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Facilitators and barriers to participation in mental well-being programs by older Australians with vision impairment: community and stakeholder perspectives

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1 Title

- 2 Facilitators and barriers to participation in mental wellbeing programs by older Australians
- 3 with vision impairment: community and stakeholder perspectives

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5 Vision impairment and mental wellbeing programs

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33 Abstract

Objective: Older adults with vision impairment experience high rates of mental health
 problems, but very few access psychological support. We investigated community and
 stakeholder perspectives of the barriers and facilitators to participation in mental wellbeing
 programs for older adults with vision impairment.

Methods: Adults aged ≥50 years with vision impairment (community) were recruited from
the client database, and low vision rehabilitation (LVR) professionals (stakeholders) from
staff of a LVR provider. Participants completed one-on-one semi-structured interviews which
were designed and analysed using behaviour change theory.

42 Results: Twenty-nine participants were interviewed; 16 community members and 13 43 stakeholders. Both groups cited mental health problems as a major concern, with many 44 stakeholders reporting the grief and distress associated with vision loss experienced by their 45 clients as having a negative impact on their mental and physical health. Major barriers to 46 participation in mental wellbeing programs included a lack of awareness and difficulties 47 accessing such programs, with stakeholders adding that their clients' lack of insight into their 48 own mental health problems may reduce motivation to participate. Facilitators to 49 participation in programs included the appeal of social interaction and inspirational speakers. 50 An appropriate intervention could overcome these barriers, or enhance participation through 51 education, persuasion, incentivisation, modeling, environmental restructuring, training, and 52 enablement.

53 Conclusions: While barriers were discussed more than facilitators to participation, there 54 was general support for mental wellbeing programs. This study provides guidance from 55 stakeholders for the development of mental wellbeing programs to address mental health 56 problems in the growing number of older adults with vision impairment.

57 Introduction

58 Globally, it is estimated that the number of people living with vision impairment 59 (encompassing low vision or blindness that cannot be corrected with glasses or surgery) will 60 rise from 38.5 million in 2020 to 115 million people by 2050; most of which (78%) are aged 61 50 years or older [1]. Older age and vision impairment are associated with an increased risk 62 of developing a mental health condition, particularly depression [2]. An estimated 69,519 non-Indigenous Australians aged 50 years or above and 4,282 Indigenous Australians aged 63 64 40 years or above were living with irreversible vision impairment in 2016 [3]; all at 65 consequent risk of mental health problems.

66 Older adults with vision impairment are approximately three times more likely to experience 67 significant depressive symptoms, compared with those without vision impairment [2, 4]. This 68 is attributed to the impacts of vision impairment on functional capacity and activities of daily 69 living [5-8]. Research suggests that low vision rehabilitation (LVR) services, and 70 psychological interventions involving self-management and problem-solving, may be 71 effective in reducing depressive symptoms and depressive disorders among adults with vision impairment [9-12]. However, although 70% of adults with vision impairment report 72 73 wanting psychological support, only 9% report receiving it [13], and it remains unclear why 74 uptake of support is so low.

75 One study of LVR professionals' (hereafter stakeholders) perspectives of a mental wellbeing 76 program found a number of barriers to the problem-solving treatment for primary care (PST-77 PC) being delivered in a LVR setting, that could be overcome through professional training, 78 support and improved screening [14]. The only other study reported on the reasons older 79 adults with vision impairment withdrew early from PST-PC, and found responses ranging from the program being perceived as not relevant, to the program goals being achieved early 80 81 [10]. Given this scant literature, the aim of this qualitative study is to investigate the barriers 82 and facilitators to participation in a mental wellbeing programs, from the perspectives of

community-dwelling older adults with vision impairment (community members) andstakeholders.

85 Subjects and Methods

This qualitative study involved semi-structured, one-on-one telephone or face-to-face interviews with community members and stakeholders, including orientation and mobility specialists and optometrists. This study was conducted within New South Wales (NSW) and the Australian Capital Territory (ACT), Australia.

90 Community members and stakeholders were recruited using purposive sampling through

91 invitation letters and follow-up phone calls between August and October 2019. <u>To address</u>

92 the study aim, we expected to recruit up to 20 community members and up to 15

93 stakeholders for interview, or until data was saturated in each group, which was assessed by

94 <u>researchers (LD, LK) at regular meetings.</u> Community members were recruited from the

95 client database of an Australian vision rehabilitation organisation, Guide Dogs NSW/ACT.

