

Possible Selves and Depressive Symptoms in Later Life

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Abstract

The pursuit of personal goals has been linked to general psychological well-being; however, less is known about the association with depression in later adulthood when individuals are contending with age-related changes in health and social relationships. We explored the connection between both health- and social related goals (as measured by possible selves) and depressive symptoms in a sample of 85 community-dwelling older adults who ranged in age from 60 to 92 ($M = 74$, standard deviation = 7.5). Participants took part in face-to-face, semistructured interviews in which they responded to measures of possible selves (future images of oneself), health, and depressive symptoms. We found that the presence of health-related, but not social-related, possible selves was significantly associated with fewer reported depressive symptoms. Additionally, the presence of health-related fears was specifically linked to fewer reported depressive symptoms. These findings suggested that the promotion of and investment in health-related personal goals may be useful in off-setting depressive symptoms in older adults, as well as indicated a potential benefit of a disease prevention focus regarding health

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in later life. Finally, the results may have implications for potential clinical interventions in addressing late-life depression.

Keywords

possible selves, goals, health, depressive symptoms

Possible selves (Markus & Nurius, 1986) encapsulate individuals' ideas of what they would like to become (*hoped-for selves*) and what they are afraid of becoming (*feared selves*). This construct also embodies a dynamic aspect of the personality system that may have the potential to elicit specific behavioral change and has received much attention in relation to adaptation and change processes across the life span (Frazier, Barreto, & Newman, 2012; Frazier & Hooker, 2006; Frazier, Newman, & Jaccard, 2007; Hooker & McAdams, 2003; Hoppmann, Gerstorf, Smith, & Klumb, 2007; Manzi, Vignoles, & Regalia, 2010; Smith & Freund, 2002). Consequently, possible selves may play a role in maintaining health and well-being (Cotrell & Hooker, 2005; Frazier, Cotrell, & Hooker, 2003; Frazier et al., 2012, 2007; Hooker, 1992; Hooker & Kaus, 1992; McGinty, Dark-Freudeman, & West, 2013) and offsetting depression (Allen, Woolfolk, Gara, & Apter, 1996; Penland, Masten, Zelhart, Fournet, & Callahan, 2000). To date, however, few recent studies have explored the specific connection between possible selves and depression, and none have focused specifically on older adults. In this exploratory study, we described the relationship between possible selves and depressive symptoms in a sample of community-dwelling older adults as well as investigate how possible selves may be uniquely associated with depressive symptoms in later life.

Background

Possible Selves

The highly personalized images represented in one's *possible selves* provide motivational incentives for current and future behavior by guiding individual decisions about which goals to construct, pursue, avoid, or abandon in order to achieve or evade particular future selves (Markus & Nurius, 1986). Possible selves are derived from developmental systems theory (Ford & Lerner, 1992); thus, they can be understood to represent the underlying motivation behind improving oneself, maintaining one's abilities, or minimizing one's losses via self-regulatory processes (e.g., self-efficacy and outcome

expectancy). The distinction between hoped-for possible selves and feared possible selves also provides a window into investigating two modes of motivational regulation such as approach goals and avoidance goals. These modes parallel regulatory focus theory (Higgins, 1997; Higgins, Shah, & Friedman, 1997), in which motivational regulation has been characterized as promotion or prevention focused. Promotion (or approach)-focused goals are derivative of gains (i.e., striving to reach a desirable outcome) and tend to be oriented toward growth or maintenance of functioning in the face of loss. Prevention (or avoidance)-focused goals are based on loss, such as avoiding an undesirable outcome. Many empirical questions remain as to which motivational regulation strategies are most significant in modifying behavioral outcomes, particularly in later life.

