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Psychological adjustment among returned overseas aid workers.

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PSYCHOLOGICAL ADJUSTMENT AMONG RETURNED OVERSEAS AID WORKERS

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Summary

A questionnaire study was conducted to investigate the psychological adjustment of people who had been aid workers overseas. Nearly fifty percent of the sample of returned aid workers (n = 145) reported that they had experienced psychological difficulties while they were overseas or following their return to Britain. Most had not received any treatment for their difficulties. People who reported psychological problems had, on average, spent longer as aid workers than those who reported no psychological problems.

Compared with a group of people preparing for their first term as overseas aid workers (n = 43), returned aid workers had significantly higher mean scores on measures assessing depression, intrusive thoughts, and, among women, avoidance. Aid workers who invalidated their feelings appeared to be especially vulnerable to developing psychological difficulties.

When compared with people who did not intend to become aid workers (n = 71), returned aid workers and people preparing to become aid workers were found to perceive the world as a more benevolent and meaningful place. However, a small proportion of returned aid workers expressed views that the world was malevolent and meaningless; such views were related to the development of psychological problems. This finding was discussed with relation to Janoff-Bulman's (1992) theory of shattered assumptions.

Implications of the findings were considered, including implications for the selection, preparation and treatment of aid workers.

Contents

We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time.

(T. S. Eliot).

'I might as well have landed on the moon'

(Winston Churchill's telegram to his mother, on arrival in Bombay).

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Abbreviations used

(See p. 17-19 for a description of these questionnaires)

BAI: Beck Anxiety Inventory

BDI: Beck Depression Inventory

SEI: Self-Esteem Inventory (Coopersmith)

Int: Intrusion subscale (Impact of Event Scale)

Avo: Avoidance subscale (Impact of Event Scale)

TCIS: Trauma Constellation Identification Scale

TCIS subscales

Malevolent: Malevolent world

Meaning: Meaningless world

Self-worth: Self-worth

STAXI: State-Trait Anger Expression Inventory

STAXI subscales (see Appendix 6 for subscale descriptions)

Sang: State Anger

Tang: Trait Anger

Tem: Angry Temperament

Rea: Angry Reaction

In: Anger-in

Out: Anger-out

Con: Anger control

Ex: Anger expression

Ch.1: Aid Workers - literature review

Overview

Within Britain there are hundreds of organisations which between them send thousands of staff overseas each year to work on emergency aid operations, and longer term relief and development projects. A survey of 116 aid agencies in the United Kingdom found that between them they had received over 3000 enquiries *per week* about work opportunities in 1996, indicating that there is a huge public interest in aid work (International Health Exchange, IHE, 1997).

Aid agencies include both large organisations such as the British Red Cross and Voluntary Services Overseas, and smaller groups. In this thesis the term "aid work" will be used as an abbreviation for all areas of humanitarian work, including those "missionaries" who are involved with relief and development activity (e.g. teachers, medical workers, logisticians etc.).

Mason (1995) reported, "The people who take up aid work are many and varied but whoever they are, and whatever their background, they are changed by their experiences" (p.14). Research documenting such changes is lacking. This review will seek to draw together the literature which does exist, most of which is based on observation rather than empirical research. This investigation was designed as a response to questions commonly asked by people working with aid workers:

* What type of psychological difficulties are experienced by aid workers while they are overseas or after their

return home?

* What proportion of aid workers report such problems?

* What are some of the vulnerability factors?

* What can be done to help reduce the problem?

Stress among aid workers

Aid workers as a group encounter a variety of potentially stressful experiences. Difficulties commonly reported include facing large-scale poverty, injustice, suffering, despair and death; powerlessness; overwhelming responsibility and ethical dilemmas; role ambiguity; communication problems; unpredictable circumstances; cross-cultural adjustment, and isolation (Chew, 1990; Gish, 1983; M. E. Jones, 1993; Kaur, 1996; Neill, 1997; O'Donnell & O'Donnell, 1992; Paton, 1992; Slim, 1995; Stafford, 1984). Aid workers are at increased risk of illness and injury because of conditions in the areas in which they work, and inadequate medical facilities (M. E. Jones, 1993). Studies have found the mortality rate to be doubled among aid workers compared with colleagues remaining at home, despite medical selection of applicants for aid work (Schouten & Borgdorff, 1995).

In guidelines produced by the International Committee of the Red Cross (ICRC) entitled Coping with Stress, it is stated: "Cumulative stress ... affects health personnel and humanitarian workers in particular, as they always have to perform in overwhelming situations, where the demands are such that they can

never be met" (ICRC, 1994, p.10). Similarly, Mason (1995) claimed, "aid workers are subjected to high levels of unrelenting stress" (p.14). Stress contributes to attrition, illness, accidents and deaths among aid workers (Munro, 1996), as well as impeding work performance (Mitchell & Dyregrov, 1993).

Aid workers tend to have high ideals and expectations of being able to achieve great results, which may put them at particular risk of experiencing emotional exhaustion or "burnout" (Chester, 1983; Richardson, 1992; Stearns, 1993). They also tend to work very long hours (Armstrong, O'Callahan & Marmar, 1991; Chester, 1983; Kaur, 1996; Paton, 1992), perhaps because they feel guilty about taking any time off when the needs are so great (Stringham, 1970a). In one study of 200 aid workers, 50% claimed they regularly worked more than 60 hours a week (Macnair, 1995). One respondent said that in retrospect, "more breaks and less work would have been more efficient, as we were all burnt out" (Macnair, 1995, p.23).

Re-entry stress

For some, the most disturbing part of their experience comes when they return to their home country (Foyle, 1987). Many returned aid workers struggle with "reverse culture shock", as they try to readjust to a society with very different values to those they have grown used to. Some feel a sense of loss or guilt because they have left friends overseas. Many report that they are isolated and that few people are interested in hearing about their experiences. Aid workers generally receive little financial reward for their work, and many have financial difficulties on

their return home, as well as difficulty gaining employment (Austin, 1983; Neill, 1997). Some workers suppress their emotions while they are overseas, in order to cope, and on return home experience extreme emotional reactions, as they begin to confront their feelings (Kaur, 1996; Smith, Agger, Danieli & Weisaeth, 1996).

Macnair (1995) found that 75% of 200 aid workers said that they had difficulty readjusting on their return. The main difficulties reported were feelings of disorientation (33%), problems getting a job (24%), lack of understanding from family and friends (17%) and financial difficulties (15%).

Lack of help on return

Busuttil (1995) asserted that:

> organisations such as voluntary disaster charities typically involved in Third World disaster settings have not recognised that their personnel inevitably suffer from catastrophic stress syndromes as a direct result of their work and no measures have been taken by the majority of these organisations to ensure the psychological health of their workers (p.18-19).

McConnan (1992) found that 73% of aid workers reported feeling inadequately debriefed and supported on their return. Many returned workers were not informed about sources of help available or encouraged to make use of these. Some resisted seeking help because they believed that aid workers should be

"able to cope", and they feared that seeking help would be an admission of personal weakness, and would prevent them from being selected for future aid operations (Dye, 1974; Kaur, 1996; Neill, 1997; Stearns, 1993; Stringham, 1970b). They were "trained to be tough and not to let certain feelings affect them" (Grant, 1995, p.75). Some attempted to ignore their own difficulties because they perceived these as very minor in comparison with the great needs they encountered overseas (Grant, 1995).

Aid workers have had a greater tendency to deny stress-related symptoms than other people in helping professions (Chester, 1983). Those with strong religious beliefs may have been especially prone to denying problems (Gibson, 1983), perhaps because they have felt that seeking help for psychological problems would indicate that they "lacked faith" or were "spiritually weak" (Stringham, 1970b).

Types of psychological problems experienced

Depression is probably the most common form of psychopathology found among aid workers (Richardson, 1992). Clinicians working with aid workers have suggested that other common reactions include anxiety disorders (including post-traumatic stress disorder, PTSD); drug/ alcohol abuse; loss of self-esteem; anger problems and psychosomatic problems (Bierens de Haan, 1996; Carr, 1994; Donovan 1992; Dye, 1974; Foyle, 1987; E. S. Jones, 1996; Jones & Jones, 1994; Richardson, 1992; Robbins, 1996; Stringham, 1970a). Chronic fatigue syndrome also appears common among returned aid workers, and it has been argued that psychological as well as physical factors contribute to this

syndrome (M. E. Jones 1996; Royal Colleges of Physicians, Psychiatrists and General Practitioners, 1996; Sharpe, 1996).

Prevalence of psychological difficulties

Given the magnitude of stressors which aid workers typically experience, and the lack of help received in coping with these, one might expect to find substantial psychological difficulties among aid workers. Clinical observation and surveys have supported this hypothesis (Austin & Beyer, 1984; Foyle, 1987; Jones & Jones, 1993). As early as 1913, an article in the British Medical Journal based on a study of 1479 missionaries reported that nervous illness of a neurasthenic type (characterised by fatigue) was the most common cause of premature repatriation (Price, 1913).

More recently, Macnair (1995) reported that 12% of aid workers returning from "difficult" missions showed some form of psychological distress. Donovan (1992) stated that 25% of aid workers may return home prematurely and 50% are likely to work with reduced efficiency because of stress (see also Brierley, 1996; Kaur, 1996). In another review, Gardner (1987) observed a great variation in attrition rate, with some societies reporting 50% attrition, while in other organisations it was as low as 1.3%.

One study of 200 aid workers found that 3% were suffering from "breakdowns", while another 10% had long-term debilitating illnesses, predominantly chronic fatigue (Dye, 1974). In a survey of 390 missionaries, Parshall (1988) found that 97% reported experiencing tension, 88% found anger to be a frequent or

occasional problem, and 20% had taken tranquillisers since becoming missionaries.

Transient psychological difficulties are common following exposure to stressful situations (Durham, McCammon & Jackson Allison, 1985; Lane, 1994; Raphael, Singh, Bradbury & Lambert, 1983), but the reports referred to above suggest enduring problems. These reports emerged from surveys or estimates based on observation, and used terms such as "breakdowns" and "tension" rather than diagnostic criteria. Empirical research has been lacking. Dally (1985) stated that “there have been virtually no studies of the psychiatric health of expatriates in the last 20 or 30 years” (p.103), while Macnair (1995) concluded, "very little research has been done on the long-term psychological effects in aid workers of the acute and chronic stresses produced by their work" (p.51).

Pre-existing problems

It is possible that some people are drawn to aid work because of pre-existing problems. Smith, Agger, Danieli & Weisaeth (1996) commented:

> Some observers have postulated that people who would seek to enter especially hazardous or upsetting situations must be acting on some neurotic motivation. Indeed, relief workers themselves have used phrases such as *martyr, misfit, masochist*, or *running away from bad relationships* to categorize the motivations of others around them, perhaps not their own, for

entering relief work (p.398, italics in original).

Engel (1980) wrote, "there is a tendency for individuals with personality problems to volunteer for the tropics" (p.304). Paluszny and Zrull (1971) observed that, although the majority of applicants for missionary service appeared to be well-adjusted individuals, seven of the 50 candidates they studied had significant psychological difficulties. Grant (1995) and Stringham (1970a) also reported that some aid workers entered this field of work as a result of emotional difficulties. Foyle (1987) found that 52-54% of missionaries who went on to develop psychological problems had experienced psychological difficulties before selection. The category of "difficulties before selection" was not limited to psychological illness, but indicated any form of emotional distress (Foyle, personal communication, April 1997), limiting the usefulness of this figure.

Although most organisations have attempted to screen out applicants with severe psychological difficulties, Foyle (1988) and Schubert (1991) acknowledged that the screening procedure was not always successful.

Longitudinal study

A literature review revealed only one longitudinal study of aid workers. In this study, Paton and Purvis (1995) administered the General Health Questionnaire (GHQ-30) to a group of nurses before they went to work in Romanian orphanages for three months, and again on their return, to investigate any difficulties which might arise following such work. GHQ-30 scores significantly

increased during the time in Romania, and the increase was maintained at one-month follow-up. The nurses were also administered the Impact of Event Scale (IES, Horowitz, Wilner & Alvarez, 1979) on their return. The IES measures symptoms of intrusion following a stressful experience (such as unbidden thoughts or pictures, disturbing dreams, or strong waves of feeling about the experience), and also symptoms of avoidance (for instance, emotional numbness, feeling the experience did not really happen, or trying to remove the experience from memory). Symptoms of intrusion and avoidance are common following a traumatic experience, and if they persist over time may be indicative of psychological difficulties (Horowitz, Wilner & Alvarez, 1979).

Paton and Purvis (1995) found that the nurses who had worked in Romania had symptoms of intrusive thoughts and avoidance which resembled those of clinical trauma patients. These symptoms did not decrease significantly during the month following their return. In addition, 56% of these nurses reported on a check-list that they had experienced depression (although this probably indicated low mood rather than clinical depression), and 22% reported sleep problems. Only 18 nurses were involved in this study; further research with larger samples and involving long-term workers would be of value.

Ch.2: Shattered assumptions as a response to trauma

Reviews

Space does not permit discussion of the large body of literature on stress and trauma here; reviews have been provided by Busuttil (1995), and Goldberger and Breznitz (1982). Appendix 1 provides a review of literature on some relevant populations, namely disaster relief workers, military personnel and peacekeeping groups.

Brewin, Dalgleish and Joseph (1996) provided a useful review of cognitive-theories of PTSD. Only the literature on world assumptions will be discussed here, as this is an area to be considered in the current investigation.

World assumptions

Janoff-Bulman (1992) proposed that three fundamental assumptions are held by most people: that the world is benevolent; that the world is meaningful (including predictable, controllable and just), and that one has self-worth (see also McCann & Pearlman, 1990a, 1990b; Winton, Clark & Ehlers, 1996). Janoff-Bulman (1989) stated that these basic assumptions could be regarded as schemata. Schemata influence how information is attended to, interpreted and remembered, and how the future is anticipated (Janoff-Bulman, 1989). Information which is inconsistent with existing schemata is likely to be ignored, dismissed or reinterpreted.

Someone who has experienced a traumatic event may be unable to dismiss it, or to assimilate it with the assumption that the

world is meaningful. Parkes wrote in 1975:

> Among the various categories of events which are often classed as "stressful" are those major changes in the life space which give rise to the need for a person to give up one set of assumptions about the world and to develop fresh ones (p.131).

Janoff-Bulman (1989) stated that many individuals who survived traumatic events experienced a "shattering" of these assumptions, which has been described as an "existential blow" (Brom & Kleber, 1989). Janoff-Bulman noted:

> regardless of population, and regardless of research approach, we have found ... the traumatic event has had a profound impact on their fundamental assumptions about the world (Janoff-Bulman, 1992, p.51).

Epstein (1991) provided further support for this theory.

Trauma survivors are faced with the task of assimilating their experience or rebuilding their assumptive world. Difficulty in reconciling the trauma with assumptions may give rise to avoidance, and, because of the "completion tendency" which promotes the processing of material which has not been integrated, intrusion (Horowitz, 1986). Intrusion and avoidance are characteristic of PTSD.

Research indicates that people who have experienced trauma

tend to hold less positive views about the self and the benevolence and meaningfulness of the world, even 15 years or more after the trauma (Janoff-Bulman, 1992).

Not only traumatic incidents but also chronic stress may result in such changes in assumptions (McCann & Pearlman, 1990a). Thus, one might expect aid workers to be subject to such changes. This was reflected in the hypotheses for the current study.

Ch.3: Method

Hypotheses

The major hypotheses were as follows:

1. A substantial proportion of returned aid workers would report that they had experienced psychological difficulties during their time overseas or following their return home.

2. Compared with people who were preparing for their first assignment as aid workers, returned aid workers would report higher scores on questionnaires assessing symptoms of depression, anxiety, intrusions, avoidance and anger, and a lower score on Coopersmith's Self-Esteem Inventory.

3. Invalidation of one's feelings would be associated with psychological problems, and with the maintenance of psychological symptoms.

4. Returned aid workers and people who were about to begin overseas aid work would, on the whole, perceive the world as more meaningful and benevolent, and would be less self-derogatory, than people who did not intend to be aid workers.

5. A minority of returned aid workers would express belief that the world was malevolent and meaningless, and that they lacked self-worth. This would be associated with psychological problems.

6. A subgroup who were studied before and after short-term aid work would show an increase in scores on scales of depression, anxiety, intrusion and avoidance, and a decrease in self-esteem scores, after partaking in overseas aid work.

Method

Recruitment of participants.

The study was approved by the ethics committee of the psychology department at the University of Wales, Bangor (Appendix 2).

Responses of returned aid workers were compared with those of people preparing for their first experience of overseas aid work. A number of methods were used to recruit participants. The charity Returning Aid Workers Trust had an information stand at a conference, and every individual who approached this stand was asked if they were an aid worker, and, if so, whether they would be willing to help with research. All 33 aid workers who approached this stand indicated willingness to help, and were sent questionnaires.