96 Clients that who had consented to be contacted regarding research were sent an email and

97 invited to contact the research team directly to express interest in the study. Participants

98 were required to be aged 50 years and older and speak conversational English. Stakeholder

99 participants were employed in a client-facing capacity by Guide Dogs NSW/ACT, and were

similarly sent an email and invited to contact the research team directly to express interest in

101 the study.

The behaviour change wheel [15] was used as a framework to design the interview guides
(Supplementary File 1 and 2), and consequent analysis of the data. The behaviour of
interest was participation in a mental wellbeing program. Specifically, the wheel uses the
COM-B model to explain an individual's propensity to adopt a behaviour (see the inner wheel
of Figure 1). Behaviour can be in turn targeted by nine intervention functions: coercion,
education, enablement, environmental restructuring, incentivisation, modelling, persuasion,

109 intervention functions; however, these were considered outside the scope of this study. 110 Semi-structured interviews, lasting 15-45 minutes, were conducted by two Master of Clinical 111 Optometry students (AW, RM) and a Faculty of Medicine and Health PhD student (DT). The 112 students were given initial training and ongoing support by two experienced public health 113 qualitative researchers (LD, LK). Interviews were audio recorded using digital recorders, 114 transcribed verbatim, and analysed using NVivo software, using deductive analysis [16], 115 following the COM-B and intervention functions of the behaviour change wheel [15]. We 116 took an iterative approach to data analysis [17], whereby data were revisited, coded, and

restriction, training [15]. The wheel also includes policy categories which can impact the

themes discussed many times to ensure analytic reflexivity. Transcripts were coded separately by two of the students (AW, RM). Initial coding was then presented and critiqued in a meeting including all three students, chaired by LD. Two of the students (AW, RM) then collaborated to establish themes under each subset of the COM-B model, which were discussed and agreed upon at regular fortnightly meetings with LD and LK. Themes were then coded using intervention functions, and categorised as barriers or facilitators to participation in a mental wellbeing program by LD and DT.

124 Patient and public involvement

No patient under medical care or members of the general public were involved in the design, recruitment or conduct of the study. However, there will be formal engagement with the LVR provider's advisory panel to discuss the next stages of developing and implementing a mental wellbeing program. Those participants who requested feedback will be informed via email or telephone call about the results.

130 Ethics approval

108

131 Ethics approval was granted by the University of New South Wales Human Research Ethics

- 132 Committee (HC190356). <u>A participation information statement was sent to interested</u>
- participants, and oral informed consent was gained before commencement of the interview.

The study is reported in line with the COREQ statement[18], supporting transparency inreporting of qualitative research.

136 **Results**

Of the 35 community members and stakeholders invited, 29 (83%, 16 community members and 13 stakeholders) completed an interview. The 13 stakeholders included 12 orientation and mobility specialists and one optometrist. All stakeholder interviews were conducted over the phone, while seven of the community participants requested face-to-face interviews in their homes due to difficulties with hearing and/or accessing a phone.

142 We identified twelve themes (Figure 1); eight represented barriers, and four facilitators to

143 mental wellbeing program participation. Illustrative quotes associated with each theme are

144 presented below, with intervention functions in brackets next to the COM-B component.

Participants are identified as C for community members and S for stakeholders, followed byan identification number.

147 Both participant groups showed a high level of interest through long and engaging

148 discussions around the mental wellbeing of people with vision impairment. Stakeholders

149 expressed that many of their clients have concerns regarding their mental wellbeing,

150 indicating the importance of this topic and need for such programs:

151 *"I'm finding most of the clients that I...work with, express that they have anxiety,*

152 depression, or have had nervous breakdowns, or are currently having mental health

153 *issues.*" (S002)

154 Barriers

155 Physical capability (Enablement, Training)

156 Mobility impacts participation

157 Participants reported difficulties in mobility as a result of their vision loss which prevented

them from engaging with their community and/or programs:

- 159 *"Because you can't go out. That's the biggest problem..."* (C008)
- 160 "So, you don't tread on little kids or get tangled up in dog leads...that's always in the
- 161 back of your mind. I think I'll just stay at home." (C004)
- 162 In particular, there were concerns regarding loss of the ability to drive:
- 163 "You're not going to get them in a group scenario, but also they can't drive so they can't
- 164 get to anywhere." (S008)
- 165 Some participants also found that their mobility limitations and location of residence
- 166 interfered with their ability to connect with other individuals with vision impairment and
- 167 contributed to feelings of isolation:
- 168 *"I would love to have a group of other people who were also vision impaired, but they*
- seem to be scattered all over the country." (C020)
- 170 Vision loss impacts everyday activities
- 171 The inability to accomplish activities of daily living deterred participation in programs and
- 172 other activities:
- 173 "Because of their vision impairment, I don't think they integrate as much with others in
- 174 their community." (S009)
- 175 "I can't watch TV and I do like TV actually. I can't read anything anymore and I used to
- 176 *love a newspaper."* (C020)
- 177 Psychological capability (Education, Training, Enablement)
- 178 *Ripple effects*
- 179 Stakeholders expressed concerns about mental health problems extending into other
- 180 aspects of their client's lives and preventing participation in mental wellbeing programs:

