Predicting Wellbeing in Retirees During the COVID-19 Pandemic: The Roles of Meaning in Life and Goal Setting

Anna Lawton[1] · Lauren Miller-Lewis[2,3,4] · Adam Gerace[2,5]

Abstract

Restrictions introduced during the COVID-19 pandemic disrupted many retirees from being able to pursue their lifestyle retirement goals. This study examined the impact of lifestyle retirement goal disruption during the pandemic, sources of meaning in life, and goal setting behaviors (planfulness) on retiree wellbeing. In this quantitative study, retirees ($n = 141$) in Victoria, Australia completed an online survey in mid-2021 containing measures of sources of meaning in life, planfulness, and wellbeing. Qualitative data were also collected using a series of open-ended questions regarding the nature of retirement goal disruptions. Findings revealed that greater sources of meaning in life and planfulness significantly predicted greater wellbeing in retirees, as did being in a relationship and living in an urban/city location. Age, gender, and years retired were not associated with wellbeing. Planfulness moderated the association between COVID-19 goal-disruption and wellbeing. Open-ended responses indicated that retirement goals commonly affected by COVID-19 were travel and family-time. The study revealed that older adults were able to adjust during a time of crisis, with sources of meaning in life and planfulness being useful resources for wellbeing. Planfulness was an important buffer for those experiencing goal-disruption due to COVID-19.

Keywords Wellbeing · Retirement · COVID-19 · Meaning · Goals

✉ Lauren Miller-Lewis
l.miller-lewis@cqu.edu.au

Anna Lawton
anna.lawton@cqumail.com

Adam Gerace
a.gerace@cqu.edu.au

1 College of Psychology, School of Health, Medical and Applied Sciences CQUniversity, Melbourne, Victoria, Australia

2 College of Psychology, School of Health Medical and Applied Sciences, CQUniversity, Adelaide Campus, 44 Greenhill Road, Wayville, 5034 Adelaide, South Australia, Australia

3 Research Centre for Palliative Care, Death and Dying, College of Nursing and Health Sciences, Flinders University, Adelaide, South Australia, Australia

4 Cluster for Resilience and Wellbeing, Appleton Institute, CQUniversity, Adelaide, South Australia, Australia

5 Appleton Institute, CQUniversity, Adelaide, South Australia, Australia

Introduction

The COVID-19 pandemic has impacted the mental health and wellbeing of people around the world. Lockdowns and restrictions were used initially to limit transmission and allow health services to mobilize against the threats of the virus (WHO, 2020). Although these measures undoubtedly saved lives, they did separate family generations from spending much time together (Vaterlaus et al., 2021) and were accompanied by reports of heightened levels of anxiety, loneliness, and severe depression (Brinkhof et al., 2022; Sepúlveda-Loyola et al., 2020; Shakespeare-Finch et al., 2020), as well as increased engagement in the use of substances such as alcohol (Rahman et al., 2020; Stanton et al., 2020).

Older persons' welfare is of concern given the potential for deleterious effects associated with lockdowns and physical distancing (Serrano-Alarcón et al., 2022). Some studies find that, compared with younger people, older adults report lower rates of anxiety and depression symptoms, and lower substance use and suicidal ideation (Czeisler et al., 2020; Vahia et al., 2020). However, the impact of social isolation

and loneliness on wellbeing has also been reported (Brinkhof et al., 2022; Sepúlveda-Loyola et al., 2020). Disruption to daily lives, plans and goals, and a loss of purpose have been found, which may negatively affect wellbeing, particularly for those with risk factors such as anxiety and depression (Brinkhof et al., 2022; Johnson et al., 2017; Takashima et al., 2020).

From a lifespan development perspective, wellbeing in older adults is experienced via multiple and diverse pathways, providing opportunity for growth, positive development and meaning in life (Nakamura & Chan, 2021). Psychological wellbeing in particular is described as a multidimensional construct that is about more than positive emotions, with a dominant model of wellbeing defining it as comprised of six aspects of positive psychological functioning: autonomy, environmental mastery, personal growth, purpose in life, positive relationships with others, and self-acceptance (Ryff, 1989). Older adults often report higher wellbeing than their younger counterparts, although this is dependent on how wellbeing is defined and measured (Xing & Huang, 2014). Commonalities between age groups include aspects such as having a positive psychological outlook and functioning, and sufficient resources to meet needs, while those 65 and older also refer to unique needs such as continuity in accomplishing goals or tasks that they have previously been able to accomplish (Bowling, 2011). Wellbeing in older adults is uniquely influenced by how they have responded over the years to stressors, important factors such as age, developmental milestones such as generativity concerns (Nakamura & Chan, 2021; Rothrauff & Cooney, 2008), health status, and meaning-making around mortality and time horizons, which in turn contribute to the motivations that drive how one spends their time (Carstensen, 2006; Carstensen et al., 2020; von Humboldt et al., 2014). A key milestone for older people is retirement from work, where older adults are said to enter a third age of development (Laslett, 1991). The retirement process is considered to be dynamic, unfolding over time and that adjustment is based on factors such as years since retirement, centrality of one's work role to identity, and resources (e.g., physical, social, financial) to meet valued needs (Topa & Pra, 2018). Retirement, for many, signals a rewarding time of freedom (Silver, 2018), and a chance to plan and participate in leisure activities, including "bucket list" goals, one has postponed or not previously had time to do (Bauger & Bongaardt, 2016; Freund, 2020).