Possible selves are both stable and contextually sensitive to reflect developmental changes over the life span (Frazier & Hooker, 2006; Frazier, Hooker, Johnson, & Kaus, 2000; Hooker, 1999). For example, adolescents and younger adults generate a greater number of possible selves (Cross & Markus, 1991) that may be important in supporting early identity development (Dunkel, 2000; Dunkel & Anthis, 2001) whereas, in later life, older adults report a reduction of possible selves, but become increasingly invested in fewer, but more meaningful possible selves related to life domains such as health or social relationships (Cotrell & Hooker, 2005; Cross & Markus, 1991; Frazier & Hooker, 2006; Hoppmann et al., 2007; Smith & Freund, 2002). The malleability of possible selves provides an effective pathway for disengaging from goals that may no longer be relevant and the ability to renew focus more exclusively on areas of life important for completion of one's life identity and story.

Furthermore, possible selves have been linked to a number of outcomes across the life span such as academic achievement, career expectations, self-esteem, delinquency, identity development, health, coping, and aging (for a review, see Dunkel & Kerpelman, 2006). This line of research indicates that possible selves provide important self-relevant motivation that can facilitate outcomes in analogous domains. For example, recidivism for juvenile delinquency was associated with adolescents' generation of delinquent possible selves (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). In addition, older adults who engaged in daily activities that were consistent with their possible selves experienced increased positive affect and reduced risk of mortality (Hoppmann et al., 2007). Possible selves have also been strongly associated with other psychosocial outcomes in older adults such as quality of life, well-being, and overall life satisfaction (Frazier & Hooker, 2006; Frazier et al., 2012; Frazier et al., 2007; Hooker, 1999).

It remains an empirical question as to which specific domains of possible selves may serve as a protective factor for older adults. Although more research is needed to fully address this question, many researchers have cited the emergence and importance of both health-related and family-related/social-related possible selves in later life (Cotrell & Hooker, 2005; Cross & Markus, 1991; Frazier et al., 2003; Hooker, 1992, Hooker & Kaus, 1992, 1994; McGinty et al., 2013; Smith & Freund, 2002). Potential age-related changes in these domains (e.g., health decline due to onset of chronic illness or shrinkage of social relationships due to loss/death) may put older adults at risk for experiencing depressive symptoms. This underscores the necessity for minimizing losses in these specific areas during later adulthood (Wrosch, Heckhausen, & Schulz, 2002), which may be achieved by investing in goals related to health and/or social relationships. This is also consistent with the tenets of the selection, optimization, and compensation model in which it should be an adaptive strategy for older adults to select and undertake developmentally appropriate goals as a means to maximize their resource gains and minimize their resource losses (Baltes & Baltes, 1990). In this exploratory study, we expanded on this line of research by examining how both health-related and social-related possible selves were associated with depressive symptoms in older adults.

Health- and Social-Related Possible Selves

Although individuals of all ages tend to identify health-related possible selves, it is not until the second half of life, when the likelihood of experiencing chronic conditions increases, that these become most important to individuals (Hooker, 1992; McGinty et al., 2013). Examples of health-related possible selves include future images of oneself avoiding disease by staying active, eating more vegetables, or losing excess weight. There have also been a number of studies that indicate that health-related possible selves are linked to both self-rated health and health behaviors in older adults (Cotrell & Hooker, 2005; Frazier et al., 2003; Hooker, 1992; McGinty et al., 2013). For example, older adults who identified a health-related possible self also reported engaging in more exercise, weight management, and medical check-ups (Hooker & Kaus, 1992). Additionally, older adults who believed they had some control over achieving their health-related possible selves also reported feeling subjectively healthier (Hooker, 1992). More recently, researchers have been using this body of research to implement interventions to influence self-regulatory efficacy and exercise behavior (Murru & Martin

Ginis, 2010; Ouellette, Hessling, Gibbons, Reis-Bergan, & Gerrard, 2005), although most of this research has been targeted toward younger adults.

Social-related possible selves that relate to family and friend relationships are also important in later life (Ko, Mejía, Hooker, 2013; Lang & Heckhausen, 2006). Examples of possible selves related to social relationships include being an involved grandparent, reconnecting with long-distance friends, or improving relationship quality. Although possible selves represent one's innermost goals and desires, they are strongly influenced by one's interaction with others. Individuals are embedded and influenced by the social context of their everyday lives (Bronfenbrenner, 1994) consequently, social networks are a vital aspect of the human experience and foster engagement with life. This illustrates the co-constructed nature of the self; it is through the feedback individuals receive from others which encourages them to proceed with or disengage from certain goals that promote the self. One recent study showed that having a possible self in the social domain was associated with eventual attainment of a social goal among older adults (Ko, Mejía, & Hooker, 2013). Although social relationships may change in later life as a result of life circumstances associated with aging, they are still important for maintaining well-being in later life (Lang & Carstensen, 2002).