- "Stress and mental health, the physiological changes to the body... impacts on people's
 functional vision. There's all these ripple effects if the mental health component is not
 addressed." (S006)
- "I'd be the only person they'd see that week and maybe they'd have a cry...need to work
 through the issues they have before they can start doing routes and getting out in their
- 186 *community.*" (S015)
- 187 Self-perception of mental health
- 188 The acknowledgement of having a mental health problem varied among participants:
- 189 "One very good friend who's also legally blind...when I bring up the subject with him he
- 190 says, Oh, better not even to think about it. And he's not really getting all the services
- 191 that he should be getting as a blind person." (C004)
- 192 "Has it affected me? I lost my licence. I'm pretty much housebound. My doctor wants
- 193 *me to see... a psychologist. And I said, No, I'm not that bad."* (C008)
- 194 *"I try to prepare myself for the future, but I don't think it's affected my mental health, as*
- 195 far as others are concerned anyway." (C009)
- 196 Physical opportunity (Environmental restructuring, Enablement)
- 197 Facilitation of services

198 Participants expressed concerns about their ability to access mental wellbeing programs

- 199 following their vision loss:
- 200 "When I lost my sight I had to really scrabble and... call for information." (C007)
- 201 *"If there is support, they [support provider] could call our clients ...[so] the client doesn't*
- 202 have to initiate [seeking services] themselves...because I have a lot of clients who once
- 203 they lose their vision, they're not able to navigate a phone." (S003)

Stakeholders also expressed their concerns about how they can best assist their clients toreceive support for their mental health problems:

206 "If we had a script or a proper format that once a client has identified that they've got

207 mental health issues that we should say because you've mentioned that to us can we

208 write some information down and pass it on to someone to suggest help or at least to

- 209 *refer.*" (S013)
- 210 Lack of awareness of services

211 Community and stakeholders were unaware of current mental wellbeing programs targeted

212 at Australians with vision impairment:

213 *"I'm not aware of any program for... people with vision impairment."* (S012)

- 214 "In a major Sydney hospital and they didn't ever say to me that I needed to be referred
- to Vision Australia or Guide Dogs or anywhere like that. And I just said, Okay, well, I can
- 216 do this. But the trouble is I couldn't see." (C005)

217 Social opportunity (Environmental restructuring, Enablement, Modelling)

- 218 Stigma about mental health problems
- 219 Participants described the negative stigma surrounding mental health issues as a barrier to
- 220 participation:
- 221 *"…it doesn't seem to be talked about a lot."* (C015)
- 222 "People have a perception, there's still a stigma around mental illness, so a lot of them
- 223 *might not disclose."* (S005)
- 224 "I would say don't call it a mental health program." (C005)
- 225 **Reflective motivation (Education, Persuasion, Incentivisation)**
- 226 Grief associated with vision loss

- Feelings of grief and beliefs regarding vision loss can make participation and engagementunmotivating:
- 229 "If a person is depressed and feels like they can't do anything, then it's likely they're not
- 230 going to go into orientation or mobility training with high expectations, and a good
- 231 *learning frame of mind."* (S012)
- 232 Facilitators
- 233 Social opportunity (Environmental restructuring, Enablement, Modelling)
- 234 Community connections
- 235 The desire for a connection to the community particularly with those experiencing similar
- 236 vision loss was described by participants:
- 237 *"…having a group that comes together that has a focus on adapting to change and*238 *understanding… I think is fairly powerful."* (C015)
- 239 "Although technology and online stuff is cool and innovative...it sort of takes away from
- 240 that human connection that you have when you sit in the same room as somebody."
- 241 (S015)
- 242 "There's others there to talk to and pass the time of day with. It's not a discussion group,
- it's just to pass the time. You know, with the social aspect of it, but they're getting to
 know me." (C003)
- 245 "For so long I just thought our family was a family of freaks because not knowing of
- 246 anyone else that had it...30 years ago I joined up with the Nepean Blind Sports Club...I
- 247 met a couple of people with the same condition and... went to social events out there."

