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Bereavement: A Behavioural Process

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Sixty-seven widows whose husbands had been killed in the context of sectarian violence in Northern Ireland were assessed in relation to the cause of death, the quality of their marital relationship and the level of worry prior to the loss. Results reported here show that the violent cause of death led to a greater level of long-term psychological distress than other causes of death. Furthermore, widows who reported happiness regarding their marital relationship showed more signs of distress after the loss than those who reported less happiness. Widows who had not worried about their husband showed less signs of psychological distress after the loss than those who had worried. The interpretation of the findings is based on recent thinking in behaviour analysis.

Introduction

While bereavement and loss have become well researched phenomena in general, a number of thanatological issues have received less attention. Three of these will be addressed and analysed here in relation to their effect on bereavement outcome: the cause of death, the quality of the lost relationship and forewarning of impending death. The context in which they are reported here is death caused by sectarian violence in Northern Ireland.

The categorisations of the actual cause of death of a particular person differ considerably in the literature (Prior 1989). Each life is unique and different and so is each person's death. While in a purely medical sense all deaths may be regarded as natural because all deaths are due to the failure of one or more of human organs, this is also the case in a philosophical sense, in that "... it is part of man's lot to die" (Jervis, 1957, cited in Prior, 1989, p. 49). However, for the psychologist it is useful to distinguish different

causes of death because there seems to be a relationship between the cause of death and the behaviour of the bereaved. For such a functional analysis it is useful to distinguish between at least three main categories of death: *Natural* and *anticipated death* which is mainly due to the ageing process or long-term illness, *accidental* and *unexpected death* which is due to man-made or natural disasters, and *death caused deliberately* as is the case in suicide or homicide.

Following a natural or anticipated death the bereaved usually re-adjust within one or two years to an extent that enables them to lead normal, fulfilled and productive lives without the deceased (Parkes & Brown, 1972; Rubin, 1977). This time scale has to be extended in cases where death was caused by man-made or natural accidents or disasters. Recently, more attention has been paid to issues in this context (Gibson, 1991; Hodgkinson & Stewart, 1991). Studies found that death in these circumstances can not only lead to prolonged grief reactions, it can also cause post-traumatic stress syndrome and may lead to other complications in the normal grieving process (Raphael, 1986).

In situations where death was caused deliberately, as is the case in suicide or homicide, the

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prognosis for bereavement outcome is even poorer. Range and Calhoun (1985) studied the effect of suicide on university students and found that those bereaved by suicide were often more negatively viewed by their colleagues than those bereaved by other causes of death. They also found that those bereaved by suicide, when asked about the cause of the death of their loved one, often did not reveal the real cause. They suggested that such behaviours are signs of poor resolution of grief. Ströbe and Ströbe (1987) discussed bereavement outcome following suicide and war casualties and concluded that if the cause of death was traumatic, problematic bereavement outcome was augmented. Individuals who experienced untimely, unexpected, anger- or guilt-provoking bereavement were particularly vulnerable (Michalowski, 1976; Prior, 1989; Raphael, 1977; Sanders, 1989).

The quality of the marital relationship prior to the loss is also thought to have an impact on the conjugally bereaved. While it is obviously difficult to assess the quality of any relationship in retrospect, most researchers rely on reports of the surviving partner for their assessment of the quality of the relationship. Generally speaking, it is thought that people who report happy marital relationships cope better when their spouse dies than people who report ambivalent relationships (Parkes & Weiss, 1983). The bereaved are usually seen as particularly vulnerable if the marital relationship did not meet their needs or fostered a high level of dependency (Raphael, 1977).

