

**HOPELESSNESS AND THE ANTICIPATION OF POSITIVE AND NEGATIVE
FUTURE EXPERIENCES IN ELDERLY PARASUICIDAL INDIVIDUALS**

and RESEARCH PORTFOLIO

PART ONE

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1. SMALL SCALE SERVICE EVALUATION PROJECT

“Opting-in” to Clinical Psychology Services: Does this improve rates of attendance?

A study looking at referrals across three localities.

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Written in accordance with guidelines for submission to *Clinical Psychology Forum*
(Appendix 1)

Introduction

One of the most consistent challenges to Clinical Psychology departments across the country relates to the question of how to manage their resources, in light of increasing numbers of referrals and the shortage which exists in the numbers of qualified clinical psychologists available to provide services. Over the past six years for example, referrals to Clinical Psychology at Stobhill Hospital, Glasgow, have almost doubled - from 690 referrals in 1990 to 1345 referrals in 1996.

A common method which psychology departments have used to deal with the problem of increasing numbers of referrals has involved the adoption of a waiting list system, which for patients, can involve a wait of up to one year before they are seen by a clinical psychologist. This waiting period is exacerbated by sizeable numbers of “wasted” appointments which result from patients failing to attend their first appointment, the late cancellation of appointments which cannot be allocated to other patients, and patients who “drop-out” of treatment following initial assessment. This represents a considerable waste of the clinical time of highly skilled therapists and adds to the length of time patients will have to spend on the waiting list before being seen. In the Clinical Psychology Department at Stobhill Hospital in Glasgow, figures collected over a four-month period in 1996 indicated the following rates of non-attendance, on average:

Total DNA	23.3%
First appointment DNA	26.1%
Return appointment DNA	10.6%
Cancellations	11.7%

The above figures represent the overall prevalence, across Stobhill's catchment area, of non-attendance in 1996. However, there is considerable variation in rates of non-attendance between the three localities covered by Stobhill, with one locality experiencing a first time appointment DNA rate of 31.3% (Springburn/Possilpark).

Research by Anderson & White (1994) has shown that the introduction of an "opt-in" system requiring patients nearing the top of the waiting list to confirm that they still wish to have an appointment with a clinical psychologist, can be effective in reducing the frequency of first appointment DNAs. Research by Balfour (1986) suggested that if patients have insufficient or incorrect information about a psychology service, this is likely to lead to increased numbers of first appointment DNAs and Webster (1992) found that these can be reduced by the provision of an information leaflet outlining to patients what they can expect during their contact with clinical psychology services. However, more recent studies, such as those of Markman & Beeney (1990) and Keen et al (1996) have suggested that although the provision of an information leaflet can be considered useful by patients and contributes to the overall quality of the clinical psychology service, in order for this approach to be effective in reducing rates of non-attendance, it should be combined with an opt-in system.

In light of the length of clinical psychology waiting lists and rates of non-attendance, the Clinical Psychology Directorate of Greater Glasgow Health Board Community & Mental Health Services NHS Trust decided to make changes in line with some of the above-mentioned research. In 1997, the Directorate decided to implement an opt-in system of the type described above, combined with the provision to patients of an information leaflet,

detailing the types of problems psychologists can help with and what to expect during the first and subsequent appointments. This research aims to evaluate the impact of the introduction of this opt-in system on rates of non-attendance across the catchment area of Stobhill Clinical Psychology Department in the north of Glasgow.

Method

Statistics collated at Stobhill, relating to numbers of patients attending and failing to attend appointments were examined using the Chi-squared test for association and the Chi-squared goodness of fit test (Bland, 1996). Two four-month periods were compared: March - June 1996 was compared with March - June 1997; in terms of the following:

- ◆ Rates of non-attendance: Total Non-attendance; First Appointment DNAs; Return Appointment DNAs; Cancellations.
- ◆ In addition rates of non-attendance for 1997 will be compared with the 1996 figures across the three localities.

Results

Table 1 : Comparison between rates of non-attendance pre- and post-opt-in for Stobhill Clinical Psychology Department

Type of non-attendance	1996	1997	level of significance
Total non-attendance	23.3%	23.3%	n.s.
1 st Appointment DNA	26.1%	19.7%	0.03
Return DNA	10.6%	10.0%	n.s.
Cancellations	11.7%	13.3%	0.02

Table 2 : Comparison across the three localities covered by Stobhill in terms of rates of non-attendance in 1996 and 1997

Strathkelvin	1996	1997	level of significance
Total non-attendance	17.7%	19.6%	n.s.
1 st Appointment DNA	20.3%	17.2%	n.s.
Return DNA	6.9%	7.3%	n.s.
Cancellations	9.7%	12.0%	n.s.
Maryhill			
Total non-attendance	17.6%	26.6%	0.001
1 st Appointment DNA	30.5%	26.3%	n.s.
Return DNA	6.6%	10.0%	0.02
Cancellations	7.9%	15.6%	0.001
Springburn/ Possilpark			
Total non-attendance	36.6%	26.9%	0.001
1 st Appointment DNA	31.3%	15.5%	0.001
Return DNA	20.9%	15.2%	n.s.
Cancellations	17.4%	13.6%	0.02

Discussion

The figures reported within Table 1 indicate that in terms of the total percentage of wasted appointments for Stobhill Clinical Psychology Department as a whole, the introduction of the opt-in system had no significant impact. Overall, the percentage of appointments offered which were subsequently wasted, remained exactly the same in 1997 as it had been in 1996. Similarly, there was no change in the proportion of appointments recorded as return DNAs. The introduction of the opt-in system does seem to have had a beneficial effect on overall rates of 1st appointment DNAs which reduced by 6.4%, a result which is significant at the 3% level. It seems that this reduction has not in turn reduced overall rates of total non-attendance since between 1996 and 1997, the overall frequency of cancelled appointments has increased by 1.6%, an increase significant at the 2% level of significance. This suggests that rather than simply not attending their appointments, patients are telephoning to cancel shortly beforehand and the appointment time is still being wasted. This significant increase in cancellations negates the observed reduction in 1st appointment DNAs, in terms of the effect on the overall rate of non-attendance.

When the data are considered individually by locality however, a more complex picture emerges. It would appear that overall, the Strathkelvin locality has not experienced any significant change in either direction in any of the rates of non-attendance recorded. The Springburn/Possilpark locality appears to have experienced a significant reduction in a number of measures, namely 1st appointment DNAs, cancellations and overall total non-attendance ($p < 0.001$, $p < 0.02$ & $p < 0.001$, respectively). The Maryhill locality has however, experienced a significant increase in a number of the measures of non-attendance recorded and this seems to have had the effect of confounding the statistics for the department as a

whole. The figures for the Maryhill locality indicate that numbers of return DNAs, cancellations and overall total non-attendance have increased significantly in the period 1996/97 ($p < 0.02$, $p < 0.001$ & $p < 0.001$, respectively).

There are a number of hypotheses which can be put forward to explain why the introduction of the opt-in system has had such a differential effect across the three localities. Firstly, it is perhaps not surprising that the opt-in system had no effect on the number of wasted appointments in the Strathkelvin locality since this locality already enjoyed significantly lower rates of non-attendance (Traynor, 1996) which may have been at a level which was unlikely to reduce further.

Rates of non-attendance were particularly high pre-opt-in, in the Springburn/Possilpark locality, an area which in terms of its assigned Jarman Index of 29.4 can be described as socially deprived. Rates of non-attendance were also high in 1996 in the Maryhill locality which has a Jarman Index of 33.2 and were low in Strathkelvin which has a Jarman Index of -0.3. (Traynor, 1996). Studies such as those of Weighill (1983) and Trepka (1986) have indicated that amongst other factors, lower socio-economic status is related to higher rates of non-attendance and vice versa, which certainly appear to be true of the localities covered by Stobhill Clinical Psychology Department. Hershorn (1993) has indicated that certain measures of recent life stability such as rates of unemployment and security of housing tenure are associated with attendance rates, with those with less stable lives having increased rates of non-attendance. It could be argued that for the two localities where socio-economic status is objectively lower as are presumably, measures of life stability, one could expect a reduction in non-attendance following the introduction of a procedure which would filter out those who were unlikely to attend their first appointment, a procedure

which also builds some structure into the treatment situation from the outset. The opt-in system sends a clear message to those referred, that they have a responsibility in initiating and maintaining contact with their psychologist. This appears to have been the result of the introduction of the opt-in system within the Springburn/Possilpark locality, which experienced a considerable reduction in rates of non-attendance. Unfortunately however, the new system did not have the desired effect in the similarly deprived Maryhill locality. This is perhaps a result of the level of upheaval experienced by clinical psychology services within Maryhill during two of the four months in 1997 which were under scrutiny. For two of those months psychology clinics had to be conducted from a number of locations away from the Community Mental Health Resource Centre, one of which was quite far outwith the Maryhill catchment area. It is possible that this led to an increase in total non-attendance since patients were being asked to attend at a venue they were unlikely to be familiar with, outwith their local area. Similarly, the disruption to routine caused by a move back to the Community Mental Health Centre once treatment was underway, may have led to further non-attendance. It would be interesting to scrutinise rates of non-attendance within the Maryhill locality in the second half of 1997 to see if these reduce now that the period of upheaval has passed.

