Fears and freedoms : A qualitative analysis of older adults' basic psychological needs for autonomy, competence, relatedness and beneficence

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1 Title

2 Fears and freedoms: A qualitative analysis of older adults' basic psychological needs for autonomy,

3 competence, relatedness, and beneficence

4 Abstract

5 Objective

6 Self Determination Theory posits three universal psychological needs: autonomy, competence and

7 relatedness. Beneficence has recently been proposed as an important behaviour for improved well-

8 being and eudaimonia. This study sought to qualitatively examine older adults' experiences of basic

9 psychological needs satisfaction and frustration.

10 Methods

11 Three separate and simultaneous national online focus groups were undertaken over four

12 consecutive days. Older Australians (n =103) explored home and community life. Themes were

13 identified using reflexive thematic analysis.

14 Results

15 Older adults are challenged in satisfying their psychological needs, especially around and after time

16 of retirement and as mobility decreases. Beneficence emerged as important for well-being,

17 congruent with evidence that beneficence influences well-being beyond basic psychological need

18 fulfillment.

19 Conclusion

20 Satisfactions and frustration may manifest differently for older adults than other groups. Thus, their

21 experiences may not adequately be captured by self-report measures. Novel themes of "fears and

22 freedoms" were identified in the study. Fear pertains to the loss of autonomy and the freedom to

23 spend time as one wishes.

Introduction

Increasing life expectancy brings a global imperative to ensure people can experience well-being into late life. According to Ryan and Deci's [1,2] Self Determination Theory (SDT) an individual's subjective well-being (SWB) depends on the degree to which one's basic psychological needs for autonomy, competence, and relatedness are satisfied. *Autonomy* refers to the need for "choice, volition, and freedom" [1(p74)] in one's thoughts and actions*, competence* refers to the need for a person to perceive they are effective and capable in their actions within an environment, and *relatedness* refers to the need to have trusting and warm relationships and consequently integration into a social group [1]. The theory has established that satisfying these three psychological needs leads to a holistically good life of 'living well' with integrity and well-being, 'eudaimonia', rather than 'hedonic' happiness or pleasure seeking that is less satisfying in the long term [1,2].

To ensure a holistically good life, it is critical to examine psychological needs fulfillment over the life span. The substantial body of evidence to support SDT from early and middle adulthood into late life exists in areas as diverse as musical participation [3] and pet ownership [4]. However, while SDT's basic psychological needs may be the same across the lifespan, need satisfactions and frustrations may be experienced differently in later life, which may, at least in part, account for variations in late-life well-being. That is, while older adults are more likely to live eudaimonically in terms of intrinsic aspirations, goal autonomy, mindfulness and fulfillment of basic psychological needs, their well-being outcomes are mixed in comparison to younger adults [5]. Studies suggest that older adults are sensitive to threats to their sense of autonomy and competence [6], while high vulnerability associated with age-related frailty might change the importance of these needs for well-being in very late life [7]. While satisfaction of basic psychological needs can lead to better well-being outcomes, differences in later life may not be captured on existing self-report measures, and should be examined qualitatively, which is the focus of this research.

Beneficence, the sense of doing, or having done, good things for others, has recently been proposed as a fourth basic psychological need [8] and is strongly linked with (psychological) needs in older adulthood. Older adults are more likely to live in prosocial ways, and 'giving back' has been recognised as a fundamental orientation for people from middle age [8]. Having been freed from early adulthood's demands for strength, productivity and planning, people are able to assume 'disponibility', an ethical and cognitive attitude that relinquishes the drive to be confined by specific

56 convictions or projects [9]. Dismissing constraints directed towards fixed projects or destinations, this

57 orientation recognises others as "human beings or companions on life's journey" rather than

58 viewing others as competitors or pawns [9(p206)]. This change in outlook is argued to not be

59 experienced or perceived as defeatist, but rather as a fundamental contributor to ageing positively,

60 leading to friendship, volunteering, and other forms of interpersonal solidarity. Therefore,

61 beneficence may be especially important for people in later life.

62 Later stages of life often brings changes in socio-demographic status and unexpected health

63 challenges that can affect fulfilment of psychological needs and hence overall well-being. The study

64 responds to Villars [10] observation about the importance of considering contemporary lived

65 experience to explore older peoples' psychological needs, and identify experiences that have unique

66 implications in later life.

