UNDERSTANDING THE NATURE AND FUNCTION OF POSITIVE EXPERIENCES IN LIVING WITH AUDITORY DISABLEMENT

By Patricia Kerr and Dafydd Stephens

Abstract: The aims of this study were threefold; to generate a variable pool describing positive experiences associated with hearing disability; to determine if ability to identify positive experiences associates with specific demographic and audiological characteristics; to establish whether there are differences between the positive experiences cited in terms of perceived "helpfulness" in living with auditory disablement. A convenience sample of 207 audiological rehabilitation patients completed an open-ended questionnaire and a visual analogue scale. 40% of respondents listed one or more positive experiences. Ability to identify positive experiences associated with age (t=4.98; p<0.001, occupational group (X²=6.42; p<0.02) and previous use of a hearing aid (X²=9.7; p<0.002). An analysis of respondents' positive comments generated five core themes - Positive audiological experiences, Self enhancement, Environmental Factors which improve social participation, Positive outcomes and outlooks and Positive social participation. An analysis of "helpfulness" ratings using the visual analogue scale found no difference between the most common positive experiences cited.

INTRODUCTION

Until recently, much of our current knowledge about physical disability has been confined to its negative characteristics of deficit, disadvantage and restriction. However, findings from our research into hearing impairment (Stephens, Jaworski Kerr and Zhao 1998, Kerr and Stephens 1997, Kerr and Cowie 1997, Stewart-Kerr 1991) suggest that the experience of this sensory impairment can incorporate positive as well as negative dimensions. Our work is based on the premise that information about the positive dimensions to living with this disablement can increase rehabilitation effectiveness by a) generating "positive" outcome indicators of functioning for inclusion in the assessment and evaluation components of the rehabilitation process and b) identifying "positive" experiences for inclusion in rehabilitation programmes which seek to maximise effective self management and adjustment to living with auditory disablement (Kerr and Stephens 1999).
Information about positive aspects to the experience of physical disability and chronic illness is not new. Indeed, several sources of positive experience are documented in the disability and chronic illness literature. These sources include events (e.g. Folkman, Moskowitz, Ozer and Park 1997a), activities (e.g. Hyland and Sodergren 1997) changes in existential values e.g. increased appreciation of life (e.g. Cella and Tross 1986, Salmon, Manzi and Valori 1996, Lafortune Fredette 1995, Weinberg and Williams 1978), increased self knowledge (e.g. Sodergren and Hyland 1997, Sodergren and Hyland), and relationship change (Collins, Taylor and Skokan 1990). Furthermore, there is some evidence of links between perceived benefits and morbidity and life satisfaction (Affleck, Tennen and Croog 1987), coping behaviours (Folkman et al 1997b) and adjustment (Salmon et al 1996). In the domain of hearing impairment Kerr and Cowie (1997) presented quantitative evidence that positive experiences were considered by some people, who had acquired their hearing loss in adult life, to be important in affecting the quality of their lives. This evidence also indicated that people who reported benefit from some types of positive experiences were also likely to benefit from others. The positive dimension is also acknowledged in recent draft revisions to the ICIDH-2 framework (WHO, 1998). These documents highlight the inclusion of "positive" outcome indicators in the measurement of function in the context of disablement. Nonetheless, evidence of positive dimensions to the experience of living with physical disability is comparatively limited and overshadowed by the wider body of evidence concerned with negative consequences.

The low impact of "positive" data in the disability literature can be attributed to a number of conceptual and methodological shortcomings. At a conceptual level the positive dimension is inconsistent with the negative emphasis on restriction that has characterised many of the theoretical disability frameworks (e.g. Badley 1987, Peters 1996, Johnston 1997) published subsequent to the original International Classification of Impairment, Disability and Handicap (ICIDH) document (WHO 1980). As a result, conceptual issues pertinent to the function of the positive dimension in the experience of living with a disablement remain under developed. In addition the "positive" literature is characterised by a lack of consensus in terminology. A number of different terms (i.e. positive experience, positive consequences, positive aspects, positive change, advantage, benefit) are used interchangeably. As a result there is little consensus about the meaning of and distinctions between the terms used. Furthermore, although some audiological and psychological theoretical frameworks have included the positive dimension (e.g. Stephens 1997, Folkman et al 1997), it is not clear whether different types of positive

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experience perform different specific functions in living with a physical disablement.