Conclusions

The introduction of the opt-in system does not appear to have had any effect on rates of non-attendance for the Strathkelvin locality. This is likely to be due to the fact that within Strathkelvin rates of non-attendance were already low before the introduction of the opt-in system. The locality which had the highest rates of non-attendance prior to the introduction of the opt-in system, Springburn/Possilpark, has experienced a considerable reduction in

non-attendance on a number of the measures used. Unfortunately, during the months covered by this research, the Maryhill locality experienced a significant increase in non-attendance on a number of the measures and it is hypothesised that this may be due to the considerable upheaval experienced by staff and patients within this locality, during the time period under scrutiny.

The introduction of the opt-in system for referrals to Clinical Psychology at Stobhill Hospital has had a mixed impact and it would therefore be pertinent to reproduce this study in six months to one year's time to monitor its ongoing effects. It may also be pertinent, given the lack of impact of the opt-in system on Strathkelvin's non-attendance rates to consider some of the other strategies which have been piloted to reduce non-attendance and/or waiting lists.

Markman & Beeney (1990) and Farid & Alapont (1993) have suggested that educating GPs on the type of referral which would be appropriately referred to Clinical Psychology and on other services available for those for whom a referral would be inappropriate, would lead to a reduction in waiting lists. Another approach, which has been used in dealing with long waiting lists, has been that which offers two assessment appointments soon after referral, before replacing patients on the waiting list for regular appointments. Geekie (1995) and Westbrook (1995) both found that patients gave positive feedback on this type of system and Geekie (1995) found that overall, patients seen in this way require significantly fewer appointments before discharge, thus reducing the waiting list. A more recent initiative by Blank et al (1996) has indicated that therapist follow-up either by telephone, letter or home visit, following a DNA, significantly reduces the likelihood of further DNAs, thus making more efficient use of therapists' time. It is clear that the

resources of clinical psychologists are unlikely to stretch to the provision of home visits, but perhaps some form of personal communication may be effective in encouraging patients to resume treatment and attend regularly. Since this study has been unable to demonstrate clearly the efficacy of the opt-in system it is perhaps necessary to continue to examine alternative strategies in the battle to reduce clinical psychology waiting lists, given that it is unlikely that sufficient numbers of qualified staff will become available in the near future.

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2. MAJOR RESEARCH PROJECT PROPOSAL

Hopelessness and the Anticipation of Positive and Negative Future Experiences in Elderly Parasuicidal Individuals

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MAJOR RESEARCH PROPOSAL

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Title: Hopelessness and the Anticipation of Positive and Negative Future
Experiences in Elderly Parasuicidal Individuals

Summary: Research is proposed which will study elderly individuals, hospitalised following a parasuicidal act, in an attempt to identify some of the important elements of hopelessness within this population. There is evidence to suggest that suicidal individuals are characterised by a view of the future in which they show decreased anticipation of positive future experiences, in the absence of any increase in anticipation of negative future experiences (MacLeod, 1993, 1997 & 1998). Until now, similar research has overlooked those over the age of 65 years, despite the fact that this age range includes those with the highest rate of suicide in the UK i.e. Males > 75 years (Dennis & Lindesay, 1995).

Parasuicidal participants will be drawn from those admitted to hospitals within Glasgow and Lanarkshire, with two control groups – one depressed and one community – being drawn from psychogeriatric services and community groups respectively. In addition to comparing parasuicidal and control participants in terms of their ability to generate positive and negative expectations regarding their future, the proposed research will attempt to address the question of whether any differences between groups relates to their near or more distant future. It is also intended that the comparison which will be made between the parasuicide group and the depressed controls in terms of their anticipation of the future, should help to determine whether any differences can be attributed to hopelessness per se, as opposed to other factors such as clinically significant depression.

Introduction: The concept of hopelessness has been described by many clinicians and researchers as important in understanding mental health problems such as: depression (Beck et al 1979); parasuicide (Petrie et al 1988); and suicide (Beck et al 1989). However, it is often the case that the term is used in clinical parlance, while the concept itself remains ill defined and under-investigated.

In attempting to elucidate the construct of hopelessness, MacLeod et al (1993) have postulated that one of its central characteristics relates to the individual's anticipation of future events. Using the Personal Future Task (PFT), an adaptation of the traditional verbal fluency task (Lezak, 1976), they found that the parasuicidal individuals who participated in their research were characterised by a view of the future which demonstrated decreased anticipation of positive future events, in the absence of any increase in anticipation of negative future events. Unfortunately, MacLeod et al were unable to identify any clear pattern of results regarding the future time periods under scrutiny, which may have helped to build a clearer picture regarding how parasuicidal individuals view both their near and distant future. In addition, the presentation of the time periods being considered was not counterbalanced, thus order effects could potentially explain the observed results.

Although MacLeod et al's (1993) study began to identify the components of hopelessness, their conclusions were limited by the fact that the majority of the group of parasuicidal participants in their study also met diagnostic criteria for depression. This made it difficult to attribute their observations to hopelessness per se, rather than depression. This question was addressed in a study by MacLeod et al (1997), who differentiated between depressed and non-depressed parasuicidal individuals and concluded that the observed bias in anticipation of positive future events can be explained in terms of hopelessness, rather than

depression. They concluded however, that concurrent depressive symptoms can accentuate this bias. In a subsequent study, MacLeod et al (1998) compared a group of parasuicides at high risk of repetition of self-harm with a non-psychiatric control group and found the same pattern of reduced positive future expectancy in their parasuicide group. They also reported tentative evidence for the efficacy of Manual-Assisted Cognitive Therapy in increasing positive future-thinking and reducing symptoms of depression in their parasuicide group (Evans et al, 1999). However, neither of these studies attempted to control for order effects in the presentation of the PFT.

The research I propose to conduct will attempt to replicate the methodology of MacLeod et al (1993, 1997 & 1998) with some small changes, within a group of elderly participants. It will investigate whether their conclusions regarding hopelessness and the anticipation of positive and negative future events are true of an over 65 year-old population. It is particularly relevant to study the concept of hopelessness within this population, since this group includes those with the highest rate of suicide in the United Kingdom (males > 75 years of age) and epidemiological data suggest that the number of female suicides continues to rise with age (Dennis & Lindesay 1995). In addition, the study of elderly parasuicides appears relevant, since these individuals closely resemble elderly suicide completers in terms of clinical and demographic factors (Merril & Owens, 1990) and are at increased risk of either repeating the attempt or completing suicide (Hepple & Quinton, 1997). Changes to the traditional MacLeod methodology (1993, 1997 & 1998) will involve the collection of information on a range of demographic and clinical variables that have been hypothesised as representing significant risk factors for elderly suicide (Merril & Owens, 1990; Hepple & Quinton, 1997; Dennis & Lindesay, 1995). These variables include: age, sex, marital status and level of social isolation, socio-economic status, physical health problems, history of

psychological dysfunction, and history of parasuicide. In addition, the presentation of the three timescales within the PFT will be counterbalanced.

The study I propose to undertake will be designed in such a way that it also allows an examination of any patterns which may exist in relation to participants' expectations of both their near and more distant future. The traditional view, such as that of Baumeister (1990) suggests that suicidal individuals tend to focus on the near future in an effort to avoid recognising the significance of events in either their past or more distant future. If this is the case, then it would not be surprising to find that suicidal individuals have greater difficulty in generating positive expectations regarding their more distant future.

In addition, since it would be difficult to recruit a group of non-depressed suicidal participants, the study will compare the pattern of responses given by a parasuicide group and depressed controls in order to determine whether the hopelessness associated with suicidal behaviour, or depression, best explains any differences in future-directed thinking. MacLeod et al (1997) suggest that the characteristic reduction in the number of positive future expectancies generated by suicidal participants can be explained in terms of hopelessness rather than depression.

Research Hypotheses:

Elderly parasuicidal individuals will generate fewer positive future expectancies as compared with both control groups.

They will not differ from the control groups in terms of their generation of negative future expectancies.

Elderly parasuicidal individuals will generate fewer positive future expectancies in relation to their longer-term, rather than their short-term, future.

Methodology:

Participants - The parasuicide group will be recruited from consecutive admissions, of individuals over the age of 65 years, to medical and psychiatric receiving wards in Glasgow and Lanarkshire, following parasuicide. Individuals will be seen by a member of the Elderly Psychiatric Liaison service, who will assess their mental state and ability to give consent to participate in the research, before referring them to the first applicant. Individuals who appear to be experiencing a psychotic illness or dementia, in the Psychiatrist's opinion, will be excluded from the study. Participants will be interviewed within seven days of parasuicide.