Methods

68 This study is part of a larger project examining contemporary older Australians' daily lived

69 experience of home and community. Using a qualitative social constructivist methodology, it

70 prioritises participants' voices. Online focus groups (OFG) were conducted to identify the

71 perspectives of older adult participants from diverse circumstances. This focus group approach

72 provided a realistic and cost effective way to bring individuals together in discussions [11], and enabled

73 participation for people from hard-to-reach populations e.g. carers [12] and people with health issues

74 [13]. The study was approved by the Queensland University of Technology Office of Ethics and Integrity

75 (#1600000983). Participants provided informed consent before being granted access to the OFG.

76 The OFG were conducted in conjunction with a private contractor that maintains a database of

77 people who have expressed interest in participating in market research and discussion forums. Email

78 invitations were sent via the contractor to 132 people 50 years and above, purposively selected from

79 a mix of locations, life stages, household structures and ownership, socio-economic and employment

80 statuses. Older people typically live in their home for decades [14], therefore this study included

81 people aged 50+ to encompass changing circumstances at different life stages. A total of 103 people

82 (78%) aged between 50 and 92 consented to participate. Participants were anonymous to

83 researchers. Participants' characteristics are summarised in Table 1. One participant withdrew from

84 the study after viewing the discussion topics, saying they did not identify as an older person.

85   Three separate and simultaneous OFG were conducted over four days, to limit the number of

86   participants per group ($n1$=33, $n2$=37, $n3$=33), and reading/ interaction burden for participants and

87   the facilitator [15]. Text interactions could be in real-time or could be posted at any time over the four

88   days, allowing participants to interact at times/locations that suited them [11,16]. The same facilitator

89   conducted all OFG to maximise comparability and ensure data were collected in the same socio-

90   political and media environment. Discussions on separate topic 'pages' addressed different topic

91   areas (e.g. Groups and communities, Home in the future). As with in-person focus groups, the

92   facilitator could stimulate or clarify, for example, 'Can you tell me a little more about….'. Participants

93   were not obliged to respond to stimulus topic/s and could type 'no comment' or similar. A detailed

94   description of the OFG process is published elsewhere[17].

95   Author 1, a female occupational therapist with an interest in housing issues, facilitated all focus

96   groups and advised participants that the research contributed to her PhD. To simplify interactions,

97   authors 2, 3 and 4, experienced female qualitative researchers, did not provide direct facilitation.

98   The contractor exclusively provided technical support.

Analysis

100   Reflexive thematic analysis provided a structured mechanism for analysing the large volume of data

101   (1800+ text-based posts) [18]. Initial analysis was conducted manually by author 1 to identify emerging

102   themes, using Nvivo v12 to manage the large data volume, without automated analysis functions.

103   Data were read and re-read to understand the nuances and implications across all OFG, with all

104   authors reviewing the data in an iterative process to identify key themes and patterns [18]. Participants

105   were anonymous and could not be approached to comment on findings.

Results

107   Results are discussed in terms of *autonomy, relatedness, competence* and *beneficence*.

Autonomy

109   The majority of participants expressed a desire for autonomy and satisfaction in making choices

110   based on personal preference or values, in a general sense or in pursuing specific activities they

111   found satisfying. Post retirement, one participant observed:

112   *'Now I'm making up for lost time and most days set aside at least an hour of "me time"'* (GI,

113   68, male, group 1)

114   Participants routinely expressed concern about anticipated constraints to autonomy as they age,

115   typically from health challenges, economic constraints or social norms, and clearly identified their

116   fear of losing autonomy. The view of many was expressed by DT:

117   *'My worst fear of the future is being unable to do what I am doing now at the age of 92 -*

118   *meeting with friends - playing ...bowls and keeping healthy….'* (DT, 92, male, group 3)

119   Participants who had chosen to fully or partially retire from paid work referred to the increase in

120   autonomy as one of the most positive aspects. GW (71, male, group 1) described retiring at 50, *'I*

121   *accepted a redundancy package, and lived happily ever after'* and SP (64, female, group 1) advised

122   others to, *'Find somewhere to volunteer and you get the best of both worlds. A purpose but no boss.'*

123   Those who felt they had been forced from the workforce (by illness, retrenchment etc.) described

124   impacts on their broader self-efficacy and reduction in perceived control across other areas of life.

125   For example:

126   *'I had my job taken from me when my [boss's] company was taken over…'* (CC, 65, Male,

127   group 2)

128   In terms of older adults' perception of their autonomy around retirement and their future,

129   autonomy was positively or adversely affected by making an informed vs a coerced decision

130   respectively.