Leisure activities, defined as non-work-obligated activities (Newman et al., 2014), have been characterized in the literature primarily by the "intrinsic motivation and freedom" (Kuykendall et al., 2015, p. 40) that is involved in their pursuit. Generative relationship-based activities such as supporting and spending time with family, along with travel, joining clubs, volunteering, sporting activities, and learning new skills, are all typical leisure-type activities undertaken by older adults particularly during the third age, and are referred interchangeably here as lifestyle retirement goals (Freund, 2020; Henning et al., 2021; Kuykendall et al., 2015; McAdams, 2013). Engagement in leisure activities is important to older adults' cognitive health (Kelly et al., 2017; Kuykendall et al., 2015), and when such activities generate subjective leisure satisfaction, they are associated with increases in wellbeing (Freund, 2020; Henning et al., 2021; Kuykendall et al., 2015; Newman et al., 2014).

Goal Disruption

The challenges caused by COVID-19 restrictions have potentially disrupted the ability of many older people to pursue and achieve lifestyle retirement goals, including those intrinsically related to areas of life that are meaningful to them (McAdams, 2013; Wrosch et al., 2003). Unachievable goals can frustrate and negatively impact individuals (Carver & Scheier, 2005), but the extent to which individuals can draw on aspects of their lives to derive meaning (sources of meaning) and their ability to engage in goal setting more generally may support wellbeing (Joly-Burra et al., 2020; Steger et al., 2009).

The COVID-19 pandemic is a relatively recent threat to goals and meaning making, however research into other health events such as severe acute respiratory syndrome (SARS) and Ebola (Chew et al., 2020; Roy et al., 2020) demonstrated that individuals engage in goal adaptation when needed, though this differs across the lifespan (Knepple Carney et al., 2021) with older adults more adept at this skill. Conversely, emotional distress, frustration, and anxiety about unachievable goals (Carstensen et al., 2020) can lead to compromised health and wellbeing (Wrosch et al., 2012). In the case of COVID-19, studies have identified resilience resources act as a buffer against the stress of the COVID-19 pandemic in older adults (Beasley et al., 2022; Fristedt et al., 2022; Knepple Carney et al., 2021; López et al., 2020; Perez-Rojo et al., 2022; Verhage et al., 2021) and this highlights a need to explore other resilience outcomes, such as the ability of older adults to be adaptable with goals when faced with difficult circumstances (Schnell & Krampe, 2020; Shakespeare-Finch et al., 2020).

Planfulness

A potential predictor of wellbeing for older adults is how they generally approach goal setting. How an individual *sets* and *achieves* goals can be examined together under the concept of planfulness (Ludwig et al., 2018). Planfulness is experienced through three thought processes used to engage

with a goal: (1) *temporal orientation*, which is the ability to look to the future at how a present behavior will have an influence on a goal; (2) *mental flexibility*, the ability to adapt goals to changing circumstances; and (3) *cognitive strategies*, which involve how one anticipates and copes with potential stumbling blocks in their quest to achieve goals. The pursuit of meaningful goals during the COVID-19 pandemic has likely been challenged posing a threat to the individual's wellbeing by interrupting their ability to pursue goals that are important to them (Wrosch et al., 2003).

Sources of Meaning in Life

The number and type of sources of meaning in life can be viewed as the building blocks of the construct of meaning (Steger, 2021) and articulate individual differences in meaning-making (Schnell, 2011). Steger's (2021) theoretical perspective suggests that what is meaningful and from what (sources) individuals derive meaning is subjective, involving perceptions of the *significance* of one's life and the ability to make sense of one's life (*coherence*), as well as pursuing goals in line with one's values (*purpose*). Such purpose is driven by a cognitive intention to portray one's values (Scheffold et al., 2014; Steger, 2021), with an inherent connection between goals and sources of meaning in life (Dudley et al., 2020; Schippers & Ziegler, 2019; Steger, 2021).

There is a positive association between sources of meaning in life and wellbeing (Pinquart, 2002; Steger, 2017). Theory and research suggest that in retirement, older adults are more likely to preferentially pursue meaningful/purposeful goals (Carstensen, 2021; Hupkens et al., 2016; Joly-Burra et al., 2020), with greater wellbeing in those whose goals are intrinsically motivated and meaningful (Emmons, 2003; Ryan & Deci, 2000; Sheldon et al., 2004; Wrosch et al., 2012). Previous research has found that individuals can adapt in the face of difficult situations by finding meaning in other areas of life and setting new, or adjusting existing, goals (Ostafin & Proulx, 2020; Rodrigue et al., 2000; Waters et al., 2021).

Study Purpose

The purpose of the present study was to examine whether sources of meaning in life and planfulness predicted wellbeing in retirees during the COVID-19 pandemic. Further, the research investigated if (a) sources of meaning in life and (b) planfulness each moderated the impact of COVID-19 retirement goal disruption on retiree-wellbeing. As part of the study, qualitative data regarding the nature of goal disruptions and changes were also collected to provide an in-depth account of their experiences.