However, some researchers noted that the quality of the marriage is not necessarily a good predictor for bereavement outcome (Clayton, Desmarais, & Winokur, 1968). Others have suggested that unhappy or conflicted marriages may in fact be followed by better bereavement outcomes (Gallagher, Thompson & Peterson, 1981-82). It has been suggested that this may be the case because unhappy marriages drain energies from the spouse and that people cope better with the loss after such marriages because the bereavement, in a paradoxical way, seems to have solved the problem. As Gallagher et al. (1981-82) put it: "It seems reasonable to assume that an individual with a satisfactory marital relationship would have a more difficult time coping with

bereavement than an individual with an unsatisfactory relationship - where in fact death of the spouse may come as a relief from marital pressures" (p. 89). Furthermore, it is thought that women who are able to maintain difficult marriages may have developed a variety of coping strategies due to the fact that they did not have the support of their husband when problems occurred. Ströbe and Ströbe (1983) suggested, that widows who were dependent and reliant on their husband as the main source of social support, comfort, and protection may suffer particular strong feelings of deprivation and loneliness after his death.

Lindemann (1944) was the first to turn scientific attention to the effects of forewarning on bereavement outcome. In his war-time studies of persons who experienced separation under the threat of death, he found that people seemed to be able to cope better with death if there had been some forewarning. Lindemann interpreted these findings by suggesting that in such cases the grieving process began when the person was informed of the impending death of their loved and that "grief work" was completed before loss had actually occurred. He coined the term "anticipatory grief" to describe this reaction.

However, Lindemann saw problems if after a time of anticipatory grief the person was reunited with the loved one who was thought to be dying, for example, when a husband unexpectedly returned from the front. He found that in several cases the ensuing problems even led to a break-up of the marriage or relationship. He concluded that "... while this [anticipatory grief] reaction may well form a safeguard against the impact of a sudden death notice, it can turn out to be of disadvantage at the occasion of reunion" (Lindemann, 1944, p.148).

Further research confirmed Lindemann's findings. For example, Glick, Weiss and Parkes (1974) found that in 56% of the cases where a forewarning was given bereavement outcome was satisfactory two and four years after the loss. Only 9% of the people who had been bereaved suddenly and unexpectedly had coped adequately in the same time span. In interpreting their findings these researchers suggested that anticipation mitigates bereavement outcome not because grief

work had begun earlier, but that the value of advance warning was that it allowed emotional preparation. Without emotional preparation, they stated, the message of the sudden death of a loved one was too much to cope with for the bereaved. They concluded that "... loss without preparation seemed almost to overwhelm the adaptive capacities of the individual. Grief may not be augmented, but the capacity to cope seemed diminished" (Glick, Weiss, & Parkes 1974, p. 32).

It can be seen that research into the effects of bereavement has been extensive. Recently, however, researchers and practitioners in the field have increasingly become dissatisfied with the traditional, well established interpretations and theories of bereavement (Greally, 1993). Some claim that, for example, "... stage theories of adjustment are of little value" (Boohan, McGuinness, & Trew, 1993, p. 37). In the search for a new approach, this paper invites the reader to consider the potential contribution to be made by recent developments in the area of behaviour analysis. Details of this approach are deferred to the discussion of the data reported here. These data were obtained from widows whose husbands had been killed in the context of sectarian violence in Northern Ireland. They were assessed for bereavement outcome in relation to the cause of death, the quality of their marital relationship and the level of worry prior to the loss.

Method

Design and Procedure

As the main research tool for the study reported here, the General Health Questionnaire (GHQ-30; Goldberg, Cooper, & Eastwood, 1970) was used. This questionnaire has been tested for its validity and reliability and is widely used to assess "psychological health" in Northern Ireland and Great Britain (Cairns & Wilson, 1985). Furthermore, questions were asked relating to the length of bereavement, the age of the widows, the length and quality of marital relationship, the religious denomination of the widows, their husbands' occupation prior to his death and the level of widows' worry prior to the loss.