The depressed control group will be recruited from consecutive referrals to the first applicant, of elderly people with a diagnosis of depressive disorder who do not appear to be experiencing a psychotic illness or dementia. These individuals will be referred from the caseloads of Psychiatrists and Clinical Psychologists working in Elderly Mental Health Services.

The community control group will be recruited from elderly people attending community groups in South Glasgow, who are not currently being seen by mental health services and who volunteer their participation upon hearing of the study.

Design and Procedure - A power analysis conducted using the PC-based package GPOWER (Faul & Erdfelder, 1992) estimated that a total sample size of 66 individuals, (22 participants in each of three groups) would result in 81.81% power of detecting a significant difference at the 5% level of significance ($p < 0.05$). When potential participants have been identified they will be provided with written information explaining the purpose and content of the study. After agreeing to participate and signing a consent form, clinical and demographic data will be collected, including: age, sex, marital status, socio-economic status, level of social isolation, any significant physical illness, any history of psychological dysfunction, number of years since first contact with psychiatric services and history of parasuicide. In addition, the level of suicidal intention in relation to the recent suicidal behaviour of the parasuicide group, will be assessed using the Suicidal Intent Scale (SIS) (Beck, Schuyler & Herman, 1974).

Measures – All participants will then be asked to complete the following measures:

Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith 1983) - to screen for clinically significant depressive symptoms.

Beck Hopelessness Scale (BHS) (Beck et al 1974) - used as a measure of the level of hopelessness of participants.

Verbal Fluency Task (VFT) (Lezak, 1976) - Following on from previous research by MacLeod et al (1993, 1997 & 1998) the standard verbal fluency paradigm will be administered, which requires participants to generate as many words beginning with the letters F, A and S as they can within a thirty second period. This is designed to function both as a preparatory exercise for the main measure and as a means of ensuring that no great differences in terms of cognitive processing skills exist between the groups. Such a

discrepancy would confound interpretation of any observed difference between groups in terms of future-directed thinking.

Personal Future Task (MacLeod et al, 1993, 1997 & 1998) - participants will be given 60 seconds to generate as many positive and negative future life events as they feel are likely to occur within three future time periods (one week, one year and 5-10 years). It will be explained to participants that a positive future expectancy is one that they were looking forward to or think they would enjoy and that a negative future expectancy is one that they think they would not enjoy, or would not look forward to. Participants will be informed that they may cite events that are both trivial and important to them. The presentation of the positive and negative experimental conditions and the different future time periods will be counterbalanced to reduce the possibility of non-specific effects. Participants will be asked for their responses for both positive and negative conditions for each time period presented, before moving on to the next time period. The researcher will write down the future expectancies generated by participants and scores on the PFT will represent a count of the number generated.

The administration of the measures should take approximately one hour including debriefing.

Settings and Equipment – The implementation of this research will rely upon prompt notification by the Psychiatric Liaison Service that an appropriate individual has been admitted to hospital following a parasuicidal act, since such hospitalisations tend to be of short duration. The research protocol will then be conducted by the researcher in the ward (parasuicide group), or at a venue convenient to participants in the control groups.

The production of photocopiable material such as information and consent forms, the provision of measures and the researcher's travelling expenses will be resourced by the Department of Psychological Medicine, Gartnavel Royal Hospital.

Data Analysis – Data gathered during the study will be anonymised and stored on SPSS for Windows on the researcher's password-controlled personal computer. The main experimental hypotheses prescribe a Mixed Design which will compare experimental and control groups in terms of scores on the Personal Future Task, across the three different timescales (Two-Way ANOVA – Mixed). For variables such as scores on the remaining measures administered, One-Way ANOVA – Unrelated would provide an appropriate analysis. Since much of the clinical and demographic information collected will be categorical, comparisons in relation to this data will be made using chi-square.

Practical Applications: The results of the proposed research could have implications for the identification and treatment of suicidal individuals. If vulnerable individuals are characterised by specific deficits in future-directed thinking, it may be possible to identify them on this basis and target them for psychological intervention. A Cognitive-Behavioural approach addressing problem-solving skills and the management of negative thoughts and emotion, may be particularly effective (Evans et al, 1999).

Timescale: It is anticipated that data collection could commence in October 1998 and will take at least six months to complete. Data analysis and report writing should commence in April 1999.

Ethical Approval: Ethical approval was secured from the Multi-Centre Research Ethics Committee in August 1998. Thereafter, ethical approval was secured during September, October and November 1998 from the Ethics Committees associated with each NHS Trust to which parasuicide participants may be admitted and the Trust providing mental health services to the depressed control participants.

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3. MAJOR RESEARCH PROJECT LITERATURE REVIEW

Suicidal Behaviour in the Elderly: A literature review **and new directions for research**

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Abstract

This paper presents a detailed review of the literature pertaining to suicidal behaviour in older adults and indicates that the majority of studies have tended to focus on the identification of clinical and demographic factors, which may increase an individual's risk of self-harm. Although there has been a recent increase in empirical investigation of the psychological factors which may contribute to suicidal behaviour, in the main, these efforts have been focused upon younger adults, which is surprising given the increased risk of suicidal behaviour in older adults. This article provides a summary of some of the main findings of the above-mentioned research with younger adults, in relation to autobiographical memory, problem-solving skills and future-directed thinking. In addition, brief information is provided on the results of what appears to be the only study to date, of hopelessness and future-directed thinking with an elderly population. This paper is intended to highlight the need for further empirical research of this nature with older adults and to suggest new directions which this research could take.

Key words: Elderly; Suicide; Parasuicide; Psychology; Hopelessness; Future-thinking.

Introduction

Suicidal behaviour is seen as a major public health problem in many European countries and in 1992 the European region of the World Health Organisation set as their objective that “by the year 2000, there should be a sustained and continuing reduction of the current rising trends in suicide and attempted suicide” (Schmidtke et al, 1993). Similarly, in the same year the UK Department of Health in their Health of the Nation white paper (Department of Health, 1992), outlined objectives to reduce the overall suicide rate by at least 15% and to reduce the suicide rate of severely ill people by at least 33%, by the year 2000.

In parallel with the official recognition of the need for action to reduce the frequency of suicidal behaviours, a considerable body of research has been developed, which recognises that although the sharpest increase in suicide rates has been amongst 25 – 44 year old males, the highest suicide rates in the population are for males over the age of 75 years and for females, suicide rates consistently rise with increasing age (Merrill & Owens, 1990; Williams & Pollock, 1993; Dennis & Lindesay, 1995; Duckworth & McBride, 1996). This pattern is reproduced in international statistics, since in all but one of the industrialised countries who provide the World Health Organisation with suicide statistics, the highest rates are for males > 75 years (Pearson & Conwell, 1995).

The recognition that elderly individuals are at particularly high risk of suicidal behaviour has led to a considerable amount of research attempting to identify the particular clinical, demographic and psychological factors that may contribute to their increased risk. The methodology utilised in many of these studies has been that of psychological autopsy and casenote review. In addition, since there have been few detailed prospective studies, many

researchers have drawn conclusions from the information available on parasuicidal individuals, those who have engaged in non-fatal suicidal behaviour. Drawing comparisons based on our knowledge of parasuicidal elderly individuals appears justified since many of the clinical and demographic factors associated with this group, closely resemble those of elderly suicide completers. This is not true to the same extent, for middle-aged and younger parasuicidal individuals (Merrill & Owens, 1990; Hepple & Quinton, 1997). This paper presents a summary of the research to date and the information this has provided on those factors associated with suicidal behaviour in the elderly. In addition, new directions for future research are highlighted in a brief review of empirical research studies that have looked at some of the psychological factors associated with suicidal behaviour in younger adults.

Clinical Factors

The majority of elderly suicide victims visit their GP prior to the suicidal act (Barraclough et al, 1974; Caine et al, 1996), but despite this, most (69.1%) have no psychiatric diagnosis at the time of their death (Duckworth & McBride, 1996). In Duckworth & McBride's sample, lifetime prevalence of parasuicide was much lower than in younger suicide victims and for 85.4% of elderly suicides, the first attempt was fatal. Similarly, in Barraclough et al's (1974) sample the majority of elderly suicide victims died in the midst of their first episode of major unipolar depression of mild to moderate severity. Therefore, it is extremely important to recognise and adequately treat at an early stage, those elderly individuals at risk of suicidal behaviour due to depressive illness. In addition, Zweig &

Hinrichsen (1993) found that elderly individuals admitted to hospital following a non-fatal suicide attempt, were much more likely than non-parasuicidal elderly individuals to have experienced a previous suicide attempt, indicating that those elderly who engage in deliberate self-harm are likely to remain vulnerable.

