# The communication and psychosocial perceptions of older adults with sensory loss: a qualitative study

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## ABSTRACT

Sensory loss (visual and/or hearing loss) is prevalent in older adults. Decreased vision and/or hearing acuity often result in poor communication and psychosocial functioning. This qualitative study explores the communication and psychosocial perceptions of a group of older adults with single or dual sensory loss. The aims were to identify the communication difficulties and conversational strategies used by the subjects, and to explore their perceptions of their social adjustment, quality of life and physical and mental well-being. The participants were all older adults with sensory loss who attended the Vision Australia Foundation. In-depth interviews revealed that the participants experienced frequent communication difficulties. They identified the personal, situational and environmental triggers responsible for communication breakdown, and they described the compensation and avoidance strategies that they used. The participants acknowledged that frequent communication breakdown resulted in decreased socialisation. The problems of adjusting to sensory loss, depression, anxiety, lethargy and social dissatisfaction were cited as factors that affected their physical and mental wellbeing, while being optimistic, coping with their sensory loss, and maintaining social contact contributed to an improved quality of life. All participants expressed interest in being involved in further communication intervention programmes.

**KEY WORDS** – vision loss, hearing loss, dual sensory loss, older adults, communication, psychosocial.

## Introduction

Over recent years there has been a growing interest in the assessment and treatment of older adults with age-related sensory loss (vision and/or hearing loss). The link between communication difficulties and sensory loss (particularly hearing loss) is well established (Lubinski 1991; McCarthy 1987), as is an association between diminished psychosocial functioning and sensory loss (Gillman, Simmel and Simon 1986; Hicks 1978; Horowitz

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and Reinhardt 1998). The inter-relationships between communication, psychosocial functioning and sensory loss, however, have received little attention.

The number of older adults reporting sensory-related difficulties in activity and participation is increasing (World Health Organization 2002 a, 2002 b). Salive et al. (1992) estimated that in the United States the prevalence of vision loss increased from 1 per cent of the population aged 71–74 years, to 17 per cent among people aged 90 and more years. Hearing impairment ranks third amongst the most prevalent chronic conditions affecting the physical health of older people (Australian Bureau of Statistics 1993). Desai et al. (2001) reported the results of a 1995 US survey which found that one-third of all non-institutionalised people aged 70 and more years had a hearing impairment. More specifically, just over a quarter of those with hearing impairments were aged 70–74 years, and approximately one-half were aged 85 or more years.

The combination of vision and hearing loss (dual sensory loss) is common in older adults. According to Horowitz and Stuen (1991), dual sensory loss occurred in six per cent of a non-institutional older adult sample. In an extensive epidemiological investigation, Kirschner and Peterson (1988) found that 70 per cent of severely visually impaired older adults had significant hearing loss. Thus, dual vision and hearing losses are prevalent disorders in older adults, but for the most part research on visual and hearing difficulties has been separated and reported in different journals. Only sparse information is available concerning the *consequences* of sensory loss, particularly dual sensory loss.

Effective communication is reliant on both the visual and auditory modalities. The visual system is important for the reception of non-verbal cues and gestures such as lip-reading, contextual cues, pragmatic markers, facial expressions and eye-gaze (Montgomery 1993). The auditory channel is important for the reception of sound, speech and auditory processing. People with hearing impairment rely on visual cues to complement their audition (Binnie 1973; O'Neill 1954). When impaired vision obscures visual cues, communication performance may be affected (Heine et al. 2002). A dual decline in vision and hearing acuity often produces serious communication and psychosocial consequences. Communication is vital for obtaining and sharing information, establishing and maintaining personal relationships and directing the behaviour of others (Brinton and Fujiki 1991). Conversationalists will usually tolerate minor misunderstandings (McTear 1985), and most cope using verbal or non-verbal actions to overcome the conversational breakdown (McLaughlin 1984). Gagne and Wyllie (1989) suggested that the selection of a 'repair strategy' is determined by cognitive, sensory and linguistic competence.

TABLEI. Factors in the model of communication

Factor	Included items	
Support systems	Partner's nature, availability, attitudes, expectations and knowledge	
Communication behaviours	Speech, language, hearing and inter-personal behaviour	
The ageing individual	Personal, financial, health, environmental and mobility factors	
The person's needs and stresses	Adaptation challenges and symbolic stresses	
The person's adaptive or coping responses	Enhanced competency, homeostasis, adaptive failure and outcomes	

Source: Adapted from Shadden, 1988.