This confusion in the literature about the nature and function of positive experiences in living with a disablement can also be attributed to methodological limitations. "Positive" data have generally been collected from small self-selected convenience samples which are heavily oriented towards specific chronic illness rather than physically disabled groups. Furthermore, in contrast to illness specific samples, disability samples tend to be heterogeneous i.e. representing different disablement groups and it is notable that sensory impairments such as acquired hearing loss and those which affect communication are particularly under-represented. In addition, with a few exceptions, information about positive aspects to disablement tends to be largely confined to findings obtained using qualitative methods (e.g. case study, interviews or open-ended questions). Although this approach has undoubtedly generated a wealth of information the absence of standardised data has inevitably resulted in a rather fragmented picture of the prevalence, types and impacts of different positive experiences on people's overall experience of disablement and how they deal with it. Furthermore, a fundamental limitation to the current "positive" literature is its neglect of the evidence that not all people cite positive experiences. This shortcoming is significant in that it raises fundamental questions about differences in people's experiences of disablement, the function of positive experiences in living with a disablement and the practical implications of positive experiences for the effective delivery of rehabilitative services.

In the context of acquired hearing loss, we are in the process of developing a standardised measure which would assist us in the investigation of these issues. As a first step, we have adapted Stephen's (1980) original self report open-ended "problems questionnaire" to collect qualitative information about the kinds of positive experiences (if any) reported by hearing impaired people. This open-ended question format has proved successful both in audiological (Noble 1998) and general disablement literature (e.g. Weinberg and Williams 1978, Sodergren 1997, Sodergren and Hyland, Collins et al 1990) as a self report tool which sheds fresh light on people's subjective experience of disablement and auditory disablement in particular. Findings from our earlier work using this method (Kerr and Stephens 1997) have generated a pool of 71 potential variable items for inclusion in a standardised measure.

In the follow-up study reported here we sought to extend the original study along three lines. First we sought to determine whether ability to identify positive experiences is associated with
specific demographic and audiological characteristics (e.g. severity of hearing loss). Second, we simply sought to extend and confirm that the original variable pool is represented in a larger separate clinical population sample. In doing so we further sought to identify a set of core themes which would not only form the basis of a standardised measure, but which would also offer hypotheses for testing in subsequent studies investigating the nature and function of positive experiences, in living with auditory disablement. Finally, in addition to the qualitative information describing the nature of people's positive experiences we sought to obtain a quantitative indication of whether particular positive experiences were considered by respondents to be more "helpful" than others in living with auditory disablement.

METHOD

Design: An open-ended self report questionnaire worded as follows - Please make a list of any positive experiences which you have had as a result of your hearing loss. Write down as many as you can think of.

Sample: A convenience sample consisting of 207 (95 male and 112 female) consecutive new patients seen in the audiological rehabilitation clinics of the Welsh Hearing Institute participated in the study. All respondents had acquired hearing disabilities with a mean admitted duration of 14 years (median 9 years). Respondents presented at least a mild hearing loss (i.e. 39.2 dB, Sd 21.2 - difficulty with faint speech) in their better hearing ears and a moderate hearing loss in their worse hearing ears (i.e. 51.8 dB, Sd 28.5 - frequent difficulty with normal speech). A total of 55 (26.6%) respondents had possessed a hearing aid previously and 84 (40.6%) reported also having the related condition tinnitus. The mean age of respondents was 63 years (SD 18 years) and 105 (51.6%) were of non-manual occupational groups.

Data Collection Procedure
Each respondent completed the open-ended questionnaire while waiting to be seen by the doctor or to have their hearing tested. Once completed, the questionnaire was collected by the clinic nurse. In the subsequent consultation with the doctor, respondents were asked to rate how helpful they found each positive experience they had listed on a scale from 0 to 100, (i.e. 0 indicated that the experience was of no help and 100 indicated that it was extremely helpful). Data collection continued until an adequate sample size for data analysis was achieved.