The role of depressive disorder in suicidal behaviour appears well-established since many studies have found evidence to suggest that individuals experience a range of symptoms indicative of depressive disorder, prior to the suicidal behaviour (Pierce, 1987; Lyness et al, 1992; Merrill & Owens, 1990). Similarly, the prevalence of depression in elderly parasuicides has been found to be much higher than in younger parasuicides (Merrill & Owens, 1990). In addition to apparent difficulties in recognising depression in elderly individuals, Merrill & Owens (1990) and Caine et al (1996) have found evidence which suggests that only a minority of those elderly individuals recognised as suffering from a psychiatric illness are given adequate follow-up and treatment. This is despite the fact that Meats et al (1991) have concluded that if given adequate treatment, longer-term outcome is as good for elderly depression sufferers as it is for younger sufferers. Indeed, intensive postgraduate training for GPs on the diagnosis and management of late-life depression has been found to lead to a significant reduction in elderly suicide rates (Rutz et al, 1989), demonstrating the link between untreated depression and completed suicide.

In one of very few prospective studies, Pierce (1987) conducted a 12 year follow-up of elderly people admitted to hospital after deliberate self-harm. He found that those who went on to complete suicide scored significantly higher on admission, on both the Suicidal Intent Scale (Beck et al, 1974) and the Intent Scale (Pierce, 1977) than those individuals who did not subsequently complete suicide. Merrill & Owens (1990), Zweig & Hinrichsen

(1993) and Hepple & Quinton (1997) have also found significant levels of suicidal intent in their samples of elderly parasuicidal individuals, although only Merrill & Owens (1990) administered an objective measure (The Suicidal Intent Scale, Beck et al 1974). Observations of such high levels of suicidal intent may relate to the tendency for elderly individuals to complete suicide at the first attempt (Duckworth & McBride, 1996) and the fact that while the incidence of parasuicide is highest in the young, the incidence of completed suicide is highest in the elderly (Merrill & Owens 1990). Even when unsuccessful in their suicide attempt, elderly individuals have been found to be at increased risk of subsequent completed suicide (Kreitman 1976; Merrill & Owens 1990; Hepple & Quinton 1997). Similarly, using the Beck Hopelessness Scale (Beck et al, 1974) research has identified high rates of hopelessness in elderly parasuicidal individuals and concluded that these feelings tend to persist after remission of the depressive illness (Rifai et al 1994).

Physical health problems are commonly found in studies of elderly individuals who have engaged in both parasuicide and completed suicide with 63% of Pierce's (1987) sample and 67% of Merrill & Owens' (1990) sample reporting significant impairment of physical health. Despite such high incidence of physical illness in suicidal individuals, Duckworth & McBride (1996) found that those individuals suffering from terminal illness, cancer or other chronic physical illnesses were less likely than their non-physically ill peers to be referred for psychiatric assessment. This suggests that mental health problems such as suicidality may not be considered abnormal, or amenable to intervention in such populations.

Demographic Factors

Across all age ranges male suicides outnumber female suicides by approximately 2 : 1 (Williams & Pollock 1993), although parasuicide appears to be more common in women than in men (1.5-2.5 : 1; MacLeod et al 1992). In terms of the statistics for elderly suicidal behaviour a similar pattern emerges with male: female suicide ratios of up to 3.7: 1 (Duckworth & McBride 1996). Elderly males are more likely to complete suicide, whereas elderly women remain more likely to fall into the category of parasuicide (Hepple & Quinton 1997). This could reflect an interaction between increased suicidal intention in elderly males, the tendency of elderly men to use more violent and effective means such as hanging (Dennis & Lindsay 1995) and the tendency of elderly women to deliberately self-harm through overdose (Duckworth & McBride 1996).

Social isolation appears to be a critical risk factor for elderly suicidal behaviour since the highest rates were found amongst divorced, single and widowed individuals, with males in these categories again outnumbering females in terms of self-harm (Hawton & Fagg 1990). The loss of a loved one appears to play a particularly significant role in increasing vulnerability to suicide in the elderly. Rates for married men over 65 years stand at 13 per 100,000 while rates for widowed men > 65 years lie at 51 per 100,000 (Williams & Pollock 1993). However, while Williams & Pollock (1993) provide some evidence that the loss of a spouse might increase the risk of self-harm, this finding should be treated with caution, since they did not control for the recency or emotional impact of, the loss.

The relationship between social class and elderly suicidal behaviour remains unclear. For all age groups, suicide rates are highest in social classes IV and V. In contrast, the one study known to have considered social class and elderly suicidal behaviour (Zweig & Hinrichsen 1993), found significant differences in social class membership between parasuicidal and

non-parasuicidal elderly individuals in their sample, the former belonging to higher social classes. However, it would be unwise to draw firm conclusions from this finding which was based on a sample drawn from a relatively atypical and culturally specific American community. In addition, social class can be related to other aspects of life such as income, education and physical health, therefore the relationship between class and suicidal behaviour in the elderly remains unclear.

Interpersonal Factors

In addition to the hypothesised relationship between social isolation and suicidal behaviour, interpersonal factors may also be important. In a study of deliberate self-harm at all ages, Michel et al (1994) found that when describing the problems they faced, parasuicidal individuals rated interpersonal problems as the most important in creating an unbearable mental state, which individuals attempted to relieve through self-harm. In a study of elderly parasuicide, Zweig & Hinrichson (1993) found that parasuicidal individuals had experienced more interpersonal difficulties than non-parasuicidal individuals including psychiatric problems in a spouse or adult child; and strain in their relationships with close relatives or carers. However, this research did not determine the aetiological significance of these interpersonal problems and did not examine the role of these difficulties in directly initiating deliberate self-harm.

The literature on elderly suicidal behaviour has tended to concentrate on identifying those clinical, demographic and to a lesser extent, interpersonal factors which may contribute to

an individual's vulnerability and many of the risk factors outlined above, consistently emerge from studies. However, in their review of completed suicide in the elderly Dennis & Lindesay (1995) concluded that since there are high rates of depressive symptoms, physical ill health and social isolation in older adults in general, such factors tend to have little predictive validity. They argued that further research is required which specifically addresses those precipitants and risk factors which reliably differentiate between those elderly individuals who are at risk of suicidal behaviour and those who are not. Dennis & Lindesay (1995) have advocated that psychological factors such as hopelessness, suicidal intent and real or perceived levels of social support should be the primary foci of future research.

More recent research in the field of suicidal behaviour has begun to focus attention on cognitive aspects of suicidal intention and behaviour, in an attempt to identify more reliable means of differentiating individuals' vulnerability to deliberate self-harm. Although such research has not yet been conducted with elderly participants, the conclusions drawn from the younger populations involved look promising and deserve further investigation within older age groups. There have so far been two main foci to the research into cognitive aspects of suicidal individuals – problem-solving skills and future-directed thinking.

Problem-solving skills

The research on problem-solving skills has developed from studies investigating autobiographical memory. Teasdale & Fogarty (1979) and Teasdale, Taylor & Fogarty (1980) have reliably demonstrated that by inducing elation or low mood in normal subjects, the time taken to retrieve autobiographical memories is affected. They found that when subjects were induced to experience sad mood, unhappy memories were more likely to be retrieved and conversely, when mood became elated, happy memories became more accessible. Subsequently, Clark & Teasdale (1982) have confirmed these results in a study using depressed individuals who experienced diurnal variation in mood. This demonstrated the interrelationship between mood and cognition, in a clinical population and contributed to a clearer understanding of the complex interaction of variables, that can contribute to the development and maintenance of depressive disorder.

This led Williams & Broadbent (1986) to become interested in the link between emotion and autobiographical memory, which they examined within a parasuicide population. They found that in response to positive and negative cue words, parasuicidal individuals generated fewer positive autobiographical memories than controls and were more likely to retrieve over-general, non-specific memories, particularly in response to positive cue words. Moreover, subjects took longer to retrieve memories which ran counter to their mood i.e. the latency of retrieval was longer for positive memories when mood was low and vice versa. Perhaps surprisingly, they found that parasuicide participants were no different from controls in terms of their retrieval of negative autobiographical memories. In a later study, Williams & Scott (1988) found that depressed subjects were characterised by the same

difficulty. They hypothesised that parasuicidal and depressed individuals experience a specific cognitive deficit which leads to a difficulty in retrieving positive memories from their own experience. They argue that this would in turn lead to a reduction in problem-solving ability, since individuals would not be able to access evidence from memory, regarding strategies that had resulted in positive outcomes in the past.

In relation to problem-solving skills, The Means-End Problem Solving Test (MEPS - Platt, Spivack & Bloom, 1975) presents a number of different problem scenarios and requires that the individual generate as many possible means of arriving at a desired end-point, as they can. The critical clinical factors relate to the total number of possible solutions generated and within these, the number that could be considered relevant or irrelevant. Schotte & Clum (1987) used the MEPS in their research with psychiatric in-patients and found that suicidal patients generated significantly fewer means, fewer relevant means and more irrelevant means than non-suicidal in-patients. Additionally, the suicidal subjects experienced more difficulty in generating relevant solutions to a specific personal problem that had led to their hospitalisation. Using a similar approach, Linehan et al (1987) found that parasuicidal in-patients were more passive in their problem-solving than both suicidal ideators and non-suicidal patients. Similarly, Orbach and colleagues (1990) found that not only did parasuicidal individuals offer more passive, avoidant and less relevant solutions, they tended to rely on others to solve the problems rather than doing so themselves.