The questionnaires were distributed to widows who lost their husbands as a direct result of sectarian violence in Northern Ireland. The majority of the widows were selected from self-help groups¹ which aim to support victims of violence. In order to establish contact with the widows the chair-person² of these groups was contacted and was then asked to distribute the questionnaires. This method was used in order to ensure participation, confidentiality and ethical correctness which are issues particularly pertinent in research of a sensitive areas such as violent death (Dillenburg, 1992). However, there is the obvious danger of bias in this selection method. In order to control for possible bias, postal questionnaires were sent directly to a small number of widows. Return rates from both these methods (41.6% vs. 25.3%) confirmed the use of self-help groups as more effective in terms of engaging participants.

The returned questionnaires were coded and analysed using the SPSS⁺ package. Statistical computation included mean scores and standard deviations, analysis of variance as well as chi-square tests for significance.

Results

Sample

Sixty-seven widows took part in the study reported here. All of them were Northern Irish residents and had lost their husbands as a direct result of sectarian violence. Twenty-five of the widows had been bereaved for less than five years while forty-two of them had been bereaved for more than five years. Six of the widows were less than thirty years of age, thirty-two were between thirty and fifty years old and twenty-nine were over fifty. Twelve of the widows had been married for less than ten years while fifty-five has been married for over ten years. The religious distribution of the widows mirrored the overall religious distribution in Northern Ireland with approximately one third ($n=26/67$) Roman Catholics and the remaining two thirds ($n=41/$

¹ Montgomery and Bell (1985) used similar methodology in their study of police response to wife assault in order to overcome problems of participation as well as to ensure ethical correctness.

² cf. Dillenburg (1992)

67) Non-Catholics. Thirty-six of the widows had been married to security officers while thirty-one of them had been married to civilians.

The effects of cause of death

Since the husbands of all the widows had died as a result of homicide, an earlier population survey in Northern Ireland (cf. Dillenburg, 1992) was used for comparative analysis. This study included a sample of normally bereaved widows. The twelve-question version of the GHQ had been used to assess their psychological well-being. For the total population in this survey ($n=705$) a mean score of 1.0 (SD 1.0) was reported. For married women ($n=240/705$) a mean score of 0.9 (SD 1.9) and for the widows ($n=53/705$) a mean score of 1.2 (SD 2.2) were reported. In order to compare these results with those of the study reported here, the relevant twelve questions were taken from the data collected here and analysed separately. This analysis found that violently bereaved widows ($n=67$) scored a GHQ-12 mean score of 4.6 (SD 3.9).

Quality of lost relationship

Fifty-one of the violently bereaved widows considered their marriage as having been very happy while sixteen reported unhappiness in their marriage (GHQ-30 mean score 11.1 (SD 8.3) vs. 5.8 (SD 6.5)). There was a statistically significant difference in the GHQ mean scores of the two categories of marital happiness ($F(1,63)=5.8$, $p<.01$). Widows who had reported marital happiness scored higher in the GHQ than widows who reported marital unhappiness.

Worry prior to loss

Forty-five of the violently bereaved widows had worried about their husband prior to his death while twenty-two had not worried. A statistically significant relationship was found between security status of the widows and reported worry prior to their husbands' death ($\chi^2=6.3$, $p<.01$). More wives of security officers ($n=29/36$) had worried about their husbands than had civilian widows ($n=16/31$). The GHQ-30 mean scores indicated that widows who had not worried about their husbands scored somewhat lower on the GHQ-30 than those who had wor-

ried (mean scores 8.8 (SD 7.7) vs. 10.3 (SD 8.5)), however, this relationship was not statistically significant.

Discussion

Data reported here clearly indicate that violently bereaved widows scored higher on the GHQ and therefore should be thought of as suffering poorer bereavement outcome than otherwise bereaved widows. Furthermore, widows who reported marital happiness had higher GHQ scores than widows who reported marital dissatisfaction. Security widows worried more about their husband's well-being prior to his death than did civilian widows. In terms of GHQ scores, widows who had reported prior worry scored somewhat higher than widows who reported that they had not worried about their husbands.