Quantitative Analysis
The quantitative analysis consisted of two stages. The first stage centred on the whole data set. The task here was twofold. First, the analysis sought to
simply quantify (using frequency analysis) the number of people who were/were not able to report a positive experience. Second, we sought to establish (using t-tests and $X^2$ analyses) whether the ability to report positive experiences related to demographic and audiological variables.

At the second stage, the quantitative analysis was confined to those respondents who were able to cite positive experiences. The aim here was threefold - to quantify (using frequency analysis) the number of respondents who scored in each response category (i.e. reported to have encountered each positive experience); to measure (using t-tests and $X^2$ analyses) whether respondents’ category scores associated with their demographic and audiological characteristics; to establish (through statistical analysis of variance) whether there were differences between the response categories in terms of perceived helpfulness as measured by respondents’ numerical scores on the Visual Analogue Scale.

Table 1: Example illustrating Classification Process

<table>
<thead>
<tr>
<th>Stage 3 Primary theme</th>
<th>Positive Audiological Experiences</th>
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<th>Stage 2: Secondary &quot;sub&quot; themes</th>
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<tr>
<td>Reduced Disturbance from unwanted noise</td>
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<tr>
<td>Communication Strategies</td>
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<tr>
<td>Successful Communication</td>
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</tbody>
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<th>Stage 1: Response categories (examples)</th>
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<tr>
<td>not bothered by noise while asleep</td>
</tr>
<tr>
<td>I &quot;switch off&quot;</td>
</tr>
<tr>
<td>traffic noise</td>
</tr>
<tr>
<td>noisy neighbours</td>
</tr>
<tr>
<td>I use humour</td>
</tr>
<tr>
<td>I can follow sub-titles</td>
</tr>
<tr>
<td>I look directly at people</td>
</tr>
<tr>
<td>I tell people I can't hear</td>
</tr>
<tr>
<td>I can hear certain sounds</td>
</tr>
<tr>
<td>I can speak on the phone</td>
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</tbody>
</table>

Qualitative Analysis
The aim of the qualitative analysis was a) to generate and confirm individual variable items for inclusion in a standardised measure and b) to identify common themes underlying people’s descriptions of positive experiences. The analysis consisted of three stages. The procedure is summarised in the following table.
At stages 1 and 2 each respondent was assigned a score of 1 if they listed a response corresponding to the categories (stage 1) or theme (stage 2). At stage 1, 62 response categories emerged. At stage 2 the categories were grouped to form secondary/sub themes. Each respondent was coded to a secondary theme if he/she scored in at least one of the response categories corresponding to that theme. At this stage the original 62 response categories were reduced to 14 secondary/sub themes. At stage 3, the 14 secondary/sub themes were reduced to a core set of 5 primary themes which underlie respondents’ descriptive statements about the types of positive experiences they encounter as a result of their hearing loss.

RESULTS

Of the 207 respondents, eighty three (40.1%) listed one or more positive experiences in living with their hearing impairment. The number of positive experiences listed across respondents ranged from one to seven, with a mean of 2.0.

1. Demographic/Audiological characteristics and ability to report positive experiences

We were interested to know whether the ability to cite positive experiences associated with any demographic characteristics in our patient group. In the first instance, using the whole data set, we compared those subjects listing one or more positive experiences with those listing none.

Three demographic factors were significantly related to the likelihood of the individual reporting one or more positive experiences; age, occupational group, and whether or not the individual had had a hearing aid previously. Thus, those listing positive experiences were younger (56.6 years versus 68.8 years; t=4.98; P<0.001), more likely to have had previous hearing aid(s) (58% vs 30%; $X^2 = 9.7$; P<0.002) and more likely to come from non-manual occupational groups (48% vs 30%; $X^2 = 6.42$; P<0.02). On the other hand, gender, severity of hearing loss, duration of hearing disability and the presence of tinnitus were not related to the likelihood of the individual reporting positive experiences.