In 1992, Evans et al drew together the findings from the two strands of research i.e. autobiographical memory and problem-solving, in a study that considered both factors in a group of parasuicidal individuals. They found that the parasuicide group retrieved significantly over-general, less specific memories in comparison with controls, particularly in

response to positive cue words; and that their latency to first response was significantly delayed. In addition, the parasuicide group produced fewer and less effective problem-solving strategies and Evans et al (1992) argued that the low effectiveness of these was significantly associated with their over-general nature.

The research reviewed suggests that differences in encoding and/or retrieval of information in individuals vulnerable to depressive disorder and/or suicidal behaviour, can lead to specific cognitive deficits in relation to accessing their memory for positive, rewarding experiences. This cognitive deficit may in turn lead to difficulties in generating relevant and detailed potential solutions to problems. If individuals with depression or suicidal intent are characterised by such cognitive deficits, this could account for the success of psychological intervention in such cases (Beck et al, 1979). Self-monitoring and diary-keeping may improve the encoding of experiences, and facilitate improved problem-solving by enabling individuals to access more detailed memories of reinforcing experiences.

Future-directed thinking

Following on from the research evidence which suggests that depressed and suicidal individuals appear to experience difficulty in thinking of their past, more recently, research effort has been invested in an examination of the future-directed thinking of these clinical populations. In doing so, researchers have tended to focus on the concept of hopelessness, which has been described by many clinicians and researchers as important in understanding mental health problems such as depression (Beck et al 1979); parasuicide (Petrie et al

1988); and suicide (Beck et al 1989). Indeed, Salter & Platt (1990) found that hopelessness, as measured by the Beck Hopelessness Scale (BHS - Beck et al, 1974), was a stronger indicator of suicidal intent than depression in a parasuicide population and it is thought to represent the variable which mediates between depression and suicidal behaviour (Minkoff et al, 1973, Beck et al, 1975, Dyer & Kreitman, 1984). However, the Hopelessness Scale, which is a 20-item self-report measure is designed to measure general feelings of hopelessness in relation to the future and does not directly quantify those variables which contribute to the global attitude of hopelessness which people can experience.

In attempting to elucidate the construct of hopelessness, MacLeod et al (1993) postulated that one of its central characteristics relates to the individual's anticipation of future events. They found that the parasuicidal individuals who participated in their research were characterised by a view of the future, which showed decreased anticipation of positive future events, in the absence of any increase in anticipation of negative future events. Unfortunately, MacLeod et al were unable to identify any clear pattern of results regarding the future time periods under scrutiny and so, were unable to draw conclusions regarding how parasuicidal individuals view both their near and distant future.

Although MacLeod et al's (1993) study began to identify the components of hopelessness, their conclusions were limited by the fact that the majority of the group of parasuicidal participants in their study also met diagnostic criteria for depression. This made it difficult to attribute their observations to hopelessness per se, rather than depression. This question was subsequently addressed in a study by MacLeod et al (1997), which differentiated between depressed and non-depressed parasuicidal individuals. They concluded that the

observed bias in anticipation of positive future events could be explained in terms of hopelessness, rather than depression, although they acknowledged that concurrent depressive symptoms can accentuate this bias.

More recently, MacLeod et al (1998) considered future-directed thinking in a group of parasuicides at high risk of repeated self-harm and confirmed the previously observed pattern of decreased positive future expectancy. In addition, they found tentative evidence for the efficacy of Manual-Assisted Cognitive Therapy in increasing the positive future-directed thinking and decreasing the depressive symptoms, of the parasuicide group at follow-up (Evans et al, 1999).

Research has recently been completed (Conaghan, 1999), which represents the first study of specific future-directed thinking in an elderly parasuicide population. This study replicated the methodology of MacLeod et al (1993, 1997 & 1998) with a group of elderly participants and observed a pattern in the parasuicide participants, of reduced positive future expectancy, in the absence of any increase in negative future expectancy. However, due to similarities in future-directed thinking and hopelessness between the parasuicide group and depressed controls, conclusions were necessarily limited and further empirical investigation is required.

It is particularly important that the concept of hopelessness continue to be examined within an elderly population, since this group include those with the highest rate of suicide in the United Kingdom (males > 75 years of age) (Dennis & Lindesay 1995). In addition, it is appropriate to continue to study elderly parasuicides since such individuals closely resemble elderly suicide completers in terms of clinical and demographic factors (Merril & Owens,

1990) and are at increased risk of either repeating the attempt or completing suicide (Hepple & Quinton, 1997). Not surprisingly, with such high rates of completed suicide, suicidal intent and hopelessness have consistently been found to be high in this population (Pierce, 1987; Merrill & Owens, 1990; Zweig & Hinrichsen, 1993; Hepple & Quinton, 1997), although despite this, little research has examined the specific variables which contribute to these affective variables.

Conclusions

A detailed review of the literature pertaining to suicidal behaviour in older adults has indicated that the majority of studies have tended to focus on the identification of clinical and demographic factors, which may increase an individual's risk of self-harm. The methodology utilised by such studies has often been one of psychological autopsy, casenote review and retrospective follow-up of individuals who have engaged in parasuicidal behaviour in the past. Few studies have involved a longitudinal design and although there has been a recent increase in empirical investigation of the psychological factors which may contribute to suicidal behaviour, in the main these efforts have been focused upon younger adults. This is surprising given the increased risk of suicidal behaviour in older adults and requires to be addressed. A summary was provided of some of the main findings of the above-mentioned research with younger adults in relation to autobiographical memory, problem-solving skills and future-directed thinking. In addition, brief information was provided on the results of what appears to be the only study to date, of hopelessness and future-directed thinking with an elderly population. This paper is intended to highlight the

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4. MAJOR RESEARCH PROJECT PAPER

Hopelessness And The Anticipation Of Positive And Negative Future Experiences In Elderly Parasuicidal Individuals

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Abstract

Objective This research examined: a) whether elderly parasuicide patients could be identified by a decrease in positive future-directed thinking in the absence of any increase in negative future-thinking; and b) whether this reduced positive future-thinking was specifically related to their more distant future.

Design A mixed design was used which compared three groups (community controls, depressed controls and parasuicides) in terms of future-directed thinking (positive and negative), in relation to three future time periods (1 week, 1 year and 5 - 10 years).

Methods 22 Parasuicide subjects over 65 years of age, who had been admitted to hospital following a non-fatal suicide attempt were compared with 22 elderly individuals being treated for depression and 22 elderly volunteers, who were not experiencing significant psychological symptoms. The main measure was an adaptation of the traditional verbal fluency paradigm and quantified future-directed thinking.

Results Parasuicide patients showed decreased positive future thinking, but no increase in negative future thinking. The deficit in positive future thinking was not specific to their more distant future. Depressed control subjects also exhibited decreased positive future thinking, confounding interpretation of the results.

Conclusions The results confirm that elderly parasuicides and individuals with depression are characterised by a reduction in positive anticipation and that this may be related to a global attitude of hopelessness.

Introduction

The concept of hopelessness has been described by many clinicians and researchers as important in understanding mental health problems such as depression (Beck et al 1979), parasuicide (Petrie et al 1988, Salter & Platt, 1990), and completed suicide (Beck et al 1985, 1989 & 1990). Hopelessness, as measured by the Beck Hopelessness Scale (Beck et al 1974), has been implicated as the variable which mediates between depression and suicidal behaviour (Minkoff et al, 1973, Beck et al, 1975, Dyer & Kreitman, 1984). However, the Hopelessness Scale, which is a 20-item self-report measure is designed to measure general feelings of hopelessness in relation to the future and does not directly quantify those variables which contribute to the global attitude of hopelessness which people can experience.

In attempting to elucidate the construct of hopelessness, MacLeod et al (1993) postulated that one of its central characteristics relates to an individual's anticipation of future events. They developed a measure, the Personal Future Task (PFT) involving an adaptation of the traditional Verbal Fluency Task (Lezak, 1976), where individuals are required to generate as many exemplars within given categories, inside a time limit. MacLeod et al compared a parasuicide group (mean age = 34 years) with two control groups, in terms of their ability to generate examples of both positive and negative future events which they considered to be likely to occur within a range of time periods. A positive future event was one that the individual was looking forward to or thought they would enjoy and a negative future event was one that they were not looking forward to or thought they would not enjoy. The five timescales examined ranged from 24 hours to 10 years and participants were advised that they could mention events which they considered to be either trivial or important.