It was predicted that:

1. Retirees with more sources of meaning in their life will report greater levels of wellbeing.
2. Retirees who have greater levels of planfulness will report greater levels of wellbeing.
3. Retirees who feel COVID-19 has impacted their retirement goals will report lesser wellbeing.
4. The relationship between COVID-related retirement goal disruption and retiree wellbeing will be moderated by (a) sources of meaning in life and/or (b) planfulness.

Method

Participants

Respondent inclusion criteria for this study was that (a) the individual must reside in the state of Victoria, Australia and (b) must be retired, as defined by the Australian Superannuation rules: i.e., retired from or working less than 10 h per week in gainful employment (Drury, 2020).

A G*Power apriori power analysis (Faul et al., 2007) was conducted for a multiple regression containing 10 predictors, resulting in a sample size estimation of at least 144 participants, with $\alpha = 0.05$, and power of 0.801, based on an estimated R^2 value of $= 0.1266$ (a small-to-medium effect) using conservative intercorrelations consistent with relevant studies measuring similar predictor variables on wellbeing (Arslan & Allen, 2022a; Rahman et al., 2020; Ritchie et al., 2020; Schnell & Krampe, 2020; Stanton et al., 2020; Trzebiński et al., 2020). There is an 80.1% chance of correctly rejecting the null hypothesis with 144 participants.

Study Location

Restrictions imposed due to the COVID-19 pandemic varied across the world. The study was conducted in the Australian state of Victoria because the state had experienced one of the longest accumulative days of lockdown of anywhere else in the world at the time of data collection (Boaz, 2021). The survey was available online for six weeks in July-August 2021 coinciding with a fifth (stage 4) lockdown, for all of Victoria, lasting 12 days, and a sixth (stage 4) lockdown, specifically for Melbourne, lasting 77 days, beyond the duration of the survey. Stage 4 restrictions included an exclusion of travel of more than five kilometers from one's home and during the sixth lockdown, an evening curfew applied (Dunstan, 2021; Victoria State Government, 2021).

Procedure

This cross-sectional study utilized a non-experimental design. Quantitative and qualitative survey data were collected via a self-reported online anonymous survey administered on Qualtrics and stored securely. Ethics approval was granted by CQUniversity Human Research Ethics Committee (approval number 2021-056).

Participants were recruited via social media, Rotary clubs, seniors' groups, estate planning lawyers, community newspapers, and Council on the Ageing (COTA) Victoria who shared the online study weblink with their relevant members/clients. The online survey started with a participant information sheet describing the study and stated that progressing to the study represented informed consent. Participants were asked about their retired status, as well as noting how many years they have been retired, gender, highest level of education, residential postcode, and age, prior to being able to move through to the psychological scales and open-ended questions about the impact of the pandemic on their retirement. The survey took participants approximately 19 min to complete.

Measures

Wellbeing

Wellbeing was measured using the parsimonious 18-item version (Stanford University, 2018) of the Psychological Wellbeing (PWB) Scale (Ryff, 1989; Ryff & Keyes, 1995), with three items per dimension: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The purpose of this scale was to provide an overall psychological wellbeing score for participants, rather than subscale scores, and was chosen for its multifaceted definition of wellbeing. Respondents completed items (e.g., "I like most parts of my personality") on a Likert-type response scale from 1 (*strongly disagree*) to 7 (*strongly agree*). An overall total overall score was calculated, with possible scores ranging between 18 and 126. Higher scores indicate greater wellbeing. This scale has good psychometric properties for a total wellbeing score (Ryff, 2013) with an alpha coefficient of 0.80 (Boylan & Ryff, 2015). Coefficient alpha in this study was 0.833.

Sources of Meaning in Life

Sources of meaning in life was measured using the Sources of Meaning Profile-Revised (SOMP-R; Reker 1996), which measures how much meaning one derives from 17 areas or taxonomies. Example items include "Being of service to others", "Engaging in personal relationships" and

"Participation in leisure activities". The 17 items are completed on a Likert-type response scale from 1 (*not at all meaningful*) to 7 (*extremely meaningful*). In this study, the scale was scored by summing the items, and the total could range from 17 to 119, with higher scores indicating higher sources of meaningfulness in life (Reker, 1996). This scale provides a time-efficient measure of sources of meaning and has good psychometric properties (Reker, 1996) with an alpha coefficient median of 0.77 (Reker & Woo, 2011). Coefficient alpha in this study was 0.795.

Planfulness

Planfulness was measured using the Balanced Planfulness Scale (Ludwig et al., 2018). This 30-item measure consists of 10 items each on cognitive strategies, mental flexibility, and temporal orientation. Example item includes, "It is hard for me to focus in the present on a goal that I have in the future". Items are completed on a Likert-type response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). It is recommended that this scale is scored as a total score only as the subscales do not have sufficient unique variance to be assessed separately (Ludwig et al., 2018). A total score is derived by summing all items and total scores can range from 30 to 150. Higher scores indicate greater planfulness and effectiveness at pursuing and achieving goals. This scale has excellent psychometric properties with an alpha coefficient of 0.89 (Ludwig et al., 2018). Coefficient alpha in this study was 0.883.