Recent research has shown that people with sensory loss often experience communication breakdown in their everyday conversations (Erber 2002; Heine *et al.* 2002). They complain about conversational partners speaking softly and indistinctly, frequently confuse verbal messages, and experience difficulty maintaining a conversation, especially in a noisy setting (Erber 2002; Garstecki 1981). People with sensory impairment may frequently find themselves in demanding listening situations, such as groups, or in situations with loud background noise. It is therefore extremely important for them to develop strategies to alleviate conversational stress (Hallberg and Carlsson 1991).

There is little information about the communication difficulties experienced by people with visual loss or dual sensory loss, although it is well documented that older people with hearing loss frequently experience conversational breakdown and perceive themselves as poor conversationalists (Belsky 1984; Hull 1992; McCarthy 1987). Shadden (1988) proposed a model of communication that incorporates behaviour ranging from inappropriate (displaying risk factors) to appropriate (effectively using resources). This dynamic model of communication assumes that older people respond to life changes to resolve communication stress and establish equilibrium. The hypothesised factors in this model are listed in Table 1. Hull (1992) further proposed that older people with sensory loss found it easier to withdraw from communication situations than to face the embarrassment of misunderstood conversations or inappropriate responses. On the other hand, good communication skills may mediate the effect of sensory loss and ageing on psychosocial functioning (Knutson and Lansing 1990).

Among the major consequences of sensory loss are poor psychological functioning and the disruption of social behaviour (Thomas 1981). Belsky (1984) explained that people with poor sensory acuity often feel more isolated and limited as individuals. They can no longer do things they enjoy,

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and often feel vulnerable, insecure and unconfident. They may also have decreased self-esteem, feel exhausted and depressed, and be unable to adjust to their new circumstances (Lambert, West and Carlin 1981; Shimon 1992). According to Jackson (1992), these social-emotional changes can lead to long-term lifestyle change, or being perceived as senile or suffering from dementia. Stuen (1990) suggested that people with sensory loss often lack coping strategies, feel a loss of independence and privacy, and complain of decreased personal integrity and fewer relationships. These perceptions may result in dependence on carers, social isolation and a diminished quality of life (Christian, Dluhy and O'Neill 1989; Weinstein and Ventry 1982). For an older person with acquired sensory loss, the onset of a vision or hearing impairment is a profound experience that affects their functional independence and health (Swaggerty 1995).

A systematic study of the communication and psychosocial perceptions of older adults with sensory loss has not previously been reported (let alone one of dual sensory loss). The visual and auditory loss research literatures are largely comprised of anecdotal accounts. This study aimed to correct the situation by investigating the views and perceptions of older adults with sensory loss about their condition and their communication and psychosocial difficulties. The specific aims were to:

- (a) investigate how people with sensory loss appraise and regard the loss and its consequences;
- (b) establish how older adults with sensory loss perceive communication, its breakdown and repair, and the psychosocial consequences, and to;
- (c) describe the inter-relationships between sensory loss, communication and psychosocial functioning, as perceived by older adults with sensory loss.

#### Methods

A qualitative approach was used to explore the research questions and develop contextual insights (Minichiello *et al.* 1995; Stewart and Shamdasani 1991). According to Bogdan and Taylor (1975), qualitative methodology 'directs itself at settings and the individuals within those settings' and allows the researcher 'to experience what individuals experience in their daily struggles with their society' (Bogdan and Taylor 1975: 4). Data were collected through in-depth interviewing which allowed the researchers to obtain information about people's perceptions, thoughts and feelings (Morgan 1988). Both individual and group in-depth interviews were conducted. Individual interviews enabled the researchers to react sensitively

Name and gender	l		Group	Sensory loss	Background Information
June	F	1, 3	Self-help	U	Lives alone, peer worker, staff member, group gatekeeper
Isabel	F	1, 4	Self-help	D	Lives with husband, peer worker, attend meetings
Becky	F	1, 3	Self-help	U	Lives with husband, pursuing further studies, husband has hearing loss
Nelly	F	1,4	Self-help	U	Lives with husband, peer worker, staff member
Margaret	F	I	Self-help	U	Lives with husband, writer, peer worker
Geoff	M	2	10-pin bowling	U	Assisted living, most recently diagnosed
Howard	M	2	10-pin bowling and other	D	Assisted living, longest diagnosed, 10-pin and other group organiser
Kay	F	Ind.	Craft	U	Lives alone, independent, limited socialisation
Mavis	F	Ind.	Craft	D	Lives alone, very independent, good social support
Irene	F	Ind.	Craft	D	Assisted living, lost husband 18 months ago, emotional