They found that in comparison with control subjects, parasuicidal individuals were characterised by a view of the future, which showed decreased anticipation of positive future events, in the absence of any increase in anticipation of negative future events. The majority of the parasuicide group met Research Diagnostic Criteria for depression (Spitzer et al, 1978) however, which meant that the observed differences in future-directed thinking could not be conclusively attributed to either depression or hopelessness. Similarly, MacLeod et al did not counter-balance the presentation of the five time periods, thus naturally leading to their observation that across all groups, participants generated significantly more future events for the short-term than the longer-term, since repetitions were disallowed. Therefore, the observed reduction in positive future-thinking in the parasuicide group could be said to reflect participants' depressive symptoms, or order effects. Baumeister (1990) has argued that parasuicidal individuals tend to focus on the immediate future, avoiding thinking about significant events in their past or more distant future. However, this could not be reliably determined, since the parasuicide group did not consistently differ from both control groups across the timescales. They did however, generate fewer positive future events than one control group, for the timescale 24 hours, which suggests that at least for the immediate future, differences may exist between groups in terms of future-directed thinking. It is not clear however, why this difference was not observed in relation to the second control group.

In subsequent research by MacLeod et al (1997), which differentiated between depressed and non-depressed parasuicidal individuals using their scores on the Hospital Anxiety and Depression Scale (Zigmond & Snaith 1983), it was concluded that the observed bias in anticipation of positive future events can be explained in terms of hopelessness, rather than

depression. This conclusion was made following the observation that both the depressed and non-depressed parasuicides generated significantly fewer positive future events than the control group, although they did not differ from each other on this measure. In addition, a significant negative correlation was observed between scores on the Beck Hopelessness Scale and positive future-directed thinking on the PFT for the parasuicide subjects. Similarly, research by MacLeod et al (1998) which compared a group of parasuicides at high risk of repetition of self-harm with a community control group, found the pattern of decreased positive future expectancy in their parasuicide group. They also reported tentative evidence for the efficacy of Manual-Assisted Cognitive Therapy (Evans et al, 1999) in significantly increasing the parasuicide group's positive future-thinking, and significantly reducing their symptoms of depression. As in MacLeod et al's 1993 study however, both of these studies failed to counter-balance the three timescales presented.

Interestingly, MacLeod et al (1997) found some evidence of increased negative future thinking for the immediate future, in the parasuicide groups. Similarly, in a study by MacLeod & Byrne (1996), which compared anxious, mixed anxious/depressed and control participants, both the anxious and mixed groups generated significantly more negative future events than controls, while only the mixed anxious/depressed group showed a deficit in terms of positive future thinking. This suggests that the pattern of responses on the future-thinking task, of participants with mental health problems, requires further clarification.

This paper reports research which utilised the methodology of MacLeod et al (1993), with some small adaptations. This adapted format was administered with a group of elderly participants, in order to determine if their conclusions regarding hopelessness and the

anticipation of positive and negative future events are true of an over 65 year-old population. Methodological changes made included the collection of information on a range of demographic and clinical variables that have been hypothesised as representing significant risk factors for elderly suicide (Merril & Owens, 1990; Hepple & Quinton, 1997; Dennis & Lindesay, 1995). These variables included: age, sex, marital status and level of social isolation, socio-economic status, physical health problems, history of psychological dysfunction, and history of parasuicide. In addition, the presentation of the three timescales within the Personal Future Task was counterbalanced.

It is particularly important that the concept of hopelessness be examined within an elderly population since this group include those with the highest rate of suicide in the United Kingdom (males > 75 years of age) and epidemiological data suggest that the number of female suicides continues to rise with age (Dennis & Lindesay 1995). In addition, it is appropriate to study elderly parasuicides since such individuals closely resemble elderly suicide completers in terms of clinical and demographic factors (Merril & Owens, 1990) and are at increased risk of either repeating the attempt or completing suicide (Hepple & Quinton, 1997). Not surprisingly, with such high rates of completed suicide, suicidal intent has consistently been found to be high in this population (Merrill & Owens, 1990, Zweig & Hinrichsen, 1993, Hepple & Quinton, 1997), although despite this, little research has examined the cognitive factors which have contributed to this (Conaghan, 1999).

This study also examined whether any patterns exist in relation to participants' expectations of both their near and more distant future. Baumeister (1990) has suggested that suicidal individuals tend to focus on the near future in an effort to avoid recognising the significance of events in either their past or their more distant future. If this contention is accurate,

parasuicidal individuals could be expected to have greater difficulty in generating positive expectations regarding their more distant future. Since it would have proven difficult to recruit non-depressed parasuicide participants (Merrill & Owens, 1990) this study recruited depressed participants for the purposes of comparison, in order to determine whether hopelessness associated with suicidal behaviour, or depression, provided the best explanation for any observed differences in future-directed thinking.

It was hypothesised that elderly parasuicidal individuals would generate fewer positive future expectancies than both control groups, that they would not differ from the control populations in terms of their generation of negative future expectancies and that they would generate fewer positive future expectancies in relation to their longer-term, rather than their short-term, future.

Methodology

Participants - The parasuicide group was drawn from consecutive admissions of individuals over the age of 65 years, to medical and psychiatric receiving wards in Glasgow and Lanarkshire, following parasuicide. Individuals were interviewed by a member of the Elderly Psychiatric Liaison service, who assessed their mental state and ability to give consent to participate in the research, before referring them to the author. Individuals who appeared to be experiencing a psychotic illness or dementia, in the Psychiatrist's opinion, were excluded from the study. The mean delay between parasuicide and taking part in this research was 4 days (Range = 2 - 6 days).

The depressed control group was recruited from consecutive referrals to the author, of elderly people with a diagnosis of depressive disorder, who did not appear to be experiencing a psychotic illness or dementia. These individuals were referred from the caseloads of Psychiatrists and Clinical Psychologists working in Elderly Mental Health Services.

The community control group was recruited from elderly people attending community groups in South Glasgow, who were not currently being seen by mental health services and who volunteered their participation upon hearing of the study. No-one recruited to the community control group was found to be experiencing clinically significant depressive symptoms during their interview, as measured by the Hospital Anxiety and Depression Scale (HAD - Zigmund & Snaith, 1983).

Design and Procedure - A power analysis conducted using the PC-based package GPOWER (Faul & Erdfelder, 1992) estimated that a total sample size of 66 individuals, (22 participants in each of three groups) would result in 81.81% power of detecting a statistically significant result at the 5% level of significance.

When potential participants had been identified they were provided with written information explaining the purpose and content of the study. After agreeing to participate and signing a consent form, clinical and demographic data were collected, including: age, sex, marital status, socio-economic status, level of social isolation, any significant physical illness, any history of psychological dysfunction, number of years since first contact with psychiatric services and history of parasuicide. In addition, level of suicidal intention in relation to the recent suicidal behaviour of the parasuicide group, was assessed using the Suicidal Intent

Scale (SIS) (Beck, Schuyler & Herman, 1974). The median score on the SIS was 18 (Range = 7 - 24), which suggests significant suicidal intent in line with that found in other studies (Dyer & Kreitman, 1984; Pierce, 1987; Ojehagen et al, 1991; Salter & Platt, 1990; Casey, 1989; and O'Donnell et al, 1996).

Measures – All participants then completed the following measures:

Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith 1983) - to screen for clinically significant depressive symptoms.

Beck Hopelessness Scale (BHS) (Beck et al 1974) - used as a measure of the level of hopelessness of participants.

Verbal Fluency Task (VFT) (Lezak, 1976) - Following on from previous research by MacLeod et al (1993, 1997 & 1998) the standard verbal fluency paradigm was administered which required participants to generate as many words beginning with the letters F, A and S as they could within a thirty second period. This was designed to function both as a preparatory exercise for the main measure and as a brief means of ensuring that no great differences in terms of cognitive processing skills existed between the groups. Such a discrepancy would confound interpretation of any observed difference between groups in terms of future-directed thinking.

Personal Future Task (MacLeod et al, 1993, 1997 & 1998) - participants were given 60 seconds to generate as many positive and negative future life events as they felt were likely to occur within three future time periods (one week, one year and 5-10 years). It was explained to participants that a positive future expectancy was one that they were looking forward to or thought they would enjoy and a negative future expectancy was one that they thought they would not enjoy, or were not looking forward to. Participants were informed

that they could cite events that were both trivial and important to them. The presentation of the positive and negative experimental conditions and the different future time periods was counterbalanced to reduce the possibility of non-specific effects. Participants were asked for their responses for both positive and negative conditions for each time period presented, before moving on to the next time period. The researcher wrote down the future expectancies generated by participants and scores on the PFT represent a count of the number generated.

The administration of the measures took approximately one hour including debriefing.

