction, anxiety and depression being 0.83, 0.92 and 0.84, respectively. The reliability of the social support scales was also very acceptable: emotional or informational support 0.98

To facilitate interpretation of the questionnaire and to provide a clearer understanding of the context within which responses to questionnaire items were made the qualitative data was analysed by examining the comments for recurrent patterns and themes.

3.0 Results

Participation

A total of 35 wives/partners of Great Barrier Reef Pilots participated in the study, giving a response rate of 60 percent.

Table 1.0 Demographic Characteristics of the Sample

Variable	percent
Age	
Less than 50 years	48.6
50 years or older	51.4
Marital Status	
Currently married	94.3
Never married	2.9
Separated	2.9
Level of Education completed	
High School	40
Technical School	28.6
University Graduate	20
Postgraduate Degree	11.4
Employment Status	
Currently employed	68.6
Children	
At least one child 18 years or less	22.9

The socio-demographic characteristics of the respondents are shown in Table 1.0. The table reveals approximately 49 percent of the sample were aged 50 years or younger. The majority of

respondents were currently married. The women participating in the study were well educated, with just over 30 percent having a university or postgraduate qualification. The majority of the sample was employed (approximately 69 percent).

From the qualitative data it was evident that for many of the women, participation in the paid workforce was directly related to changes in pilotage operations and a consequent drop in family income. Several women felt they had, in fact, been 'forced' to return to the workforce to supplement the family income. Some of the older women who had been out of the paid work-force for 20 or more years, had found this return difficult and stressful, were unable to return to jobs they had been trained for, and now worked in low skilled employment. information support is shown in Table 3.0.

The majority of respondents (71 percent) believed that there was someone that they could count on to listen to them at least some of the time. Additionally, most respondents believed that they had access to someone for advice during a crisis (61 percent); someone who could provide them with information to help them understand a particular situation (64 percent); someone to confide in (68 percent); someone to provide wanted advice (59 percent); someone to provide assistance to deal with personal problems (53 percent) and someone who was understanding (65 percent).

However, approximately 53 percent of respondents did not believe that they had access to someone to share their most private thoughts with.

85

Table 2.0:	Distribution of scores	across the seven items	comprising the marit	al satisfaction scale.
------------	------------------------	------------------------	----------------------	------------------------

Item	All the time percent	Most of the time percent	Some of the time percent	Rarely percent	Never percent
1 In general, would you say things betwee you and your partner are going well?	0.0 1	37.1	54.3	2.9	5.7
2 How often do you think about divorce, separation or termination of the relationship?	0.0	2.9	11.4	25.7	60.0
3 How often do you or your partner leave the house after a fight?	0.0	0.0	0.0	25.7	74.3
4 Do you find it easy to confide in your partner?	42.9	42.9	5.7	2.9	5.7
5 Do you ever regret tha you married or lived together?	t 0.0	0.0	5.7	17.1	77.1
6 How often do you and your partner quarrel?	0.0	5.7	31.4	54.3	8.6
7 How often do you and your partner 'get on eact	5.7	5.7	34.3	51.4	2.9

Marital satisfaction

The Spanier Dyadic Adjustment Scale was designed to assess the quality of a relationship for both married and cohabiting couples.

The distribution of responses to this series of questions was skewed towards the end of the scale indicating satisfaction with the dyadic relationship (Table 2.0). Only two respondents (6 percent) believed that things were never going well between themselves and their partner. One respondent (3 percent) was considering divorce. A further 9 percent expressed difficulty confiding in their partners Table (2.0).

Emotional or informational support

The item content and distribution of scores comprising the measure of emotional and

The numbers of women reporting a perceived lack of emotional and information support was substantial.

The qualitative data provided some insight into the issue of availability of social support. The qualitative comments indicated that those respondents who lived closer to family and relatives reported greater levels of social support than those who have had to move away from family for work purposes. Several respondents considered this dislocation of themselves and their children to be a major form of stress.

Family, rather than friends, appeared to be the most important source of social support for a number of women.

However, at least one women who had relocated to another state reported that good friends and neighbours were important sources of support.

Those respondents who were geographically distanced from family support to maintain this link commonly used telephone contact.

The scores for all items were skewed towards the end of the scale indicating normality. However, a small number of respondents scored towards the negative end of the scale.