TABLE 2. Profiles of the participants

Notes: Gender: F – female; M – male. Groups: Ind. – individual interview. Sensory loss: U – unisensory; D – dual.

to those older adults who found it difficult to converse in large groups (Erber 1996). Group interviews allowed individuals to interact, discuss and respond to topics of interest or that were shared (Morgan 1988). Murphy, Cockburn and Murphy (1992) described six to eight participants as optimal, but for this study the group was limited to a maximum of five participants (and a minimum of two).

# **Participants**

The participants were 10 people aged over 60 years who attended one or more of the services provided by the Vision Australia Foundation of Victoria, Australia. Potential participants were invited to attend interviews, and participation was voluntary. All participants were diagnosed as legally blind (Snellen distance visual acuity of 6/60 or worse), and normal or self-reported hearing impairment was confirmed in their case history records. Six participants had unisensory (visual) loss and four participants had dual sensory loss. Table 2 shows the participants' details and gives the adopted names that will be associated with the later quotations.

## Procedure

The facilitator, an experienced and empathetic communicator with older adults with sensory loss, guided the discussion but attempted to retain neutrality. Three participants were interviewed individually and two interview groups were formed, one of five participants and the other of two. All interviews were conducted in a quiet room at one of two Vision Australia

# TABLE 3. Topics in the interview guide

- 1. Introductions
- 2. General discussion about each person's role at Vision Australia
- 3. Brief description of the group they attend at Vision Australia
- 4. Self-perception of sensory status vision and hearing
- 5. Description of conversational difficulties previously encountered
- 6. Environmental, situational and communication partner issues
- 7. Conversational breakdown and repair strategy use
- 8. Role of sensory loss in communication breakdown
- Other factors related to sensory loss and communication breakdown demographic, age, socioeconomic, financial, intellectual, health, social, emotional

Foundation branches. The facilitator used a semi-structured interview guide to facilitate discussion (Table 3). As suggested by Stewart and Shamdasani (1991), a 'funnel' approach was followed, by which interviews began with the moderator introducing the topic and clarifying the purpose of the study. Participants were asked to introduce themselves, provide a brief account of their sensory status, and to describe their involvement with the Vision Australia Foundation. Discussion began with the general openended questions, continued with more specific topics, and concluded with possible next steps. Each interview ran for around 1.5 to 2 hours. Some of the group participants met a week later for a second time (in Groups 3 and 4). Data collection continued until saturation was reached. The facilitator took notes during the discussions, and the interviews were audio-taped and some video-taped. The facilitator and an assistant later transcribed the audio-tapes *verbatim*, and they resolved discrepancies through discussion.

## Data analysis

The three stages of analysis suggested by Taylor and Bogdan (1984) were followed. The first was to code the data, identify themes and develop propositions, the second to refine the themes and the third to write the reports. The sequence included content and thematic analysis. Qualitative content analysis involved coding, analysis and interpretation of the participants' meanings, motives, feelings and ideas (Thomas *et al.* 1992). Thematic analysis included noting each participant's major points, themes and arguments. Following transcription, relevant sections of the text were underlined and categories pertaining to the research questions were identified. The major topics and issues were coded into a coherent framework of definitions that represent, according to Denzin and Lincoln (1994), the abstract constructs behind the text. Coded material was checked, tallied and linked to similar material. Short descriptive statements of the thematic

categories were developed to enable the researcher to discern relationships, patterns and themes.

## Results

The two broad themes that emerged from the data were reactions to sensory loss and communication perceptions.

## Reactions to sensory loss

An early interview topic was the participant's perception of legal blindness and his or her response to their diagnosis of sight loss. Geoff's view was that:

Losing your sight can be compared to a vintage car with beautiful headlights. You're driving and suddenly the lights cut out. That's the state you're in. Sitting in the dark and not in the light.