Results

Demographic and Clinical Variables

The mean age was 77.95, 74.68 and 73.14 years, for the community controls, depressed and parasuicide groups respectively. Groups were compared in terms of age using One-Way ANOVA (Unrelated), which indicated a significant main effect ($F = 3.42$, $df(2, 63)$ $p < 0.04$). Post-hoc analysis with Tukey's Honestly Significant Difference Test (HSD) indicated the parasuicide group was significantly younger than the community control group ($p < 0.03$).

Chi-square analyses indicated there were no differences between groups in terms of the ratio of males: females ($\chi=0.59$, $df=2$, n.s.), or socio-economic status as rated by the Standard Occupational Classification (OPCS, 1995) ($\chi=1.04$, $df=2$, n.s.). Groups did not differ in their frequency of contact with family and friends ($\chi=1.65$, $df=2$, n.s.), the impact of

physical illness upon their general functioning ($\chi=5.94$, $df=4$, n.s.) or whether or not they had a history of psychological dysfunction ($\chi=0.53$, $df=2$, n.s.).

The groups differed in terms of marital status, with there being significantly more married individuals in the depressed and parasuicide groups than in the community control group ($\chi = 10.47$, $df = 2$, $p < 0.005$). In addition, the parasuicide group had significantly more participants with a previous history of parasuicide than the depressed ($\chi = 5.50$, $df = 1$, $p < 0.05$), although there were no differences between the parasuicide and community control groups, or the community control and depressed groups, in terms of this variable.

Clinical Measures

HAD Scale Depression scores and BHS scores were analysed using One-Way ANOVA and Tukey's HSD. A significant main effect for group was found for HAD Depression score ($F = 61.66$, $df (2, 63)$ $p < 0.001$) and BHS Score ($F = 19.42$, $df (2, 63)$ $p < 0.001$). The community control group scored significantly lower HAD Depression scores than the depressed and parasuicide groups ($p < 0.001$). In terms of BHS scores, the community control group had significantly lower scores than both the depressed and the parasuicide groups ($p < 0.001$) and the depressed group scored significantly lower than the parasuicide group ($p < 0.001$).

Due to the non-parametric nature of the data, Kruskal-Wallis and Mann-Whitney U analyses, were used to compare groups in terms of HAD Scale Anxiety scores, years since first contact with mental health services and scores on the Verbal Fluency Task. The results of the Kruskal-Wallis tests are reported in terms of the Chi-Square distribution and for the

follow-up Mann-Whitney U tests, the level of significance is reported. There were significant differences between the groups ($\chi=24.01$, $df=2$, $p< 0.001$), with the community control group reporting significantly lower HAD Anxiety scores than both the depressed and parasuicide groups ($p < 0.001$). The depressed and parasuicide groups did not differ significantly. Significant group differences were found for the variable “years since first contact with mental health services” ($\chi=11.04$, $df=2$, $p<0.01$). The depressed group were found to have had their first contact with mental health services significantly more recently than the community control group ($p < 0.001$), but they did not differ from the parasuicide group on this variable. The parasuicide and community control groups did not differ significantly. There were no differences between the three groups in terms of their scores on the Verbal Fluency Task ($\chi=4.41$, $df=2$, n.s.).

Personal Future Task

The mean scores and standard deviations of each group of participants on the Personal Future Task, are represented in Table 1 below.

[Insert Table 1 here]

Analysis was conducted using Two-Way (Mixed) ANOVA which compared the three groups in terms of their scores on the Personal Future Task, across the three timescales i.e. Time (1 week, 1 year, 5 - 10 years) X Valence (Positive, Negative) X Group (community control, depressed, parasuicide). This analysis indicated a significant main effect for Valence ($F = 29.30$, $df = 1$, $p < 0.001$) and a significant Valence X Group Interaction ($F =$

3.80, $df = 1,2$, $p < 0.03$). The effect for time was non-significant, as was the effect for Group. There was no significant Time X Valence X Group Interaction. Post hoc analysis using Tukey's HSD indicated that the community control group generated more positive future expectancies for the next year than the depressed controls ($p < 0.01$) and the parasuicide group ($p < 0.02$). There were no other statistically significant differences between groups for any of the remaining timescales.

Comparisons were made between groups in terms of total positive and negative future expectancies. The effect for Group was found to be non-significant for total negatives generated. A significant main effect for Group was observed in relation to the total number of positives generated ($F = 4.78$, $df (2,63)$, $p < 0.02$). Post-hoc analysis using Tukey's HSD indicated that the community control group generated significantly more positive future expectancies than the depressed controls ($p < 0.02$) and the parasuicides ($p < 0.05$). The depressed and parasuicide groups did not differ significantly.

Correlational analysis indicated a significant negative correlation between BHS scores and total positive future expectancies ($r = -0.31$, $p < 0.05$) which was maintained when VFT scores were controlled ($r = -0.26$, $p < 0.04$). Correlations between BHS scores and total negative future expectancies were non-significant ($r = -0.15$, n.s. and $r = -0.08$, n.s., when VFT scores were controlled).

Discussion

Personal Future Task

The first of the research hypotheses was partially supported, given the significant Group X Valence Interaction observed when comparisons were made between groups in terms of their performance on the Personal Future Task and the significant Group Effect for total positives generated. The parasuicide group generated significantly fewer positive future expectancies than the community control group, although there were no differences between the depressed and parasuicide groups in terms of positives generated. This indicates that when compared with elderly individuals who are not currently experiencing mental health problems, those admitted to hospital following parasuicide are less able to think of positive future events which they are looking forward to. This observation must however, be treated with caution, since no significant differences were found between the parasuicide and depressed groups on the Personal Future Task, making it difficult to determine whether the reduction in positive future-directed thinking observed in both groups, is related to hopelessness or clinically significant depression.

It had been hypothesised that due to increased hopelessness, the parasuicide group would generate fewer positive expectancies than the depressed controls. Since the groups experienced a similar reduction in future-directed thinking, this cannot be reliably attributed to either depression or hopelessness. One reason why the depressed and parasuicide groups could not be reliably differentiated in terms of their PFT scores, may relate to the high level of hopelessness as measured by the BHS, in both groups. Their mean BHS scores were 9.64 and 12.82, respectively, both scores indicating moderate levels of hopelessness, on average. The fact that the BHS successfully differentiated between the depressed and

parasuicide groups, although scores for both groups lay in the symptomatic range, suggests that this measure could, at present, have greater utility than the Personal Future Task in identifying those elderly individuals who are vulnerable to engaging in parasuicidal behaviour.

It could be argued that perhaps the PFT was not sensitive enough to detect any small differences that existed between the depressed and parasuicide groups in terms of future-directed thinking. Alternatively, perhaps no differences between the groups were detected on the PFT because it measured more specific aspects of future-directed thinking than the BHS and there were no actual differences between the two groups. It is possible that the depressed controls in this study differed from those recruited to MacLeod et al's studies (1993, 1997 & 1998) in that these depressed older adults were more similar to the parasuicide group in terms of hopelessness and thus, characterised by a deficit in future-directed thinking. Similarly, it is possible that the delay between parasuicide and participating in this study led to changes in specific future-directed thinking in the parasuicide group. This may have meant that although global attitudes towards the future remained stable (as measured by the BHS), the parasuicide group had more specific events to look forward to since their self-harm e.g. discharge from hospital, spending more time with shocked family members. Further empirical evaluation of future-directed thinking in this population is warranted and should attempt to clarify these issues by recruiting a larger sample including non-depressed parasuicides, incorporating a recognised diagnostic interview, attempting to see parasuicides sooner following deliberate self-harm and by including a reliable measure of current suicidality such as the Scale for Suicidal Ideation (Beck, Kovacs & Weissman, 1979) for all participants. Such methodological changes

should enable any differences between groups in future-directed thinking to be more reliably attributed to hopelessness or depression.

Additionally, further research to identify appropriate BHS norms for each of the three populations who took part in this study would be advisable, in order to clarify the level of hopelessness which is to be expected of older adults with, and without mental health problems. The need for further clarification of norms is highlighted by the observation in this study that although 59.1% of the community control group achieved BHS scores in the “normal range”, the remaining 40.9% of the group had scores within the mild to moderate range in terms of hopelessness.

In combination with the reduction in positive future-directed thinking in the parasuicide group, further evidence of a link between hopelessness and reduced positive future-thinking exists in the form of the significant negative correlation between scores on the BHS and positive future expectancies generated on the Personal Future Task. This indicates that as the level of hopelessness of participants increased, positive future-directed thinking reduced, suggesting that a link between hopelessness and future-directed thinking exists, regardless of participant group.

The second experimental hypothesis was supported by the data. The parasuicide group did not differ from either of the control groups in terms of negative future expectancies generated. This suggests that elderly individuals who have recently engaged in parasuicidal behaviour, view their future no more negatively than their peers. It also confirms the pattern of thinking observed in younger parasuicidal individuals by MacLeod et al (1993, 1997 & 1998). This is an important finding since it suggests that in attempting to clarify the

concept of hopelessness and its relationship to suicidal behaviour, research effort should continue to focus on areas other than, the perceived negativity of the individual's future. The observed significant main effect for Valence indicates that in general, participants were able to think of more things to look forward to than events that they were not looking forward to. This is not a surprising result given that it is perhaps more socially and individually acceptable to discuss positively-valenced future events.