131   ## Competence

132   Being engaged and capable in later life was recognised and valued, for themselves, and also for

133   people with whom participants shared their lives:

134   *'My wife … goes out of her way to help others who are sick amazes me… forever cooking*

135   *meals for neighbours and friends. What an inspirational woman.'* (BF, 75, male, group 2)

136   Some participants described feeling competent in daily life at present , but expressed concern that

137   this could change in future due to societal changes, emerging technology and an increasingly de-

138   personalised world. This was clearly expressed by CP:

139   *'Knowing that the days of newspapers, free TV, postal services [are] either going to be*

140   *obsolete or other technical things changing life will become harder for the [ageing]*

141 *population. It has happened already with… the inability to speak to a person for help'* (CP,

142 79, female, group 1)

143 Many participants observed that older peoples' capabilities were undervalued in their communities.

144 A lack of satisfaction, and in some cases distress, was evidenced where peoples' skills and abilities

145 were not perceived as useful or valued.

146 *'I am on my own and very independent… It irritates me when people tell me I shouldn't be*

147 *mowing the lawn or painting a room. Why not if you are capable …'* (ML, 80, female,

148 group 2)

149 Participants also valued developing new competencies, taking classes, exploring new hobbies and

150 emerging technologies. This was described as personally satisfying and a way to engage more

151 effectively in desired activities or relationships e.g. learning vegetarian cooking with a grandchild.

152 Despite different contexts, many individuals discussed drawing on existing skills while adapting to

153 emerging circumstances:

154 *'I'm still involved with equestrian sports, especially Dressage as a judge & event organizer.'*

155 (MT, 70, female, group 1)

Relatedness

157 Relationships with others of all ages were paramount in coping with life, which could be experienced

158 like JS with a *'very supportive group of family and friends who rally when needed'* or via her list of

159 reliable tradespeople (JS, 66, female, group 1). In terms of intergenerational relationships, some

160 expressed the perspective that they *'find the younger generation pretty understanding and tolerant'*

161 (DJ, 57, female group 1), while others were concerned that their sense of community belonging was

162 undermined by behaviour perceived as negative stereotyping, or lack of respect for older people.

163 Indeed, the issue of intergenerational relatedness also impacted more broadly on autonomy and

164 competence needs. For example:

165 *'The attitude of some of the younger people that due to our age we cannot understand for*

166 *example how businesses operate and need our hands held …'* (GB, 70 ,male, group 1)

167 The opportunity to focus on interests was valued and the social aspects of activities were often an

168 important element. For example, CP observed that the interpersonal aspect was integral to learning

169 to speak Italian:

170 *'I love the language and… not only the fun of learning but sharing this with others in the*

171 *class.'* (CP, 79, female, group 1)

172 A small number of participants expressed a preference for isolation, like LK (65, female, group 3)

173 who explained that *'I did groups and communities for decades as a professional, now I savour my*

174 *peace and quiet'*. However, most participants described how they valued and aspired to retain

175 diverse long-term personal and place connections as part of their lives, as described by LH:

176 *'…we looked at retirement villages, but that would mean going away from all our friends…*

177 *to change Church… We are in a good area, surrounded by nice, friendly neighbours with all*

178 *the shops and public transport within walking distance.'* (LH, 81, female, group 2)

179 Those who felt isolated described their situation as 'hard' and separation from relationships as

180 'difficult'. Some participants faced a future separated from significant relationships by death or

181 distance. Participant MW (67, female, group 2) explained that physical limitations and task sharing

182 meant she struggled after her husband's death:

183 *'…everything was shared out… then we went off together to share any leisure time... I am*

184 *feeling extremely useless, worthless and frustrated. The worst thing is if a friend/s call in*

185 *they will quickly point out that - you should do this or that - but never offer to actually*

186 *help…'.*

187 Some participants sought alternative ways to engage with others, including using virtual methods to

188 stay in touch with important contacts, and keep up with news, social media, online interest and

189 advocacy groups. Participant AS (77, female, group 2) for example observed that:

190 *'I love Facetime on my iPhone. I can talk to my son and his children in the UK on wi-fi for*

191 *free.'*

192 However, others found the inability to be physically present highly unsatisfactory. Overall, what

193 mattered most about relationships was whether they met the participant's needs and were on their

194 own terms.