2. Positive Experiences: Primary Response Themes

Table 2 shows the 5 primary themes along with corresponding secondary/sub themes and the numbers of respondents who score in each secondary/sub theme.

Two themes (Positive audiological experiences, Positive outcomes and outlooks) are specific to audiology. The remaining three themes are consistent with themes identified in the wider "positive" literature. The latter point is important from an audiological rehabilitation perspective, in that it suggests that the sensory disability of
acquired hearing loss shares "positive" features associated with other physical disablements and chronic illness.

Table 2 Primary Positive Experience themes with corresponding secondary themes and number of respondents scoring in each

No. Respondents scoring in at least one response category grouped to each secondary theme

1. **POSITIVE AUDIOLOGICAL EXPERIENCES**
   - Reduced disturbance from unwanted sounds 43
   - Communication strategies 24
   - Successful communication 4

2. **SELF ENHANCEMENT**
   - Affinity to other deaf and disabled groups 15
   - Perceived Self development 14
   - Stigma management 1

3. **ENVIRONMENTAL FACTORS WHICH IMPROVE SOCIAL PARTICIPATION**
   - Technical aids 7
   - Communicative & social support 6
   - Professional support 2

4. **POSITIVE OUTCOMES AND OUTLOOKS**
   - Using hearing loss to self advantage 6
   - Positive reappraisal 3

5. **POSITIVE EXPERIENCES OF SOCIAL PARTICIPATION**
   - Leisure 2
   - Employment aspects 2
   - Able to drive/look after others 1

1. **POSITIVE AUDIOLOGICAL EXPERIENCES**
   The first core theme - Positive audiological experiences - underpins three secondary/sub themes (i.e. Reduced disturbance from unwanted noise, communication strategies and successful communicative functioning). These three sub themes, although specific to hearing loss, describe quite different sources of positive experience.
The response categories grouped in the first secondary/sub theme labeled "Reduced disturbance from unwanted noise" describe the loss of "annoying" sounds as one source of positive experience. This theme contained the highest number of respondents (43) who scored in at least one response category. The most frequently cited response categories grouped in this theme describe reduced disruption of sleep from noise (11) reduced disturbance from traffic noise (9) and noisy neighbours (7) as sources of positive experience. The remaining response categories describe reduced disturbance from a range of sounds including music (5), thunder (4), street noise (4), television noise (3), children screaming (3), people shouting (2) house noises (2) and miscellaneous (e.g. dog barking, doorbells etc) noises (14). The key point here is that through the recognition of situations where the loss of hearing can be a pleasant experience, respondents are able to redefine the meaning of hearing loss in a positive beneficial context.

The second most frequently (24) reported source of "positive" audiological experience reported by respondents describe "Communication strategies". This secondary theme describes a range of behavioural "coping" strategies employed to manage communication as a source of positive experience. Respondents cite; using humour to repair communication breakdown (8), increased awareness of speech clarity (4), "switching off" (4), facing/looking directly at people in conversation (2), withdrawing from conversation (2), smiling (1), disclosing the hearing loss (1), positioning the self (1), switching the hearing aid off (1) and guessing (1) as sources of positive experience. Respondents' comments relating to this theme suggests that it is the experience of engaging in the behaviour rather than the outcome (i.e. successful communication) which is the main source of benefit.

The point above is further supported by the comparatively low number of respondents (4) who cite the third theme - "Successful communicative functioning." These respondents report being able to lip-read (1), hear certain sounds (1), follow television subtitles (1), and understand speech (2).

In sum, these three sub themes describe different audiological sources of positive experience. These sources describe a) a redefinition of the meaning of hearing impairment in terms of gain rather than deficit; b) specific behavioural changes employed to increase communicative functioning and c) the achievement of successful auditory and communicative functioning.

2. SELF ENHANCEMENT
The next core theme - Self enhancement - is common to three distinct secondary/sub themes (i.e. "Affinity to other deaf and disabled people", "Perceived self
development", "Stigma management"). This core theme describes various non-audiological sources of positive experience and reflects theoretical developments in both the psychological coping and disablement literatures.