Possible Selves and Depressive Symptoms

The pursuit of personal goals has been linked to psychological well-being, health, and life satisfaction (Carver & Connor-Smith, 2010; Frazier et al., 2007, 2012; McGregor & Little, 1998; Schueller & Seligman, 2010; Sheldon & Kasser, 1998). Goal construction (such as developing possible selves) can optimize a person's ability to cope with many life transitions (e.g., parenting, aging, and caregiving). According to Markus and Wurf (1987), the construction of goals that optimize a person's chances to deal successfully with life span transitions requires a comparison of one's individual motives with the developmental tasks and contextual opportunities or constraints that are typical of an individual's age period. Detailed empirical research on the specific relationship between personal goals and clinical depression outcomes in later adulthood is less developed. A better understanding of volitional processes, or specifically what individuals are attempting to achieve or avoid, could significantly inform clinical work, particularly in engaging clients/patients in health behavior change that could improve mood. Given the detrimental effects of late-life depression, recognition of older adults' goal structures and self-regulatory processes has potential to provide new information for reducing depressive symptoms in later life.

Late-life depression. Depression has been identified as a leading cause of disability worldwide (Ferrari et al., 2013). In the United States, an estimated 2 million Americans aged 65 and older have a depressive illness and another 5 million may have subsyndromal depression or significant depressive symptoms that fall short of meeting full diagnostic criteria for clinical depression (Blazer, 2003). Among community-dwelling older adults, an estimated 10–15% suffer from clinically significant depressive symptoms (Blazer, 2003; Segal, Qualls, & Smyer, 2011; Smyer & Qualls, 1999). Overall, clinical depression is less prevalent among older adults than younger adults, but nonetheless even minor depression has serious negative consequences, including increased burden of physical illness on individuals and families, impaired functioning, and increased health care costs (Devanand, 2014; Grabovich, Lu, Tang, Tu, & Lyness, 2010; Johnson, Weissman, & Klerman, 1992; Langa, Valenstein, Fendrick, Kabeto, & Vijan, 2004).

Although the precise etiology of late-life depression remains unclear, a number of risk factors have been identified (for a review of late-life depression, see Fiske, Wetherell, & Gatz, 2009). This includes biological, social, and psychological factors (Bruce et al., 2002; Krishnan, 2002) such as genetic predisposition, physical illness, and coping with stressful life events; the cause of late-life depression is likely due to a complex interaction of multiple risk factors. For example, there are many unique experiences common to aging that have been associated with depression in later life: coping with multiple chronic conditions, medication interactions, and stressful life events such as death of a spouse (Segal et al., 2011).

Health status, age, and gender are also often specifically linked with depression. A number of studies have documented that patients with chronic medical illnesses also have higher rates of comorbid major depression (see Katon, 2011). Although depression can lead to health decline, these effects are often reciprocal, as individuals who are depressed may also have reduced motivation to exercise or engage in important health-related behaviors. Across the life span, symptoms of depression do not follow a linear trajectory, but rather appear to be highest in both young adulthood and later adulthood (Sutin et al., 2013). Many older adults with depression also experience their first episode after the age of 60 (Bruce et al., 2002). A recent study among community-dwelling older adults found that the odds of experiencing moderate depressive symptoms began to increase after the age of 72 (Lee, Lee, Brar, Rush, & Jolley, 2013). Finally, although incidence of depression across the life span is typically higher in women than men, this gender gap appears slightly narrower in older adults (Djernes, 2006; Sutin et al., 2013).