Questionnaires were also distributed to individuals attending routine medical checks before or after aid work; debriefing appointments, or conferences, at three centres

specialising in this work (InterHealth in London, Care for Mission in Berwickshire, and Bawtry Hall in Doncaster). Over 100 UK-based aid organisations use these centres, and the clients represent a wide cross-section of aid workers.

Thirty aid organisations (including both large and small, Christian and secular organisations) were sent details about the research, and asked if they would pass questionnaires to people preparing for overseas aid work, and those who had returned. Twelve organisations agreed to help in this way, and were sent questionnaires to distribute.

In total, 230 initial (Time 1) questionnaires were distributed, some of which may not have been passed on to aid workers by the personnel of organisations. 188 completed questionnaires were returned (82%). As many were returned anonymously, it is uncertain how many were returned from each of the outlets.

Respondents who indicated that they were going overseas for a short-term assignment and would return during the period of data collection were sent a follow-up questionnaire approximately one month after their return. Returned aid workers who were not anticipating returning overseas during the next three months were sent a follow-up questionnaire three months after their original questionnaire had been returned (Time 2). Exceptions to this were those who had replied anonymously or indicated that they did not wish to receive further questionnaires; those who had returned more than eight years previously, and those who responded to the initial questionnaire within the final three months of data

collection. Seventy-eight follow-up questionnaires were sent out, of which 64 were returned (82%). Of the completed questionnaires, 17 (27%) were from individuals who had been involved in further overseas aid work in the intervening time, while 47 (73%) were from people who had not been overseas again.

As no age-matched general population norms were available for the questionnaire concerning world assumptions, a group of people who had never been aid workers and were not contemplating becoming aid workers were asked to complete this questionnaire. Most of the group who were preparing for their first experience of aid work were students or health care professionals. A similar sample was sought for the comparison group. Fifty-six students in a university hall of residence were selected randomly and questionnaires were left in their mail boxes. Only 33 of these were returned (59%), five of which were excluded from the analysis because the respondents were intending to do aid work in the future (n = 1), or wrote nonsense answers (n = 4, Appendix 3).

Because a large proportion of the aid workers were committed Christians, it was judged important to include a subgroup of Christians in the control sample. Questionnaires were delivered to 55 people known to be involved in the Christian Union group at the same university, or to work in Christian health-care settings, or to have positions of leadership in local churches. Forty-three (78%) of these questionnaires were returned.

Measures.

As clinical observation has suggested that the most common psychological problems among returned aid workers include symptoms of depression, anxiety, and low self-esteem (Dally, 1985; Dye, 1974; King, 1975; Richardson, 1992), measures were made of these symptoms. Symptoms of intrusion, avoidance and expressed and unexpressed anger were also assessed. Finally, to explore the world assumption theory, belief in the benevolence and meaningfulness of the world and in self-worth was assessed, along with other cognitive factors.

The following self-report questionnaires, which can be completed relatively quickly, were given to participants, packaged in this order, with a covering letter (Appendix 2):

1. *Trauma Constellation Identification Scale* (Dansky, Roth & Kronenberger, 1990), an inventory with 30-items to be responded to along a seven-point Likert-type scale (Appendix 3). This measure covers six affect categories (rage, helplessness, fear, loss, shame and overwhelming emotions) and nine cognitive schema categories (malevolence of the world; meaninglessness of the world; self-worth; legitimacy of feelings; self-blame; isolation; reciprocity in relationships; trust and alienation). The psychometric properties of the TCIS are reported by Dansky, Roth and Kronenberger (1990). The TCIS has high internal reliability (Cronbach's alpha = .94), and its subscales load on two higher-

order factors. Both factors, and the total TCIS score, are correlated at the $p < .001$ level with all 12 subscales of the SCL-90-R (Derogatis, 1983, cited by Dansky, Roth & Kronenberger, 1990), an inventory designed to measure overall levels of psychological distress. This is taken as an indication of construct validity. Limitations of the TCIS are discussed in the final chapter of this thesis.

2. *Impact of Event Scale (IES)*, a measure with 15 items to assess symptoms of intrusion and avoidance (Horowitz, Wilner & Alvarez, 1979). The IES has high internal reliability (Cronbach's alpha = .78 for intrusion subscale, and .82 for avoidance subscale). A correlation of .42 ($p < .01$) between the intrusion and avoidance subscales indicates that these subscales are associated, but do not measure identical dimensions. Further psychometric details, including evidence of the scales' sensitivity to change, are provided by Horowitz, Wilner and Alvarez (1979).

3. *Beck Anxiety Inventory (BAI)*, a 21-item inventory of anxiety symptoms (Beck, Epstein, Brown & Steer, 1988). High internal consistency (Cronbach's alpha > .90) has been found in a number of studies (reported by Beck et al., 1988, who also reported details of construct validity and discriminant validity).

4. *Beck Depression Inventory (BDI)*, a widely utilised 21-item inventory to assess depressive symptomatology (Beck, 1978). The BDI has high internal consistency in both clinical and nonclinical populations (Cronbach's alpha > .80 in several studies, reviewed by Beck & Steer, 1987. Beck & Steer, 1987, also provide details of the validity of this scale).

5. *State-Trait Anger Expression Inventory (STAXI)*, a 44-item questionnaire measuring the experience and expression of anger (Spielberger, 1991). The subscales are described in Appendix 4. The authors provide evidence of the high internal consistency of the scale (Cronbach's alpha > .80, in a number of studies). Significant correlations were found between scores on this scale and scores on other measures of anger, as reported by Spielberger (1991). This questionnaire was not sent at three-month follow-up, as it was felt that reducing the number of questionnaires would increase response rate, and this was judged to be the most complex of the questionnaires, and one for which little data had been published on test-retest reliability.

6. *Coopersmith's (1993) Self-Esteem Inventory*, 25 statements to be answered "like me" or "unlike me" as a measure of self-esteem in adults. Coopersmith (1993) reports evidence of the internal reliability of the scale (Cronbach's alpha = .81).

Demographic information was also obtained, and participants were asked about their experience overseas (Appendixes 5 and 6). The questionnaires used at follow-up are sensitive to changes over time, with the possible exception of the Coopersmith Self-Esteem Inventory, which may be less sensitive to such changes.

Data analysis.

The data was analyzed using the Statistical Package for Social Sciences (SPSS). The distribution characteristics of the data were checked to ensure that it was valid to use parametric statistics. Pearson's calculation was used for all chi-squared statistics.

In some of the tables which follow, columns do not add up to 100%, due to rounding errors.

Ch. 4: Sample characteristics

There were 145 respondents in the group of returned aid workers (referred to as the "returned group"), 43 in the group preparing for their first assignment of aid work (the "preparing group"), and 71 in the comparison group who were not intending to be aid workers (the "not going" group).

Organisations represented

7.7% of the returned group and 7.3% of the preparing group reported they organised their aid work themselves, not through any society. 5.6% of the returned group reported that they had worked with more than one aid organisation. The remaining returned respondents had worked with 62 different aid organisations, including major UK organisations, and many smaller agencies. The preparing group represented 14 different organisations, again including both large and small, religious and secular groups. Thus the sample was not restricted to workers from a few agencies (as previous studies had been).

Sex

Table 1 gives the sex distribution for each of the three groups. A chi-squared calculation did not indicate significant differences between groups ($X^2 = 0.29$, 2 df, $p > .1$). Approximately 70% of each group were female.

Table 1: Sex distribution for the three groups

	Returned (n = 145)	Preparing (n = 43)	Not going (n = 71)
Women (%)	69.0	67.4	71.8
Men (%)	31.0	32.6	28.2

Age

The mean age for each group is shown in Table 2. An analysis of variance (ANOVA) indicated a significant difference in group means, $F(2,254) = 20.08$, $p < .001$. Post-hoc Scheffe tests indicated that the returned group had a significantly higher mean age than each of the other two groups, at the 5% significance level. In the data analysis, consideration was made of whether age differences might contribute to between-group differences.

Table 2: Mean age in years (and SD) for the three groups

Returned (n=144)	Preparing (n = 42)	Not going (n = 71)
37.08 (13.23)	25.02 (9.42)	28.72 (12.84)

Religious beliefs

Respondents were divided into those who reported that they held strong religious beliefs, and those who stated that they did not hold strong religious beliefs. No attempt was made to provide quantitative data on religious beliefs or practices.

Unfortunately, because of the questionnaire format, many of the preparing group failed to answer the question about religious beliefs. Where the information was missing, those who were going overseas through organisations known to only accept applicants who were committed Christians, were put in the "religious beliefs" group on the basis of this knowledge. Table 3 shows the proportion of each group reporting religious beliefs.

Table 3: Religious beliefs among the three groups

	Returned (n = 145)	Preparing (n = 43)	Not going (n = 71)
No strong beliefs	21.4%	2.3%	33.8%
Strong beliefs	77.9%	76.7%	64.8%
Missing data	0.7%	20.9%	1.4%

Other demographic information

Descriptions of the groups in terms of nationality; marital, educational and occupational status; companions in the journey overseas, and location and type of aid work are given in Appendix 9. Details of the reported motive for becoming an aid worker, best and worst parts of the time overseas, reason for returning to the United Kingdom and help received on return are shown in Appendix 10.

Duration of time overseas, and time since returning

The mean time which the returned group reported having spent as aid workers was 50.84 months (SD 66.04), with a range from 1-324 months. The mean time since returning was 34.48 months (SD 62.86 months, range 1-336 months). Although a few respondents had returned more than 10 years previously, they reported that they still thought of themselves as returned aid workers, whether their experiences had been positive or negative.

As the amount of time spent overseas and the time since return were not normally distributed, nonparametric tests were used for calculations involving these variables. The returned aid workers were a heterogenous group in many ways, these variables being just two examples of their heterogeneity.

How it felt to return

Returned aid workers were asked how they had felt when they first returned to the United Kingdom after their aid work. This was an open question. Responses were subsequently categorized as shown in Table 4.

Table 4: How respondents felt on return to UK

	%
NEGATIVE FEELINGS	
Disoriented / confused / scared / strange	18.6
Devastated / worst time in life / bereaved	14.3
Difficulty readjusting	7.9
"Reverse culture shock" (not defined)	5.0
Isolated	4.3
Frustrated with materialism	2.9
"Like a fish out of water"	2.9
Guilty	1.4
Sense of unreality	1.4
Exhausted and cold	1.4
POSITIVE FEELINGS	
Good, relieved	15.0
MIXED FEELINGS	
Mixed feelings	14.3
"It was easier than expected"	1.4
NO STRONG FEELINGS	
No strong feelings	9.3

Table 4 indicates that 60.1% of respondents reported feeling

predominantly negative emotions when they returned home after involvement with aid work. The emotions listed were similar to those observed by Foyle (1987) and Fowke (1994). Some respondents described their experience vividly, for example:

> The feeling of hollowness and absolutely "gutted-loss" when returning to UK just doesn't bear thinking about. Quite literally the worst experiences of my life were leaving India (S105).

> For some of us this is not a home coming but the beginning of exile. We become displaced persons (S24).

Some not only experienced unpleasant emotions, but developed psychological disorders, as will be discussed in the next chapter.

The responses suggest that the return home, and not just the experiences overseas, may have contributed to any psychological difficulties encountered. A number of participants reported a higher level of symptomatology on the follow-up questionnaire than on the initial questionnaire, and indicated that readjustment was proving more difficult than they had anticipated.

Ch. 5: Psychological difficulties experienced

This chapter considers hypothesis 1, which was that a substantial proportion of returned aid workers would report experiencing psychological difficulties during their time overseas or following their return home.

Psychological problems among returned aid workers

In the final section of the questionnaire (Appendix 7), returned aid workers were asked whether they had ever suffered from "depression, a stress disorder, anxiety, over-use of alcohol or drugs, or any other psychological problems", and if so, when, and whether they had received any treatment. Table 5 summarises the responses. Some of those who had problems after working overseas had developed the difficulties while they were overseas, while for others the problems had developed after their return.

Table 5: Psychological problems experienced

	%
Never had psychological problems	40.0
Psychological problems during /after aid work only	38.6
Psychological problems before aid work only	11.7
Psychological problems before and after aid work	6.9
Psychological problems - time not specified	2.1
Missing data	0.7

38.6% of the returned aid workers reported that they had developed psychological difficulties during or after being involved with overseas aid work, although they had never had psychological problems before they worked overseas. Given that many aid organisations are highly selective when recruiting candidates, turning down any who shown any indication of being physically or psychologically "at risk", this percentage appears to be very high.

Self-report was used to gather this information, which limits the validity of the data, as problems might be either under- or over-reported. It is possible that some of those reporting psychological problems actually experienced only mild difficulties rather than diagnosable psychological disorders. However, most of those who answered in the affirmative mentioned the treatment they had received, or, if untreated, the professional who had made the diagnosis, indicating that the difficulties were serious enough to merit professional attention. A minority (mainly health professionals) had made a self-diagnosis.

It may be that people who had experienced psychological difficulties were more likely to return the questionnaire - although one might equally argue that the most badly affected aid workers might be too depressed to be motivated to complete a questionnaire. To reduce the probability of a response bias, the covering letter sent with the questionnaire explained that the researcher was equally interested in hearing from people who had positive, negative or mixed experiences (Appendix 4).

In a separate survey, the author found that 5.8% of returned

aid workers were known by their sending agencies to have developed psychiatric problems severe enough to require treatment, while a further 1.7% were known to have developed chronic fatigue syndrome (Appendix 11). Personnel directors responding to this survey reported that they knew of other returned workers who had psychiatric problems but had refused treatment and so were not included in this percentage. They also reported that they had no contact with the majority of returned aid workers, so that those who had informed them that they were having psychiatric treatment were likely to be only a small minority of those who had psychological problems. This provided further support for the hypothesis that psychological problems were not uncommon among returned aid workers.

Type of difficulties experienced

Table 6 illustrates the type of difficulties experienced by the subgroup who developed psychological problems for the first time while overseas or on their return.

Table 6: Types of psychological problems experienced

	% of those who had problems overseas or after return
PROBLEMS DEVELOPED WHILE ABROAD	
Depression	9.1
Chronic fatigue syndrome and depression	7.3
"Burnout"	1.8
PROBLEMS DEVELOPED AFTER RETURN	
Depression	78.2
Post-traumatic stress disorder	3.6

Of those who developed psychological problems, 18.2% reported developing them while overseas, and the remainder said they developed them on their return home. This is in keeping with the observation of Smith, Agger, Danieli and Weisaeth (1996), and Mitchell and Dyregrov (1993), that some people can "cope" for a time while in a stressful situation, perhaps using avoidance, but develop difficulties after leaving the situation. It is well known that PTSD can develop a considerable time after a traumatic incident. Bebbington, Der, MacCarthy, Wykes, Brugha, Sturt and Potter (1993) report that depression may also develop after an "incubation period". It is also possible that for some

respondents the problems which developed related less to experiences overseas than to the return to Britain.

Depression was the problem most commonly reported. Clinical observation has also indicated that this is the most prevalent form of psychopathology among aid workers (Richardson, 1992).

Duration of time overseas, and psychological difficulties

A Mann-Whitney test was performed to see if those who reported having psychological problems while overseas or on their return home differed from those who did not, in terms of the duration of time spent overseas. Table 7 shows the mean ranks. Respondents who reported psychological problems on return were found to have spent significantly longer doing aid work ($z = -2.70$, $p < .01$).

Table 7: Duration of time overseas, for those with and without psychological problems

	n	Mean rank
No psychological problems during/ after	78	63.88
Psychological problems during/ after	66	82.69

It is likely that a combination of cumulative stress plus increased difficulty in readjusting to life in Britain following a longer time away increased the risk of psychological problems developing. The cumulative effect of stress was described by one respondent who had been involved with aid work for over 20 years.

He wrote that although he had been shot at and had seen colleagues shot on a number of occasions, he found individual incidents were easier to cope with than cumulative stress. He explained, "I think I cope well with stress - but sometimes it all seems too much to take in - as experiences accumulate" (S99).

Time since completing aid work, and psychological difficulties

Another Mann-Whitney test was calculated to see whether those who reported having psychological problems at the time of completing the questionnaire had been back in Britain for a significantly shorter time than those who did not report current psychological problems (as would be expected if symptoms were found to subside over time). The difference was not found to be statistically significant ($z = -.35$, $p > .1$). Table 8 shows mean ranks.

Table 8: Time since return, and psychological problems

	n	Mean rank
No current psychological problems	103	73.27
Current psychological problems	66	70.57

Age and psychological problems

A t-test was used to investigate whether there was a significant difference in age between respondents who reported having experienced psychological problems and those who did not. No such difference was found (Table 9; $t = -1.09$, 141 df, $p > .1$).

Table 9: Age and psychological problems

	n	Mean age in years(SD)
Never had psychological problems	57	35.72 (12.68)
Have had psychological problems	86	38.17 (13.51)

Ongoing psychological problems

No member of the preparing group acknowledged having psychological problems at the time of the first questionnaire. In comparison, 28.5% of the returned group reported that they had psychological problems at the time of completing the initial questionnaire. The problems reported are shown in Table 10. Chronic fatigue syndrome is included in this table, although whether this is predominantly a physical or a psychological disorder has been debated (Royal Colleges of Physicians, Psychiatrists and General Practitioners, 1996; Sharpe, 1996). It is included here because the respondents with this condition described it as a psychological disorder.