Within the context of the thanatological literature mentioned earlier, a traditional discussion of these findings would concentrate on terms such as "anticipatory grief" (Lindemann, 1944), "adaptive capacities of the individual" (Glick, Weiss, & Parkes, 1974), "mental continuation of the relationship" (Flesh, 1975), "leave-taking" (Kübler-Ross, 1969), or "regaining of homeostasis" (Parkes & Weiss, 1983). From a behavioural perspective, however, the use of terms like these only leads to confusion in the search for an explanation of psychological phenomena. It is argued here that terms like "anticipatory grief" or "adaptive capacity" are mistakenly given explanatory status because of a category error (Ryle, 1984) in the analysis of bereavement. That is, because the traditional terms mentioned above function as descriptive labels for observations of specific patterns of behaviour³, they can not then be used to explain the same behaviours.

³ The term 'anticipatory grief' is meant to describe overt behaviours such as crying, talking about the past, talking about plans for the future, talking about death and generally beginning to plan life without a certain person as well as covert behaviours such as feeling sad or thinking about a certain person. The term 'adaptive capacity,' on the other hand, is a more general term that is used to label behaviours such as social skills (e.g., making new friends, managing time and personal lifestyle, being able to work and enjoy leisure activities, or caring for the children) or practical skills (e.g., being able to drive the car, sort out finances, keep the house in order, etc.).

When descriptive labels are used to explain why a person behaves in the way s/he does, we unwittingly engage in a mentalistic analysis⁴ whereby concrete observations are transformed into abstract entities which are then reified and used to explain behaviour (see Baum 1994 for an excellent analysis of the problems of mentalism in mainstream psychology). In the context of the analysis of bereavement the circularity of this argument becomes apparent; a descriptive label for a certain pattern of behaviour (e.g., "anticipatory grieving") is transformed into an abstract entity (e.g., "anticipatory grief") which is then reified and used to explain a behavioural pattern (e.g., "anticipatory grieving")⁵. This kind of circularity not only leads to confusion, it actually impinges on the analysis of what really goes on.

As an alternative approach to the analysis of bereavement, consider a study by Ashkenazi (1977) who was asked to devise a programme for war-time orphans in Israel. Ashkenazi and her colleagues found that certain behaviours that were previously considered to have been caused by the bereavement experience, and thus were considered "normal" for orphans (such as temper tantrums, bed-wetting, thumb sucking, and whining etc.) could actually be increased or decreased depending on the reaction of the carer. In other words, the probability and extent of these behaviours was found to be a function of their consequences. Ashkenazi suggested that, in an effort to reduce their frequency, adults should manage these kinds of behaviours in the same way that they would manage any other child behavioural problem. When orphans were cared for in this way it was found that they adjusted to the loss of their father much more quickly and successfully than those whose carers responded in the traditional way.

Clearly, Ashkenazi's findings suggest that a complex psycho-social process like bereavement is amenable to behaviour analysis. In the section below we outline in more detail aspects of the natural science approach of behaviour analysis that are pertinent to the analysis of bereavement.

Explanation in Behaviour Analysis

In a behavioural analysis an explanation for behaviour⁶ is found in the contingencies to which the individual is exposed. In other words, behaviour is analysed in terms of its antecedents and consequences. Furthermore, an adequate explanation of behavioural phenomena has to take into account contingencies operating at three different levels; phylogenetic, cultural, and ontogenetic (cf. Catania & Harnad, 1988). Skinner (1953) pointed out that:

"In both operant conditioning and evolutionary selection of behavioral characteristics, consequences alter future probability. Reflexes and other innate patterns of behavior evolve because they increase the chances of survival of the species. Operants⁷ grow stronger because they are followed by important consequences in the life of the individual" (p.90).