The first "sub" theme - "Affinity to other disabled and deaf people" - is the most frequently reported (15) non-audiological source of positive experience cited by respondents. The response categories corresponding to this theme indicate that these respondents benefit from a process of self enhancement gained through positive social comparison with other hearing impaired and disabled groups. Specific sources of positive experience reported are increased awareness/insight into problems of hearing impaired people (8), greater awareness of other disabled people (1), awareness of other people's difficulties (2) feeling sorry for people who are really deaf (1), seeing things from the other person's perspective (1), marvelling at the achievements of the blind (1) and becoming more sympathetic towards others (1).

The second sub theme - "Perceived self development" - is cited by 14 people as a source of positive experience. Some response categories grouped to this theme describe the acquisition of communication related skills. These include perceived improved concentration (5), motivation to learn sign language (2), and lip-reading (2). These categories are distinct from those grouped to the communication strategy sub theme, in that they describe the acquisition and improvement of new cognitive and behavioural skills required to perform specific communication behaviours (e.g. sign and lip-reading). The self development theme also includes response categories which describe perceived growth in specific aspects of respondent's personality (e.g. becoming more observant or more patient) since the onset of hearing loss. The final sub theme - "Stigma Management" - contains a single response category corresponding to a comment from one respondent who cited "having her hair done to cover her hearing aid" as a positive experience. This comment has been grouped to the primary core theme as it reflects a "cosmetic" approach to self enhancement.

3. ENVIRONMENTAL FACTORS WHICH IMPROVE SOCIAL PARTICIPATION
This third primary non-audiological theme encompasses three sub themes, cited by much smaller numbers of respondents and describe benefit from various environmental communicative aids (i.e. "Technical," "Communicative and social support," "Professional support").

Seven people cite "Technical aids" which maximize speech comprehension i.e. teletext (1), hearing aids (1), electronic communication (1), telephone aids (3), loop system (1) and tv
amplifier (1) as a source of positive experience.

Six people cite "Communicative and Social Support from Hearing People" as a source of positive experience. Of these, three respondents acknowledge the behavioural efforts that hearing people, including children, make to communicate with them. Four people describe instances of emotional support and two describe benefit from informational support. The comments from two respondents who report benefit from "Professional Support" in terms of staff in the rehabilitation clinic and sign language teachers showing understanding of hearing loss are also grouped with this primary theme of communicative and social support.

4. POSITIVE OUTCOMES AND OUTLOOKS
This fourth primary theme encompasses two secondary themes (i.e. "Using hearing loss to self advantage," "Positive reappraisal") which reflect respondents' perceptions of gains and positive outlooks associated with their hearing loss.

Six people cite "Using hearing loss to self advantage" in certain situations i.e. as an excuse to avoid unwanted interactions (4), to carry out a preferred activity (1), and "incidental" gains (1) (e.g. missing one's turn to buy a round of drinks). In contrast to the wider disablement literature where the terms "self advantage" or "gains" refer to incidental benefits such as access to statutory benefits and entitlements to specific treatment (e.g. Weinberg and Williams, 1978, Sodergren 1997), the findings here indicate that gains can also be initiated by respondents to manage specific situations in a way that will achieve a desired outcome.

The "Positive reappraisal" sub theme corresponds to responses from only three people. They describe being grateful for the hearing they have, an appreciation that hearing loss has influenced their career choice in life, and the realisation that there is more to deafness than just not hearing loss. This theme describes an existential source of positive experience in which people evaluate the meaning of their disablement within the broader context of their life and is consistent with findings in the chronic illness literature (e.g. Salmon et al 1996).

5. POSITIVE EXPERIENCES OF SOCIAL PARTICIPATION
The final core theme describes everyday activities that involve social participation (i.e. Employment and Leisure) as sources of positive experience. There are two interesting observations about these sub themes. The first is the low number of respondents who cite leisure and employment activities as a sources of positive experience, particularly given the high representation of younger groups of working age in the sample.
The second observation is that the positive examples of social participation cited describe mainly solitary rather than interactive activities.