Table 10: Psychological problems reported at Time 1

	% of returned group
No psychological problems	71.5
Depression	23.6
Bulimia nervosa	2.1
Chronic fatigue syndrome	2.1
Unspecified problems	0.7

All respondents who reported that they were suffering from depression scored ten or above on the Beck Depression Inventory, a cut-off point used to indicate at least mild depression (Beck & Steer, 1987).

Although 45.5% of the returned group reported that they had suffered from psychological problems after returning from overseas work (Table 5), only 28.5% reported that they were suffering from such problems at the time when they completed the first questionnaire, indicating that some had got over their difficulties.

Psychological difficulties at time of follow-up

Respondents who completed follow-up questionnaires were asked if they were experiencing any psychological difficulties at the time of the follow-up, which was three months after the original questionnaire for those who had not been overseas again, or one month after return for those who had been overseas again. The responses are shown in Table 11.

Table 11: Psychological difficulties at follow-up.

	No further aid work (n = 47)	Further aid work (n = 17)
No psychological problems	68.1	64.7
Depression	27.7	29.5
Bulimia nervosa	2.1	5.9
Chronic fatigue syndrome	2.1	0.0

Treatment

Of the 86 people in the returned group who reported that they had suffered from psychological problems at some point, 59.3% reported that they had not received any treatment, as Table 12 illustrates. As 9.3% did not respond to this question, it is likely that the true percentage was even higher.

Table 12: Treatment received by returned aid workers who reported psychological problems (n=86)

	%
NO TREATMENT	59.3
TREATED PRIOR TO AID WORK BY:	
Counselling or psychotherapy	3.5
Rest	1.2
Unspecified treatment	1.2
TREATED WHILE OVERSEAS BY:	
Unspecified treatment	1.2
TREATED BEFORE AND AFTER AID WORK BY:	
Antidepressants (and in-patient after)	1.2
Counselling	1.2
TREATED AFTER RETURN BY:	
Antidepressants and counsellor/ psychologist	10.5
Medical treatment only	9.3
Psychiatrist	2.3
MISSING DATA	9.3

Some individuals explained that they had not sought treatment because they did not want to acknowledge their difficulties. For instance, one respondent wrote:

I didn't seek or receive help for my negative feelings about my experience overseas. I avoided thinking about them. I can't tell people about it easily, especially those who "sent" me ... [as] a Christian I felt more guilty for not being a success ... I feel I let people and myself down. It still upsets me. I find it hard to acknowledge failure (S46).

Summary

38.6% of the returned group reported that they had never suffered from psychological problems before engaging in aid work, but they did suffer from such problems (the most prevalent being depression) after their aid assignments. A further 6.9% had suffered from psychological problems prior to being aid workers, and relapsed during or following their period of aid work. Thus the morbidity rate was high, supporting the first hypothesis.

Those who reported psychological difficulties had spent significantly longer working as aid workers than those who did not report such problems. A majority of those who had experienced psychological problems had not received treatment. Implications of the findings will be considered in Chapter 11.

Ch. 6: Comparison of mean levels of symptomatology

This chapter considers hypothesis 2, which was that compared with people preparing for their first assignment as aid workers, returned aid workers would report higher scores on scales assessing depression, anxiety, intrusions, avoidance and anger, and a lower score on Coopersmith's Self-Esteem Inventory.

Sex differences

A literature review found little previous empirical research on differences between the psychological responses of male and female aid workers. Therefore, in order to determine whether the sexes should be studied separately, or whether combined analyses would be appropriate, an initial analysis was performed to compare the responses of male and female returned aid workers on the questionnaires used. T-test responses are shown in Table 13. The abbreviations used in this and subsequent Tables are explained on page viii.

Table 13: Questionnaire means (and SDs) for male and female returned aid workers

	Women (n= 90-99)	Men (n= 42-45)	t	df	p
BAI	6.67 (6.69)	5.82 (6.94)	0.69	142	.49
BDI	7.42 (6.48)	7.29 (6.98)	0.11	140	.91
SEI	71.52 (18.87)	78.95 (17.91)	-2.15	133	.03*
Int	13.82 (8.93)	11.05 (8.73)	1.70	138	.09
Avo	11.51 (9.09)	7.28 (7.72)	2.63	138	<.01*
Sang	11.46 (3.01)	11.14 (1.98)	2.31	121	.47 (sep)
Tang	16.90 (4.39)	15.84 (3.42)	1.40	132	.16
Tem	5.86 (2.46)	5.43 (1.45)	1.25	127	.21 (sep)
Rea	8.26 (2.27)	7.77 (2.26)	1.16	132	.25
In	16.53 (3.46)	16.65 (3.98)	-0.17	131	.86
Out	14.33 (3.43)	13.70 (3.19)	1.02	131	.31
Con	23.48 (4.67)	25.00 (4.86)	-1.74	131	.09
Ex	23.37 (8.39)	22.42 (9.03)	0.59	131	.55

* $p < .05$

"Sep" indicates separate variance estimate; otherwise, the pooled variance estimate was used.

Male and female returned aid workers were found to score

significantly differently on only two measures: the Self-Esteem Inventory, and the avoidance subscale of the Impact of Event Scale. The scores suggest that the women had lower self-esteem, and showed more avoidance. When the Bonferroni multiple comparison procedure was applied to adjust for familywise error, neither of these differences remained significant. To err on the side of caution, male and female responses were considered separately for these two scales; the two sexes were combined for the other comparisons, to increase the sample size.

It was considered that any differences might be most apparent during the first year after returning from overseas aid work, and so only those who had returned less than twelve months previously were included in the t-test comparisons shown in Table 14. For information, comparisons using the whole sample of returned aid workers are shown in Appendix 12.

Ratings of anxiety, depression, intrusions and anger

Table 14: Questionnaire means (and SDs) for returned and preparing groups

	Returned (n= 71 - 73)	Preparing (n = 43)	t	df	p
BAI	7.05 (7.53)	8.91 (8.56)	-1.22	114	.23
BDI	8.10 (7.06)	5.05 (4.35)	2.85	112	.005* sep
Int	14.33 (8.23)	6.40 (8.88)	4.83	113	<.001*
Sang	11.49 (2.38)	10.40 (2.39)	2.38	112	.02*
Tang	16.55 (4.01)	15.16 (3.24)	1.92	112	.06
Tem	5.51 (1.69)	5.12 (1.28)	1.40	106	.17 sep
Rea	8.23 (2.35)	7.42 (2.13)	1.84	112	.07
In	16.90 (4.08)	16.95 (4.07)	-0.06	111	.95
Out	14.08 (3.48)	13.36 (2.97)	1.13	111	.26
Con	24.45 (4.96)	23.90 (5.42)	0.55	111	.59
Ex	22.66 (9.16)	22.60 (7.79)	0.04	111	.97

SEE P. VIII FOR AN EXPLANATION OF ABBREVIATIONS

* $p < .05$

"Sep" indicates separate variance estimate; otherwise, the pooled variance estimate was used.

When compared with the group preparing to go overseas, the returned group scored significantly more highly on the measures

of depressive symptomatology, intrusions, and state anger. When the conservative Bonferroni procedure was applied to adjust for multiple comparisons, the differences for depression and intrusion remained significant at the 5% level, but the difference for state anger did not.

One might question the use of the Impact of Event scale with the preparing group, as one might argue that people cannot have intrusive thoughts or a tendency to avoid thoughts about stressful experiences of aid work before they have even begun the aid work. However, this group did report intrusive thoughts and attempts to avoid thinking about the forthcoming overseas work, associated with anticipatory anxiety. They did not consider the questionnaire to be irrelevant. Using the questionnaire with both groups allowed for comparison of scores before and after aid work.

Self-esteem and avoidance

As sex differences had been found for the measures of self-esteem (SEI) and avoidance (Avo), t-tests were performed separately on the data from males and females, as shown in Table 15.

Table 15: Self-esteem and avoidance scores for returned and preparing groups

	WOMEN Returned (n= 93 - 98)	**WOMEN** Preparing (n = 28)	t	df	p
SEI	71.53 (18.87)	74.14 (15.76)	-0.67	119	.51
Avo	11.51 (9.09)	4.04 (7.28)	4.00	124	<.001*
	MEN Returned (n = 42)	**MEN** Preparing (n = 13-14)	t	df	p
SEI	78.95 (17.91)	84.31 (14.47)	-0.98	53	.33
Avo	7.29 (7.72)	4.93 (7.35)	1.00	54	.32

SEE P. VIII FOR AN EXPLANATION OF ABBREVIATIONS

* $p < .05$

Table 15 indicates that, for women, the returned group showed significantly more avoidance than the preparing group (a difference which remained significant when Bonferroni's procedure was applied). This difference was not significant for the male group. No significant differences were found for self-esteem.

Percentage scoring above cut-off points

Although some statistically significant differences were observed between the returned and the preparing groups in the preceding analyses, whether there were clinically significant

differences was not apparent. Therefore, further analyses were performed to compare the percentage of the preparing and the returned respondents who scored above the cut-off points indicative of symptomatology. These questionnaires cannot be used to diagnose, but do provide a useful indication of difficulties. The following analyses were not restricted to aid workers who had returned within the past twelve months; the whole sample of returned aid workers was included.

Anxiety

In the manual for the Beck Anxiety Inventory (BAI), Beck and Steer (1993) stated that scores of 10 or above indicated at least mild anxiety. Using this cut-off point, a higher percentage of those preparing to go overseas were found to score within the anxious range than those who had returned (Table 16). A chi-squared test did not indicate that this difference was significant ($X^2 = 1.94$, 1 df, $p > .1$). The finding that 30% of those preparing to go overseas reported anxiety indicated that anticipatory anxiety was normal among those preparing for aid work.

Table 16: Percentage scoring above BAI cut-off of 10

	Returned Group	Preparing Group
BAI < 10	115 (79.9%)	30 (69.8%)
BAI 10 +	29 (20.1%)	13 (30.2%)

Depression

The manual for the Beck Depression Inventory (BDI, Beck and Steer, 1987) reported that scores of 10 or above indicated at least mild depression. 24.6% of the returned group and 9.5% of the preparing group scored above this cut-off point (Table 17). This difference was statistically significant ($X^2 = 4.44$, 1 df, $p < .05$).

Table 17: Percentage scoring above BDI cut-off of 10

	Returned group	Preparing group
BDI < 10	107 (75.4%)	38 (90.5%)
BDI 10+	35 (24.6%)	4 (9.5%)

Williams (1984) suggested using a higher cut-off point of 14 for depression. Using this cut-off, a significant difference was still observed (Table 18; $X^2 = 3.94$, 1 df, $p < .05$).

Table 18: Percentage scoring above BDI cut-off of 14

	Returned group	Preparing group
BDI < 14	118 (83.1%)	40 (95.2%)
BDI 14+	24 (16.9%)	2 (4.8%)

Intrusion

Among both men and women, a score as high as 21 on the intrusion subscale of the Impact of Event Scale is indicative of

a significant stress reaction (Horowitz, Wilner & Alvarez, 1979; Paton & Purvis, 1995; see also Creamer, Burgess & Pattison, 1990, 1992). 24.3% of the returned aid workers and 7.1% of the preparing group scored above this cut-off point (Table 19). This difference was statistically significant ($X^2 = 5.86$, 1 df, $p < .05$).

Table 19: Percentage scoring above intrusion cut-off of 21

	Returned group	Preparing group
Intrusion < 21	106 (75.7%)	39 (92.9%)
Intrusion 21 +	34 (24.3%)	3 (7.1%)

Anger

The Anger Expression (AX/ EX) scale of the State-Trait Anger Expression Inventory (STAXI) provides a general index of the frequency with which anger is expressed, regardless of the direction of that anger. This is the subscale of the STAXI most frequently used for research purposes. A score above the 75th percentile indicates that the individual experiences intense angry feelings, to a degree likely to interfere with optimal functioning (Spielberger, 1991). A score of 33 was taken as a cut-off point for analysis; this is above the 75th percentile for both male and female college students, and above the 95th percentile for adults (Spielberger, 1993).

16.5% of the group of returned aid workers and 11.9% of the preparing group scored above this cut-off point (Table 20), a difference which was not statistically significant ($X^2 = 0.53$, 1 df, $p > .1$).

Table 20: Percentage scoring above cut-off for anger expression

	Returned group	Preparing group
Anger expression < 33	111 (83.5%)	37 (88.1%)
Anger expression 33+	22 (16.5%)	5 (11.9%)

Self-esteem

The data for men and women were considered separately for the measures of self-esteem and avoidance, due to sex differences on these measures.

For male and female adults, a score of 44 or below on the Coopersmith Self-Esteem Inventory (SEI) is under the tenth percentile, and indicates very low self-esteem (Coopersmith, 1993). This was taken as a cut-off point for comparisons. Among women, 11.8% of the returned group and 3.6% of the preparing group were found to score within the range for very low self-esteem (Table 21). This difference was not statistically significant (Fisher's Exact Test $p > .1$).

Table 21: Women scoring below cut-off on self-esteem scale

	Returned women	Preparing women
Self-esteem < 44	11 (11.8%)	1 (3.6%)
Self-esteem 45+	82 (88.2%)	27 (96.4%)

Among men, 7.1% of the returned group and none of the preparing group scored within the range for very low self-esteem (Table 22), a difference which was not statistically significant

(Fisher's Exact Test p > .1).

Table 22: Men scoring below cut-off on self-esteem scale

	Returned men	Preparing men
Self-esteem < 44	3 (7.1%)	0 (0.0%)
Self-esteem 45 +	39 (92.9%)	13 (100.0%)

Avoidance

A score of 17 or above on the avoidance subscale of the Impact of Event Scale is suggestive of a stress response syndrome (Paton & Purvis, 1995; see also Horowitz, Wilner & Alvarez. 1979). 32.7% of women in the returned group and 10.7% of women preparing to go overseas scored above this cut-off point, a difference which was statistically significant (Table 23; $X^2 = 5.22$, 1 df, $p < .05$).

Table 23: Women scoring above avoidance cut-off of 17

	Returned women	Preparing women
Avoidance < 17	66 (67.3%)	25 (89.3%)
Avoidance 17+	32 (32.7%)	3 (10.7)

Among men, 16.7% of the returned group and 14.3% of the preparing group scored above the cut-off point for avoidance (Table 24), a difference which was not statistically significant (Fisher's Exact Test p > .1).

Table 24: Men scoring above avoidance cut-off of 17

	Returned men	Preparing men
Avoidance < 17	35 (83.3%)	12 (85.7%)
Avoidance 17 +	7 (16.7%)	2 (14.3%)

Correlations with age

As the mean age of the preparing group was significantly lower than that of the returned group, it was possible that age might have contributed to the differences observed. However, when the scores on each of these questionnaires were correlated with age, the only significant correlations which emerged were for anxiety and anger-in (which were negatively correlated with age). The questionnaire scores for which group differences had been found were not significantly correlated with age, and the correlations indicated that little of the variance could be explained by age (Table 25).

Table 25: Correlating questionnaire scores with age (n = 160)

	r
BAI	-.22*
BDI	-.08
SEI	-.08
Intrusion	.04
Avoidance	.01
State anger	-.09
Trait anger	-.05
Angry temperament	-.02
Angry reaction	-.03
Anger-in	-.21*
Anger-out	.06
Anger control	.15
Anger expression	-.16

SEE P. VIII FOR EXPLANATION OF ABBREVIATIONS

* $p < .01$

Correlations with time since returning

For the returned group, correlations were calculated between questionnaire scores and the number of months since the respondent returned to Britain. The results are shown in Table 26. The only significant correlation was for the intrusions scale, reported

intrusions falling as time since return increased. The lack of significant correlations for the other measures suggested that questionnaire scores did not fall in a predictable manner as time since return increased.

Table 26: Correlating questionnaire scores with months since return (n = 122)

	r
BAI	-.15
BDI	-.12
SEI	-.01
Intrusion	-.22*
Avoidance	-.16
Anger expression	.11

SEE P. VIII FOR EXPLANATION OF ABBREVIATIONS

* $p < .01$

Follow-up

For the 47 participants who completed follow-up questionnaires after three months without further aid work, paired t-tests were performed to see whether their questionnaire scores significantly changed during this period. The results are shown in Table 27.

Table 27: Comparison of Time 1 and Time 2 scores on scales of symptomatology

	Time 1 Mean (SD)	Time 2 Mean (SD)	t	df	p
BAI	6.64 (6.39)	5.57 (6.37)	1.32	46	.19
BDI	6.96 (5.56)	6.59 (5.06)	0.55	45	.58
SEI	71.09 (20.03)	73.34 (20.69)	-1.28	43	.21
Int	13.51 (8.86)	10.36 (6.66)	3.15	46	.003*
Avo	11.04 (9.39)	6.60 (6.98)	3.66	46	.001*

ABBREVIATIONS ARE EXPLAINED ON P. VIII.