248 (C012)

249 Who can facilitate mental wellbeing programs

- 250 Participants also expressed their opinions about who they think would be best suited to
- 251 deliver low vision mental wellbeing programs. Different levels of expertise were articulated

252 ranging from lay-facilitators to mental health professionals like psychologists:

- 253 "Anybody who has got group-based skills and some level of working with groups."
- 254 (C005)
- 255 *"I always feel that if someone's been through a situation they're the ones I think are the*256 *better ones."* (C012)
- 257 A consultant psychologist with a good knowledge of grief... it would be great to be able
- to run scenarios by that person. And say, this is what I'm dealing with, or this is what I've
- done. It would be lovely to be able to say to clients If you want to talk more about this,
- 260 we have a psychologist on staff that might be able to give you a ring." (S004)
- 261 *"It would be good if we had one person that they could make a call to that has more*
- specific information and then can put them in touch with people in their own area... or

263 what organisations are close to them." (S013)

- 264 Automatic motivation (Modelling, Enablement)
- 265 Inspiration/role model
- Some participants stated how a role model is an inspiring motivation for participating in
- 267 mental wellbeing programs:
- 268 *"Those have been some of our better meetings when we've been inspired by others in*
- 269 *other words.*" (C009)
- 270 *"...hearing people's stories about how they might have done it is really powerful for*
- 271 people who might be going through that part of the process." (C005)
- 272 **Reflective motivation (Education, Persuasion, Incentivisation)**
- 273 Self-efficacy

274 Many participants believed they were self-sufficient and capable of handling their own275 issues:

"I can't change it, I've just got to learn to adjust to it and that's just going to be my life."
(C011)

278 "I don't feel sorry for myself, there's no point. I've got two legs, I can walk, so life's
279 good." (C022)

280

281 **Discussion**

282 Consistent with evidence of the high burden of mental health problems in older adults with 283 vision impairment [2, 4], we found strong interest in developing mental wellbeing programs 284 among community members and stakeholders. The interviews revealed that both groups 285 acknowledged the substantial negative impacts of mental health problems. However, both 286 groups were unaware of any mental wellbeing programs specific to people with vision 287 impairment, thus, confirming the importance of developing a mental wellbeing program 288 tailored to this population group.

289 We identified two times more barriers than facilitators (i.e. eight vs four) to effective 290 participation in a mental wellbeing program. The intervention function Enablement was 291 relevant to all three facilitators, and the majority of barriers. Enablement refers to increasing 292 means, and reducing barriers [15], and is key to designing a program for this population. A 293 major concern related to Enablement, along with Environmental Restructuring (changing the 294 physical or social context [15]), was functional disability. Many community members felt that 295 vision loss limited their capability and opportunity to access programs due to difficulty 296 reading or finding information, and travelling to where programs were held. Travel concerns 297 are a common barrier in this population [19], and is influenced by the severity of vision 298 impairment, distance to program location, and availability of support people.

299 Recommendations to overcome these barriers, as they relate to intervention functions [15],

include: producing material in larger, easy-to-read print (*Enablement*); LVR professionals
telling community members what options are available (*Education;* increasing knowledge or
understanding); and program organisers making community transport available
(*Environmental Restructuring*) or provide orientation and mobility services (*Training;*imparting skills), if travel is required.

305 In addition to physical limitations, the acknowledgement of having a mental health problem 306 influenced participation and varied among participants. Some mentioning conditions like 307 depression and anxiety, others downplaying any concerns and associating it with 308 complaining, and the remainder stating that their vision loss did not have any impact on their 309 mental health. The intervention functions of *Modelling* (an example for people to aspire to or 310 imitate) and *Education* are particularly relevant to alleviate these concerns and key to 311 tackling the barriers of social stigma and self-perception. Nyman et al. [20] identified that 312 vision impairment can impact psychosocial well-being through social isolation; while 313 acceptance of vision loss, and social support were facilitators of adjustment. We also 314 identified self-efficacy as a facilitator, which has been shown to lead to good mental health 315 outcomes in other contexts [21]. Given there was general consensus among both groups of 316 the benefits of social connection and positive role models, it is recommended interventions 317 include this in their design.

318 A pilot feasibility study in Australia recently investigated the delivery of PST-PC by LVR 319 professionals to older adults with vision impairment who met the criteria for mild symptoms 320 of depression [10]. PST-PC, based on Cognitive Behavioural Therapy (CBT) principles, is a 321 low-intensity approach designed to assist with functional adjustment, resilience building and 322 generalised well-being. PST-PC can be delivered by non-mental health professionals, face-323 to-face, as well as over the phone, or over video conference, significantly increasing its 324 reach. Holloway et al. [10] found that those that who stayed in the study had significant 325 reductions in depressive symptoms, and improvements in health-related quality-of-life and 326 problem-focused coping. Those who withdrew from the study early were typically older, with 327 complex needs, as has been found in other studies [22-24]. Thus, it is critical that any future
 328 interventions must consider methods to retain adherence of older participants with
 329 competing health priorities.