The participants concurred that since they had been diagnosed as legally blind, their perceptions of themselves, of others and of the world around them had changed. Both behavioural and emotional changes were perceived. They described the period during which they were diagnosed of 'legal' blindness as stressful, and many said that they were devastated, disappointed and depressed, and that they denied the sensory loss. Low morale contributed to the emotional reaction. Although the participants expressed despair with their disability, they also then hoped that their sensory loss would improve, or at least not deteriorate further. Some participants later acknowledged their disability and were able to alter their attitude and accept a changed lifestyle. With time they had come to feel more comfortable with their disability, as Becky explained: 'Because I've had my sight loss for a few years now, you learn to be comfortable with it and it's no big deal'.

The participants also believed that effective change led to coping, and that coping indicated strength. They expressed the fact that every day they met new challenges; these required resolution, which was dependent on their coping ability and their mental strength. June made this point clearly: 'And I don't mind saying that I'm feeling strong and confident'. The participants also reported that they were extremely sensitive to other people's reactions to their sensory loss, especially when people with normal sensory acuity made offensive or rude comments. Becky related a story about two high school students who 'sniggered' at her visually impaired friend who has a guide dog. Becky said, 'Just because she couldn't see, they seem to think, well, she couldn't hear either'. The participants

acknowledged that compromise was necessary. This was understood as being able to see one's disability from another perspective, and this was described as a key to acceptance, adjustment and effective coping. Participants believed that once acceptance had been achieved, the enjoyment of life could begin. The concept manifested in Becky's acceptance that 'being diagnosed with legal blindness means I go (somewhere) accepting the fact that I'm not going to have the whole. I'm going to miss a few things.'

The participants with visual loss and normal hearing said that they were grateful that they at least had intact hearing, and empathised with people who had dual sensory loss. One such, Isabel, said 'I think when you have a hearing loss, it's more hurtful'. One participant reported that her spouse had a hearing loss, so the combination of both their disabilities proved difficult. Although inconvenienced, she accepted her spouse's disability. A physical or other disability also complicated adjustment and social interaction. Howard spoke about the effect of his physical disability: 'I can't go out on my own, my legs (are) no good. Blind[ness] is not the problem'. The participants mentioned that they needed a great deal of physical strength and energy to get through each day. Most participants reported that they stayed in bed longer in the mornings or went to bed early (some even by 5 p.m.). Geoff explained:

I must not try and see. I see a blur, which I try and clarify with no success. Next day, I'm fatigued. I need to sit in a dark room rather.

The participants also acknowledged that they needed to be patient and realistic about their shortcomings and to accept help graciously. Some noted that their lack of independence and reliance on others was extremely difficult to accept. They often felt angry about their disability and disappointed with themselves, and this resulted in feelings of discomfort and embarrassment about their predicament. One group discussed ordering a meal in a restaurant. Since they could not see the menu, they would have to rely on a sighted person to read it to them, as June recalled: 'So people start off like that with me. I feel myself getting angry, so I say, "Look I really feel like such and such, and don't go bother with the details just the main bits"'. As well as acknowledging the help that they received from 'sighted people', the participants said that they were often angry with them. For example, when June spoke about 'sighted people' she used the pronoun 'whoever' instead of their name. Howard expressed how he felt about some sighted people:

You can experience ... sometimes with people there is a problem. With a sighted person [my companion], another sighted person talks to [them] and ignores me. For example, the shop assistant [says] 'What does he want.' [It's] rude anyway to refer to a person in the third person.

Most participants thought that people with normal sensory acuity viewed them as different, could not believe that one could have both visual and hearing loss, and underestimated the effect of visual loss. They believed that people with intact sensory acuity did not really understand the implications of sensory loss and that many, especially younger people, had unrealistic expectations of what the participants could do. Howard related an incident when travelling overseas:

A fellow said to me, 'Howard you don't miss much in life'. I said, 'No, perhaps not. But I heard you were hiring a car. I'd like to do that and go shopping ... You go out and see [a] beautiful sky and sunset'. No, don't suppose I miss much, do I?