Lifestyle Retirement Goal Changes

Due to the lack of measures assessing COVID-19 goal disruption, lifestyle retirement goal changes were measured using a new measure based on previous measures assessing goal changes (e.g. Derogatis 1986; Doig et al., 2015), behavioral changes during COVID-19 (Stanton et al., 2020), and goal efficacy during COVID-19 (Ritchie et al., 2020).

First, participants were asked to describe their top three lifestyle retirement goals prior to the pandemic and to answer up to 10 questions on changes (if any) that they have made to adjust to the current times. Two items, referred to as "ability to pursue goals" and "changed goals" were used to assess the disruption of the pandemic on participants' retirement goals and their wellbeing in the data analyses. "Ability to pursue goals" was rated on a four-point scale (1 = *no change at all*, to 4 = *completely prevented ability to pursue*) and "actually changed goals" was also rated on a four-point scale (1 = *goals unchanged*, to 4 = *completely changed*).

Additional questions were designed to capture a descriptive understanding of the nature of any changes made to participants' goals during COVID-19 such as "Since the

onset of the COVID-19 pandemic, I have adjusted some of these goals so I can still achieve a version of them." These were rated on a Likert-type response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Finally, respondents were then asked to provide an open-text response to "please expand on why you answered this way?". These open-text comments were then categorized and interpreted using content analysis.

Data Analyses

Data were analyzed using IBM SPSS Statistics Version 28 (IBM Corporation). Kolmogorov-Smirnov tests of normality and histograms indicated that the continuous variables were within normal range.

Bivariate correlations between variables were investigated followed by a simultaneous linear multiple regression analysis for the first three hypotheses. Predictor variables were ability to pursue goals, changed goals, sources of meaning in life, and planfulness, as well as demographic variables, with the outcome variable being wellbeing. Semi-partial correlation coefficients were also calculated in SPSS 28 and squared (sr^2) to identify the unique contribution of each predictor variable to the model (Pallant, 2020). All main predictors had a continuous level of measurement

Table 1 Demographics of Participants (n = 141)

	n (%)
Gender	
Male	75 (53.2)
Female	66 (46.8)
Relationship status	
Married/partnered	103 (73)
Not married (a)	38 (27)
Geographical location (b)	
Urban/city	87 (61.7)
Regional	54 (38.3)
Years retired	138
< 5	32 (22.7)
5–10	34 (24.1)
11–15	29 (20.6)
16–20	17 (12.1)
21–25	26 (18.4)
Education level (c)	
Secondary/advanced	97 (68.8)
University	44 (31.2)

Notes a. 'Not married' included categories of separated, widowed, divorced, never married.

b. Postcodes were categorized based on the Australian Bureau of Statistics suburb classification for remoteness (Australian Bureau of Statistics, 2018).

c. Education levels for secondary/advanced included secondary school, diplomas/advanced diplomas and a category for 'other'

Education level for university included undergraduate and postgraduate degrees

except for changed goals, which along with some demographic variables were dichotomized for inclusion in the regression, based on skewed distributions of responses. To determine the moderation effects for the final hypothesis, main effects and interactions were derived using the SPSS PROCESS v4.0 Macro (Hayes, 2017). Age, gender, number of years retired, education and relationship status were included as covariates.

The open-ended text responses were analyzed using qualitative content analysis (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). Participant responses were read and re-read to search for common meaningful coding units to represent participant goals and experiences, and thematic categories generated for those that were mentioned repetitively. Thematic categories were discussed and agreed upon by two raters.

Results

Sample Characteristics and Descriptive Statistics

A total of 154 participants completed the survey. Participants were excluded if they were not from the state of Victoria ($n = 6$), or were not retired ($n = 5$). Data screening for univariate ($z > 3.29$) and multivariate outliers (via Mahalanobis distance; $p < .001$) resulted in the removal of two multivariate outliers only. The final sample for analysis therefore consisted of $n = 141$ participants (53.2% male). The sample consisted of considerably more married/partnered respondents (73%) than respondents who were either widowed, divorced, separated, or never married (27%). Most participants were not university educated (68.8%), and more participants resided in urban Melbourne (61.7%) rather than regional Victoria (38.3%). The mean age was 73 years ($SD = 6.5$, *Range* = 57–92 years, $n = 139$). Our retired sample were slightly over-represented by males, married/partnered participants and university education (Australian Bureau of Statistics, 2021). The demographic characteristics of the sample are shown in Table 1.

Mean score on the psychological wellbeing scale was 98.90, which is at the higher end of possible scale scores, but consistent with a similarly-aged cohort from the Midlife in the United States (MIDUS 3) 2013–2014 dataset (Ryff et al., 2019). The mean score on the sources of meaning in life measure was consistent with previous studies in healthy adults (Mason, 2018; Prager, 1996) and indicated a moderately high level of meaningfulness in life ($M = 88.8$). The planfulness scale is a newer measure, however the mean for the present study ($M = 105.4$) was also consistent with previous studies by the developers of the tool, indicating a medium level of planfulness (Ludwig et al., 2018, 2019).