* $p < .05$; these differences remained significant at the 5% level after the application of Bonferroni's procedure to adjust for multiple comparisons.

The mean amount of time since the respondents in the follow-up group had returned from overseas was 18.17 months (SD 24.45) at the time they completed the first questionnaire; the second questionnaire was sent out three months later. The levels of reported intrusions and avoidance fell during this period, suggesting that these symptoms may continue to fall gradually for a long time after the individual returns from overseas. Expectations of a very rapid return to normality are unlikely to be met.

Anxiety, depression and self-esteem scores did not alter significantly during the same period.

Paired t-tests were also performed to determine whether there was any change during the three month follow-up period for the scores for the TCIS subscales measuring belief in a malevolent world, meaningless world, and self-worth (Table 28).

Table 28: World assumption scores at Time 1 and Time 2

	Time 1 Mean (SD)	Time 2 Mean (SD)	t	df	p
Malevolent	4.36 (1.84)	4.55 (2.45)	-0.63	46	.53
Meaningless	5.11 (2.24)	5.38 (2.83)	-0.89	46	.38
Self-worth	4.68 (2.54)	4.47 (2.09)	0.67	46	.51

Table 28 indicates that there was no significant change in any of the world assumption scores during the follow-up period. Correlations were calculated for the whole sample of returned aid workers between the scores for these subscales and the number of months since the respondent had returned from overseas (Table 29). None of these correlations were found to be significant (at the 5% level), which, like the data in Table 28, suggests that these scores may remain relatively stable after return from overseas.

Table 29: Correlating world assumption scores with number of months back (n=144)

	r
Malevolent world	.18
Meaningless world	-.07
Self-worth	.07

Summary

Previous reports have suggested that people might apply to be aid workers because they have low self-esteem, are attempting to escape from depressive feelings, or have other psychological problems (Grant, 1995; Paluszny & Zrull, 1971; Smith, Agger, Danieli & Weisaeth, 1996; Stringham 1970a). Such difficulties did not appear prevalent among the group preparing for aid work in the current study. None of these respondents reported having current psychological problems (see previous chapter), and few scored above cut-off points indicative of low self-esteem, depression, or other difficulties. 30% did score above the cut-off point indicative of mild anxiety, but it is likely that this was normal, anticipatory anxiety. It is possible that people in the preparing group who had current psychological problems chose not to return the questionnaires. The option to return questionnaires anonymously, and the high response rate, suggest that it was unlikely that there was a considerable response bias.

People who had already performed aid work had significantly higher mean scores than people preparing for their first term of

aid work on measures assessing depressive symptomatology and intrusive thoughts. Among women, the returned group also scored significantly more highly on an avoidance scale. These differences were not explained by between-group age differences.

The results appeared to be not only statistically but also clinically significant. Significantly more people in the returned than in the preparing group scored above clinical cut-off points for depression, intrusive thoughts, and, among women, avoidance. It is necessary to bear in mind that questionnaire results alone cannot be used for diagnosis, and the cut-off point taken for the Beck Depression Inventory was that suggestive of mild rather than severe depressive symptomatology, and intrusions and avoidance on their own do not constitute clinical disorder. However, the combination of these quantitative results and the self-reports of psychological problems discussed in the previous chapter indicate an increase in symptoms of depression and symptoms associated with post-traumatic stress following aid work.

Significant differences were *not* found between the returned and the preparing groups on responses to the Beck Anxiety Inventory, Coopersmith's Self-Esteem Inventory, or the subscales of the State-Trait Anger Expression Inventory (although there was a tendency towards a higher score for the returned group on the state anger subscale). Previous reports had suggested that anger problems and low self-esteem might be common among returned aid workers (Dye, 1974; Parshall, 1988). In the current study the mean scores for aid workers on the anger and self-esteem scales were found to be within the normal range for adults (Coopersmith, 1993; Spielberger, 1991), and the proportion of people scoring above clinical cut-off points was not significantly larger in the

returned group than among the preparing group.

Other studies have found that following a traumatic experience, self-esteem and symptoms of avoidance improve more quickly than symptoms of intrusion (Scurfield, Kenderdine & Pollard, 1990). Curle and Williams (1996) found that people who experienced a traumatic incident and received no treatment often continued to report symptoms of intrusion for over two years. This is in keeping with the current finding that symptoms of intrusion were continuing to fall gradually among aid workers who had returned many months previously.

Ch. 7: Invalidation of feelings, and psychological problems

Symptoms such as intrusive thoughts may be normal in the weeks following return from overseas aid work. The belief that one is "overreacting" and that symptoms of stress or normal depressive reactions are a sign of weakness or inadequacy, may intensify such symptoms (Teasdale, 1985; West, Mercer & Altheimer, 1993; Winton, Clark & Ehlers, 1996). Hypothesis 3 proposed that invalidation of one's feelings would be associated with psychological problems, and with the maintenance of psychological symptoms.

In order to test this hypothesis, returned aid workers were divided into two groups, those who invalidated their feelings ("invalidaters") and those who did not ("validaters"). This division was made according to scores on the subscale of the Trauma Constellation Identification Scale (TCIS) assessing illegitimacy of feelings ("I believe that I overreacted to what happened to me", "I blow things way out of proportion"). The TCIS uses a seven-point Likert-type scale, each item being rated from 1 ("strongly disagree") to 7 ("strongly agree"), with 4 indicating "neither agree or disagree". A total score of eight for this subscale was taken as a cut-off point, with eight or below indicating that feelings were not invalidated, and above eight indicating invalidated feelings. The psychometric properties of this scale were outlined in chapter 3, and limitations of this scale will be discussed in chapter 11.

Although many of the returned aid workers had endured traumatic experiences, only 20% of them invalidated their feelings, which suggests that experience of trauma does not necessarily lead to invalidation of feelings.

T-tests were performed to indicate whether the validaters and invalidaters among the returned group differed in their responses to the other measures, at the time of the initial questionnaire and at follow-up three months later. As suppressing feelings of anger might be considered to be one feature of invalidating one's feelings, the subscale related to this aspect of

anger ("in") was included in the analysis as well as the more general anger expression ("ex") subscale of the STAXI. The results are shown in Tables 30 and 31.

Scores at Time 1

Table 30: Initial scores of validaters and invalidaters

	Validaters (n = 108-116)	Invalidaters (n = 25-28)	t	df	p
BAI	5.73 (6.28)	9.18 (7.99)	-2.46	142	.02*
BDI	6.30 (5.64)	11.79 (8.41)	-3.28	33	.002* sep
SEI	77.96 (16.06)	57.33 (20.31)	5.65	133	<.001*
Int	11.61 (8.26)	18.78 (9.44)	-3.94	138	<.001*
Avo	8.73 (8.14)	16.59 (9.20)	-4.40	138	<.001*
In	16.08 (3.43)	18.68 (3.73)	-3.36	131	.001*
Ex	22.25 (8.52)	26.56 (8.11)	-2.30	131	.02*

FOR EXPLANATION OF ABBREVIATIONS, SEE P. VIII

* $p < .05$ (unadjusted)

"Sep" indicates separate variance estimate; otherwise,

the pooled variance estimate was used.

For differences to remain significant after applying Bonferroni's adjustment, the significance level would have to be greater than 0.007. At this level, differences remained significant for the measures of depression, self-esteem, intrusion, avoidance and unexpressed anger. The invalidaters scored significantly more highly on these measures, with the exception of the self-esteem scale, for which their mean score was significantly lower.

Follow-up questionnaires

At follow-up, the invalidaters continued to score significantly more highly than the validaters on measures of depression and avoidance, and they had significantly lower scores on the self-esteem inventory (Table 31). These differences remained significant after the application of Bonferroni's procedure.

Table 31: Scores at follow-up for validaters and invalidaters

	Validaters (n = 33-34)	Invalidaters (n = 12-13)	t	df	p
BAI	5.50 (4.93)	9.62 (8.74)	-1.60	15	.13 (sep)
BDI	5.27 (4.36)	11.23 (6.13)	-3.71	44	<.001*
SEI	76.36 (18.12)	58.00 (19.18)	2.96	43	.005*
Int	12.09 (7.76)	17.23 (10.71)	-1.82	45	.08
Avo	8.82 (9.12)	16.85 (10.14)	-2.81	45	.007*

FOR EXPLANATION OF ABBREVIATIONS, SEE P. VIII

* p < .05

"Sep" indicates separate variance estimate; otherwise, the pooled variance estimate was used.

A theory of causality

Causality cannot be inferred from the significant differences shown in Tables 30 and 31. It is plausible that symptoms such as suppressed anger, depression, low self-esteem, avoidance and intrusive thoughts were a consequence of invalidation of feelings. It is also possible that these symptoms developed first, and those who experienced such symptoms then developed a belief that they were overreacting. A third possibility is that there was an intervening variable which affected both the questionnaire scores and the invalidation of feelings.

Two questions which may help throw light on the issue of

causality are:

1. Did all those who had psychological difficulties invalidate their feelings? And

2. Did all those who invalidated their feelings have psychological difficulties?

In response to the first question, Table 32 shows the percentage of returned aid workers (a) without and (b) with psychological problems who invalidated their feelings.

Table 32: Invalidation of feelings among those with and without psychological problems

	No current psychological problems	Have current psychological problems
Validaters	91 (88.3%)	25 (61.0%)
Invalidaters	12 (11.7%)	16 (39.0%)

A significantly higher percentage of people with psychological problems than people without psychological problems reported invalidating their feelings ($X^2 = 14.03$, 1 df, $p < .001$). Nevertheless, still only a minority of those with psychological problems invalidated their feelings, so that the first question was answered in the negative. Invalidation of feelings did not appear to be simply a symptom of psychological difficulties.

In response to the second question, Table 33 shows the proportion of people who had current psychological problems, among (a) people who did not invalidate their feelings and (b) those who did invalidate feelings.

Table 33: Psychological problems among validaters compared with invalidaters

	Validaters	Invalidaters
No psychological problems	91 (78.4%)	28 (42.9%)
Have psychological problems	25 (21.6%)	16 (57.1%)

$X^2 = 14.03$, 1 df, $p < .001$.

57.1% of those who invalidated their feelings were found to have psychological problems at the time of the first questionnaire, but so were 21.6% of those who did not invalidate their feelings. 42.9% of those who invalidated their feelings reported that they did not have ongoing psychological problems; thus, the second question was also answered in the negative.

A third question to be considered was:

3. Did those who invalidated their feelings have a past history of psychological problems, even if these problems had been

resolved?

In response to this third question, Table 34 shows the percentage of people who (a) did not invalidate their feelings and (b) did invalidate their feelings, who had a history of psychological problems.

Table 34: Invalidation of feelings and history of psychological problems

	Validaters	Invalidaters
Never had psychological problems	56 (48.3%)	2 (7.1%)
History of psychological problems	60 (51.7%)	26 (92.9%)

48.3% of people who did not invalidate their feelings reported no history of psychological problems. In contrast, only 7.1% of those who invalidated their feelings reported no history of psychological problems - a difference which was statistically significant (X^2 = 15.86, 1 df, $p < .001$).

Invalidation of feelings in the preparing group

20% of the returned aid workers and 18.6% of the preparing group fell above the cut-off point for invalidation of feelings (Table 35).

Table 35: Invalidation of feelings among returned and preparing groups

	Returned group	Preparing group
Validaters	116 (80%)	35 (81.4%)
Invalidaters	29 (20%)	8 (18.6%)

This difference was not statistically significant (X^2 = 0.041, 1 df, p > .1). However, in sharp contrast to the finding with the returned group, among the preparing group only one of the eight respondents who invalidated their feelings (i.e. 12.5%) reported a history of psychological problems (Table 36).

Table 36: Invalidation of feelings and history of psychological problems among preparing group

	Validaters	Invalidaters
Never had psychological problems	30 (85.7%)	7 (87.5%)
History of psychological problems	5 (14.3%)	1 (12.5%)

Fisher's Exact Test p > .1

A diathesis-stress theory provides a possible explanation

for the difference between the preparing and returned groups. It may be that a tendency to invalidate feelings made respondents vulnerable to developing psychological problems, but that a stressor was necessary to trigger the problems. The group who had already been aid workers were more likely to have encountered such a stressor.

Invalidation of feelings and symptom maintenance

People who returned the follow-up questionnaire were divided into those who indicated on the initial questionnaire that they invalidated their feelings (n = 23), and those who did not invalidate their feelings (n = 24). To equalize sample sizes, six was taken as the cut-off point for the invalidation of feelings subscale. Paired t-tests were used to see whether questionnaire responses showed any significant changes during the three-month follow-up period, for each group (Tables 37 and 38).

Table 37: Validaters' changes in symptomatology over follow-up

	Time 1 Mean (SD)	Time 2 Mean (SD)	t	df	p
BAI	4.96 (5.03)	3.83 (6.88)	0.98	23	.34
BDI	4.30 (3.98)	4.91 (4.65)	-0.95	22	.35
SEI	78.54 (15.15)	86.91 (12.66)	-4.33	21	<.001*
Int	12.21 (7.18)	9.04 (6.72)	2.95	23	.007*
Avo	9.17 (8.57)	4.63 (5.95)	3.48	23	.002*

FOR ABBREVIATIONS SEE P VIII

* p < .05; these differences remained significant after the Bonferroni adjustment procedure was applied.

Table 38: Invalidaters' changes in symptomatology over follow-up

	Time 1 Mean (SD)	Time 2 Mean (SD)	t	df	p
BAI	8.39 (7.26)	7.39 (5.34)	.86	22	.40
BDI	9.61 (5.71)	8.26 (4.99)	1.17	22	.26
SEI	63.64 (21.80)	60.36 (18.64)	1.07	21	.30
Int	14.87 (10.33)	11.74 (6.45)	1.80	22	.09
Avo	13.00 (9.99)	8.65 (7.50)	2.06	22	.05*

FOR ABBREVIATIONS SEE P. VIII

* This difference did not remain significant at the 5% level after Bonferroni's adjustment procedure was applied.

During the three-month follow-up period, those who had been identified as validaters at Time 1 showed a significant decrease in avoidance and intrusion, and increase in self-esteem. During the same period, the invalidaters only showed a significant decrease in avoidance, and this did not remain significant after the application of Bonferroni's adjustment procedure.

It appeared that those who invalidated their feelings at Time 1 did not share the improvements at follow-up made by those who did not invalidate their feelings. The sequence may be circular. It is normal to experience intrusive thoughts on return from overseas aid work (Table 14). People who accept such thoughts as a typical part of the readjustment process (validaters), are likely to find that intrusive thoughts decrease during the months

following their return. Their self-esteem is likely to increase as they are aware that they are coping well with a difficult readjustment process. However, those who judge themselves to be overreacting and attempt to avoid their intrusive thoughts may find that the intrusive thoughts are maintained. This may further increase their belief that they are overreacting, and increase their attempts at avoidance. Their self-esteem is not likely to rise during this time.

Summary

Support was found for the third hypothesis. Among the group of returned aid workers, the minority who invalidated their feelings had significantly higher scores than the validaters on measures of depression, intrusion, avoidance, and suppressed anger; they also had significantly lower self-esteem scores.

The vast majority of returned aid workers who invalidated their feelings (92.9%) reported a history of psychological problems. It was suggested that a tendency to invalidate one's feelings might be a vulnerability factor for psychological difficulties.

This might be true in the general population, but returned aid workers may be especially likely to experience situations which trigger the problems (which may help to explain the difference in findings between the returned and the preparing groups). Symptoms of intrusion are commonly reported by returned aid workers (Table 14). Symptoms of depression are also common among this group (Table 14; Richardson, 1992).

Dunning (1990) noted that, "emergency workers who pride themselves on their self-control ... seem to be especially

troubled by subsequent emotional difficulties" (p. 99). People who conclude that they are "overreacting" when they have normal reactions are likely to add to their distress and intensify their symptoms by doing so (see Teasdale, 1985; Winton, Clark & Ehlers, 1996). One respondent described such a process occurring. He wrote that he had become an aid worker because he believed in working for peace, but, "being in a situation of extreme violence seems to have awakened or brought to the fore emotions and feelings of violence within myself" (S68). He had initially tried to suppress his violent thoughts, but had become depressed. During therapy, he was encouraged to accept his response as normal in the circumstances - which is in fact the case, as traumatic experiences are known to sometimes evoke feelings of violence (Collins & Bailey, 1990; Egge, Mortensen & Weisaeth, 1996). The respondent wrote that this normalisation had helped in his recovery process.

People who invalidate their feelings, perhaps believing that they should "be able to cope" without difficulties, may be reluctant to seek treatment. The follow-up data indicate that validaters showed a significant decrease in intrusive symptoms and an increase in self-esteem over a three months follow-up period, but invalidaters did not share these improvements.