Social support and contact may also be an important factor in onset of depression in later life (Blazer, 2003; Horowitz, Reinhardt, Boerner, & Travis, 2003; McKenzie et al., 2012). Marital status, poor health, low quality of relationships with family, and low stability of friendships explained approximately half of the variance in depression as independent risk factors for depression in later life (Horowitz et al., 2003). Social isolation and loneliness are also strongly tied to late-life depression (Alpass & Neville, 2003). The risk factors associated with depression in later life indicate that it may be important for older adults to invest in both health-related and family-related/social-related possible selves as a means for addressing depression.

In the present exploratory study, we aimed to (a) describe the relationship between possible selves and depressive symptoms in a sample of community-dwelling older adults; (b) investigate whether the selection and investment in health- and/or social-related possible selves was uniquely associated with fewer self-reported depressive symptoms, and (c) determine whether the framing of health- or social-related possible selves as something to strive for (i.e., hoped-for self) or to avoid (i.e., feared self) was linked to depressive symptoms. We focused specifically on possible selves related to health and social relations (which included both family and friend relationships) because they appear to become particularly salient life domains that may be important to self-identity in later adulthood. The likelihood of reporting these specific domains of possible selves increases with age (Frazier et al., 2000; Hooker, 1999; Hoppmann et al., 2007; Smith & Freund, 2002) and may reflect unique developmental areas in which it would be useful for older adults to invest and pursue goals in an effort to avoid depressive symptoms.

Method

Participants

We recruited community-dwelling older adults from two primary care clinics in a small city; many participants lived in the rural communities surrounding the area. Previous studies indicated that at least 15% of community-dwelling older adults might have untreated depression (Blazer, 2003; Segal et al., 2011; Smyer & Qualls, 1999). Furthermore, older adults are substantially more likely to seek help for psychological/emotional concerns from their primary care providers than specialty mental health professionals (Harman, Veazie, & Lyness, 2006; Unutzer et al., 2002), making primary care settings an important location for identification of individuals at risk for depression.

With the cooperation of clinic staff, informational flyers and cards were available to participants upon check-in for their appointment. In addition, a researcher maintained a recruitment table in the clinic lobby to provide study information, answer questions, and schedule interviews for eligible participants. All participants were interviewed face-to-face by trained researchers and each interview lasted between 90 and 100 min. Interviews were conducted in the participants' homes or in a private office in the primary care clinic.

Measures

Depression was assessed using the abbreviated Geriatric Depression Scale (GDS) (Sheikh & Yesavage, 1986). The shortened 15-item version of the GDS is commonly used and has demonstrated reliability and validity for assessing depression among community-dwelling older adults (Sheikh & Yesavage, 1986). Cronbach's α for the GDS in this study was .81. Generally, the use of a cutoff point between 4 and 5 (of the 15) on the GDS-15 produces high sensitivity and specificity rates for diagnosing clinical depression (93% and 65%, respectively; Almeida & Almeida, 1999); however, the use of a cutoff of between 3 and 4 has also indicated adequate sensitivity (86%) and specificity (72%) in at least one study of older adults (Weintraub, Oehlberg, Katz, & Stern, 2006).

The key predictor variables of interest were generated from the possible selves interview. These interviews were conducted based on an open-ended questionnaire modeled after Hooker (1999) and Hooker and Kaus (1994). In face-to-face interviews, participants were asked to think about how they saw themselves in the future. For example,

We all think about the future to some extent. When doing so, we usually think about the kinds of experiences that are in store for us and the kinds of people we might possibly become. Sometimes we think about what we *hope* we will be like—selves we hope to become in the future—or *hoped-for possible selves*. In addition to having hoped-for possible selves, we may also have some images of ourselves in the future that we *fear*, dread, or don't want to have happen. These are called *feared possible selves*. Some of us have a large number of possible selves in mind, while others may have only a few. Take a few minutes to think about your possible selves.