A response of either three, four or five (that is, a report of experiencing a symptom, some, most or all of the time) to any item was considered equivalent to experiencing a particular symptom. On this basis, the most frequently occurring symptoms of anxiety included 'worrying about every little thing' (44 percent) 'having a pain or tense feeling in the neck or head' (32 percent) and

'being kept awake at night due to worry' (23 percent). Five respondents or 14 percent of the sample reported experiencing four or more symptoms and can be considered to be experiencing high levels of anxiety.

Depression

Table 5.0 presents the item content and distribution of scores for the seven items included in the DSSI measure of depression. The distribution of scores on this measure of depression was skewed towards the end of the scale indicating normality.

However, a small number of respondents scored towards the negative end of the scale. By combining responses where respondents have reported the experience of a symptom 'all', 'most' or 'some of the time', the most frequently occurring symptoms of depression included feeling 'so miserable that I have difficulty sleeping' (26

 Table 3.0.
 Distribution of scores for the eight items comprising the measure of emotional or informational support.

ltem	Never percent	A little of the time percent	Some of the time percent	Most of the time percent	All of the time percent
1 Someone you can count on to listen to you when you need to talk	5.9	23.5	4.7	32.4	23.5
2 Someone to give you good advice about a crisis	11.8	26.5	17.6	26.5	17.6
3 Someone to give you infor- mation to help you underst- and a situation	12.1	24.2	15.2	27.3	21.2
4Someone to confide in and talk about yourself or your problem	5.9	26.5	20.6	32.4	14.7
5 Someone whose advice you really want	11.8	29.4	14.7	23.5	20.6
6 Someone to share your most private thoughts with	38.2	14.7	8.8	23.5	14.7
7 Someone to turn to for suggestions about how to deal with personal problems	17.6	29.4	11.8	26.5	14.7
8 Someone who understands your problems	20.6	14.7	23.5	26.5	14.7

percent); feeling 'depressed' (23 percent) and feeling that 'the future seems hopeless' (20 percent).

4.0 Discussion

This study was one of several conducted during an extensive investigation of the fatigue aspects of the work patterns of Great Barrier Reef pilots and as such provided insight into the social and psychological impact of home and away work patterns on wives and families. The wives' experiences were considered extremely important given the intimate relationship that exists between a worker's home life, work situation, work performance and well being (Cooper & Sloan, 1985; Karlins et al, 1989).

Generally, the study results demonstrate extra hardships on those at home when a husband or father is involved in work-related absences. While direct comparisons with other industries are difficult, in most aspects, the study results were broadly consistent with the experiences of wives in other occupations involving home and away work patterns such as airline workers (Rigg & Cosgrove, 1994), offshore oil industry (Sutherland & Flin, 1989), other maritime sectors (Shipley & Cook, 1980; de Vries-Griever, 1982; Berger, 1984; Parker et al., 1997), military (Rigg 1990), and mining sectors (La Forte, 1991; Houghton, 1993; Storey & Shrimpton, 1991; Hogan & Berry, 2000).

Many of the present wives experienced stress due to the home and away nature of pilotage work and felt strongly regarding the reasons for their return to the workforce. A substantial number of wives perceived a lack of emotional or informational support in their lives, and at the time of the study a considerable percentage reported depression.

The current data should be interpreted conservatively due to the small sample size (n = 36). However, the 60 percent response rate was generally comparable with that in similar studies involving postal surveys to wives in other home and away situations. For example, postal surveys to the wives of commercial airline pilots (Cooper & Sloan

ltem	All the time	Most of the time	Some of the time	Rarely	Never
	percent	percent	percent	percent	percent
1 I have been worried about every little thing	5.9	0.0	38.2	20.6	35.3
2 I have been so worked up that I could not sit still*	2.9	0.0	8.8	26.5	61.8
3 For no good reason I have had feelings of panic**	0.0	0.0	12.1	21.2	66.7
4 I have had a pain or tense feeling in my neck or head	5.9	2.9	23.5	20.6	47.1
5 Worrying has me awake at night	2.9	2.9	17.6	32.4	44.1 kept
6 I have been so anxious that I could not make up my mind about the simplest thing.	2.9	0.0	11.8	17.6	67.6
7 I have been breathless or have had a pounding of my heart.	0.0	0.0	8.8	20.6	70.6

Table 4.0:	Distribution of scores	of the seven items	comprising the DSS	I measure of anxiety.
------------	------------------------	--------------------	--------------------	-----------------------

1985) Australian seafarers (Foster and Cacioppe 1986) off shore oil rig workers (Taylor et al. 1985) provided responses of 56 percent, 40 percent and 70 percent, respectively.