330 Varying levels of mental health problems and requirements for support were reported by 331 community members as well as stakeholders about their clients. A stepped-care approach 332 may be the most efficient in this context, as not all clients require the same type or intensity 333 of intervention [25]. Stepped-care comprises different intervention components, with the 334 idea that if the first, less intensive step does not lead to a reduction in symptoms, then a 335 person moves to the next step, consisting of more intensive and potentially more expensive 336 interventions [9]. Several randomised controlled trials conducted outside the field of low 337 vision have found that a stepped-care approach can be effective in minimising depression 338 and/or anxiety [26, 27], and has been endorsed to address depression in older adults in 339 clinical guidelines, such as the UK NICE guidelines [28]. The ideas for interventions 340 identified in this study could be integrated within a stepped-care approach, including social 341 groups, psychologist referral and PST-PC.

342 Strengths and limitations

343 This is the first study to explore the perspectives of older adults with vision impairment and 344 client-facing professionals involved in LVR regarding mental health problems. The inclusion 345 of client-facing professionals provides essential insight needed to design a stakeholder-346 driven intervention. A second strength is the semi-structured nature of the interviews which 347 allowed for tailored discussions to explore each participant's personal outlook and 348 interpretation of the impacts of mental health problems and vision impairment. However, this 349 also resulted in interviews of varying length, and occasional tangents in conversation. 350 Despite compelling findings, the authors acknowledge that the study is limited to one 351 community organisation and therefore the presented results are only a preliminary indicator 352 of the mental health perspectives in this population group. <u>Moreover, community member</u> 353 participants were recruited through purposive sampling from the client base of one

354 Australian LVR provider, and specifically only those clients who had agreed to be contacted about participating in research, and had also agreed to participate in this particular study. 355 356 This potential selection bias may have influenced our results, and may limit the 357 generalisability of findings to those not associated with an Australian LVR provider, or those 358 not interested in participating in research or this particular study. Similarly, stakeholder 359 participants were orientation and mobility specialists and one optometrist from the one 360 Australian LVR organisation, which may limit the generalisability of findings to these LVR 361 providers in other organisations, or other professions involved in LVR, such as occupational 362 therapists, orthoptists, assistive technology specialists and social workers. Nonetheless, as 363 data saturation was achieved, we are confident the range of themes and corresponding 364 intervention functions suitably address the study aim. Moreover, as participants were 365 recruited through purposive sampling, there may be influences of selection bias influencing 366 results and perhaps likely underestimating the mental health problems of individuals not 367 associated with an LVR provider. Furthermore, information on visual acuity, cause of vision 368 loss and presence of comorbidities was not available for collection. This information may 369 have been valuable in terms of interpreting the qualitative data.

370 This study has several key implications for clinical practice. First, improving the mental 371 wellbeing of visually impaired older adults is a priority. We postulate this may enhance their 372 participation in other programs, such as orientation and mobility, and this in turn could 373 improve their physical health, community connections, and overall well-being. Second, LVR 374 professionals, such as orientation and mobility specialists, and optometrists, are in a unique 375 position to identify those at risk of, or already experiencing mental health problems and can 376 refer as necessary, if provided with the necessary training. Third, older adults with vision 377 impairment may benefit from appropriate education and training to better support them as 378 they adjust to living with a vision impairment. We suggest this may be in the form of 379 evidence-based education regarding their vision diagnosis and prognosis, or psychological 380 support from an appropriately trained mental health practitioner. Fourth, providing older

adults with vision impairment the opportunity to connect with others in similar situations, as
well as those who are living well with vision impairment, is likely to improve their community
connections and social engagement. As a next step, the suggestions for future interventions
collected here will be presented through round tables with older adults with vision
impairment and service providers. This will ensure that any developed strategies are
practical and acceptable to the community and stakeholders, with the aim to improve the
ultimate adoption and scalability of a mental wellbeing program.

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393 Conflict of Interest

394 The authors declare that they have no conflict of interest.

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479 Titles and legends to figures

- 480 Figure 1 Barriers and facilitators to mental wellbeing program participation mapped on the
- 481 behaviour change wheel[15]. Barriers to participation appear in bold, while facilitators
- 482 appear underlined, with their relative intervention function presented in the outer wheel.