195 *'…I don't mind to join with any kind of people of other religion… I am always interested with*

196 *different culture and different religion, I always respect each religion and different people*

197 *of different nationality…'* (AC, 65, male, group 3)

Beneficence

Beneficent behaviours were themselves often closely aligned with forms of interpersonal relatedness. Positively impacting the lives of others, either directly or indirectly, was frequently mentioned with the majority of participants engaged, or aspiring to engage in, a wide range of beneficent or giving behaviours. Participants were keen to use their available time, resources and competencies e.g. computer skills, driver's licence, and acknowledged the value of such activity in terms of expanding their existing interests, skills, social engagement or the opportunity to nurture others. LH described their experience in this way:

'…we have 'adopted' a young man our second son's age who is all alone now that his wife has died… feels like we have family close by again.' (LH, 81, Female, group 2)

The majority of participants valued having community connections that they could contribute to close to home, and many were also interested in engaging physically and intellectually with the wider world, actively seeking information, developing opinions and seeking to influence matters they felt strongly about. Beneficent activity was often long term, for example:

'I love being involved & making what I consider to be a contribution. I've been involved in the community in one form or another most of my life, SES, Fire Brigades, local sports clubs [etc].' (PO, 67, male, group 1)

While participants often focussed on making a positive impact, challenges to their capacity to contribute could affect confidence in offering or performing these activities. These challenges could make people feel frustrated, inadequate, lacking worthiness or undervalued:

'I was a Scout Leader and enjoyed it immensely. Getting children to engage, …was an integral part of my life, but sadly ill health stopped that. Later on I was a Committee member of a group… and again ill health forced me to resign. Every group I have looked at to participate in needs mobility.' (JT, 73, male, group 3)

Around one third of participants had dependants, typically minor or adult children, spouses, or other relatives, and described finding satisfaction in making their lives better. Participants noted that trying to improve others' lives could be difficult or put a strain on relationships. For some, giving priority to others led to problems e.g. health issues, while for others a lack of ability to provide positive outcomes induced distress and anxiety. Participants described their different situations:

227 *'My needs have been put to one side for the last 19 years and unfortunately that has meant my*

228 *health has suffered. I am well aware that means upcoming medical issues that will be long term*. (SP,

229 51, Female, group 1)

230 *'I used to volunteer at [regional hospital] but [Health Department] closed us out of the food*

231 *kitchen…'* (AS, 72, male, group 3)

232 The quotes from participants provided examples of the daily experiences of older adults. These are

233 representative of the OFG and valuable in terms of better understanding need satisfaction of older

234 people.

Discussion

236 This study examined the nuances of older adults' experience of psychological need satisfaction to

237 qualitatively inform possible paths and obstacles to the satisfaction of older adults' basic

238 psychological needs. The research uniquely captures perspectives of older people from multiple life

239 stages and age ranges, including people often excluded from providing feedback due to their health

240 status, location, or caring roles.

241 It is clear that need satisfaction influenced the way older adults sought to engage in daily activities,

242 relationships and interaction with their communities. These behaviours then impacted on older

243 peoples' level of satisfaction in basic psychological needs. Variations in autonomy satisfaction were

244 apparent after job and retirement changes in later life, due to the cessation of job-related

245 gratifications and concerns. On one hand, we found plentiful evidence that forced retirement

246 created a fear of immediate loss of ability to satisfy needs for autonomy and competence in later

247 life. Yet, on the other hand some older adults experienced increases in autonomy in retirement,

248 although these older adults were either partially retired or had not been forced into retirement.

249 Gains in autonomy satisfaction in retirement were observed for people able to choose self- directed

250 activities after retirement, particularly people who retired on their own terms rather than being

251 forced into retirement. Autonomy satisfaction may be supported by choosing retirement timing and

252 establishing a strong baseline sense of autonomy through arranging affairs for a desired post

253 retirement lifestyle.

254 The importance of autonomy and competence was highlighted where satisfaction in these areas was

255 threatened, especially where limitations to physical ability or mobility (age related or not) and ageist

256 social expectations combined. Societal and technological changes could engender frustration, both

257 through perceived personal lack of ability and societal perceptions of declining competence.
258 Importantly, for some this time of life also provided the opportunity to indulge and expand interests
259 and skill sets. The potential loss of identity as an autonomous competent person may be more
260 salient among older people with a lifetime of identity establishment, leading to this studies'
261 observed fear of immediate loss of ability to satisfy needs, hence it is important to support older
262 people to maintain satisfaction in competence and autonomy as it may be difficult to regain
263 satisfaction in these needs if it is lost. The small number of participants aged 85+ makes it difficult to
264 draw conclusions about Neubauer et al.'s [7] assertion that high vulnerability in very late life may
265 change the importance of competence and autonomy needs.