Demographic results revealed the majority of women participating in the present study were married, well educated, and approximately 70 percent were employed. The number of wives employed was higher than broadly comparable Australian population data indicating 58 percent of women are in the workforce (Australian Bureau of Statistics, 1998).

The percentage of pilots' wives in the workforce was also higher than data from earlier studies of workforce participation by spouses in other home and away situations (Cooper & Sloan, 1985; Foster & Cacioppe, 1986; Taylor et al, 1985). The older age category of the present wives and absence of young children (only 23 percent of the sample have children aged 18 years or younger), may partly account for the higher workforce participation.

Developing one's career has been associated with greater life and job satisfaction in working wives of airline pilots (Cooper & Sloan, 1985); however, the underlying tone in the pilots' wives comments strongly suggested that work was due to financial pressures and not by choice.

Home and away work patterns across industries appear to place relationships at risk. Despite approximately 50 percent of the present sample reporting moderate to high levels of marital satisfaction, almost one quarter of the women (23

88

percent) participating in this study appeared to be concerned about the home and away nature of their partner's work being a risk to their relationship.

This figure was somewhat less than the 42 percent of wives of Australian seafarers reporting concern over marital risk from work-related absences (Foster & Cacioppe, 1986). Likewise, a study of aircrew wives revealed participants were concerned with the ever-present risk to relationships of extra marital affairs (Rigg & Cosgrove, 1994).

In contrast a military study showed that although female soldiers are less likely than male soldiers to be married (49 percent versus 63 percent) they are more likely to get divorced or separated (17 percent versus 8 percent). This finding indicates that the deployment of female soldiers was stressful for marriages, while the wives of deployed men were able to adapt to their husbands absences (Angrist & Johnson, 2000). This maybe due to the husband remaining at home having to take on what is considered to be more feminine roles.

The finding that a considerable percentage of the current sample perceived a lack of emotional or informational support is concerning given the major responsibility assumed by a wife during her husband's absence. Considerable evidence now indicates the importance of social support to quality of life and to the ways in which individuals cope with stressful situations (Thoits, 1995; Vaux,

Item	All the time percent	Most of the time	Some of the time	Rarely	Never
1 I have been so miserable that I have had difficulty sleeping*	2.9	5.9	17.6	20.6	52.9
2 I have been depressed*	2.9	5.9	17.6	29.4	44.1
3 I have gone to bed not caring if I never woke up*	0.0	2.9	2.9	11.8	82.4
4 I have been so low in spirits that I have sat up for ages doing absolutely nothing.*	2.9	5.9	0.0	14.7	76.5
5 The future seems hopeless*	2.9	0.0	17.6	11.8	67.6
6 I have lost interest in just about everything	3.1	0.0	6.3	25.0	65.6
7 I have been so depressed I have thought of doing away with myself	0.0	0.0	2.9	1.8	85.3

Table 5.0: Distribution of scores on the seven items comprising the DSSI measure of depression

Missing values * n=1.

1988; Cohen and Wills, 1985).

Social support is believed to promote well-being either directly, by promoting well-being regardless of the level of stress the individual is experiencing; or indirectly, by 'buffering' or attenuating the stressor. The importance of a close confidant for the seafaring wife has been previously reported. Foster & Cacioppe (1986) indicated 80 percent of wives of Australian seafarers had a close friend in whom they could confide, however these respondents pointed out that unless the person was familiar with the seafaring life, their concerns could sometimes be misunderstood.

The qualitative data provided some insight into the issue of availability of social support. These comments indicated that those respondents who lived closer to family and relatives reported greater levels of social support than those who have had to move away from family for work purposes.

Several respondents considered this dislocation of themselves and their children to be a major form of stress. Family, rather than friends, appeared to be the most important source of social support for a number of women. However, at least one woman who had relocated to another state reported that good friends and neighbours were important sources of support. Those respondents who were geographically distanced from family support to maintain this link commonly used telephone contact.

Difficulties in planning and involving partners in social events appear to be a common problem in home and away occupations (Rigg & Cosgrove, 1994; Foster & Cacioppe, 1986; Taylor et al., 1985). The present wives considered that their level of involvement in social situations in the community was greatly influenced by the uncertainty of being able to plan ahead for social events and whether or not their husband would be at home or on leave.

Moreover, the reintegration of the absent member into family life again is associated with feelings of relief, excitement and tension. Communication is also difficult due the different experiences of both parties during separation (Rigg, 1990).