In terms of bereavement, some of the behaviours that usually occur at the time of separation or loss may be considered to be phylogenetic in origin because they have survival value. For example, behaviours such as crying can be observed across a wide variety of species and in so far as they stimulate reunion and ensure protection (e.g., parents return to their crying young) they can be considered to be adaptive. However, Malott, Whaley, and Malott (1993, p.98) have observed that although crying might occur initially without reinforcement, ontogenetic influences (e.g., the effects of attention) might contribute to its eventual frequency and cause great

⁴ Moore (1981) noted that mentalism is characterised by several explicit or implicit features: "(a) the bifurcation of human experience into a behavioral dimension and a prebehavioral dimension, (b) the use of psychological terms to refer to organocentric entities from the prebehavioral dimension, and (c) the use of organocentric entities as causally effective antecedents in explaining behavior." (p. 62)

⁵ See Lee (1988, Chpt. 5) for a more detailed discussion of the issues that arise when a scientific vocabulary uses action verbs instead of nouns to identify categories of psychological interest.

⁶By way of circumventing any misrepresentation of behaviour analysis as "black box psychology," it is helpful for the reader to consider 'behaviour' generally to be anything that a dead person cannot do.

⁷ An operant is a functional unit of behaviour, i.e., it is a class of responses whose probability of occurrence is affected by their common effect on the environment. (Lee, 1981; Skinner, 1953).

difficulty. Catania (1992) describes how crying can be shaped to become louder and more annoying by delaying the parental response:

"Consider now the parents who always wait before attending to a crying child. They may not notice that they have gradually shaped louder and more annoying cries. The attention strengthens the crying and annoying cries are, by definition, the ones most likely to get attention. The annoying cries have survived, and other non-annoying types of behavior perhaps have extinguished" (p. 1524).

Research on maternal responding to infant crying has shown that this analysis is correct. In fact, studies of crying behaviour in very young babies have shown that this behaviour can be reduced by immediate parental responding; in other words, the frequency of this type of behaviour is a function of its consequences (Gewirtz & Boyd, 1977).

Crying is obviously not the only response to loss and separation. In fact, we usually observe a complex pattern of grieving behaviours when a person has lost a loved one. However, studies of cultural differences⁸ have shown that overall this pattern of grieving behaviour is not uniform. Different patterns of grieving behaviour can be observed in different societies (Irish, Lundquist, & Nelson, 1993). Consequently, if patterns of grieving behaviour are amenable to cultural influences we must assume that they are, at least in part, shaped by the individuals cultural as well as personal experiences. Analysis of the contingencies responsible for such experiences has led to the discovery of a number of basic principles or laws by which human behaviour can be understood (Baldwin & Baldwin, 1986).

Extinction

We suggest that extinction is one of the main principles of behaviour by which many of the reactions to loss can be understood. Generally speaking, extinction is a process by which the frequency of behaviour is reduced due to discontinuation of reinforcement of a previously rein-

forced behaviour (Cooper, Heron & Heward, 1987). Extinction takes place when "... there is no reinforcement associated with a certain behaviour or there is less reinforcement associated with the behaviour than with some superior alternative" (Baldwin & Baldwin, 1986, p. 21). Put simply, behaviour that is exposed to these contingencies ultimately becomes less frequent.

In the case of bereavement, behaviours in question are mainly those behaviours of the bereaved person that characterise the particular relationship which they had with the deceased. In other words, we are concerned with the behaviours they typically engaged in with their spouse before the bereavement. These behaviours (examples obviously depend on the relationship between the two people) were shaped and maintained by complex dynamic contingencies involving mutual reinforcement by each partner. By definition, it is expected that these behaviours undergo extinction when one of the couple dies, i.e., they will become less frequent. Studies of grieving behaviour have, in fact, shown that this is the case (Parkes & Weiss, 1983).