Only 10.6% of the sample reported that the pandemic had made 'no change at all' to their *ability to pursue* their retirement goals, with 29.1% reporting some minor changes, 40.4% some serious change, and 19.9% saying the pandemic had completely prevented the pursuit of their retirement goals. Overall, 41.1% reported they had changed their retirement goals since the onset of the pandemic, with 58.9% reporting no change. 'Goals changed' was a grouped category for answers from three response options in the survey: 'I have made a slight change to my goals', 'I have changed my goals quite a bit', and 'I have changed my goals completely' so the responses could be analyzed as a dichotomized variable.

Correlations Between Variables

Table 2 shows the correlations between variables. Higher levels of both planfulness and sources of meaning in life were each associated with greater wellbeing. The relationship between one's ability to pursue retirement goals and wellbeing was not statistically significant, but there was a statistically significant negative relationship between having to change goals and wellbeing ($p = .011$). Of the associations between demographic factors and key study variables, being in a relationship, being university educated and living in an urban/city location were associated with greater wellbeing; being female, not married, and younger were associated with reduced ability to pursue goals, and being in a relationship was associated with higher sources of meaning

in life. Age, gender, and years retired were not associated with psychological wellbeing.

Hypothesis Testing

To investigate the predictive power of sources of meaning in life, planfulness, and retirement goal disruption and goal change on wellbeing, a simultaneous multiple linear regression was conducted. The demographic characteristics of years retired, gender, age, relationship status, education, and location were also included in the model. The analysis model explained 53.1% of the total variance in wellbeing, $R^2 = 0.531$, $F(10, 125) = 14.16$, $p < .001$.

Examination of standardized beta coefficients revealed that the strongest significant predictors of wellbeing were planfulness ($\beta = 0.491$) and sources of meaning in life ($\beta = 0.253$). Weaker predictors included relationship status ($\beta = -.215$) and education levels ($\beta = 0.153$), with those who were partnered and those with higher educational attainment reporting greater wellbeing. Changed goals as a predictor of wellbeing approached significance ($\beta = -0.112$, $p = .075$), with lower wellbeing reported by those who had changed their goals. The unique contributions to the model, however, were mostly made by planfulness and sources of meaning in life, as shown in Table 3 by the squared semi-partial correlation coefficients indicating that 31.9% of the variance explained in wellbeing was attributed to planfulness scores, and 9.7% was attributed to sources of

Table 2 Correlations Between Variables (n = 141)

	Psychological wellbeing	Years retired	Gender	Age	Relationship status	Education level	Geographical location	Planfulness	Sources of meaning in life	Ability to pursue goals
Psychological wellbeing										
Years retired	0.000									
Gender [a]	0.046	−0.269**								
Age	0.033	0.640**	−0.324**							
Relationship status [a]	−0.178*	0.011	0.199*	0.038						
Education level [a]	0.177*	−0.210*	0.258**	−0.087	0.177*					
Geographical location [a]	−0.202*	0.016	−0.037	−0.148	−0.15	−0.121				
Planfulness	0.591***	0.022	0.011	0.013	−0.026	−0.002	−0.093			
Sources of meaning in life	0.477***	0.044	0.074	0.083	−0.211*	0.062	−0.164	0.281***		
Ability to pursue goals [a]	−0.023	−0.165	0.168*	−0.282**	0.197*	0.035	0.005	0.044	0.088	
Changed goals [a]	−0.201*	−0.062	0.082	0.001	0.012	−0.034	0.053	−0.055	−0.159	−0.080

Notes. *** $p < .001$, ** $p < .01$, * $p < .05$. *

[a] Correlations were calculated using Spearman's rho due to the variables being ordinal or dichotomized but all others were calculated on Pearson's correlation coefficient

Ordinal variables were coded as follows: ability to pursue goals: 1 = No change at all, 2 = Some changes, but only minor ones, 3 = Some serious change, 4 = COVID-19 impact has completely prevented me from pursuing my retirement goals

Dichotomized variables were coded as follows: gender: 1 = male, 2 = female; relationship status: 1 = married/partnered, 2 = not married; education level: 1 = secondary/advanced, 2 = university; geographical location: 1 = urban/city, 2 = regional; changed goals: 1 = goals unchanged, 2 = changed goals

Table 3 Regression Analysis Predicting Retiree Wellbeing (n = 136)[a]

| Model | Unstandardized coefficients | | Standardized coefficients | t | p Sig. | 95.0% Confidence interval for B | | Semi-partial correlation coefficient (sr) | Squared semi-partial correlation coefficient (sr²) |
	B	Std. Error	β			Lower bound	Upper bound		
Constant	27.132	15.313		1.772	0.079	-3.174	57.437		
Years retired	-0.042	0.692	-0.005	-0.061	0.951	-1.412	1.328	-0.005	0.000
Gender	0.366	1.673	0.015	0.219	0.827	-2.945	3.677	0.020	0.000
Age	0.010	0.160	0.006	0.065	0.948	-0.306	0.327	0.006	0.000
Relationship status	-5.793	1.861	-0.215	-3.112	0.002**	-9.477	-2.109	-0.268	0.072
Education level	3.968	1.702	0.153	2.332	0.021*	0.600	7.337	0.204	0.042
Geographical location	-2.124	1.585	-0.086	-1.340	0.183	-5.261	1.013	-0.119	0.014
Planfulness	0.518	0.068	0.491	7.666	<0.001***	0.384	0.652	0.565	0.319
Sources of meaning in life	0.301	0.082	0.253	3.658	<0.001***	0.138	0.464	0.311	0097
Ability to pursue goals	-0.681	0.886	-0.052	-0.768	0.444	-2.434	1.073	-0.069	0.005
Changed goals	-2.731	1.523	-0.112	-1.793	0.075	-5.745	0.283	-0.158	0.025