**Single positive responses**

Of the 84 respondents who cited positive experiences 37 cited just one positive experience. It was therefore interesting to establish whether the single positive experiences were confined to positive audiological experiences only. An examination of the response categories generated by the single responses group reveals that the responses listed describe both audiological and non audiological aspects of hearing loss and reflect the four most frequently cited secondary themes in the main data set (i.e. Reduced disturbance from unwanted noise, Communication strategies, Affinity to other deaf and disabled people and Self development).

3. **Association of specific positive experiences with demographic/audiological characteristics.**

Given the small number (84) of respondents who were able to cite specific positive experiences, further quantitative analyses of the reduced data set were limited. Where appropriate, $X^2$ tests of association were carried out but no significant relationships between respondents’ audiological and demographic characteristics with their scores in either the secondary positive themes or specific response categories were found.

A more substantial data set was produced from respondents’ ratings (using the visual analogue scale) measuring the extent to which they found the particular positive experiences they cited as helpful in living with their hearing loss. The "helpfulness" ratings varied from 5 to 100. The mean rating across all positive experiences was 66.4 with a median of 70. Most subjects gave similar ratings to all positive experiences. Amongst the most frequently reported experience themes, the mean rating for Reduced disturbance was 60.0, Communication strategies 69.6, Affinity with other people with disabilities 60.8 and Perceived self-development 63.8. An analysis of variance showed no significant difference between the ratings of the different types of positive experiences.

**DISCUSSION**

The first aim of this study was to determine if ability to identify positive experiences associated with specific demographic and audiological characteristics (e.g. severity of hearing loss). A frequency analysis of total sample (N=207) responses indicated that 40% of respondents were able to report at least one or more positive experiences. This represents a higher proportion of respondents than in our previous (Kerr and Stephens 1997) study (20%) in
which the questionnaires were mailed to the subjects and confirms Noble's (1998) observation of higher return rates in the collection of self report data using interview methods.

Results from the quantitative analysis presented here showed that those who report positive experiences are more likely to have had a hearing aid previously, to be of a younger age group (of working age) and to represent non manual occupational groups. A comparison of these findings with those in the wider disablement literature is inconclusive due to the current preponderance of self selected "positive" samples, small sample sizes in comparison studies, and the diversity of specific "positive" data sets such as events, (Ryff 1989), belief changes (Collins et al. 1990) and positive functioning (Zautra et al 1990).

Nonetheless, the fact remains that the majority (60%) of respondents were unable to identify any positive experiences. Three possible explanations can be offered for this finding. The most obvious explanation is that these respondents simply do not experience any positive aspects to their experience of auditory disablement. The findings presented here suggest that the influence of individual differences in the ability to perceive positive experiences may offer one source of explanation. From this perspective information about the influence of other sources of individual difference not investigated here (e.g. presence of other disabilities and psychological differences such as personality, memory, etc.) would be potentially beneficial to our understanding of the perception of positive experiences among different client groups and their implications for rehabilitative intervention.

However, the argument that the (in)ability to report positive experience is due to fundamental group differences is weakened by a finding from our earlier work that people who reported positive experiences also reported negative experiences (Kerr and Stephens 1997, Kerr and Cowie 1997). These earlier findings suggest an alternative explanation - that people respond differently to the consequences of their hearing impairment. From this perspective, the ability to identify positive experiences reflects the effectiveness of specific coping responses in terms of changes in functioning. This perspective has been incorporated into recent theoretical frameworks in the psychological literature on coping (e.g. Folkman et al 1997a, Folkman et al 1997b) to which we will return later.

However, at this stage it is perhaps useful to warn against confusing the ability to report positive experiences as an indicator of coping effectiveness with the ability to cite positive experiences as an indicator of adjustment. Implicit in the latter term is
the assumption that respondents have reached a stage where they no longer require rehabilitative input. The evidence from our work that respondents can cite both positive and negative experiences suggests otherwise. Furthermore, the finding that 40% of respondents seeking rehabilitative assistance were able to identify positive experiences on their first visit suggests that these respondents were already adopting "self management" responses to the effects of their auditory disablement prior to the formal process of rehabilitation. The question is therefore whether the effectiveness of their coping responses to the various dimensions of this disablement can be increased through the inclusion of positive information into their rehabilitation programme.