Research into extinction has shown that the actual process of extinction is a complex phenomenon. For example, in the early part of extinction the frequency of behaviour often increases (the so-called "extinction burst" (Sulzer-Azaroff & Mayer, 1991, p. 590)) before it declines. In relation to grieving behaviour, this initial increase in the probability of certain behaviours is often observed shortly after the death of a loved one. For example, during this time the bereaved often experience a period of recurring memories and dreams about the deceased and often they feel the need to speak of the deceased repeatedly (Flesh, 1975). In other words, the frequency of behaviours that were typical for the relationship with the deceased increases for a time. Behaviour analysts are aware that if behaviours are reinforced during the extinction burst the frequency of these behaviours may, in fact, remain higher than it had been prior to extinction (Cooper, Heron & Heward, 1987). This phenomena may help us understand some of the complicated patterns of grieving behaviour, such as so-called "prolonged grieving" or "chronic grieving" (Raphael, 1984).

⁸ See Catania (1992, p.1525) for discussion on cultural selection and transmission of behaviour.

Furthermore, research has shown that as part of the extinction process outbursts of behaviour can occur that can be described as aggressive. Rilling (1977) noted that "... withdrawal of the opportunity for reinforcement is one of the primary determinants of extinction-induced aggression" (p. 469). These findings are useful in the understanding of aggressive feelings (such as anger, guilt or blame) or outbursts of aggressive behaviours (such as revenge seeking or self-injurious behaviour) which have commonly been described as reactions following bereavement (Kübler-Ross, 1969).

Spontaneous recovery

After the extinction process seems completed, another phenomenon often appears. Fantino and Logan (1979) note that: "The response will once again be emitted at a rate reminiscent of that seen prior to extinction" (p. 100). This process is usually referred to as "spontaneous recovery" (Sulzer-Azaroff & Mayer, 1991). This phenomenon can be experienced at times when the bereaved is no longer primarily engaged in behaviours that are directly related to the deceased. The bereaved may feel that they "have gotten over the loss", when suddenly, completely unexpectedly, grieving behaviours re-appear. While this resurgence of behaviours is a normal part of the extinction process it could easily be misunderstood and taken for a sign that "... the extinction procedure is no longer effective" (Cooper, Heron & Heward, 1987, p. 385). In the context of bereavement, people may erroneously conclude that it is a sign of resistance to extinction which leads to complications in the grieving process (Raphael, 1984).

Resistance to extinction

When resistance to the extinction process appears, this can be due to at least two factors. Firstly, repeated exposure to stimuli that have discriminative⁹ functions might foster behaviours even after these had seemingly been successfully extinguished. In the case of grieving behaviours typically observed at anniversaries (Raphael, 1984),

the discriminative function of environmental stimuli (such as certain dates or places) usually does not cause long lasting problems. However, repeated exposure to discriminative stimuli, for example, media reports of violence and murder (a near daily feature of Northern Ireland news reports over the past twenty-five years) can prevent or prolong extinction of grieving behaviours. In this case, we typically observe delays in the rate of extinction, i.e., prolonged periods of grieving. Data reported here suggested that this is, indeed, the case for violently bereaved widows in Northern Ireland. Violently bereaved widows scored much higher in the GHQ (an indication of persistent grieving behaviours) than did otherwise bereaved widows.

The rate of the extinction process also depends on the history of reinforcement prior to extinction. In other words, there is a close link between the way in which behaviours were previously reinforced and the way in which, after withdrawal of reinforcement, these behaviours extinguish (Catania, 1992; Cooper, Heron & Heward, 1987). In the context of an analysis of grieving behaviours this means that patterns of mutual reinforcement between the deceased and the bereaved may be linked with the extinction rate of grieving behaviours. Data reported here regarding the effect of the quality of the marital relationship suggests that such a link can indeed be observed. Widows who reported happiness in their marriage, i.e., who had enjoyed high levels of mutual reinforcement, scored relatively high in the GHQ, an indication of persistent grieving behaviours. Widows who reported unhappiness in their marriage, i.e., who had experienced low levels of mutual reinforcement, scored lower in the GHQ, an indication of low levels of grieving behaviours.