There were contrasting views about the use of the white cane, with some finding it beneficial since it indicated to others that they have a visual disability, whereas others found it deterred people from approaching them. The participants acknowledged that a lack of confidence in their abilities often led to periods of depression, and they described how their sight loss had affected their participation in hobbies and activities. Kay remarked that 'reading is dreadful because you can't see your mail ... or know what's going on ... You can't see food. You can't see anything right in front of you'. Mavis had a different perspective: 'I have done a lot of oil painting ... it's macular degeneration ... that was the most terrible blow to me. Trying to find the colours ... If I'm going to get worse, I think it's best to do something else'. Several participants admitted that they often felt lonely and socially isolated. Howard commented: 'But there are those lonely times. I think, what on earth am I doing here?' The participants' reactions to sensory loss therefore reflected their diverse experiences and perspectives but collectively demonstrated that older adults with sensory loss experience numerous psychosocial difficulties.

# Communication perceptions

All the participants had actively thought about the communication consequences of their sensory loss. They agreed that their conversations were sometimes unsuccessful, and at times they saw themselves as 'failures'. Frequent communication breakdown caused them embarrassment and sometimes resulted in social restriction. Howard remembered what it was like to talk to someone at a party: 'I'll be having a conversation and suddenly the person leaves and leaves you standing there ... you don't know that the conversation has finished'. The resulting communication breakdown produced negative feelings about such interactions among the participants because many felt offended or left out. The events that particularly caused embarrassment included: long silences with the conversational

partner looking at you and waiting for a reply, having to rely on a friend or partner to clarify a conversation, missing information during a conversation and, worst of all, needing to clarify one's own failure. Lack of eye contact, not being able to see people's faces and not being able to lip-read were disturbing to most participants. June said, 'for me, in a meaningful communication, not having eye contact still gets to me', and Nelly said 'you've got to say back, "Are you looking at me?" It's very embarrassing'.

Certain situations were particularly difficult, especially for those with dual sensory loss, including group or crowded situations such as birthday or dinner parties. The participants explained that they relied on voice identification rather than visual cues to identify a speaker. Conversations often required intense concentration, which caused fatigue, communication anxiety and anticipations of conversational failure. Other situations that caused difficulty included noisy environments and group conversations when the speaker was far away or there was glare. Isabel described her experience when a communication breakdown occurred: 'I [couldn't] hear a couple of things and I said: "Mary, do you mind taking your hands away from your mouth"'.

The participants acknowledged that they frequently encountered difficult communication situations. They said that they could choose to ignore the consequences and enter the situation anyway, or they could try to minimise the consequences, or they could limit their social contact and avoid the situation completely. Some communication difficulties were attributed to the conversational partner mumbling their words or not being able to communicate with a person who has a sensory loss. Communication with teenagers was found particularly difficult. Teenagers were described as inconsiderate communicators, who mumble, don't put ends on their words, talk too fast and use their own language. Some participants said that their interaction with teenagers was inconsequential and misunderstandings did not worry them, but others believed that they should 'keep up with the times' and learn to communicate with young people. On the other hand, some conversational partners were regarded as being easy to speak to, especially if there was a shared topic of interest or conversational partners were familiar, such as the members of the self-help group. As Becky said: 'Yeah, but we know each other'. Commenting on the staff where he lives, Geoff said '[I] can converse with [them]. They come in a few times a day. Music [is] a big thing. I converse with those that enjoy that'.

One topic that led to disagreement was requests for clarification, for some insisted that conversational partners should use clarifications to help them understand a conversation, and added that they felt 'belittled' and angry when partners did not respond to a clarification request. This was especially so if the partner answered, 'Oh, never mind!' Isabel's reaction in these situations was:

It's when a conversation has been going on. I say: 'Oh what was that? I can't hear', and they say, 'Oh never mind', [or] you say 'um sorry', you know, you freeze. Oh I can't handle this.

The participants spoke about the ways that they deal with difficult situations. They used concepts and terms such as 'avoid', 'restrict' and 'limit' difficulties, 'select' comfortable situations and 'organise' themselves to avoid confrontational communication situations. They employed various strategies to anticipate communication breakdown and to resolve such breakdowns. Some participants were more aware of these strategies and referred to several that they frequently used. Howard, for example, confided what he might say to his conversational partner, 'Let's talk privately', and he added that if there was a lot of noise 'we would find a quieter spot'. The participants believed that use of these strategies reduced the frequency of conversational breakdown. They agreed that it was better to use a proactive strategy prior to the conversation, to avoid a breakdown, than to rely on a reactive strategy during the conversation, for the latter might not work.