Note: *** $p < .001$. ** $p < .01$. * $p < .05$

[a] This multiple regression had $n = 136$, as $n = 2$ participants had missing data on age, and $n = 3$ had missing data on number of years retired

meaning in life. Table 3 presents the results of the multiple regression.

Moderation Analysis

Four potential moderation effects were tested. It was predicted that the relationship between the impact of COVID-19 on participants' retirement goals and retiree wellbeing will depend on (a) sources of meaning in life and/or (b) planfulness. The COVID-19 impacts on retirement goals were examined for both the ability to *pursue goals* and for *actually changing goals*. Contrary to the expectations, sources of meaning in life did not moderate the relationship between goal disruption and wellbeing for both the ability to pursue goals, and for changed goals. Similarly, planfulness did not act as a moderator between wellbeing and the ability to pursue goals. However, the analyses showed that planfulness moderated the relationship between wellbeing and changed goals (interaction coefficient = -0.296, $p = .048$, r^2change = 0.018).

The conditional effects in this significant moderation highlight that at low levels of planfulness, there is no association between having to change goals and wellbeing; that is, people with lower planfulness had lower wellbeing regardless of whether they had to change their goals or not (*coefficient* = -0.165, $p = .946$). But at medium and high levels of planfulness, there was a significant effect on wellbeing when having to change goals (*coefficient* = -3.718, $p = .023$ and *coefficient* -7.272, $p = .003$ respectively). This means that respondents who had medium planfulness scores had a lower wellbeing score if they changed their goals, compared to those who did not change goals. This effect was even stronger for those with high planfulness scores. Figure 1 illustrates the conditional effect, plotting slopes for the 16th, 50th, and 84th percentiles on planfulness (as recommended by Hayes 2017).

The moderating effect of this fourth model was then tested with covariate analyses including age, gender, relationship status, number of years retired and education level. The model adjusting for education level demonstrated a slightly stronger interaction effect (interaction coefficients of -0.316 [$p = .032$] versus -0.296 [$p = .048$]), which suggests that education level was an influencing variable on the scores. This could also be due to the over-representation of our sample with university education. No other covariate analyses showed significant interaction effects.

Content Analysis

Almost 90% (89.4%) of participants reported that the pandemic had changed their 'ability to pursue' retirement goals at least to some extent, and 41% stated they had changed

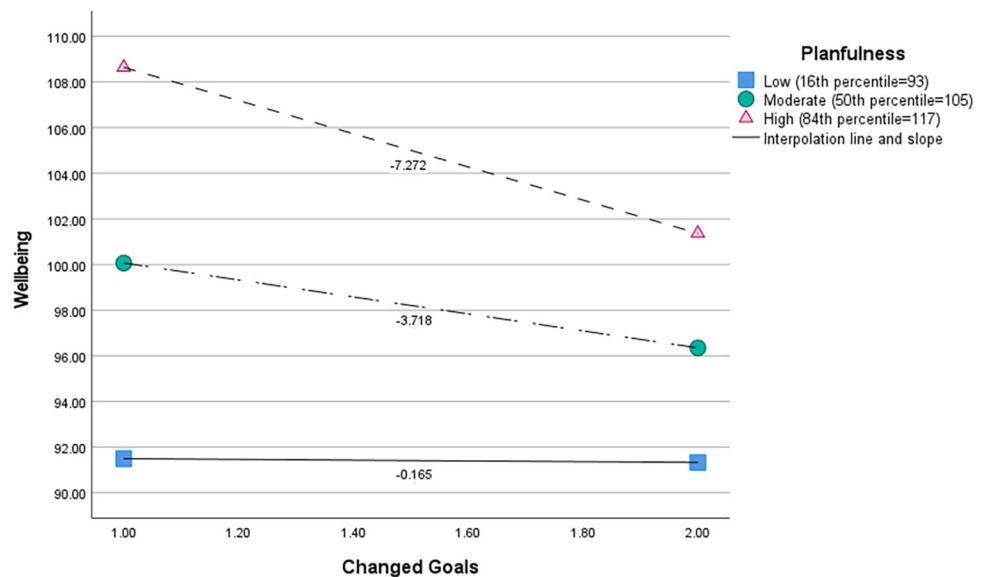**Fig. 1** Moderation Effect of Planfulness on Changed Goals and Wellbeing