A follow-up study of the respondents who were in the preparing group is planned. It is hypothesized that those who invalidated their feelings before going overseas would be more likely to develop psychological problems following the period of aid work than those who did not invalidate their findings. If this hypothesis is supported, these findings would have implications

in terms of educating potential aid workers about the normal adjustment process, in an attempt to help them accept their symptoms as "normal" rather than perceive them as an "overreaction".

It is important to remember that many of those who developed psychological problems did not invalidate their feelings; this was only one of a number of vulnerability factors.

Ch. 8: World benevolence and meaningfulness, and self-worth

Benevolence and meaningfulness

The fourth hypothesis, like the third, related to subscales of the Trauma Constellation Identification Scale (TCIS).

Janoff-Bulman (1992) concluded that most people believe that the world is benevolent and meaningful, and that they are worthy people. The next chapter will consider whether there is a subgroup of returned aid workers who have experienced the "shattering" of these basic assumptions. Before looking for such a subgroup, however, it is necessary to investigate the assumptions held by the majority of aid workers.

People involved with aid work encounter suffering on a massive scale, and see the effects of genocides and wars. In the midst of such suffering, it would be easy to conclude that the world is malevolent and unjust. However, such conclusions would be likely to lead aid workers to feel that their work was futile, and to respond to the situation with disillusionment, hopelessness and despair. Cognitive dissonance might encourage belief in a just world.

Lerner (1970) stated that, "for their own security, if for no other reason, people want to believe they live in a just world where people get what they deserve. Any evidence of undeserved suffering threatens this belief" (p.208). Aid workers must develop a means of surviving in the face of injustice. They may even participate in some of the unfairness, perhaps having to make decisions about who can be helped and who cannot, and knowing that they have adequate supplies for themselves, while those around them do not (Smith, Agger, Danieli & Weisaeth, 1996).

The work of Lerner (1970) suggests that acting on behalf of people who are suffering may help one to maintain a belief in a just world. In addition, because aid workers mix with other like-minded people who are helping promote justice, and are supported by people who give money for humanitarian work, they may believe that many people are working for justice. Maintaining a belief in world benevolence and justice might be an important coping strategy for aid workers, allowing them to feel that their efforts are worthwhile, and to cope with the widespread suffering. It was hypothesised that returned aid workers and those preparing to become aid workers would have significantly higher mean scores on scales of belief in world benevolence and meaningfulness (which includes justice) than people who did not intend to be involved in aid work.

Self-worth

The third of the basic assumptions discussed by Janoff-Bulman (1992) was that of self-worth, and this assumption will also be considered in this chapter.

Many aid organisations rigorously select from those applying to work with them, and choose only those who appear to be the most capable, and who demonstrate good physical and mental health. Such people may be less likely to devalue themselves. Aid workers may also have an increased sense of self-worth because they feel their job is a particularly important one, and they may receive admiration from others. It was hypothesised that the returned and preparing aid workers would devalue themselves less than people who were not involved with aid work.

Sex differences and religious beliefs

Initial analyses revealed that for each of the three groups, there were no significant sex differences in the scores on the subscales measuring world malevolence, meaninglessness and self-worth; therefore, sex differences were not considered in subsequent analyses.

It was hypothesised that religious beliefs might influence assumptions. Therefore the presence or absence of strong religious beliefs was considered when studying assumptions.

Belief in a malevolent world

The "malevolent world" subscale of the TCIS assesses belief that the world is malevolent, with items such as "I see this world as a bad place to live in", and "nothing in this world is any good". A higher score indicates a stronger belief in a malevolent world.

An analysis of variance was performed on the scores of the malevolent world subscale. The independent variables were the group of the respondent (returned, preparing, or not going to be aid workers), and the presence or absence of religious beliefs.

The results are shown in Table 39.

Table 39: ANOVA for malevolence score by group and religion

	df	F	p
Group	2	10.37	<.001
Religion	1	2.28	.11
Interaction	2	2.07	.13

A significant effect was found for group, but no significant effect was found for religious beliefs. Therefore, groups were not sub-divided according to religious beliefs in a subsequent one-way ANOVA which was performed. The one-way ANOVA gave $F(2,256) = 13.39$, $p < .001$. Post-hoc Scheffe tests indicated that the preparing and returned aid workers perceived the world as significantly more benevolent than the not going group, at the 5% level, supporting the hypothesis. Table 40 gives the group means.

Table 40: Group means for malevolence score

	n	Malevolent world subscale mean (SD)
Preparing	43	3.95 (1.94)
Returned	145	4.03 (2.05)
Not going	71	5.54 (2.32)

Belief in a meaningless world

The "meaningless world" subscale of the TCIS assesses belief that the world is meaningless (random and unjust), with items

such as "I don't think that justice exists in this world" and "I believe that there is no rhyme or reason in this world". A higher score indicates stronger belief in a meaningless world.

An ANOVA was computed for the scores on this subscale, with group and religious beliefs as independent variables. The results are shown in Table 41.

Table 41: ANOVA for meaningless world score by group and religion

	df	F	p
Group	2	6.05	.003
Religion	1	28.53	<.001
Interaction	2	1.95	.14

As a significant effect was found for religion as well as for group, a one-way ANOVA was performed using only the respondents who reported holding strong religious beliefs, to control for the effect of religion. (The sample sizes were too small to repeat this analysis using the respondents who reported holding no strong religious beliefs). With scores on the meaningless world subscale as the independent variable, the ANOVA gave $F(2, 189) = 8.56$, $p < .001$. Subsequent Scheffe tests indicated that among the respondents with strong religious beliefs, the preparing and returned groups perceived the world to be significantly more meaningful than the never going group (at the 5% level), supporting the hypothesis. Table 42 gives

group means.

Table 42: Group means for meaningless world scale

	n	Meaningless world subscale mean (SD)
Preparing	33	4.36 (2.21)
Returned	113	4.54 (2.08)
Not going	46	6.02 (2.41)

Belief in self-worth

The "self-worth" subscale of the TCIS directly assesses self-deprecation, with items such as "There is something very wrong with me" and "I don't like myself". A higher score indicates less self-worth.

The scores on this subscale were included in a two-way ANOVA, with group and religion as independent variables. Table 43 shows the results.

Table 43: ANOVA results for self-worth scale, by group and religion

	df	F	p
Group	2	3.76	.03
Religion	1	5.40	.02
Interaction	2	0.64	.53

As a significant effect was found for religion as well as

for group, participants reporting strong religious beliefs were selected for further analysis to control for religion. A one-way ANOVA of self-worth score by group revealed a significant group effect, $F\ (2,\ 189) = 4.31$, $p < .05$. Subsequent Scheffe tests indicated that the preparing and returned groups reported significantly higher self-worth (i.e. a lower score on the subscale) than the never going group, (at $p < 0.05$), supporting the hypothesis. Means are shown in Table 44.

Table 44: Mean scores on self-worth scale, by group

	n	Self-worth subscale mean (SD)
Preparing	33	3.85 (1.97)
Returned	113	4.21 (2.66)
Not going	46	5.46 (3.36)

Correlations with age

To consider whether group differences in the malevolent world, meaningless world and self-worth subscales might be related to age differences, correlations were calculated between these subscales and age, for the entire sample. The results are shown in Table 45. None of the correlations were significant, and the correlations were very small, indicating that the group effects could not be explained by age differences.

Table 45: Correlations of world assumption scores with age (n=257)

Malevolent world	.07
Meaningless world	-.01
Self-worth	-.01

Summary

The results supported the hypothesis that preparing and returned aid workers would, on the whole, show greater belief in a benevolent and meaningful world and in self-worth than the not going group.

Although 45% of returned aid workers reported developing psychological problems during or following aid work (Chapter 5), one should not overlook the fact that the majority of aid workers did not develop such problems. A salutogenic approach (see Antonovsky, 1987) would consider why some aid workers do *not* develop problems, despite being exposed to what would be considered by most people to be stressful or even traumatic conditions. Detailed study of this is outside the scope of the present report, but one small contributory factor may be the belief in a meaningful, benevolent world and in self-worth, held by most aid workers.

One returned aid worker interviewed in a-separate qualitative study by the author commented when asked a general question about her experience of aid work:

> ... Whereas before, if I'd watched some really disturbing news report I would have felt really "oh the world is so

terrible and aren't human beings terrible people", but now I feel, I suppose because I've got access to a lot more information, that there are things happening and it is quite positive ... I feel really ... privileged in a way doing the work that I do ... you kind of think you've got the moral high ground in some sense ... I'll be honest, it's really quite nice. ... You ... see a wonderful side of human nature... I sometimes wonder if we [people in Britain] have forgotten basic consideration.

(Permission given to cite respondent here).

Belief in self-worth and that justice and benevolence exist in the world may be important in helping aid workers to believe that their work is worthwhile, and to avoid being overcome with helplessness, hopelessness and despair in the face of large-scale suffering.

Ch. 9: Shattering of assumptions, and psychological symptoms

According to Janoff-Bulman's (1992) theory, traumatic events can shatter belief in world benevolence and justice, and in self-worth. In the light of this, the fifth hypothesis stated that a minority of returned aid workers would no longer perceive the world to be benevolent and meaningful, and would devalue their own worth. It was hypothesised that this would be associated with psychological difficulties.

World malevolence

A score above eight on the malevolent world subscale of the TCIS reflects a belief that the world is on the whole a malevolent place. Only 4.7% of the preparing group and 6.2% of the returned group scored above this cut-off point, a difference which was not statistically significant (Table 46; Fisher's Exact Test $p > .1$).

Table 46: Malevolent world belief among returned and preparing groups

	Returned group	Preparing group
Benevolent world	136 (93.8%)	41 (95.3%)
Malevolent world	9 (6.2%)	2 (4.7%)

The assumption of world benevolence did not appear to have been shattered for the majority of returned aid workers, despite the horrendous situations some had experienced. The nine returned aid workers who did endorse belief in a malevolent world had all

experienced psychological problems (Table 47).

Table 47: Psychiatric history for those believing in malevolent world (returned group)

	Benevolent world	Malevolent world
Never had psychological problems	58 (43.0%)	0 (0.0%)
History of psychological problems	77 (57.0%)	9 (100%)

Fisher's Exact Test $p < .01$

A third of those who expressed belief in a malevolent world had recovered from their psychological problems.

89.5% of those who had had psychological problems did not believe in a malevolent world (Table 48), suggesting that psychological problems do not necessarily cause a long-term belief in a malevolent world.

Table 48: Belief in malevolent world for those in returned group with (compared to without) a history of psychological problems

	No history of psychological problems	History of psychological problems
Benevolent world	58 (100%)	77 (89.5%)
Malevolent world	0 (0%)	9 (10.5%)

Fisher's Exact Test $p < .01$

Meaningless world

A score of eight or above on the meaningless world subscale indicates a belief that the world is on balance meaningless. 9.3% of the preparing group and 19.3% of the returned group were found to score above this cut-off, a difference which was not statistically significant (Table 49; $X^2 = 2.35$, 1 df, $p > .1$).

Table 49: Meaningless world belief among returned and preparing groups

	Returned group	Preparing group
Meaningful world	117 (80.7%)	39 (90.7%)
Meaningless world	28 (19.3%)	4 (9.3%)

Table 50 indicates that of the returned aid workers who

expressed belief in a meaningless world, 92.9% had experienced psychological problems. In comparison, only 51.7% of those who believed in a meaningful world had experienced psychological problems. This difference was statistically significant (X^2 = 15.86, 1 df, $p < .0001$).

Table 50: History of psychological problems among those believing in a meaningless (versus meaningful) world - returned group

	Meaningful world	Meaningless world
No history of psychological problems	56 (48.3%)	2 (7.1%)
History of psychological problems	60 (51.7%)	26 (92.9%)

Table 51 shows that of those who reported never having experienced psychological problems (including at follow-up), only 3.4% expressed belief in a meaningless world. In contrast, 30.2% of those who had experienced psychological problems endorsed this belief. This difference was statistically significant (X^2= 15.86, 1 df, $p < .0001$).

Table 51: Meaningless world belief among returned aid workers with (compared to without) a history of psychological problems

	No history of psychological problems	History of psychological problems
Meaningful world	56 (96.6%)	60 (69.8%)
Meaningless world	2 (3.4%)	26 (30.2%)

Importantly, three respondents who expressed belief in a meaningless world, reported at Time 1 that they had never experienced psychological difficulties, but at follow-up reported suffering from depression. This would suggest that belief in a meaningless world might be a risk factor for depression.

50% of those expressing belief in a meaningless world did not report having psychological problems at the time when they completed the questionnaires. It was not the case that belief in a meaningless world was a symptom of ongoing psychological difficulties; in at least some cases this belief preceded the development of psychological problems and persisted after recovery. Future research might indicate whether an enduring belief in a meaningless world could be predictive of relapse.

Self-deprecation

A score of eight or above on the self-worth subscale of the TCIS indicates self-deprecation. Using this cut-off, 11.6% of the preparing group and 16.6% of the returned group were found to devalue themselves, a difference which was not statistically

significant (Table 52; $X^2 = 0.62$, 1 df, $p > .1$).

Table 52: Self-acceptance among returned and preparing groups

	Returned group	Preparing group
Self-acceptance	121 (83.4%)	38 (88.4%)
Self-deprecation	24 (16.6%)	5 (11.6%)

Of the 24 returned aid workers who scored above the cut-off point on this scale, 23 reported a history of psychological problems (Table 53). In comparison, only 52.5% of those with a score below the cut-off point reported having had psychological problems. This difference was statistically significant ($X^2 = 15.61$, 1 df, $p < .001$).

Table 53: Psychological problems and self-deprecation

	Self-acceptance	Self-deprecation
Never had psychological problems	57 (47.5%)	1 (4.2%)
History of psychological problems	63 (52.5%)	23 (95.8%)

66.7% of those above the cut-off point reported having psychological problems at the time of the questionnaire, while

33.3% did not - the majority of these having recovered from past psychological problems, but continuing to devalue themselves.

The majority (73.3%) of returned aid workers who had experienced psychological problems scored within the self-acceptance range, indicating that psychological problems did not necessarily lead to enduring self-deprecation (Table 54).

Table 54: Self-deprecation among returned aid workers with (compared to without) a history of psychological problems

	No history of psychological problems	History of psychological problems
Self-acceptance	57 (98.3%)	63 (73.3%)
Self-deprecation	1 (1.7%)	23 (26.7%)

$X^2 = 15.61$, 1 df, $p < .0001$

Summary

On the basis of Janoff-Bulman's (1992) theory, one might predict that traumatic experiences endured by aid workers would lead to a shattering of world assumptions. In fact, as shown in the previous chapter, aid workers on average hold these assumptions even more strongly than the general public. In the current chapter, the vast majority of returned aid workers were found to express belief in a benevolent and meaningful world, and self-worth.

Aid workers choose to engage in such work, and are to some extent prepared for what they encounter. Voluntary exposure to suffering over a period of time is likely to have different effects from the involuntary and/ or unexpected critical incidents which have been the subject of Janoff-Bulman's (1992) research. One difference may be that involuntary participants in a traumatic incident may struggle to find any sense of meaning or benefit to be gained from the experience; aid workers, in contrast, may feel that their exposure to the suffering of others has served a purpose, as they have been able to help other people. Awareness of the benefits of their work may assist them in finding a sense of meaning. Cognitive appraisal undoubtedly influences the ability to cope with traumatic experiences (McCammon, Durham, Allison & Williamson, 1988). In addition, confronting widespread suffering may lead to a reevaluation of priorities, which can result in a greater sense of meaning in life (Janoff-Bulman, 1992; Kaur, 1996).

Several aid workers commented that their religious faith had helped them to establish a sense of meaning; examples of these comments are listed in Appendix 13.

A minority of returned aid workers did report a belief in a malevolent or meaningless world, or lacked a belief in their own self-worth. Of these three negative beliefs, the one most frequently endorsed by this group was belief in a meaningless world. This is in keeping with Janoff-Bulman's (1992) observation that where a traumatic experience has no perpetrator, the main assumption affected is that of meaningfulness. Loss of belief in a meaningful world may have been a consequence of a particular traumatic incident, or due to on-going stressful circumstances

(see Appendix 10 [iii]).

Some respondents may have experienced a loss of purpose in life (shattering the assumption of meaningfulness) on return to Britain, rather than while overseas (see Table 4). Several wrote that while in developing countries, they became used to expressions of generosity from other aid workers and from the people they were helping, but on their return home they were distressed by the greed, materialism and self-centredness they encountered. Their belief in human kindness (or benevolence) was shattered, and they viewed life in Britain as 'hollow' compared with fulfilling experiences overseas.

Although the data in Tables 28 and 29 indicate that world assumption scores remain relatively stable following return from overseas, this data was based on respondents who had been back in Britain for at least one month, and in many cases for considerably longer. For some individuals, assumptions may change markedly during the initial weeks following return.

Adams (1996) observed of aid workers: "disillusionment can set in rather quickly if there is not a perceived way forward in incorporating this experience into the totality of his life 'meaning'" (p.12). Grant (1995) reported, "not to believe that good will prevail can lead to despair and hopelessness. Much of a missionary's life flows out of this belief, as well as the belief that one can make a difference" (p.78). Disillusionment may produce depression because of a sense of loss.