No evidence was found to support the third research hypothesis, that elderly parasuicidal individuals would generate fewer positive future expectancies in relation to their longer-term, rather than their short-term future. There was no significant main effect for Time and the only observed differences between groups on the individual timescales of the PFT, related to positive future-thinking for the next year. Since no differences were found between groups for either the next week or the next 5 - 10 years, no conclusions can be drawn about whether elderly parasuicidal individuals are less positive in relation to the near, or more distant, future.

Clinical and Demographic Data

It is not surprising that the community control group had significantly lower HAD Scale scores than the depressed and parasuicide groups, since this measure was used to screen for clinically significant depressive symptoms, in order that such individuals would be removed from the community control group. The fact that the parasuicide group was found to be significantly younger than the community control group may have some bearing on the observed differences between these groups in terms of future-directed thinking. Replication of this research with a larger sample and more effective control for age would help to clarify

whether the differences in future-directed thinking between these two groups is a function of their age.

It is difficult to evaluate the impact upon future-directed thinking, of the fact that the depressed control group had experienced their first contact with mental health services significantly more recently than the community control group. The depressed controls did not differ significantly from the parasuicide group on this variable, nor did the community control group differ from the parasuicide group. This result may have little relevance in predicting future-directed thinking and to a certain extent is to be expected, since it could be assumed that if a community control participant had been in contact with mental health services in the past, this would have occurred less recently than individuals currently in contact with services. The fact that the community control and parasuicide groups did not differ significantly on this variable may support previous research by Duckworth & McBride (1996) that the majority of elderly suicide completers do not have a psychiatric diagnosis at the time of their death. In this study, the majority of the parasuicide group were not in contact with psychiatric services at the time of their suicide attempt.

The fact that the three groups did not differ on the Verbal Fluency Task, coupled with the fact that the negative correlations between BHS and Personal Future Task performance remained significant after Verbal Fluency Task scores were controlled for, suggests that the pattern of results obtained cannot be attributed to underlying differences in general cognitive processing skills. Similarly, the observation that the groups did not differ in terms of their socio-economic status, level of social isolation, physical health problems, history of psychological dysfunction or sex, suggests that none of these factors exerted undue influence upon the observed results. Therefore, it seems unlikely that in terms of these

variables at least, the parasuicide group's reduced positive future-thinking can be attributed to an objectively more negative reality. However, future research would benefit from addressing this issue more systematically.

In contrast, the fact that the community control group did not differ from the parasuicide group in terms of history of parasuicidal behaviour, is difficult to interpret. Zweig & Hinrichsen (1993) found that elderly parasuicidal individuals were much more likely than non-parasuicidal individuals to have experienced a previous non-fatal suicide attempt. Their finding was not supported by this study. However, Duckworth & McBride (1996) have since found that for 85.4% of elderly suicide completers, the first attempt was fatal, so perhaps those parasuicides who participated in the present study have less in common with those who complete suicide, than with those who have not recently engaged in deliberate self-harm. Another interesting result emerged from the analysis of the marital status of participants, with there being significantly more married individuals in both the depressed and the parasuicidal groups. This is perhaps unexpected, given that the "unmarried" classification, to which the majority of the community control participants belonged, was mainly composed of widowed individuals, a demographic variable that has been shown to be a risk factor for suicidal behaviour in the elderly (Williams & Pollock, 1983). Further research would be necessary in order to disentangle the relationship between marital status and mental health in older adults.

Conclusions

This study, having replicated the methodology of previous researchers (MacLeod et al, 1993, 1997 & 1998) found evidence to suggest that the future-directed thinking of individuals admitted to hospital following recent parasuicide, is characterised by a decrease in positive future expectancy, in the absence of any increase in negative future expectancy. The parasuicide group in this study consisted of older adults, over the age of 65 years and as such, at increased risk of completed suicide (Hepple & Quinton, 1997). There is now a considerable body of evidence to suggest that the hopelessness which characterises those who engage in suicidal behaviour may relate specifically to a difficulty they experience in thinking of positive events which they are looking forward to or might enjoy. The results of this study, which is the first to have investigated future-directed thinking in older adults, suggest that elderly parasuicidal individuals are similar to younger parasuicides in this respect. Unfortunately, no conclusions could be drawn in relation to whether this decreased positive expectancy relates to individuals' thinking regarding their near or more distant future. Suggestions have been made for methodological adaptations to further research, which should clarify some of the issues raised in relation to the findings of this study.

Table 1: Mean Scores and (Standard Deviations) on the Personal Future Task

	Community Control Group	Depressed Controls	Parasuicide Group
<u>POSITIVE</u>			
1 week	3.05 (1.65)	2.32 (1.36)	2.64 (1.59)
1 year	3.09 _a (1.48)	1.86 _{b***} (1.25)	1.95 _{b**} (1.33)
5 - 10 years	3.27 (2.03)	2.18 (1.97)	2.18 (1.37)
Total positives	9.41 _a (4.10)	6.36 _{b**} (3.14)	6.77 _{b*} (3.34)
<u>NEGATIVE</u>			
1 week	2.09 (1.34)	1.68 (1.21)	1.77 (1.31)
1 year	1.68 (1.64)	1.55 (1.01)	1.55 (1.10)
5 - 10 years	2.23 (1.57)	2.09 (1.38)	1.91 (1.38)
Total negatives	6.00 (3.44)	5.32 (2.80)	5.23 (2.86)

N.B. - Those mean scores sharing a subscript horizontally do not differ from one another at the 5% level of significance. Where subscripts differ the level of significance is as follows:

* $p < 0.05$

** $p < 0.02$

*** $p < 0.01$

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1. Clinical Case Research Study 1

**Major Depressive Disorder with Co-Morbid PTSD: A case study
of CBT for functionally separate disorders.**

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Written in accordance with guidelines for submission to *Journal of Consulting and Clinical Psychology*

Abstract

This article presents information on the assessment and treatment of a 27 year-old woman who presented to Clinical Psychology Services with Major Depressive Disorder and co-morbid PTSD. It was hypothesised that in this case, the two disorders were functionally unrelated with depression as the primary disorder and that specific Cognitive-Behavioural Therapy (CBT) targeted at alleviating her depressive symptoms, would have little or no impact upon her PTSD symptoms. It was predicted that her PTSD symptoms would improve only when specific PTSD treatment strategies were subsequently introduced. Consecutively introduced Cognitive-Behavioural interventions were effective in treating both disorders separately. Treatment efficacy was evaluated in terms of symptomatic change and confirmed by the use of a statistical method for single case designs (Yarnold, 1988).

Clinical Case Research Study 2

The Impact of an Integrated Family Therapy Intervention in Treating School Phobia: A case study

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Written in accordance with guidelines for submission to *Journal of Adolescence*

Abstract

Information is presented on the impact of Integrated Family Therapy (Will & Wrate, 1985) upon the assessment and treatment of a 12 year-old boy referred to Child and Family Mental Health Services, with School Phobia. Assessment, treatment intervention and treatment outcome is described. It is concluded that the Integrated Family Therapy model was effective in guiding treatment in this case and requires further empirical investigation and validation.

3. Clinical Case Research Study 3

Cognitive-Behavioural Intervention in the Treatment of Post-stroke Panic Disorder with Agoraphobia: A case study

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Written in accordance with guidelines for submission to *Psychosomatic Medicine*

Abstract

Objective To provide information on the contribution of Cognitive-Behavioural Therapy (CBT) to the assessment and treatment of a 63 year-old man who presented with Panic Disorder with Agoraphobia one year after a left occipital infarct.

Method Following clinical and brief neuropsychological assessment, 11 sessions of CBT was administered, which had been adapted to take account of his cognitive deficits. Issues covered in treatment included anxiety management techniques, in vivo exposure work and cognitive techniques designed to challenge anxiety-provoking thoughts.

Results After 11 sessions the patient was more able to travel independently outwith his home and self-reported anxiety had significantly reduced. The contribution of hypertension to his anxiety symptoms and progress in treatment was highlighted.

Conclusions Using careful ongoing assessment and appropriate adaptations to treatment intervention, some evidence for the efficacy of CBT for Post-stroke anxiety, has been demonstrated.

Key Words: Stroke, Anxiety, Agoraphobia, Psychological Treatment.

CBT = Cognitive-Behavioural Therapy; GAD = Generalised Anxiety Disorder; DSM IV = Diagnostic and Statistical Manual – fourth edition; CVA = Cerebro-Vascular Accident; BAI = Beck Anxiety Inventory; AVLT = Auditory Verbal Learning Task; NATs = Negative Automatic Thoughts; SUDs = Subjective Units of Distress; GP = General Practitioner.