Table 4 List of Retirement Goals

Goals	Total sample, $n = 130$ N. participants identifying each as a goal (%)
Travel (local, interstate, international)	92 (70.8)
Time with family	75 (57.7)
Leisure activities/hobbies	53 (40.8)
Health	38 (29.2)
Volunteering/contribution to others	32 (24.6)
Social life/friendships	26 (20.0)
Wellbeing/mental fitness	23 (17.7)
Physical fitness	20 (15.4)
Financial security	19 (14.6)

Notes Participants identified their top 3 lifestyle retirement goals each, therefore the total number of goals exceeds 130

Most participants listed 3 goals, $n = 101$, with 10 listing 4 goals, 16 participants listing 2 goals and three participants listing 1 repeated goal

Repeated goals per participant were recorded only once (e.g., "travel, travel and more travel")

their pre-existing goals to some degree. Most participants (92%) shared their top three retirement goals (see Table 4) and provided additional commentary on the impact COVID-19 had had on their goals (see Table 5).

Overall, of the retirement goals listed by participants (Table 4), *travel* was the goal reported the most (70.8%) by respondents, followed by spending time with family (57.7%), and then leisure activities (40.8%). Not surprisingly, recurring comments of not being able to travel (40.9%) and difficulties of staying in touch with and seeing family (27.3%) were evident in their open-text comments about the impact of COVID-19 (Table 5). A strong sentiment of frustration (64.4%) was present in the comments

categorized by emotive responses such as, *'totally sick of lockdowns, feel imprisoned'*. Words assessed as attributable to frustration, included *'can't'*, *'impossible'*, *'lost'*, *'unable to'*, *'frustrated'*, *'prevented'* and *'curtailed'*.

Though frustration was prevalent, nearly a third of the participant responses (30.3%) demonstrated perspective on their circumstance. Comments included, *'I have reassessed and found some very positive impacts of COVID-19…being less busy, enjoying the outdoors…. in all it has been a pivot rather than severe impact'* and others who saw this time as transient, such as *'I have adjusted to the rules. It won't last forever!'*.

Discussion

The present study examined the importance of sources of meaning in life, planfulness, and goal disruptions to wellbeing in retirees during the COVID-19 pandemic. Overall, wellbeing scores were quite high in this group of retirees despite the COVID-19 restrictions. As expected, greater wellbeing in retirees was predicted by greater sources of meaning in life and planfulness. However, the influence of COVID-related goal disruption on wellbeing was weaker and inconsistent, and appeared to depend, at least in part, on planfulness levels.

Respondents who reported greater sources of meaning in life also reported greater wellbeing. Respondents generally reported several sources of meaning from which to draw on, including engaging in personal relationships, financial and physical independence, and volunteering. This supports previous research, where wellbeing in older adults is derived from such aspects as relationships with others,

Table 5 COVID-19 Impact on Lifestyle Retirement Goals In Retiree Sample

Content analysis codes (a)	Total sample, $n = 132$ (%)	Example quotations
Areas impacted		
Travel plans	54 (40.9)	"… I have cancelled over 10 local and international trips over the last 2 years…"
Family and relationships	36 (27.3)	"…rarely see grandchildren" "Cut me off from friends…"
Health and fitness	19 (14.4)	"I have lost fitness … and put back half the weight I'd lost which affects my health."
Themes		
Frustration (b)	85 (64.4)	"lockdown has just stuffed up everything" "Loss of personal freedom and control of our lifestyle"
Perspective (c)	40 (30.3)	"Restricted … goals …, but allowed me to write quite a lot of stories about my life and experiences…"
Loneliness and isolation (d)	10 (7.6)	"My partner is in assisted care, I live on my own and am unable to visit her or have people to the home. I am unable to dine with or travel to see friends."

Notes (a): Categorizations were derived from qualitative content analysis of open-ended text comments

(b): Frustration: i.e., a focus on not being able to do what they wanted to do, whether this was to travel, see family or be with friends, volunteer

(c): Perspective: comments that focused on what one has been able to do, choosing to adapt to the changing circumstances, seeing that the current time will not last forever

(d): Participants reported loneliness and isolation from partners, family, friends, church and other communities

autonomy and being of service to others, enhancing overall meaning and purpose in life (Ryan & Deci, 2000; Ryff & Keyes, 1995; Steger, 2017). Therefore, it is possible that during this pandemic, where an area of meaning in life has not been accessible, and goals were not as achievable, this group of older adults were still able to direct their attention and energy to other sources of meaning (Joly-Burra et al., 2020; Scheffold et al., 2014) as a way to maintain or balance their wellbeing (Beasley et al., 2022; Prager, 1996; Schnell, 2009). The ability to do this is potentially derived from learning how to navigate stressors throughout one's lifespan (Nakamura & Chan, 2021; Perez-Rojo et al., 2022).

Greater planfulness also predicted greater wellbeing and may explain why individuals in this sample seemed to have adapted, despite their frustration in not being able to achieve some of their retirement goals during this time. Participants generally reported a moderate level of planfulness indicating effective mental flexibility in their approach to achieving goals (Ludwig et al., 2018), competence in using cognitive strategies to adjust to current circumstances, and an openness to make sacrifices in the present for a future achievement (Ludwig et al., 2018). This suggests that those who are more apt to change tactics or rethink how to achieve a goal can keep motivated to pursue their goals, particularly when goals are important to the individual (Ritchie et al., 2020).