Two reactive strategies were described: non-specific clarification requests through the tone of voice or by saying, for example, 'I didn't catch that', 'I can't see that' or 'I didn't hear that'; and specific clarification requests, most often for repetition, such as, 'Please say that again'. Becky said that her phrases were 'I'm sorry I didn't catch that', 'Would you mind repeating that' and 'I can't hear at all'. Other strategies included: pretending to understand, getting someone else to repeat what was said and monopolising the conversation. It was remarked that when the conversational partner did not understand what they had said, they would expand or rephrase their utterance. They would also try to minimise conversational difficulties by not putting their hand over their mouth, facing the conversational partner to improve auditory localisation, speaking clearly, changing the topic and simplifying their speech. Nelly said, 'I alter it sometimes, I'll rephrase it'.

Communication repair strategies were only used when the participants felt confident, strong and energetic. Communication was viewed as 'hard work' and at times caused immense anxiety. We were told that dealing with a non-empathic conversational partner was extremely difficult, as is repeatedly re-introducing oneself or reminding the partner that one has a sensory loss. Becky said, for example, 'I think if you're feeling anxious, I feel the other person might get impatient'. Some participants commented that they felt more socially isolated through the difficulties caused

by their sensory loss and feared difficult communication situations. The participants believed that conversational repair strategies could be learnt, and they indicated an enthusiasm for further group discussion of this topic. June made the following comment about the value of the self-help group: 'We've talked about this and so we're in a stronger position to practise strategies'. The participants also agreed, however, that some situations could not be controlled. As Becky said:

I mean, there are situations where you can't have a strategy. Not one that you've organised [for example] going to the theatre, or going to the opera.

In summary, according to the participants, proactive action (such as avoiding groups) was necessary to face most situations, new or old. Prior rehearsal of situations and the use of learnt strategies could avoid embarrassment and unnecessary anxiety, and enabled successful communication. The participants suggested that when they convinced themselves that communication could be successful, this improved the chance of success. They described the intervention plan that they found useful. It included accurately identifying the components of communication, understanding the connection between communication and sensory loss, identifying the factors that contribute to communication breakdown, learning new strategies, practising and timing the strategies, and incorporating them into their communication repertoire.

## Discussion

The results of this study indicate that sensory loss has implications for both communication and psychosocial behaviour. According to Wood (1987), the onset of sensory loss is a form of psychological trauma which is commonly associated with initial reactions of shock, confusion and bewilderment. As reported by our participants, most especially Geoff, the initial diagnosis of sensory loss engendered devastation and disappointment, and the period following the initial diagnosis was associated with loss and grief. Hicks (1978) suggested that the grief has seven stages, beginning with preloss and anticipation, and followed by awareness, initial reaction, denial, reorganisation and ultimately resolution. Dual sensory loss has received little research attention despite its increasing prevalence in the older adult population. The participants in this study with this condition identified with others with disabilities of all kinds. Many said that having a sensory loss made them different from people with normal vision and hearing. The acknowledgement of the disability was however viewed as a sign of adjustment.

Decreased functional capacity (evinced as dependence on others) and decreased physical health and strength are important correlates of sensory loss (Fitzmaurice, Kendig and Osborne 1996; McCarthy 1987). Our participants freely discussed their restricted mobility and need for assistance with daily activities. Limitations in the independent performance of daily living tasks have been correlated with feelings of helplessness, increased daily hassles, loss of independence and reliance on others (Davis, Lovie-Kitchin and Thompson 1995; Halpin 1989). Burfield and Casey (1987) noted that loss of autonomy (independence and control) threatens self-confidence and self-esteem. The participants in this study explained that they often felt angry and disappointed with themselves, and uncomfortable and embarrassed about their sensory loss. A lack of confidence and anger with their predicament leading to mood changes and periods of depression are common findings in the ageing and visual loss literatures (Horowitz and Reinhardt 1996; Stacey 1997).

Many participants in this study had thought about the communication consequences of their sensory loss. Experiencing frequent communication breakdown caused fatigue, embarrassment and social restriction. The situations that caused participants difficulty included noisy environments, groups, conversations with teenagers and when the speaker was far away or there was a glare. These are common findings, as is the link between sensory loss and decreased communication performance (Erber 1996; Tye-Murray 1994). An inability to perceive visual cues was identified as a major factor in communication breakdown. The participants suggested various strategies to resolve communication breakdown that have been identified in previous studies - and these have demonstrated their prevalence and importance (Caissie and Rockwell 1993; Erber 1996; Tye-Murray 1994). The subjects also demonstrated many insights into the usefulness of proactive strategies to control the communication interaction and pre-empt a breakdown. Such strategies should therefore be an essential part of communication intervention programmes.