Of the returned aid workers who reported a belief in a malevolent or meaningless world, or lack of self-worth, the vast majority had experienced psychological difficulties. Three returned aid workers who endorsed belief in a meaningless world

went on to develop psychological problems during the three month follow-up period, although they had no history of psychological difficulties. Thus support was found for Janoff-Bulman's (1992) theory that the shattering of the belief in a benevolent, meaningful world and in one's self-worth could lead to psychological problems. A longitudinal study is in preparation to test this theory further. If supportive evidence is found for this theory, implications will arise for the preparation and treatment offered to aid workers.

Ch. 10: Follow-up of short-term aid workers

The final hypothesis was that a subgroup of respondents who completed questionnaires before and after short-term aid work would show an increase in scores on measures of depression, anxiety, intrusions and avoidance, and a decrease in self-esteem score, following the assignment.

Seventeen respondents completed questionnaires before and one month after a period of aid work. Ten of the respondents were overseas for only one month during this time, while the remainder were away from 2-6 months. The mean time overseas was 2.06 months (SD 1.60). Fourteen of the 17 respondents had performed previous assignments of overseas aid work, while for three respondents, this was their first experience of aid work.

Psychological problems

Four respondents (23.5%) reported psychological problems at the time of the initial questionnaire, before they went overseas (three cases of depression, and one of bulimia nervosa). After the short period overseas, six respondents reported having psychological problems (35.4%; five cases of depression and one case of bulimia nervosa). This included three of the four respondents who had reported difficulties at Time 1, and a further three who had developed depression since going overseas. Of the six who reported psychological problems on their return, three were receiving treatment.

Paired t-tests were used to compare the respondents' questionnaire scores before and after aid work. The results are shown in Table 55, including responses to the TCIS subscales

assessing belief in the malevolence and meaninglessness of the world, and self-deprecation (labelled "malevolent", "meaning" and "self-worth").

Table 55: Questionnaire scores before and after aid work

	Time 1 Mean (SD)	Time 2 Mean (SD)	t	df	p
BAI	6.53 (7.67)	7.06 (10.35)	-0.52	16	.61
BDI	8.71 (9.31)	8.12 (9.72)	0.64	16	.53
SEI	71.50 (20.23)	72.75 (24.05)	-0.41	15	.69
Int	9.00 (8.90)	9.86 (8.18)	-0.43	14	.68
Avo	8.27 (7.96)	4.86 (5.74)	1.64	14	.12
Malevolent	3.82 (2.22)	4.29 (2.47)	-1.46	16	.91
Meaning	6.00 (2.98)	6.06 (2.49)	-0.12	16	.91
Self-worth	5.18 (2.94)	4.95 (2.85)	0.89	16	.39

FOR ABBREVIATIONS, SEE P. VIII

Table 55 indicates that for these 17 respondents, responses after a period of short-term aid work did not significantly differ from their responses before this work. Significant differences might have been found had a larger sample been used. Power calculations were not computed in advance because of the lack of comparable data, but a post-hoc power calculation conducted with the results obtained indicated that at least 66 subjects would

have been needed for these results to have been significantly different between groups at $p < .05$ (Appendix 14).

Although the small sample size means that caution must be taken when considering these results, it is interesting to note that for these 17 respondents, changes in the mean scores on the avoidance, depression and self-esteem scales were in the opposite direction to the hypothesis.

The mean scores did not indicate an increase in symptomatology during short-term aid work, although further research with a larger sample is necessary before conclusions can be drawn with any confidence. It is possible that the knowledge that a project is short-term may help people to cope with, and even enjoy, aid work, while avoiding the symptoms of stress which may accompany longer term service overseas. As discussed in Chapter 5, in the larger sample, the mean time spent overseas was significantly greater among aid workers who reported having psychological problems on their return home than among those who did not have psychological problems (Table 7).

Paton and Purvis (1995) studied a group of 18 young nurses before and after they worked in Romanian orphanages for three months, and found much higher scores on the Impact of Event Scale one month after return than were found in the present study of short-term workers. It is probable that this was the first experience of aid work for the nurses in Paton and Purvis' study, which might explain the higher scores on their return. Paton and Purvis (1995) did not use the Impact of Event Scale before the overseas work, so a before and after comparison of scores was not possible.

Summary

This study did not show an increase in symptomatology following short-term aid work, although this may have been due to the small sample size. Three of the 17 participants did develop depression during the short term overseas, and a further three continued to present with pre-existing psychological problems. Most of the group had been involved with aid work before, which may explain why the respondents reported fewer symptoms of avoidance and intrusive thoughts following aid work than respondents in a previous study by Paton and Purvis (1995).

Ch. 11: General discussion

A summary of the findings, and discussion of relevant literature, has been offered at the end of each chapter, and so individual results will not be repeated here. A report of the main findings (which was sent to participants and societies) is given in Appendix 15. As this study is the first empirical investigation of its kind, there is not a large body of similar literature with which the results should be discussed and compared. The remaining space will be used to discuss implications of the findings.

Implications

Selection

Selection criteria in the major aid organisations have become more stringent since Paluszny and Zrull's finding in 1971 that many people volunteered for aid work in an attempt to escape from their own psychological difficulties. In the current study, no members of the preparing group reported having psychological difficulties at the time of the initial questionnaire, and it appeared from their scores that they were a psychologically healthy group.

Of the returned group, 6.9% reported that they had had psychological problems before they became aid workers and relapsed after the aid work. One of these respondents admitted that she had become an aid worker as a result of "needing to be needed", while another woman acknowledged that her motive for entering into aid work had been "escapism".

In the group studied before and after short-term work, 23.5% reported that they had psychological disorders when they began the

aid work. These respondents had all worked overseas previously. A thorough screening process used before every aid assignment (and not just the initial assignment) might detect those who are having psychological difficulties, so that they can be offered support, rather than sent back overseas with untreated problems.

Preparation

a) Stress management.

Psychological difficulties were found to be common among returned aid workers. The literature on related populations, such as the military and paramedical populations, indicates that it may be possible to reduce some of these problems with additional preparation (see Busuttil, 1995; Kaur, 1996; Mitchell & Dyregrov, 1993). At present, not all aid workers receive training in basic stress management techniques. Aid workers could (like military personnel) be trained to recognise and respond appropriately to symptoms of stress among themselves and their colleagues, and also to take preventative action. It might be useful to inform preparing workers about potential difficulties they might face, so that they could consider in advance how they might deal with these.

b) Normalising difficulties.

There was some evidence that invalidation of feelings might be a vulnerability factor for development of psychological problems among returned aid workers. If this finding is supported by longitudinal investigations, it may have implications for training. In particular, preparation could include providing information about stress symptoms which are common following aid

work, and encouraging people to accept these symptoms as a normal part of the readjustment process, instead of invalidating them. Dunning (1988) stated: "If workers know that symptoms are common and predictable, their emergence is not as traumatic, hence not as likely to be exacerbated by anxiety or refusal to seek resolution" (p.300).

Length of assignments

Returned aid workers who reported that they had experienced psychological problems were found to have spent significantly longer overseas than those who did not report such problems. The results suggest that it might be worth considering shorter contracts for aid workers, so that there would be less time for stress to accumulate, and reintegration into life in Britain might be easier. This is not to rule out the possibility of renewing contracts for some individuals after reassessment, as longer-term work can be very effective, and some people find it very fulfilling (as it allows better understanding of the language and culture, and deeper friendships to be formed). Some societies have recently accepted this model of shorter, renewable contracts (Gateley & Gateley, 1995).

Education about psychological difficulties and sources of help

45.5% of the returned aid workers studied reported that they had experienced psychological difficulties (either for the first time, or relapsing) after being involved with aid work. Most of these individuals did not seek treatment, or waited many months before seeking treatment, during which time their symptoms became more severe.

Reasons for failing to seek help might have included not knowing where help was available; believing that seeking help would be seen as a sign of weakness; and feeling that they would not be understood by people who had no experience of aid work (Kaur, 1996; Neill, 1997). One participant wrote:

> My organisation offered no help when I returned. I felt I really needed help from people who really understand the pressures of "re-entry" and the symptoms of burn out ... how vital is support and debriefing in the period following return (S69).

Educating organisations and aid workers about sources of help, and that psychological difficulties are not unusual after returning from aid work, might lead to an increase in the number of individuals seeking treatment.

Health professionals (such as G.Ps) could also be encouraged to look out for potential difficulties when visited by returned aid workers, who might not mention psychological difficulties unless specifically asked. Aid workers are more likely to feel "understood" by professionals who are well-informed about this topic.

Only 29.7% of respondents reported that they had received debriefing or professional help on their return from overseas (Appendix 10 [v]). A number of respondents expressed annoyance at not being offered any, or adequate, debriefing. Macnair (1995) found that 87% of aid workers felt that all returning aid workers should be offered psychological debriefing. Some organisations already offer routine psychological debriefing, and further

therapy when appropriate. A recent proposal has urged that all aid organisations should provide this service (Davidson, 1997). It is hoped that by informing organisations about the prevalence of psychological difficulties among returned workers, more organisations will consider this option, and offer debriefing routinely (rather than on request), so that there is no implication that those who accept debriefing are "weak". One respondent wrote that aid workers "would like to see more councelling (sic) services offered ... as a normal part of the returning home process" (S113, emphasis in the original).

Recovery time

It might also be beneficial for both aid workers and those in contact with them to be aware that return to normality following aid work can be a lengthy process. In the follow-up study, the mean length of time since respondents had returned from abroad was over 18 months, and yet their reported levels of intrusion and avoidance were found to still be falling. Some aid workers return from one assignment and are sent on another within a few weeks. This may not give them sufficient time to overcome stress symptoms, and may lead to problems with cumulative stress.

Treatment implications

The results suggested that aid workers who no longer believed in a benevolent or meaningful world, or in their own worth, tended to experience psychological difficulties. Three aid workers who expressed a belief in a meaningless world when they returned, developed psychological problems during the follow-up period,

although they reported no prior psychological difficulties. It might be useful to routinely help returned aid workers find a sense of meaning in their experience and in the world, reframing their experiences, as a strategy aimed at preventing the development of psychological problems (see Taylor, 1983). Some forms of debriefing aim to provide this (Janoff-Bulman, 1992).

Among those who have already developed psychological difficulties, it might be useful to address shattered assumptions during therapy, in an attempt to help the client re-establish some belief in a meaningful, benevolent world, and their own self-worth. Janoff-Bulman (1992) indicated that people who have had their assumptions shattered never completely regain their old beliefs, but can partially regain them. It has been said that 'to live is to suffer, to survive is to find meaning in the suffering' (Gordon Allport, cited in Simpson, 1993). Victor Frankl's logotherapy (Frankl, 1946/ 1965) focuses on establishing a sense of meaning, and many other forms of treatment also encompass this (e.g. Brende, 1993). A future longitudinal study could investigate whether belief in a meaningful and benevolent world increases during recovery from traumatic stress.

Limitations

a) Not longitudinal.

There are a number of important limitations of this investigation. Firstly, because of constraints of time, it was not a longitudinal study. Causality cannot be confidently asserted, although theories of possible causality were proposed. Longitudinal research might help to answer the question of

whether, for some people, participation in aid work leads to a shattering of assumptions of the benevolence and meaningfulness of the world, and self-worth. If these assumptions are schemata, as Janoff-Bulman (1989) proposed, shattering them would influence the selection, interpretation and retrieval of information. This, in turn, would influence emotions, perhaps causing psychological disturbance, as seen especially in the literature on depression (Williams, 1984). The world would no longer be perceived as a good, meaningful, safe place, but rather as unfamiliar and threatening. As Janoff-Bulman (1992) observed, "the very assumptions that had provided psychological coherence and stability in a complex world are the very assumptions that are shattered" (p. 64).

A longitudinal study is now planned, building upon the current findings, to test whether shattering of world assumptions does occur among some aid workers and lead to psychological difficulties.

b) Recruitment method, and self-report measures.

Respondents were recruited through travel clinics, and through aid organizations. A high proportion (including those who had worked with secular organisations) reported that they held strong religious beliefs. Although the response rate was high, the sample may not be representative of all aid workers.

Self-report measures were used, and clinical interviews were not held to confirm diagnoses. Some information was collected retrospectively. Thus reports of psychological problems may not have been clinically accurate. However, most respondents reporting psychological problems were able to state the diagnosis they had

been given by a professional. Participants were informed that all responses would be confidential, and many participants chose to remain anonymous. This reduced the likelihood that self-report information would be subject to bias. (See Briody & Chrisman, 1991, and Peppiatt & Byass, 1991, on the acceptability of self-report and retrospective data in such investigations).

c) TCIS Questionnaire.

Another limitation was use of the Trauma Constellation Identification Scale (TCIS) to assess world assumptions. This questionnaire was selected because it provided a measure of belief in the three world assumptions and other relevant scales (including invalidation of feelings); had high reported reliability and validity (Dansky, Roth and Kronenberger, 1990); could be quickly administered, and was not worded in such a manner as to only be applicable to clients who had experienced assault (like the scale of Winton, Clark & Ehlers, 1996).

Dansky, Roth and Kronenberger (1990) reported that the original 64-item TCIS was reduced to a 30-item scale by retaining the items with the highest item-to-subscale correlations. They provided evidence of the validity and reliability of the 30-item scale, including high internal reliability (Cronbach's alpha = .94). All corrected item-to-total correlations were greater than .4, the majority being above .55.

However, in spite of the above, the TCIS is not a very

satisfactory questionnaire. In particular, the small number of items per subscale and the lack of reverse scoring items (increasing the likelihood of response bias) are significant weaknesses of the scale.

Future research

a) Consideration of other variables.

Aid workers are a very diverse group, ranging from school leavers to retired people, who may work alone, with a partner or as part of a team, in a conflict region or a peaceful area, for weeks or for decades. Some are involved with relief work, while others participate in development projects. Some find the experience extremely traumatic, while others enjoy it. Some receive a lot of support for their work, and are offered debriefing and counselling services when they return home, while others have little support. There are a large number of variables which were not considered in any detail in the current study, which was in many respects a preliminary investigation.

Age is one variable which merits consideration, although age did not appear to explain the differences which were found in the current study. Another important variable which has not been considered is the amount of social support received by the returned worker. Social support appears to be a crucial factor in influencing adjustment following traumatic experiences (e.g. Janoff-Bulman, 1992; Liberman, 1982). Perception of isolation and

alienation are subscales of the TCIS, but space does not allow for detailed consideration of these variables here. Some aid workers may receive little social support on their return, especially if they have not maintained frequent contact with friends. In the absence of social support, professional support may be all the more necessary. This is a factor which could be usefully considered in further studies.

b) Treatment and debriefing studies.

As has been mentioned previously, a longitudinal study is in preparation, building on the research reported here. It is hoped that a follow-up study of people who receive treatment will also be possible, to indicate to what extent world assumptions and other factors change during the course of therapy.

It would also be desirable to compare the adjustment of returned aid workers who receive debriefing with those who do not, in order to indicate whether such debriefing is beneficial, and how benefits can be maximised. Rigorously controlled empirical investigations of the value of debriefing have not yet taken place (Busuttil, 1995; Macnair, 1995).

In conclusion, it is hoped that this investigation will lead to further research, and encourage improvements in the service offered to those who are serving others overseas.

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Appendix 1: Review of research on related groups

Working with large-scale disasters

A number of studies have been conducted on workers involved in helping after a disaster, such as an earthquake, a major fire or a fatal train crash. These have generally found symptoms of psychological disturbance (such as anxiety, depression, insomnia and intrusive thoughts of the event) to be common in the days following the disaster (e.g. McCammon, Durham, Allison, & Williamson, 1988; Pichot, 1991; Raphael, Singh, Bradbury & Lambert, 1983; Wertheimer, 1987). Some research has also suggested that symptoms may be present in longer-term follow-up. Durham, McCammon & Jackson Allison (1985) found that eighty percent of workers involved after an explosion had at least one PTSD-related symptom five months after the disaster, and 10% had eight or more symptoms.

McFarlane (1986, 1988a, 1988b) studied 459 fire-fighters involved in fighting serious bushfires in Australia. Twenty-nine months after the fire, 21% of the fire-fighters were continuing to experience thoughts and feelings about the fire to an extent which interfered with their lives. Of 20 fire-fighters who had had an intense exposure to the disaster and had subsequently developed definite or borderline PTSD, only one had consulted a mental health professional (McFarlane, 1988b). This suggests that estimates of the prevalence of difficulties based only on the number of people seeking treatment may be very inaccurate.

Disaster workers are generally involved in a short-lived crisis which takes place in their own community. Following a short period of disaster work, they are often offered psychological

support, and given time off work to recover. Many receive psychological debriefing. Although carefully controlled studies on the effectiveness of debriefing are lacking, surveys suggest that most personnel who report stress symptoms following a critical incident claim to have found debriefing helpful in reducing these symptoms (Robinson & Mitchell, 1993; see also Deahl, Gillham, Thomas, Searle & Srinivasan, 1994).