A third explanation for the substantial number of respondents who did not cite positive experiences is methodological. It must be recognised that as the results were derived from a convenience sample it was not possible to control for the influence of various sources of sample bias. Another limitation is that the open ended format of the questionnaire requires respondents to be able to have some degree of self insight and ability to articulate their experiences on paper, particularly less tangible experiences (e.g. positive re-evaluation). It is also possible that these respondents failed to understand what was meant by the term "positive experience". This is not surprising given the diversity of terms prevailing in the empirical literature. However, the intention not to operationalise the term "positive experience" for respondents was necessary to generate a pool of items that represented the various subjective "meanings" that respondents attached to the term. Another explanation for the high proportion of "non positive responders" may simply be that on a first visit to the rehabilitation clinic, negative aspects are of more concern to respondents. Furthermore, in the context of a clinical situation, some may have been reluctant to cite positive experiences if their expectation was to receive specific deficit orientated rehabilitation.

The second aim of this study was to simply confirm the original variable pool (Kerr and Stephens 1997) and to identify a set of core themes which would offer hypotheses for testing in subsequent studies investigating the function of positive experiences in living with auditory disablement. With regards to the positive data set, the findings presented here are broadly consistent with the secondary themes identified in our earlier work (Kerr and Stephens 1997, Stephens et al 1998) and the additional response categories extend the item pool. The findings here indicate that the pool of variables generated by describing positive experiences in the context of auditory disablement is now comprehensive enough from which to develop a standardised measure.
In terms of generating hypotheses for further investigation into the nature and function of positive experiences, the findings from the current study suggest that one potential line of enquiry centres on whether the domain of positive experience is a uni or multi-dimensional construct. The findings from Kerr and Cowie (1997) and the findings reported here are inconclusive (due to methodological differences). Both studies identify different sources of positive experience. Some of the themes and response categories reported here describe experiences which are essentially intrinsic and subjective (e.g. "Reduced disturbance from noise", the experience of "Successful communication", the experience of "Social participation"). Other themes (e.g. Self Enhancement, Positive reappraisal) describe positive experience in terms of different individual belief systems that a person may have about the self, others, disablement and life in general. A third type of positive experience describes certain behavioural responses (e.g. Communication strategies, Using hearing loss to self advantage). The latter two groups of positive experience appear to reflect changes in both cognitive and behavioural functioning and suggest that for some respondents they benefit overall well being in ways that are not measured by current cognitive and behavioural outcome indicators. Additional sources of positive experience describe external events/social situations (e.g. employment) or structures (e.g. technical aids and social relationships) that improve the experience of social participation. Given the diversity of positive experiences described, we define the term positive experience as "any intrinsic experience, state or belief, or extrinsic behaviour, event, or physical or social structure that people consider to be a source of mental, physical, spiritual, social or emotional benefit in their lives."

Although the findings by Kerr and Cowie (1997), using factor analysis, showed that different types of positive experience grouped together, i.e. people who benefited from some kinds of experience also reported benefit from others, the item pool was comparatively smaller and did not reflect the diversity of experiences reported here. Consequently the question of whether the nature of positive experiences is uni or multi-dimensional remains unresolved at this stage.

The third aim of the current study was to obtain a quantitative indication of whether particular positive experiences were considered by respondents to be more "helpful" than others in living with auditory disablement. This aim represented a preliminary step in the investigation of the function(s) of positive experiences in living with a physical disablement and their potential implications for rehabilitative intervention. The findings from analysis of the visual analogue scale (VAS) data shed little light on the issue. The
limited information gained from the VAS approach can be attributed to the observation (Steiner and Norman 1995) that visual analogue scales are not sensitive enough to measure real differences. It is possible that different positive experiences do perform quite different functions and that these are not reflected in the term "helpful". It therefore cannot be assumed that different positive experiences affect the overall experience of disablement to the same extent and in the same way. The limitations to the question about how "helpful" positive experiences are to living with hearing loss are not simply confined to matters of measurement. The question is also about the process by which positive experiences are incorporated into, and contribute to people's overall experience of disablement. In this context, the question about the function of different positive experiences may be more effectively investigated in the future using qualitative rather than quantitative methods of enquiry, and confined to specific domains of positive experience.