Levels of both anxiety and depression in the present sample were notably higher than population figures. By comparison, 14 percent of the current sample was classified as anxious; prevalence rates for anxiety disorders in the adult population have been estimated at between seven and 15 percent (Freedman, 1984).

Similarly, the prevalence of depression was 9 percent in pilots wives compared with a figure of 3 percent assessed across approximately 20 studies conducted since 1980 (Wittchen et al., 1994). However, the shorter term, six month to one year, depression prevalence rate was approximately 6 percent. The range across studies was from 2.6 to 9.8 percent.

Previous studies have reported the occurrence of symptoms of anxiety and depression and lower levels of well-being in the wives/partners of men involved in work-related absences (Morrice and Taylor, 1978; Taylor et al., 1985; Rigg and Cosgrove, 1994). The frequent partings and reunions associated with these work practices manifest in symptoms of anxiety and depression and have also been used to classify sufferers of 'Intermittent Husband Syndrome' (Morrice and Taylor, 1978; Taylor et al., 1985; Rigg and Cosgrove, 1994).

Research examining the psychosocial effects of frequent partings on off-shore wives revealed that these wives experienced greater levels of anxiety than a comparative group of onshore wives. However, the increased anxiety occurred only while their husband was off shore (Taylor et al., 1985).

Additionally, the levels of anxiety associated with partings and reunions tended to decrease as wives became more 'experienced,' that is, had been with their partner for longer periods of time (Taylor et al., 1985). However, It was notable that a considerable percentage of the present wives still experienced stress from the home and away nature of their husband's work. This occurred despite their husband having spent up to 30 years in the general maritime sector prior to joining the pilotage service.

5.0 Conclusion

The impact of home and away work patterns on the pilots' wives was consistent with the experiences of wives in other home and away settings. It was clear that a support group for pilots wives would enable communication with others in the same 'boat', particularly in light of the scattered home locations along the Queensland coast.

Present levels of anxiety and depression and the reported lack of support for the group are concerning given the extensive experience by the current group in home and away situations and reinforces the need for counselling and support services. Co-operation between industry and family professionals will enable families experiencing the negative effects of work-related absences to feel added support.

89

In their more detailed qualitative responses, several women pointed out that they knew what to expect from life before they married a seafarer. They knew that they would have to cope with a life spent, at least in part, separated from their partners. In their opinion, they do cope.

6.0 Future directions

Additional research is needed particularly in view of: the relationship between a happy family life and worker productivity; the huge financial importance of the mining industry to Queensland economy; and the likely expansion of FIFO mining operations.

This paper has presented common findings across families who experience work related routine absence.

From an industry standpoint several issues also emerge: Do mining wives experience similar problems? Does the industry have a support program in place? What is the utilisation rate of this program? What are the 'best practice' options for FIFO families? Does successful family coping increase worker productivity? Do family needs differ across the various mining sectors?

References

1 Alkov RA & Borowsky MS 1980, A questionnaire study of psychological background factors in U.S. Navy aircraft accidents. *Aviation, Space, and Environmental Medicine*, 51(9): 860-3.

2 Angrist JD & Johnson JH 2000. Effects of workrelated absences on families: Evidence from the Gulf War. *Industrial and Labor Relations Review*, 54(1): 41-58.

- 3 Australian Bureau of Statistics 1998. *Australian Social Trends.* Cat. No. 4102.0. ABS, Canberra.
- 4 Australian Bureau of Statistics 1995. *Australian Health Survey – Summary of Results.* Cat. No. 4364.0. ABS, Canberra.
- 5 Australian Bureau of Statistics 1998. *Census Characteristics of Australia.* Cat. No. 2710.0. ABS,Canberra.
- 6 Australian Bureau of Statistics 2000. *Australian Mining Industry*, 1998-99. Cat. No. 8414.0, Canberra
- 7 Berger Y 1984. Pot Phillip Sea Pilots: An Occupation at Risk No. 1. Technical Report. Department of Psychology and Brain Behaviour Institute, La Trobe University.
- 8 Boyle F 1993. Mothers bereaved by sudden infant death syndrome, neonatal death or stillbirth; patterns of distress and predictors of recovery. PhD Thesis, University of Queensland.
- 9 Cohen S and Wills T 1985. Stress, social support and the buffering hypothesis: *Psychological Bulletin*, 98:310-357.
- 10 Cooper CL and Sloan S 1985. The Sources of Stress on the Wives of Commercial Airline Pilots. *Aviat. Space Environ. Med* 56: 317-312.
- 11 De Vries A 1982. A study of the work of Dutch government pilots. In: European Maritime Pilots'Association Congress of the EMPA, Rotterdam, May 14.
- 12 Foster D and Cacioppe R 1986. When the ship comes home: The stress of the Australian seafarer's partner. *Australian & New Zealand Journal of Family Therapy.* 7(2): 75-82.
- 13 Foulds G and Bedford A 1978. *Manual of the Delusions-Symptoms-States Inventory (DSSI)*. Windsor: National Foundation for Education Research.