Most disaster workers return to families and friends soon after the incident. Those who live alone tend to find it more difficult to cope (Woodroffe, 1989). Aid workers, serving away from their own communities, in a different culture, may feel cut-off from their support networks.

Many people involved with emergency work following a disaster only do such work once during their lifetime. Some aid workers, in contrast, spend their working lives involved in one emergency situation after another, facing suffering and poverty daily, over a period of months or years. There may be a cumulative effect of stress. Mitchell (1988) observed that emergency workers who had been "able to demonstrate proficiency in previous stressful situations, may decompensate upon continued exposure to severe stress" (p.205).

Military Research

Military personnel share with aid workers the experience of going to another country for a period of months, to work in what is likely to be a stressful environment.

Research has been conducted on reactions of military personnel who have served in a variety of conflicts. Most research has concerned veterans of the Vietnam war, many studies reporting

chronic adjustment problems among this group (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss, 1990; O'Brien & Hughes, 1991). However, this war was not typical, because of the fierce opposition it provoked, and the rejection of returned veterans by their society.

Research has also found a detrimental effect on mental health following experience in other conflicts (Busuttil, 1995; Mikulincer & Solomon, 1988). Elder and Clipp (1989) reviewed studies of psychological health following experience in various conflicts, and conducted their own research. They found that depression, anxiety, flashbacks, nightmares, irritability and hypersensitive startle reflex commonly continued into later life. One quarter of men who had been involved in "heavy combat" in World War II or the Korean War reported at least one symptom of post-traumatic stress 40 years later. In comparison, only 3-7% of those who had minimal or no fighting experience during the same wars reported stress symptoms. This might suggest that the fighting itself accounted for most of the stress experienced, in which case the "heavy combat" findings might have little relevance for aid workers. There was some evidence that men who were less submissive, more resourceful and more socially competent managed to avoid being selected for heavy combat, and these personality characteristics may also contribute to the differences between the two groups (Elder & Clipp, 1989).

There are obvious differences between combat experience and aid work. One less obvious but important difference is that the military services have developed structures to address the psychological needs of soldiers, and those in command are trained to identify and respond to symptoms of stress (Kaur, 1996). Many

aid organisations do not yet have such structures, and stress reactions among aid workers are more likely to go unnoticed.

Peace-keepers

The experience of peace-keeping may be considered to be more similar to aid work than is combat experience. Peace-keepers, like aid workers, go to another country in order to help and not to fight, and typically remain away from home for longer periods than soldiers involved in combat. They may also feel more powerless and vulnerable, as they are unarmed (Bache & Hommelgaard, 1994). Watching violence while being forbidden to intervene, and being personally humiliated, are described as more stressful than actual combat (Elklit, 1996b). Elklit (1996a, 1996b) reviewed the existing studies of peacekeeping soldiers, and found that only a small percentage of peace-keepers reported any serious, lasting psychological disturbance following missions, although minor difficulties were not uncommon. Egge, Mortensen and Weisaeth (1996) described a "peace keepers' stress syndrome", characterised by, in addition to symptoms of PTSD, considerable fear of losing control of one's aggression. They did not cite any research on the prevalence of such a syndrome.

One of the most thorough studies of peace-keepers was that of Bache and Hommelgaard (1994), who studied 514 Danish United Nations peace-keeping soldiers (all male) after a six-month assignment in Croatia in 1993. 41% of these men reported that they had felt their lives were in danger during this time, 66% had seen hunger and distress, and 77% had at times experienced the mission as hopeless. Six months after repatriation, 16% reported that they "relived" unpleasant events which had occurred during the mission;

16% had feelings of guilt; 28% reported feeling angry more frequently than they had before the deployment, and 38% reported sleeping problems. Other changes reported were increased sadness (24%), indifference (28%), "emptiness inside" (18%), forgetfulness (17%), tension (20%), and withdrawing from others (14%). Nevertheless, only 7% showed lasting, severe reactions, while 90% reported that the mission had to some extent been profitable to them. 72% reported that their self-confidence had increased after the mission, while only 2% reported that it had decreased. Bache and Hommelgaard (1994) observed that the accumulation of several stressful experiences was more likely to lead to psychological difficulties than a single, more dramatic experience.

Those who had severe reactions tended to report having fewer opportunities to speak about the unpleasant experiences they had endured than those who were not badly affected. 63% of the total sample had been able to discuss their unpleasant experiences with others in their team, and this appeared to be helpful. Such group support is not always available for aid workers, some of whom work in isolation. Peace-keeping forces, like military units, generally receive thorough training in dealing with stressful situations (Bache & Hommelgaard, 1994).

The majority of disaster workers, military personnel and peace-keepers who have been studied have been men. Egge, Mortensen and Weisaeth (1996) reported that female peace-keepers were less likely to be repatriated during service than males, but more likely to report PTSD symptoms at follow-up.

A large proportion of aid workers are women. In the current study, differences between the responses of male and female aid workers were considered.

Appendix 2:
Approval from ethical committee

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January 22, 1996

Dr. Debbie Lovell
Clinical Trainee
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Dear Colleague,

Your research proposal (referred to on the attached sheet) has been reviewed by the School of Psychology Ethics Committee and they are satisfied that the research proposed accords with the relevant ethical guidelines.

If you wish to make any substantial modifications to the research project please inform the committee in writing before proceeding. Please also inform the committee as soon as possible if participants experience any unanticipated harm as a result of taking part in your research.

Good luck with your research.

Kath Chitty
Ethics Committee Coordinator

Enc.

c.c. Dr. Robert Jones

Athro a Phennaeth yr Ysgol
Professor and Head of School
C Fergus Lowe, PhD, FBPsS

Appendix 3: Examples of "nonsense answers"

Four questionnaires from the "never going" group were excluded from the analysis because they contained nonsense answers. Examples of such answers were claiming to be two years old; and a student who claimed to be a hermaphrodite Peruvian working as a biscuit-taster, and holding religious beliefs of "ethnodetestation".

Appendix 4: Covering letter

Thank you very much indeed for offering to help me with my research. I should be extremely grateful if you would complete the enclosed questionnaires and return them to me in the envelope provided. Sorry if there seem to be a lot of questions-they should not actually take too long to complete, as most of them only involve circling or ticking a response. Don't worry if you can't reply immediately; there is no hurry. **I am interested in your responses whether your experiences were very positive, very negative, or somewhere in between - I would like to study what sort of things influence this.**

After filling in the questionnaires, you might feel that I have failed to ask you about something important. If you would like to add any extra details, please do so. All responses will be strictly confidential, and so your answers will not influence any future work you may plan, as I will not inform anyone or any organization of your participation in this study. There are no right or wrong answers. Please try to give an honest response; if there are any questions which you do not wish to answer, please leave them blank.

It is hoped that the results of this study will help lead to improvements in preparing people to work overseas, and support when they return. Thus, your experiences overseas can still be of help to others.

If you would like to know the results of the study, please mention this when you return the questionnaire, or contact me at a later date. I am sorry that I am not able to thank everyone individually when I receive the completed questionnaires.

With sincere thanks for your help,

Debbie Lovell (Dr)

PS. If you decide you do not wish to complete the questionnaire, please could you return it in the envelope provided. Many thanks.

Appendix 5: TCIS Questions (Dansky, Roth & Kronenberger, 1989)

For each statement, the respondent is asked to circle the number which best indicates the extent to which he/ she agrees or disagrees.

Strongly disagree			Neutral			Strongly agree
1	2	3	4	5	6	7

1. I am terrified of things.

2. I've lost a part of myself.

3. I feel responsible for the bad things that happen to me.

4. I feel embarrassed.

5. There is something very wrong with me.

6. Other people can never understand how I feel.

7. I feel overwhelmed with emotions.

8. I never trust anyone.

9. I see this world as a bad place to live in.

10. I feel like there isn't anything I can do to manage what happens to me.

11. I have missed out on important parts of life.

12. I'm afraid to allow myself to feel certain feelings.

13. Nothing in this world is any good.

14. I don't think that justice exists in this world.

15. Nobody can understand my feelings.

16. I don't like myself

17. I always end up taking care of others without getting anything in return.

18. I feel isolated from others

19. I believe that I overreacted to what happened to me

20. I believe that there is no rhyme or reason in this world.

21. I feel unable to handle many situations.

22. I feel angry in situations that don't seem to make others feel angry.

23. I can't tell people what happened without feeling embarrassed.

24. I don't trust other people.

25. I blow things way out of proportion.

26. I always give in my relationships and never receive.

27. I often blame myself after bad things happen.

28. I feel alone.

29. I feel afraid.

30. I find myself feeling angry at people.

Appendix 6: STAXI Subscales

The subscales of the STAXI questionnaire are described as follows in the questionnaire manual (Spielberger, 1991):

State Anger: The intensity of angry feelings at a particular time. High scores indicate intense angry feelings. If trait anger and anger-in scores are also high, high elevations in state anger score are likely to reflect chronic rather than situational anger.

Trait Anger: Individual differences in the disposition to experience anger. Persons with high scores frequently experience angry feelings and often feel they are unfairly treated. Has 2 components:

Angry temperament: A general propensity to experience and express anger without specific provocation. High scores suggest an individual is often impulsive and lacking in anger control, but is not necessarily vindictive and vicious in attacking others.

Angry Reaction: The disposition to express anger when criticized or treated unfairly by others. High scorers are highly sensitive to negative evaluation by others.

Anger-in: The frequency with which angry feelings are held in or suppressed.

Anger-out: The tendency to act aggressively toward other people or objects, physically or verbally.

Anger Control: The frequency with which an individual attempts to control expressions of anger.

Anger Expression: A general index of the frequency of anger expression, regardless of the direction of expression. Persons with high scores experience intense angry feelings, which may be suppressed, expressed in aggressive behaviour, or both.

Appendix 7: Information requested with initial questionnaire

Please provide the following details:

Your name.....

Address.....

Date of birth..... Today's date .....

Nationality..... First language.....

Sex: Male/ Female

Marital status ..... Occupation .....

Educational level: School / graduate / post-graduate

IF YOU INTEND TO WORK OVERSEAS IN THE COMING MONTHS

Please state: When do you plan to go?

Where to?

With which organization (if any)?

For how long?

Would you be willing to consider completing a questionnaire while you are away / when you return? Yes /No

IF YOU HAVE WORKED OVERSEAS ALREADY (use overleaf if necessary)

Please state (for each period of aid/ relief/ development/ missionary work):

a) where you have worked overseas

b) when this was

c) whether you were on your own or with family/ friends (and if so, who)

d) how long you were there

e) the type of work you were involved with

f) which organization you were with (if any), and

g) why you returned to the U.K.

What were your main reasons for doing this work?

What was the worst part?

What was the best part?

What did it feel like to return home afterwards?

Did you receive or seek help with any difficulties when you returned home?

Have you ever suffered from depression, a stress disorder, anxiety, over-use of alcohol or drugs, or any other psychological problems? If so, please state when, and whether you have received any treatment.

Do you have any religious beliefs, and if so did these influence your experience in any way?

Any other comments:

Appendix 8: Information requested at follow-up

Name: Today's date:

a) Where were you overseas this time?

b) What were the dates of your visit?

c) Which organisation were you with (if any)?

d) Were you on your own, or with family/ friends? (If so, who?)

e) What type of work were you involved with?

f) What were your reasons for doing this work?

g) What was the worst part?

h) What was the best part?

i) What did it feel like to return home afterwards?

j) Have you received or sought help with any difficulties since returning home (e.g. debriefing, counselling)?

k) Have you ever suffered from depression, a stress disorder, anxiety, over-use of alcohol or drugs, or any other psychological difficulties? If so, please state when, and whether you have received any treatment.

l) Do you have any religious beliefs, and if so, did these influence your experiences in any way?

Any other comments (use overleaf if necessary):

Appendix 9: Demographic data

i) Nationality

All respondents spoke fluent English. Over 90% of each sample reported that they were British, as indicated in Table A.

Table A: Nationality of respondents, by group

NATIONALITY	Returned Group (%)	Preparing Group (%)	Not going Group (%)
BRITAIN	91.7	97.7	93.8
OTHER EUROPEAN	3.5	0.0	4.7
AUSTRALIA/ NEW ZEALAND	2.1	2.3	0.0
USA	0.7	0.0	1.6
SOUTH AFRICA	1.4	0.0	0.0
KOREA	0.7	0.0	0.0

ii) Marital status

This information was not gathered from the "not going" group.

Table B: Marital status of returned and preparing aid workers

	Returned group (%)	Preparing group (%)
Single	59.7	81.4
Married	36.8	18.6
Divorced	3.5	0.0

iii) Educational level

Table C: Educational level of respondents

	Returned group (%)	Preparing group (%)	Not going group (%)
School	16.3	46.3	52.9
Graduate	50.4	31.7	41.2
Post-graduate	33.3	22.0	5.9

iv) Occupation

Respondents were asked to record their occupation; responses were subsequently categorized as shown in Table D. Some respondents recorded "aid worker" without giving further details, and so this was included as a category.

Table D: Occupation for the three groups

	Returned (%)	Preparing (%)	Not going (%)
Student/ recent graduate	11.8	47.6	59.2
Teaching	6.9	4.8	5.6
Health	41.0	16.7	12.7
Charity office	9.0	0.0	0.0
Unemployed	3.5	2.4	7.0
Accounts / bank	2.8	2.4	0.0
Aid work	11.1	16.7	0.0
Housewife	2.8	0.0	0.0
Maintenance	0.7	0.0	0.0
Engineering	2.8	0.0	0.0
Agriculture/ horticulture/ linguistic	4.2	2.4	0.0
Interior design	1.4	2.4	0.0
Retired	0.7	2.4	2.8
Administrative/ factory work	0.7	2.4	9.9
Navy	0.0	0.0	1.4
Clergy	0.7	0.0	1.4

v) Companions in the journey overseas

52.1% of the returned workers reported that they had gone overseas alone, as shown in Table E.

Table E: Whom accompanied respondents overseas? (Returned group)

	%
Alone	52.1
Team	13.9
Partner	12.5
Family	12.5
Friends	6.9
Nationals of country visited	0.7

vi) Location for aid work

Table F: Location of aid work

	Returned group (%)	Preparing group (%)
Africa	43.1	48.7
South or Central America	2.8	35.9
Asia	41.7	2.6
Oceania	2.1	0.0
Europe	10.4	12.8
Middle East	14.6	0.0
Several places	9.7	0.0

vii) Type of aid work (returned group only, n = 141)

Table G: Type of aid work

	%
Health	36.9
Teaching / development	26.2
Various types of work	10.6
Refugee relief work	5.7
Technical / administrative	4.3
Orphanage work	4.3
Agricultural	2.8
Maintenance	2.1
Peace building	1.4
Hospitality	1.4
Disaster relief	0.7
Engineering	0.7
Human rights	0.7
Management	0.7
Publicity	0.7
Research	0.7

Appendix 10: Motive for aid work, best and worst parts, reason for return, and help received on return

i) Motive

Returned aid workers were asked why they had become aid workers. This was an open question. Their responses were categorized as shown in Table H.

Table H: Reason for becoming aid worker

	%
Call of God	24.1
Humanitarian reasons	21.4
Job interest	15.9
For experience	11.7
To work overseas	11.0
Good at it	2.8
Invitation	2.8
Partner is aid worker	1.4
Curiosity	0.7
Escapism	0.7
Missing data	7.6

ii) Best part of the aid work

Respondents were asked the open-ended question, "what was

the best part?" [of the experience overseas]. Responses were subsequently categorized, and frequencies calculated, as shown in Table J.

Table J: Best part of the aid work experience

	%
People; friends made	40.7
Work satisfaction	29.7
New culture and conditions	7.6
Personal development	4.8
The place, countryside, climate, simplicity	4.8
Being in God's will; seeing God work	4.8
Seeing my wife	0.7
Everything/ no response	7.6

iii) Worst part of aid work

Respondents were also asked what the worst part of the experience was, again as an open-ended question. Responses were categorized as shown in Table K.

Table K: Worst part of the aid work experience

	%
Cultural difficulties and frustrations	21.4
Relationship problems / people	17.9
Dissatisfaction with the agency or the work	17.2
Missing home, or problems at home	11.7
Traumatic incidents	7.6
Living conditions / health	6.2
Isolation	4.8
Returning home	4.8
Everything/ no response	8.3

As Table K shows, only 7.6% of the sample reported that the worst part of aid work had been experiencing traumatic incidents. Several respondents who had been shot at or shelled, or witnessed deaths, or lived in conditions of poverty, stated that the worst part of the experience had been personal relationships, or internal politics of the sending organisation. This is in keeping with Johnston's (1983) observation that the majority of the problems reported by missionaries concern interpersonal conflict and frustration.

Personal criticism may be more detrimental to aid workers than being shot at by people who do not know them personally, and on-going frustrations may be more psychologically harmful than short-lived traumatic events. Elklit (1996a) similarly reported

from a study of peacekeeping soldiers that for some people the worst part was not a distressing event, but an enduring state of uncertainty or fear.