Although there was a significant relationship between having changed goals and wellbeing in the bivariate correlations, the unique effect of this variable was not statistically significant in the regression model. Nonetheless, respondents did indicate their frustration, expressed in

free-text comments about goals that had been disrupted because of COVID-19. It may be that respondents felt the pursuit of their goals was still possible despite the uncertainty, which could indicate that many participants were in a state of decisional conflict (Herrmann et al., 2019); that is, unable to choose whether to give up on the goal or hold on for a little while longer. Other goals such as being with family may have been of such great generative importance that one was unwilling to change them. This is consistent with a UK-based study of adults, where Ritchie et al. (2020) found that those still confident in their pre-pandemic goals had also not given up on them, even when these goals had been rated as not possible to do right now. Data from free-text responses also suggested participants were able to put the impact of the pandemic into perspective and see some positives, and this type of benefit-finding has been theorized as beneficial to wellbeing (Martela & Steger, 2016; Reker & Wong, 2012). Other studies have also identified buffers against negative events caused by the pandemic on wellbeing, such as sense-making (Russo-Netzer & Ameli, 2021), coping skills (Ferreira et al., 2020; Kalaitzaki, 2021; Peker & Cengiz, 2022), social connections (Herrera et al., 2021; Walsh, 2020), and meaning making (Ostafin & Proulx, 2020; Schnell & Krampe, 2020). Such factors may explain why there was a small significant bivariate relationship between goal disruption and wellbeing, but that the unique effect was not statistically significant in the regression model adjusting for the effects of other variables.

Of the demographic variables, being in a relationship and higher education level were associated with greater

wellbeing in the regression analysis. These findings are generally supported by previous research, although in the case of relationship status, nature of the relationship, rather than just having a partner, has been found to be important to understanding the partner-wellbeing relationship in older adults (Hank & Wagner, 2013). Similarly, the relationship between education and wellbeing is mixed (Ruiu & Ruiu, 2019). Other variables such as age and number of years retired were not significant predictors in the present study. This may be due to the study focusing on older people instead of as a comparison with younger age groups, or that years since retirement does not measure factors associated with retirement such as importance of prework life, and financial resources (Quine et al., 2007; Wang et al., 2011).

Only one of the four moderating interaction effects tested was statistically significant. Our small sample size may have lacked the statistical power to detect more modest interaction terms (Luthar & Cushing, 1999). The moderating effect of planfulness on the association between changed goals and wellbeing, however, was statistically significant. This suggests that for those with low planfulness, changing goals had little impact when wellbeing was already low. For those with medium and high planfulness, however, the conditional interaction effects showed that planfulness had a protective-reactive effect (Luthar et al., 2000). That is, planfulness conferred an advantage on one's wellbeing albeit less so for those who changed their goals; but overall, they still fared better than those low in planfulness. This is an interesting finding, but further research is needed to extrapolate the potential role of planfulness on wellbeing during goal disruptions, and whether planfulness and goal setting skills are worthy targets for wellbeing intervention (Doig et al., 2015; Earl & Burbury, 2019; Locke & Latham, 2002).

Limitations

Whilst this study offered a unique perspective on the experiences of retirees in a region faced with repeated COVID-19 lockdowns by gathering both quantitative and qualitative data, the study was cross-sectional, meaning the findings cannot lead to causal statements. Longitudinal research that follows individuals over time to determine the temporal ordering of events is needed to better understand the interactive effects of goal disruption, meaningfulness, and planfulness on long-term wellbeing during the pandemic and, indeed, other sources of disruption in older adults. This study was also limited by a small sample size, which may have hampered the statistical power to detect smaller effects. Recruitment methods may have skewed the sample towards more educated participants and influenced particular types of retirees to participate, particularly those with online accessibility, those already engaged in retirement

activities and, potentially, with greater wellbeing than older adults less engaged in activities in the community. Future research with a larger and more representative sample could also explore measurement tools that capture more in-depth information on sources of meaning (Schnell, 2009), and more situational state-based information on wellbeing.

Conclusion

Despite prolonged periods of COVID-19 lockdowns and interruptions to activities, the study demonstrates that retired older adults are able to adjust during a time of crisis (Carstensen et al., 2020). The study supports the importance of sources of meaning in life and effective planfulness in supporting wellbeing in older adults, with or without the experience of a pandemic. The findings also highlighted that planfulness was important to consider when goals were disrupted and could be considered a buffer for those who find themselves having to change their goals.

Declarations

Competing Interests The authors have no relevant financial or non-financial interests to disclose. The authors have no competing interests to declare that are relevant to the content of this article. All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript. The authors have no financial or proprietary interests in any material discussed in this article.

Ethics Approval Ethics approval was granted from the CQUniversity Ethics Committee, approval number 2021-056.

Consent Participants completed an online survey, which started with a participant information sheet describing the study and stated that continuing to the items indicated informed consent to participate.

Data Transparency All data and materials as well as software application or custom code, support our published claims and comply with field standards.

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