266 Older peoples' descriptions of relatedness were strongly associated with helping others and an
267 orientation towards beneficence. Importantly, participants frequently discussed beneficent activities
268 without identifying them as beneficent or voluntary, though the purpose was clearly to contribute to
269 other people or communities. Beneficence was identified as having an important impact on
270 positivity and influencing need satisfaction for older adults. Beneficence's impact on psychological
271 need fulfillment could be enhanced and strengthened over time as people strengthened
272 relationships, and built and maintained engagement with home environments and communities
273 through their contributions. Beneficent activity was typically in the context of formal volunteering,
274 informal assistance to family, friends and neighbours, and active membership of organisations e.g.
275 assisting neighbours who were unwell or unable to drive, raising grandchildren, involvement in local
276 interest groups, service clubs and organisations. We can speculate that Romaioli and Contarello's [9]
277 'disponible' worldview (reducing 'strength and productivity' drive, while embracing interpersonal
278 solidarity) could be a human's default orientation, not adopted in modern society until social
279 pressure is relaxed at retirement.

280 While late life presented the opportunity to spend time in company or alone, the fundamental need
281 to relate to others may remain as a motivator, allowing people to reorient time and effort towards
282 friendship and volunteering in ways that meet their personal interests and needs. While people
283 raised concerns about mobility and proximity regarding relatedness and beneficence satisfaction, it
284 was those with a long history of community contribution and volunteering who were most likely to
285 raise this issue. The majority of participants expressed concerns that barriers surrounding mobility
286 and physically accessing locations would increase in later life, with potential impacts on relatedness
287 and beneficence satisfaction. Older adults' efforts to overcome mobility and proximity limitations

288   through the virtual world were somewhat successful, but a clear desire was apparent for

289   interpersonal interaction and engagement for psychological need fulfilment. Psychological need

290   domains are highly interdependent, as changing personal circumstances, daily experiences and

291   social interactions reciprocally influenced satisfaction outcomes.

292   In considering well-being in later life it is important to understand when and how in their lives older

293   adults develop their sense of well-being. The developmental perspective has been debated since

294   Erikson [19,20] argued that from middle adulthood people become more focussed on generativity to

295   nurture, guide and contribute to well-being for future generations. McAdams and colleagues'

296   conceptual framework identified that complex interactions among inner needs, cultural demands,

297   interests, objectives, behaviours or narratives are entwined in generative orientation and behaviour

298   [21] to contribute to creating a better world, or beneficence. As this developmental stage must be

299   negotiated to successfully deal with later life, beneficence might therefore be seen as a potential

300   psychological need for people as they move from middle adulthood, or retirement, through later

301   adulthood.

Conclusion

303   This study contributes to ageing research by furthering our understanding of psychological need

304   satisfaction and the importance of beneficence for the well-being of contemporary older adults.

305   Martela et al's [8] theory that *beneficence* may be a basic psychological need in addition to *autonomy,*

306   *competence, relatedness* is somewhat supported by our findings.

307   Psychological need fulfilment was supported by older adults' engagement in daily activities,

308   relationships and interactions, which is important for well-being. Older people gain need satisfaction

309   from contributing to their communities but are likely to face challenges to their ability to contribute

310   in later life. This tension suggests that targeted support to build community connections and

311   volunteering options for people around retirement time could support older adults to develop

312   approaches which can satisfy psychological needs over the long term.

Impact statement

314   This study highlights that older people require access to relationships and community in order to

315   find meaningful ways to satisfy psychological needs. Practitioners should prioritise matching older

316   people with opportunities to engage socially and volunteer in local roles they are interested in, to

317   support psychological need satisfaction and well-being in later life.

318 Data availability statement: Authors elect to not make data available.

References

1. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol*. 2000;55(1):68-78. doi:10.1037/0003-066X.55.1.68

2. Ryan RM, Deci EL. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York, NY: Guilford Publications; 2017.

3. Krause AE, North AC, Davidson JW. Using Self-Determination Theory to Examine Musical Participation and Well-Being. *Front Psychol*. 2019;10. doi:10.3389/fpsyg.2019.00405

4. Kanat-Maymon Y, Antebi A, Zilcha-Mano S. Basic psychological need fulfillment in human–pet relationships and well-being. *Personal Individ Differ*. 2016;92:69-73. doi:10.1016/j.paid.2015.12.025