Other findings concern some participants' experience of social disruption through poor communication or psychosocial functioning. Both the type and frequency of social activities and degree of social support had changed since the onset of their sensory loss. Some participants had managed their social commitments. Hallberg and Carlsson (1991) described this response as effective control of the environment. The participants who did not manage their social commitments tended to avoid social contact. Group participation and social interventions appear to aid adjustment to sensory loss, to improve social skills and to assist with coping. These strategies should be important components of interventions. Overall, it has been shown that people with sensory loss are sensitive to their

Progression of sensory losses over time							
Phase I	Phase II	Phase III					
Premorbid status	Decline in sensory acuity	Subsequent sensory deterioration					
	Diagnosis of sensory loss	Living with increasing sensory loss					
<b>\</b>	<b>\</b>	<b>↓</b>					
Preconceived ideas	Grief, anger and depression	Frustration, anger, depression					
	Develops coping strategies	Compromise, dependence					
	Acceptance of sensory loss	Adjustment to circumstances					
1	1	J					
Uses established	Experiences communication	Experiences frequent					
communication habits	difficulties	communication breakdowns					
1	1	1					
Pursues usual social	Experiences social disruption	Tendency to social avoidance					
contacts	r	,					
Uses usual communication strategies	Uses usual and new communication strategies	Uses usual strategies but continued breakdowns, raising					
		likelihood of social isolation					
$\downarrow$	$\downarrow$	$\downarrow$					
Ongoing communication	Ongoing communication and	New strategies reduce					
and psychosocial adaptation	psychosocial adaptation	breakdowns and isolation.					

Figure 1. A model of the psychosocial and communication responses to sensory loss.

disability, often experience communication and psychosocial difficulties, and need to adjust to their new capacities. One representation of the interactions is presented in Figure 1. Both the reaction to sensory losses and the communication limitations they impose tend to damage physical and mental well-being and psychosocial functioning, and these in turn tend to reduce social interaction and may bring about social isolation. The participants confirmed that they frequently experienced communication breakdown and recommended specific strategies both to anticipate breakdown and to repair its effects when it occurred.

As well as these personal reactions, broader societal factors impact on well-being, for people with sensory loss experience 'stigma' (Goffman 1963). For example, some participants felt that using a white cane brought them too much attention, and many reported the ridicule of 'sighted people'. According to Lawton's *ecological theory of ageing*, there is an interplay between individuals and their environment, for 'individuals tend to adapt to external stimuli in such a way that after a period of time, the present stimuli are perceived as neither strong nor weak; in fact, they are barely perceived at all' (Nahemow 2000: 23). At this point, adaptation is achieved. For older adults with sensory loss, ongoing sensory changes and environmental demands require individuals with sensory loss to have repeated adaptations to achieve optimal functioning. That is, older adults with sensory loss

who have made the necessary changes to specific circumstances perform within the adaptive level of functioning, while those who do not adapt to their capacities function out of their 'comfort zone' and will display negative affect and maladaptive behaviour. Unfriendly environments that do not support optimal functioning therefore contribute to a feeling of discrimination. For example, the reliance on others to read a menu in a restaurant contributed to feelings of dependence. Verbrugge and Jette (1994) have argued that disability is in fact a gap between personal resources and environmental support. Environmental noise, poor communication strategies used by communication partners and poor visual cues contribute to disability in people with dual sensory loss.

This study has elucidated the links between sensory loss, decreased communication ability and poor psychosocial functioning. In addition, it has contributed to the understanding of sensory loss and its consequences, and provided valuable insights into the psychosocial and communication perceptions of older adults with sensory loss. The findings emphasise the need for both increased awareness of sensory loss and multidisciplinary assessment and interventions to improve the communication ability and psychosocial functioning of older adults who are affected. As a society, we need to provide supportive environments that enhance the independence and well-being of older adults with sensory loss.

## NOTES

1 Participants were read an informed consent form, which they signed to indicate their agreement to participate in the study. They were free to withdraw from the study at any time. The study was approved by the La Trobe University Ethics Committee. The names of participants were changed to ensure anonymity.

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