This does not render Janoff-Bulman's (1992) theory of shattered assumptions irrelevant for aid workers. The theory encompasses the possibility that belief in a meaningful, benevolent world and in personal worth may be lost in situations of on-going stress (and not only during particular traumatic events).

iv) Reason for return

The reason for returning to the UK was also asked as an open question, and responses categorized as shown in Table L.

Table L: Reason for return home

	%
End of contract / work finished	49.7
New stage in life (e.g. to study; marry; retire)	13.1
Personal / family needs (e.g. illness; marital problems)	13.1
Home assignment (e.g. to raise money)	11.0
No option (e.g. no visa; no funds; evacuated)	4.8
Missing data	8.3

v) Help received

Respondents were asked whether they received help concerning any difficulties when they returned home. Responses were subsequently categorized, as shown in Table M. Some of those who received professional help stated that they had not sought such help until several months after their return.

Table M: Help received on return

	%
No help received	49.7
Professional help (e.g. counsellor or psychiatrist)	20.7
Support from family/ friends/ church/ sending agency	16.6
Debriefing only	9.0
No response	4.1

Appendix 11: Summary of survey on chronic fatique syndrome, and psychiatric problems

The following letter was circulated to the 23 largest organizations using InterHealth, a travel clinic for aid workers. This was followed up by a second letter to organizations which had not responded to the first, and then a phone-call to request additional information about the total number of people who had been serving overseas for six months or more during the same twelve month period.

Five societies did not respond. A further two reported that they did not have any staff working for six months or longer overseas during this period; another society stated that they did not have a record of the data requested, and one was excluded because the figures given did not add up. Thus, the responses of 14 societies were included.

The 14 organizations had 2436 workers serving overseas on contracts of six months or longer during this time. Eight of 466 (1.7%) workers who returned home during this period were known by their organizations to have chronic fatigue syndrome (CFS). Some of those with CFS might have returned early because of their illness, but others were known to have stayed overseas until their contract expired, despite having CFS.

The organizations were aware of other psychiatric problems among 27 of the 466 returnees (5.8%).

It should be noted that some organizations commented that they did not keep in touch with all their returned

workers, and they were aware that some might have had such difficulties without this being known to them, thus these figures might be underestimates. Some societies also commented that they knew of returned aid workers with psychological problems who had refused to seek help, and so had not been professionally diagnosed, and therefore were not included in the figures.

Ref: CFS/TL

7 November, 1996

«Title» «FirstName» «LastName»
«Company»
«Address1»
«Address2»
«Address3»
«Address4»

Dear «FirstName»

I wonder if you could give us some help in carrying out some research which we feel will be useful for mission and aid agencies.

Over the years that InterHealth has been seeing people returning from assignments abroad on behalf of their sending agencies, we have become aware of the large number of returnees who have symptoms of Chronic Fatigue Syndrome (CFS). This problem, in which abnormal fatigue unexplained by physical or psychiatric illness persists for six months and more, has also been called "ME" or "post viral syndrome" (PVS) in the past. It can necessitate repatriation and in some cases cause months and years of debilitation subsequently.

We feel it is important to try to understand factors that may predispose to or trigger CFS in this group of overseas workers, and realise that InterHealth is ideally placed to do this. We plan to set up a research programme to identify these factors, which we hope will lead to suggestions that will reduce this problem among people working abroad.

First, though, we need your help in establishing the scale of the problem. We would be most grateful if you could use your records (and your own memories!) to fill in the enclosed table with respect to adults who have returned to the UK in the 12 months from **1 May 1995** to **30 April 1996**. We are interested in people who have worked abroad for a minimum of six months. We would like to know:

- the number of men and women who have had CFS diagnosed either before or after returning;
- the number of men and women who have had other psychiatric problems (for example, depression, anxiety or abnormal stress reactions) diagnosed before or after returning;
- the total number of men and women returning between these dates, whether well or ill.

We understand that the second category in particular is not well defined, and that some of those returning towards the end of this period may not have yet been given the diagnosis of CFS. However the information will give us a broad picture of the extent of the problem, and help direct further research. Any information you send will, of course, be kept entirely confidential, and in any prepared documents will not be identifiable to your agency.

cont...

Thank you very much for your help with this important problem. Could we have your answers by **1 December**?

I am also enclosing a copy of a letter from Dr . psychologist attached to InterHealth for 6 months, and would be very grateful if you could distribute this to any of your members preparing to go overseas.

Dr

enc

INTERHEALTH CFS SURVEY

ADULTS OVER 18 YEARS RETURNING BETWEEN 01/05/95 AND 30/04/96

Name of Sending Agency: .....

	Men	Women
Diagnosis of CFS		
Diagnosis of other psychiatric problem		
Total number of people returning between these dates who have been on assignment for 6 months or more		

Completed by: .....

Date: .....

Thank you for filling in this form.

Please return to: Dr InterHealth, 157 Waterloo Road., London, SE1 8US

Appendix 12: Questionnaire scores for whole sample

	Returned (n = 134-144)	Preparing (n = 43)	t	df	p
BAI	6.40 (6.76)	8.91 (8.56)	-1.76	58	.08 (sep)
BDI	7.38 (6.62)	5.05 (4.35)	2.68	102	<.01 * (sep)
Int	12.99 (8.93)	6.40 (8.88)	4.20	180	<.001 *
Sang	11.35 (2.72)	10.40 (2.39)	2.06	175	.05 *
Tang	16.55 (4.11)	15.16 (3.24)	2.02	175	.05 *
Tem	5.72 (2.19)	5.12 (1.28)	2.21	124	.03 * (sep)
Rea	8.10 (2.27)	7.42 (2.13)	1.73	175	.09
In	16.57 (3.62)	16.95 (4.07)	-0.58	173	.57
Out	14.13 (3.35)	13.36 (2.97)	1.33	173	.18
Con	23.97 (4.77)	23.90 (5.42)	0.07	173	.94
Ex	23.06 (8.58)	22.60 (7.79)	0.31	173	.76

* p < .05

SEE P. VIII FOR EXPLANATION OF ABBREVIATIONS

"Sep" indicates separate variance estimate; otherwise, the pooled variance estimate was used.

When compared with the group preparing to go overseas, the returned group scored significantly more highly on the measures of depression, intrusion, state and trait anger, and angry temperament. However, these differences should be

viewed with caution, as when the conservative Bonferroni procedure was applied to adjust for multiple comparisons, the only difference which remained significant at the 5% level was the measure of intrusion.

Appendix 13: Comments on religious beliefs, related to meaningfulness

Religious faith may help to maintain belief in a meaningful world. For example, one British aid worker whose husband and friends were murdered in the genocide in Rwanda in 1994 wrote:

> It was like being in the tiny pinpoint of calm at the centre of a massive whirlwind ... I have been stripped in one fell swoop of so much that made up my life - my husband, my home, my job, some of my dear friends ... But at the bottom of it all, God is still there. I *know* he is still in control, and that he *will* bring good out of all this ... It's inexpressibly painful. But in a way it's a mysterious and awesome privilege
>
> (Bilinda, 1996, p. 97-98, italics in original).

The following are a selection of quotations from participants in the current study which further illustrate the association between religious beliefs and meaningfulness:

> [Christian faith] gives a great coherent framework for living, hope in all situations (S6).

> Being a Christian helped me cope with difficult situations at work. Also, if you felt homesick you knew there was a purpose for you being there (S20).

> I use the suffering creatively in the purpose of God

in Jesus Christ (S24).

God's presence - helped me make sense of strange situations (S26).

I am a Roman Catholic and when working in relief programmes and witnessing a lot of death and suffering, I found my spiritual beliefs gave me a lot of comfort and helped me to "lay it all at rest" in my head and come to terms with it all (S103).

Practising Christian. Gave me a framework for coping with pain and suffering around me (S125).

Religious faith appeared to help maintain a sense of meaning, as long as this faith was not shattered. In some cases, experience of aid work led to the loss of religious faith, e.g.:

> I left home for abroad with probably the strongest Christian faith of anyone I knew. I came home with few thoughts of the same (S108).

> Questions have arisen, "why?" ... I believe that as a Christian God has called us and brought me out there [to Africa] for a particular job, and then I can't do it [because of illness], this seems ridiculous [and depressive episodes followed] (S77).

Shattering of religious faith and the sense of meaning it

provided tended to be associated with psychological difficulties.

McCann and Pearlman (1990a) reported that religious beliefs "are particularly vulnerable to disruption after traumatization" (p.276). Grant (1995) stated: "Exposure to violence can destroy feelings of safety, justice, personal efficacy, and faith in humanity, as well as beliefs in a just and loving God" (p.72). Individuals who go overseas with religious beliefs which they have not thought through clearly, may question whether God can truly exist in the face of the suffering they encounter (Carr, 1994). Antonovsky (1987, p.25) stated, "When one thinks there are solutions to all problems, reality imposes itself and one is shattered".

Respondents who were able to maintain their religious beliefs overseas reported that their beliefs were helpful in the face of suffering. Believing in an afterlife (justice reigning after death), and that evil can never destroy intrinsic goodness, may sustain belief in a benevolent, meaningful world, even in the midst of tragedy (Linn, Linn and Linn, 1995). However, those whose faith could not encompass the distress they encountered risked losing their religious faith, and with it their sense of meaning in life.

Appendix 14: Power calculation for follow-up study

Table 55 indicated no significant differences on questionnaires completed before and after a period of short-term aid work, for 17 respondents. It is possible that significant differences would have been found had a larger sample size been used. To determine the size of sample necessary for the results to be significant, a power calculation was conducted for the measure in Table 55 which had the largest t-value, and was nearest to being significant - the avoidance subscale (avo).

The power calculation was made using the computer programme by Borenstein and Cohen (1988). This programme indicated that for power to be .80 (2 tailed), with alpha = 0.05, 66 subjects would be needed.

As multiple comparisons were used, the number of subjects required would in fact be greater than 66.

Appendix 15: Summary of findings (sent to participants and societies)

Within Britain, there are hundreds of organisations which between them send thousands of staff overseas each year to work on emergency aid operations, and longer term relief and development projects. 'Aid work' in this report refers to all such work, and includes the work of missionaries who are involved with relief and development work (such as teaching, medical work, etc).

Aid workers as a group encounter a variety of potentially stressful experiences, including facing widespread poverty, injustice and suffering; overwhelming responsibility and ethical dilemmas; role ambiguity; communication problems; unpredictable circumstances; cross-cultural adjustment; isolation, and risk of illness and injury. Many work very long hours. For some, the most disturbing part of their experience is returning to the home country, and many struggle with 'reverse culture shock'. There has been little research on the psychological adjustment of aid workers on their return to the home country. This study was designed as a response to questions commonly asked by people working with aid workers:

* What proportion of aid workers experience psychological problems during or after a period of aid work, and what types of difficulties do they experience?

* What are some of the vulnerability factors?

* What can be done to help reduce the problem?

In this investigation, 145 returned overseas aid workers, 43 people who were preparing for their first term as aid workers, and 71 people who did not intend to become aid workers, completed a series of questionnaires. Their responses were compared using statistical analyses. The returned group had worked with 62 different aid organisations, and had spent between 1 and 324 months overseas (mean 51 months).

Many of the returned aid workers described their time overseas as a positive, fulfilling experience, during which they had been effective in their work. 60% reported feeling predominantly negative emotions on their return home, while only 15% reported feeling glad or relieved that they were home; the remainder reported mixed feelings or no strong feelings. The most common experiences on return were feeling disorientated and confused, and feeling devastated and bereaved, having left friends overseas.

46% of the returned aid workers stated that they had experienced psychological difficulties either while they were overseas or on their return home. The vast majority of these had never had psychological problems before they

became aid workers, and their difficulties appeared to be related to stressful circumstances overseas, and difficulty readjusting when they returned. Of those who developed problems, 18% reported that they had developed them while overseas, while the remainder had developed them after returning home. Depression was the problem most frequently reported, and had been severe enough in most cases to merit diagnosis from a mental health professional.

People who developed psychological problems had, on average, spent longer as aid workers than those who did not.

Compared with the group of people preparing for their first term as overseas aid workers, returned aid workers had significantly higher mean scores on measures assessing depression, intrusive thoughts and, among women, avoidance. The groups did not differ significantly on scores of anxiety, self-esteem, or anger expression. It appeared to be normal to experience some symptoms of depression and intrusive thoughts (such as having pictures about the time overseas popping suddenly into one's mind, or dreaming about it) following experience as an aid worker. People who accepted these symptoms as a normal part of the readjustment process appeared to adjust better than those who thought that they were 'overreacting'; the latter tended to develop psychological problems.

When compared with people who were not involved with aid work, people preparing to become aid workers and those who had returned appeared to be more self-accepting, and to view the world as a more meaningful and benevolent place. However, a small proportion of returned aid workers expressed views that the world was meaningless (random and unjust), and malevolent. Such views were related to the development of psychological problems.

Implications of the findings

Selection

Selection criteria in most aid organisations have improved during the past 25 years. No members of the group who were preparing to go overseas reported that they had ongoing psychological problems, and their questionnaires indicated that they were a psychologically healthy group. Of a group studied before and after short-term aid work, 23.5% reported that they had psychological problems (depression or an eating disorder) before they began the aid work. Most of these respondents had worked overseas previously, and had been accepted for a further period of aid work without further psychological screening. A thorough screening process used before every aid assignment (and not just the initial assignment), might detect those who are having psychological difficulties, so that they can be offered support, rather than sent back overseas with untreated problems.

Preparation

a) Stress management.

Psychological difficulties were found to be common among returned aid workers. The literature on related

populations, such as the military, indicates that it may be possible to reduce some of these problems with additional preparation. Not all aid workers at present receive training in basic stress management techniques; such training would be beneficial. It might also be useful to inform preparing workers about potential difficulties they might face, so that they can consider in advance how they might deal with these. Aid workers could be trained to recognise and respond appropriately to symptoms of stress among themselves and their colleagues.

b) Normalising difficulties.

There was some evidence that invalidation of feelings (e.g. thinking that one is 'overreacting') might be a vulnerability factor for development of psychological problems. Preparation could include providing information about stress symptoms which are common following aid work, and encouraging people to accept these symptoms as a normal part of the readjustment process.

Length of assignments

Returned aid workers who reported that they had experienced psychological problems were found to have spent significantly longer overseas than those who did not report such problems. This result suggests that it might be worth considering shorter contracts for some aid workers, so that there would be less time for stress to accumulate, and reintegration into life in Britain might be easier. As longer term development work can be very effective, and some people find longer term work very fulfilling, contracts could be renewed after further psychological screening for individuals who wished to continue the work.

Education about psychological difficulties and sources of help

46% of the returned aid workers studied reported that they had experienced psychological difficulties during or after being involved with aid work. Most of these individuals did not seek treatment, or waited many months before seeking treatment, during which time their symptoms became more severe.

Reasons for failing to seek help might have included not knowing where help was available; believing that seeking help would be seen as a sign of weakness; and feeling that they would not be understood by people who had no experience of aid work. One participant wrote:

> My organisation offered no help when I returned. I felt I really needed help from people who really understand the pressures of "re-entry" and the symptoms of burn out ... how vital is support and debriefing in the period following return (S69).

Educating organisations and aid workers about sources of help, and that psychological difficulties are not unusual after returning from aid work, might lead to an increase in the number of individuals seeking treatment.

Health professionals (such as G.P s) could also be encouraged to look out for potential difficulties when visited by returned aid workers, who might not mention psychological difficulties unless specifically asked. Aid workers are more likely to feel "understood" by professionals who are well-informed about this topic.

Only 30% of respondents reported that they had received debriefing or professional help on their return from overseas. A number of respondents expressed annoyance at not being offered any, or adequate, debriefing. Some organisations already offer routine psychological debriefing, and further therapy when appropriate. A recent proposal has urged that all aid organisations should provide this service (Davidson, 1997). It is hoped that by informing organisations about the prevalence of psychological difficulties among returned workers, more organisations will consider this option, and offer debriefing routinely (rather than on request), so that there is no implication that those who accept debriefing are "weak". As one respondent wrote, aid workers "would like to see more counselling services offered ... as a normal part of the returning home process" (S113).

Recovery time

It might also be beneficial for both aid workers and those in contact with them to be aware that return to normality following aid work can be a lengthy process. The mean length of time since respondents had returned from overseas was over 18 months, and yet they still reported having intrusive thoughts about the aid work. Some aid workers return from one assignment and are sent on another within a few weeks. This may not give them sufficient time to overcome stress symptoms, and may lead to problems with cumulative stress.

Treatment implications

The results suggested that aid workers who no longer believed in a benevolent or meaningful world, or in their own worth, tended to experience psychological difficulties. It might be useful to routinely help returned aid workers find a sense of meaning in their experience and in the world, as a strategy aimed at preventing the development of psychological problems. Some forms of debriefing aim to provide this. Among those who have already developed psychological difficulties, it might be useful to offer therapy which attempts to help the client re-establish some belief in a meaningful, benevolent world, and their own self-worth.