Participants generated up to three of their most important hoped-for and three of their most dreaded feared possible selves. Each possible self was

coded into 1 of the 15 categories: personal, physical, abilities and education, lifestyle, social relationships, occupation, material possessions/financial security, success, social responsibility, leisure, health, independence/dependency, death, bereavement, and threats (see Hooker, 1999, for detailed description). A trained research assistant unfamiliar with the study coded 20% of the possible selves data in order to examine coding reliability. Interrater reliability was high for both hoped-for and feared selves (Cohen's $\kappa = .91$ and $.89$, respectively). For the purposes of this study, we focused on two domains of possible selves to older adults: health and social relationships. We expected these domains to be the most prominent and commonly reported. Examples of health-related possible selves in this study included "to become a healthier person by keeping up with my water aerobics class" (hoped-for self) and "to become a diabetic" (feared self). Examples of social-related possible selves included "To live long enough to spend more time with my family" (hoped-for self) and "To become a distant grandparent" (feared self). Social relations with both family and friends were coded in this domain.

Covariates. Since health status has long been a known predictor of depressive symptoms (e.g., Almeida et al., 2013; Kennedy, Kelman, & Thomas, 1990), participants reported on their health by answering the question: "In general, how would you say your health is?" and responded on a 4-point Likert-type scale (with higher score indicative of better health). Subjective measures of health are useful and can predict mortality beyond objective health indicators (Idler & Kasl, 1991). We also collected demographic information from participants on gender, age, marital status, race/ethnicity, education level, and living situation. In statistical models, we adjusted for relevant sociodemographic variables found to be correlated with depressive symptoms, such as age and gender (Glaesmer, Riedel-Heller, Braehler, Spangenberg, & Luppá, 2011).

Data Analysis

Descriptive statistics were used to provide a profile of the participants. Poisson regression modeling was used to examine the connections between health- and social-related possible selves and depressive symptoms. Because depressive symptoms are based on a count of how many symptoms each participant reported, they are not reflective of a normal distribution. For example, the majority of community-dwelling older adults are not depressed; in our sample, the majority (78%) reported only 0 to 3 symptoms, which is generally not indicative of clinical nor subsyndromal depression. Therefore, the

advantage of relying on a count model versus a linear model is that it will account for the skewness of the outcome variable because a normal distribution of this variable is not assumed. The data were analyzed using STATA/MP 13 (StataCorp, 2013).

Results

Participant Characteristics

Participants ranged in age from 60 to 92 ($M = 74$, standard deviation = 7.5) and included 57 women and 28 men (see Table 1). The participants were primarily White (99%, $n = 84$), married (66%, $n = 56$), retired (86%, $n = 73$), and had at least a high school education (67%, $n = 57$). Most participants reported good to excellent health (77%, $n = 62$) and the mean GDS score was relatively low ($M = 2.3$), although scores ranged from 0 to 11. Using a cutoff point of 3/4 on the GDS would indicate that approximately 18% of the participants ($n = 22$) might be at risk for depression, which is consistent with estimates in community-based samples.

Descriptive Information

Among the entire sample, more hoped-for selves ($n = 203$) were generated than feared selves ($n = 133$). As expected, the most frequently reported possible selves were related to the health domain ($n = 71$; 45 hoped-for selves and 26 feared selves) and social relation domain ($n = 50$; 41 hoped-for selves and 9 feared selves). We did not focus on analyzing any of the remaining 13 domains of possible selves because they were more infrequently reported (e.g., ranged from only 2% to 29% of the entire sample for each remaining domain). Overall, more than half of the participants reported at least one health-related possible self (65%) and at least one possible self in the social relation domain (52%), thus the initial rationale to examine these two important domains was borne out by the data.

Possible Selves and Depressive Symptoms

The results of the Poisson regression analyses are presented in Tables 2 and 3. Given the potential confounding effects of age, health, and gender in relation to depressive symptoms, we adjusted for these variables in each model. In addition, we checked for a quadratic trend in age by also examining age squared in each model; however, because it had little effect on the results, we kept age as a linear variable for parsimony.

Table 1. Demographic Characteristics of Participants.