5. Mackenzie CS, Karaoylas EC, Starzyk KB. Lifespan Differences in a Self Determination Theory Model of Eudaimonia: A Cross-Sectional Survey of Younger, Middle-Aged, and Older Adults. *J Happiness Stud*. 2018;19(8):2465-2487. doi:10.1007/s10902-017-9932-4

6. Miller PA, Sinding C, Griffith LE, Shannon HS, Raina P. Seniors' narratives of asking (and not asking) for help after a fall: implications for identity. *Ageing Soc*. 2016;36(02):240-258. doi:10.1017/S0144686X14001123

7. Neubauer AB, Schilling OK, Wahl H-W. What Do We Need at the End of Life? Competence, but not Autonomy, Predicts Intraindividual Fluctuations in Subjective Well-Being in Very Old Age. *J Gerontol B Psychol Sci Soc Sci*. 2017;72(3):425-435. doi:10.1093/geronb/gbv052

8. Martela F, Ryan RM. The Benefits of Benevolence: Basic Psychological Needs, Beneficence, and the Enhancement of Well-Being. *J Pers*. 2016;84(6):750-764. doi:10.1111/jopy.12215

9. Romaioli D, Contarello A. Redefining agency in late life: the concept of 'disponibilità.' *Ageing Soc*. 2019;39(1):194-216. doi:10.1017/S0144686X17000897

10. Villar F. Successful ageing and development: the contribution of generativity in older age. *Ageing Soc*. 2012;32(7):1-19. doi:10.1017/S0144686X11000973

11. Liamputtong P. *Focus Group Methodology: Principles and Practice*. SAGE Publications Ltd; 2011. doi:10.4135/9781473957657

12. Bonevski B, Randell M, Paul C, et al. Reaching the hard-to-reach: a systematic review. *BMC Med Res Methodol*. 2014;14(42). doi:10.1186/1471-2288-14-42

13. Froonjian J, Garnett JL. Reaching the Hard to Reach: Drawing Lessons From Research and Practice. *Int J Public Adm*. 2013;36(12):831-839. doi:10.1080/01900692.2013.795161

350   14.   Boldy D, Grenade L, Lewin G, Karol E, Burton E. Older people's decisions regarding 'ageing in
351   place': A Western Australian case study. *Australas J Ageing*. 2011;30(3):136-142.
352   doi:10.1111/j.1741-6612.2010.00469.x

353   15.   Hatten JE. *Optimal Size For Online Asynchronous Text-Based Focus Group Discussions: A Mixed
354   Methods Study*. University of Minnesota. 2014.

355   16.   Wilkerson JM, Iantaffi A, Grey JA, Bockting WO, Rosser BS. Recommendations for internet-
356   based qualitative health research with hard-to-reach populations. *Qual Health Res*.
357   2014;24(4):561-574. doi:10.1177/1049732314524635

358   17.   Dendle K, Buys L, Vine D. *Online Focus Groups: National Focus Groups With Diverse Older
359   Adults*. SAGE Publications Ltd; 2021. doi:10.4135/9781529758535

360   18.   Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol Lond*. 2006;3(2):77-
361   101. doi: 10.1191/1478088706qp063oa

362   19.   Erikson EH. *Insight and Responsibility*. Norton; 1964.

363   20.   Erikson EH, Erikson JM, Kivnick HQ. *Vital Involvement in Old Age*. W.W. Norton; 1986.

364   21.   McAdams DP, De St. Aubin E. *Generativity and Adult Development: How and Why We Care for
365   the next Generation*. 1st ed. American Psychological Association; 1998.

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Tables

369 Table 1. Participant demographic characteristics

370

Variables	Possible responses	Group 1 n=33	Group n=37	Group 3 n=33
Gender	Female	17	18	17
	Male	16	19	16
Age	50-59	10	11	9
	60-69	11	6	9
	70-79	10	14	10
	80+	2	6	5
Education	Primary/ highschool	8	12	8
	Trade / post-secondary	16	14	13
	University	9	11	12
Relationship status	Married/ partnered	22	27	20
	Divorced/ single/ widowed/ never married	11	10	13
Household income	Under $39,999	14	17	15
	$40,000 - $79,999	12	10	12
	$80,000 or more	7	10	6
Home tenure type	Own part or outright	27	33	33
	Rent/ lease/ share	6	4	0
Location	Capital city inner	4	2	2
	Capital city suburb	14	19	19
	Regional / rural	15	16	12