Understanding the relationship between the history of reinforcement and the rate of extinction also offers an explanation of some of the behaviours that typify so-called "anticipatory grief reactions." These responses have been observed in wives either when their husband has been diagnosed as being terminally ill (Parkes & Weiss, 1983), or when he has gone to the front (Lindemann, 1944). In either case, the contingencies associated with the interaction between

⁹ A discriminative stimulus sets the occasion for the emission of a response because of the consequences of past responding in its presence.

wife and husband change long before his death; for example, a terminally ill husband is removed to hospital or hospice (Kübler-Ross, 1969) or a soldier leaves home. In these cases, reinforcements for usual interaction patterns are discontinued and extinction takes place.

The analysis of this process is complicated by the fact that it does not occur in a vacuum. While some behaviours may begin to extinguish, new patterns of behaviour are reinforced. In the case of the husband who is in either a hospital or a hospice, new interactions take place with the spouse (e.g., during hospital visits or by letters). Another context that supports the development of new behaviours is provided by the people who constitute the support group to the wife. It is probably the development of new behavioural patterns alongside the extinction of old behavioural patterns that has a mitigating effect on eventual permanent separation. The whole process is functionally similar to a "fading procedure" (Martin & Pear, 1992).

Anticipation and worry

Data reported here showed that women whose husbands were members of the security forces reported worrying about their husbands' safety more often than women whose husbands were civilians. Security force membership is a highly dangerous occupation in Northern Ireland¹⁰ and as such the situation appears similar to that of women in Lindemann's (1944) war-time study who were said to have anticipated their husbands' death. However, Lindemann's sample coped better with eventual bereavement than did the Northern Irish widows.

A mentalistic interpretation of these different findings would suggest that anticipating is quite different from worrying because the former involves "knowledge of impending death" while the latter involves "anxiety about the possibility of loss". Such an analysis falls short of a comprehensive explanation of the differences in question because it does not recognise that knowledge and anxiety are themselves a function of

different sets of contingencies (see Kohlenberg & Tsai, 1991).

To understand the difference between the acts of anticipating and worrying, then, we have to closely examine the contingencies responsible for these behaviours. The act of anticipating starts at the time when the wife was told that her husband is going to die and it is, therefore, usually linked with major changes for all concerned. The reason why usually less grieving behaviours are observed after the actual death may be due to the fading principle described earlier.

Contingencies responsible for worrying behaviour are quite different. In the context of Northern Ireland, a wife's worrying behaviour is clearly linked with her husband's membership in the security forces. As such, these behaviours have been shaped over a long period of time and are persistent. The fact that widows who had worried about the possibility of their husbands' death scored somewhat higher in the GHQ than those who had not worried, suggests that there may be a synergistic relationship between the extinction of worrying behaviours and the extinction of grieving behaviours.

Conclusion

The call for alternative theories of bereavement has been made by practitioners as well as researchers. Behaviour analysis, applied as well as experimental, offers a new and useful approach to a great variety of complex phenomena (Skinner, 1989). While the tentative analysis offered in this paper suggests that a behavioural analysis of highly emotional behaviours can be undertaken, it has to be noted that more conclusive interpretations must await the findings from future research conducted from a behavioural perspective.

Bereavement counselling based on such an analysis would be functionally defined and proactive. That is, it would focus attention on the contingencies that operate on the behaviour of the bereaved and it would be in a position to suggest changes to those contingencies that lead to maladaptive behaviours (cf. Dillenburg & Keenan, 1993). If this new understanding is applied to bereavement even in violent circum-

¹⁰ Much of paramilitary violence in Northern Ireland is explicitly aimed at members of the security forces (see Hamill, 1986).

stances, we might be able to design our environment, culturally as well as individually, so that we learn to deal with separation and loss more adequately.

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