90

- 14 Freedman D 1984. Psychiatric epidemiology counts. *Archives of General Psychiatry*, 41:931-933.
- 15 Henderson S, Byrne D and Duncan-Jones P 1981. *Neurosis and the social environment.* Sydney Academic Press.
- 16 Hogan L & Berry P 2000. Mining and regional Australia: Some implications of long-distance commuting. *Australian Commodities*. 7(4): 648-59.
- 17 Houghton DS 1993. Long distance commuting: a new approach to mining in Australia. *The Geographical Journal.* 159(3): 281-91.
- 18 Karlins M, Koh F and McCully L 1989. The spousal factor in pilot stress. *Aviat. Space Environ. Med.* 60: 1112-1115.
- 19 Keeping J, Najman J, Morrison J et al, 1989. A prospective longitudinal study of social, psychological and obstetric factors in pregnancy; response rates and demographic characteristics of the 8556 respondents. *British Journal of Obstetrics and Gynaecology.* 96:289-297.
- 20 Jackson RT, 1987. Commuter mining and the Kidston gold mine: goodbye to mining towns? *Geogr.* 72: 162-5.
- 21 La Forte J 1991. Long distance commuting in the mining industry: a wives point-of-view. *CIM Bulletin.* 84(953): 65-66.
- 22 Little LF, Gaffney IC, Rosen BS, Bender MM 1990. Corporate instability is related to airline

pilots' stress symptoms. *Aviat. Space Environ. Med.* 61: 977-982.

- 23 Morrice JKW and Taylor RC 1978. The intermittent husband syndrome. *New Society*.12-13
- 24 Najman J 1995. Society, Culture and Male Mental Health. *Men and Mental Health.* 6-19.
- 25 Parker AW Hubinger L Green S Sargent L & Boyd R 1997. A Survey of the Health, Stress and Fatigue of Australian Seafarers, Australian Maritime Safety Authority, Canberra
- 26 Rigg BA 1990. Routine-work-related-absence: The effects on families. *Marriage and Family Review.* 15(3-4): 147-160.
- 27 Rigg RC and Cosgrove MP 1994. Aircrew Wives and the Intermittent Husband Syndrome. *Aviat. Space Environ. Med.* 65:654-660.
- 28 Rohall DE, Segal MW and Segal DR 1999. Examining the importance of organizational supports on family adjustment to Army life in a period of increasing separation. *Journal of Political and Military Sociology*, 27(1): 49-65.
- 29 Sherbourne C and Stewart A. 1991 The MOS Social Support Survey. *Soc Sci Med.* 32: 705-714.
- 30Shipley P and Cook TC 1980. Human factors studies of the working hours of UK ships' pilots, Part 2: A survey of work scheduling problems and their social consequences. *Applied Ergonomics.* 11(3): 151-159.
- 31 Spanier GB 1976. Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *J. Marriage and Fam.* 15-28.
- 32 Storey K & Schrimpton M 1991. 'Fly-in' mining: pluses and minuses of long-distance commuting. The Mining Review. 15(6): 27-35.
- 33 Sutherland VJ and Flin RH 1989. Stress at sea: a review of working conditions in the offshore oil and fishing industries. *Work & Stress* 3(3): 269-285.
- 34 Taylor R, Morrice K, Clark D and McCann K 1985. The psycho-social consequences of intermittent husband absence: an epidemiological study. *Soc. Sci. Med.* 20(9): 877-885.
- 35 Thoits P 1995. Stress, coping and social support processes: where are we? What next? *Journal of Health and Social Behaviour (Extra Issue)*: 53-79.
- 36 Vaux A 1988. Social support: theory, research and intervention. New York: Praeger
- Wittchen H-U, Knauper B and Kessler R 1994.
 Lifetime risk of depression. *British Journal of Psychiatry.* 165(Suppl. 26): 16-22.

¹ School of Human Movement Studies, Queensland University of Technology, Brisbane, Australia.

² Centre for Health Promotion and Cancer Prevention, Medical School, University of Queensland, Brisbane, Australia.