At a theoretical level, there have been some recent developments in the audiological and psychological literature which offer potential frameworks in which to further investigate the function of positive experiences further. In the context of auditory disablement, Stephens (1997) incorporates the positive dimension into a model of auditory disability as a means to reduce the overall experience of handicap. This framework offers a number of pointers for further investigation. One potential line of enquiry centres on the nature of the relationship between the perception of positive experiences (both in general and specific) and perceived handicap (both global and specific). A second potential line of enquiry centres on the influence of positive experiences on people's behavioural responses to handicap situations, and a third centres on the impact of positive experiences on a person's overall experience of disablement and well-being.

Recent theoretical developments from the psychological literature on coping also offer potential frameworks in which to further investigate the function of some of the specific positive experience themes cited here. Some of the themes generated in this study are consistent with the proposal by Folkman et al (1997a) that positive events in general perform specific coping functions. Some of the findings supported here (e.g."Successful communication", and "Self development") are consistent with the "sustainer" function which helps to motivate coping and the "restorer" (e.g. "Social and communicative support") which acts to restore diminished well-being and self esteem. Clearly, the findings here point towards further investigation of the function of the specific positive experiences identified here.

In a subsequent paper, Folkman et al (1997b) outline a theoretical framework
which offers some explanation as to why the cognitive and behavioural coping strategies reported in the current study were cited as positive experiences. The framework links positive events to coping behaviours and positive emotions. According to the framework, effective coping leads to a positive outcome (event) which results in a positive emotion. If the outcome of the coping approach is not favourable, the person experiences distress and uses an alternative coping strategy aimed at changing the meaning of the outcome. Such "meaning" oriented methods result in a positive emotion, which in turn sustains the coping process. In the context of the diversity of positive findings presented here, this framework points to investigating the links between different positive experiences, emotional responses and coping as a potential line along which to extend this work.

A third area of theoretical development in the psychological literature that is of relevance to the current findings is Social Comparison theory (Buunk 1997). This perspective is consistent with the Self-Enhancement theme which emerged from the data presented here. Social comparison theories are based on the premise that self evaluation is dependent on the group with which one compares oneself, and that affiliations with others can reduce stress as well as provide valuable information about successful coping. Thus, this perspective offers an alternative framework in which to extend the current investigation, in the context of specific social comparison beliefs and the positive role they play in living with auditory disablement.

Finally, in addition to highlighting a number of issues regarding the nature and function of positive experiences for further investigation, the findings from the current study also suggest some potential practical benefits from the inclusion of information about positive experiences in the rehabilitation process. In the context of hearing loss, auditory rehabilitation has traditionally focused on reducing hearing disability (through the provision of amplification aids and training in communication techniques). The findings reported here, in particular the "Positive Audiological Experience" theme and corresponding sub theme "Reduced disturbance from unwanted noise" emphasise the benefits of rehabilitative approaches aimed at managing sound reduction in addition to the more widely documented "amplification" approaches. This "sub" theme also offers some insight into service issues, particularly the question of why people choose not to wear their hearing aids in particular situations. In this context, it is interesting to note the comparatively small number of respondents who cited technical aids as sources of positive experience. In contrast, the larger number of respondents who reported "Communication strategies" as a positive experience combined with the low number who report the achievement of successful
communication, raises the question of what the additional benefits of behavioural changes in communication are.

The findings reported here also highlight a number of non audiological themes (e.g. Self enhancement, Social participation) as sources of positive experience which are currently largely neglected in the auditory rehabilitation process.

In conclusion, the findings presented here indicate that information about the nature of positive experiences offers a fresh perspective from which to understand the experience of disablement. Furthermore, the themes identified, in conjunction with recent developments in theoretical and rehabilitation literature, offer some promising directions for the investigation of how positive experiences function to maximise the effectiveness of self-management responses, particularly to auditory disablement.

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