Variable	N (%)
Gender	
Men	28 (32.9)
Women	57 (67.1)
Race/ethnicity	
White	84 (98.8)
Hispanic	1 (1.2)
Marital status	
Married	56 (65.9)
Divorced/separated	10 (11.8)
Single	3 (3.5)
Widowed	15 (17.6)
Living with partner	1 (1.2)
Employment status	
Retired	73 (85.9)
Homemaker	6 (7.1)
Full-time	2 (2.4)
Part-time	4 (4.7)
Education ^a	
Grade 8	5 (5.8)
High school	32 (37.7)
Partial college	30 (35.3)
College graduate	8 (9.4)
Graduate/professional	8 (9.4)

Note. $N = 85$.

^aTwo participants completed through the 11th grade.

Health-related possible selves. We found that the presence of health-related possible selves (either framed as a hope or a fear) was significantly related to fewer reported depressive symptoms ($p = .05$; Table 2). In order to further test whether the framing of the possible self was related to depressive symptoms, we ran an additional model that independently examined both health hoped-for and feared selves. The presence of feared health selves (vs. hoped-for health selves) was associated with significantly fewer reported depressive symptoms ($p = .02$) even after controlling for age, gender, and self-reported health. Although the effect sizes for both of these findings were small (0.15 and 0.12, respectively), they were significant.

Social-related possible selves. We were not able to replicate the above findings for the association between social-related possible selves and depressive

Table 2. Adjusted Poisson Regression Models of Health-Related Possible Selves and Depressive Symptoms.

Variables	β	SE	<i>p</i>
Model 1: Collapsed (health hopes and fears combined)			
Health possible selves ^a	-.29	.15	.05*
Gender ^b	-.37	.17	.03*
Health ^c	-.56	.09	<.001***
Age	.05	.01	<.001***
Constant	-.84	.88	.33
Model 2: Separated (health hopes and fears examined independently)			
Feared health possible selves	-.34	.14	.02*
Hoped-for health possible selves	-.10	.13	.47
Gender ^b	-.44	.17	.01**
Health ^c	-.56	.09	<.001***
Age	.05	.01	<.001***
Constant	-.62	.90	.49

Notes. *N* = 85. SE = standard error.

^aThe presence (1) or absence (0) of health possible selves. ^bWomen = 0, men = 1. ^cHealth perception scores, with higher score indicating better health.

$R^2 = .20$ (Model 1); $R^2 = .21$ (Model 2).

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

Table 3. Adjusted Poisson Regression Models of Social-Related Possible Selves and Depressive Symptoms.

Variables	β	SE	<i>p</i>
Model 1: Collapsed (social-related hopes and fears combined)			
Social-related possible selves ^a	-.25	.15	.09
Gender ^b	-.31	.17	.07
Health ^c	-.80	.15	<.001***
Age	.05	.01	<.001***
Constant	-.98	.90	.27
Model 2: Separated (social-related hopes and fears examined independently)			
Social-related fears	.28	.26	.29
Social-related hopes	-.10	.11	.35
Gender ^b	-.42	.17	.02*
Health ^c	-.53	.09	<.001***
Age	.05	.01	<.001***
Constant	-1.2	.90	.20

Note. *N* = 85. SE = standard error.

^aThe presence (1) or absence (0) of social-related possible selves. ^bWomen = 0, men = 1. ^cHealth perception scores, with higher score indicating better health.

$R^2 = .19$ (Model 1); $R^2 = .19$ (Model 2).

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

symptoms; however, there was a trend in the same direction ($p = .09$; Table 3). This suggests that the presence of social-related possible selves could be associated with fewer depressive symptoms, but additional research is needed. When examining the social relation hoped-for and feared possible selves independently, we did not find that the framing of social-related possible selves was associated with depressive symptoms in this sample.

Discussion

Many older adults in this study spontaneously generated health- or social-related possible selves ($n = 55, n = 44$, respectively). This finding corroborated previous research in which these two domains were also the most commonly reported by older adults (Hooker & Kaus, 1994; Hoppmann et al., 2007; Smith & Freund, 2002). The unique developmental transitions associated with later life likely make these domains more salient; consequently, goal striving in these specific domains has the potential to be more important and adaptive than other domains (Wrosch et al., 2002). We found partial support for this hypothesis: Health-related possible selves, but not social-related possible selves, were significantly linked with depressive symptoms.

Individuals who spontaneously generated health-related possible selves also reported significantly fewer depressive symptoms. These findings are suggestive of the theoretical assertion that goal striving in the health domain may be an adaptive response for older adults with regard to depression outcomes. The creation of future health-related images of oneself could serve as a motivational incentive for older adults to maintain health or regulate health losses, which ultimately may also affect mood. Others have also reported that the presence of possible selves not only motivates behavior but increases a sense of personal meaning and well-being (Frazier et al., 2007, 2012), which could influence the onset of depressive symptoms. Additionally, because health is a broad domain, it may encompass individuals' goals to maintain both physical and psychological health.

The results of this study also indicated that striving to prevent disease (as represented by feared health possible selves), versus promoting or maintaining health, was linked to fewer reported depressive symptoms. This finding is in line with life span theory in that the focus of later life becomes more balanced between both acquiring gains and averting losses (Baltes & Baltes, 1990). Older adults, in comparison to younger adults, are also more likely to report goals aimed at losses (Heckhausen, 1997) as a growing awareness of age-related changes (i.e., vulnerability to health problems) may lead older adults to expend greater focus on prevention goals rather than promotion

goals. Ultimately, this may result in a tendency for stronger prevention orientations in older adults, particularly in the realm of health, in order to avoid threatening health outcomes. Research on the preferences for health-related role models among older and younger adults supports this notion; for example, in one study, while younger adults were motivated by examples of healthy, fit individuals, older adults appeared to be motivated by both healthy and unhealthy models (Lockwood, Chasteen, & Wong, 2005).

Hoyle and Sherrill (2006) found additional evidence of the motivational strength of feared possible selves: College students who wrote about a feared health-related possible self were more likely to engage in healthy behaviors compared to those who wrote about a hoped-for health-related possible self. In a similar vein, McGinty, Dark-Freudeman, and West (2013) found that older adults reported more health activities to support health fears than health hopes. Hoped-for possible selves tend to be positive and based upon observations of others, whereas undesired feared selves tend to be negative and often reflect personal experience relevant to a specific self-image (Hoyle & Sherrill, 2006). As such, feared possible selves may be more effective at determining one's current self-state than hoped-for selves (Carver, Lawrence, & Scheier, 1999), which may drive individuals to increase the discrepancy between current and future self, particularly if the future image is negative (i.e., being in poor health). Feared possible selves may be activated less frequently than hoped-for selves (Ruvolo & Markus, 1992), which is reflected in the trend for fewer spontaneously generated feared selves in comparison to the number of generated hoped-for selves reported in the current study. Nonetheless, they may serve an important role in self-regulation and potentially mood.

Additional future studies designed to address the underlying mechanisms of these distinct motivational strategies (i.e., promotion vs. prevention focused possible selves) are needed. For example, Hoppmann, Gerstorf, Smith, and Klumb (2007) found that older adults with hoped-for possible selves (not feared selves) were more involved and engaged in daily activities to support health- and social-related goals. It is possible that individuals with feared possible selves who lack the means and strategies to avoid them may feel trapped (Hooker, 1992) and thus, may be less likely to engage in daily activities to evade feared possible selves. The participants in the current study consisted of mostly healthy, independent living older adults. As a result, it is plausible that they felt they had the resources to avoid feared health self-images, which could also explain the stronger prevention focus that emerged in our study. Future researchers should further investigate the process by which possible selves motivate change and the effects not only on health and health behaviors but on mental health and mood.

In terms of possible selves in the social relation domain, although there was a trend for the presence of social-related possible selves to be linked with fewer reported depressive symptoms, no significant associations were found. These findings were potentially skewed because very few participants reported any feared possible selves related to social relationships. It would be important to replicate this analysis in a larger sample of older adults before drawing any firm conclusions on the significance of social-related possible selves to older adults. Alternatively, this result may indicate that health goals, not social-related goals, are more closely tied to depressive symptoms. For example, perhaps individuals may feel more control over personal health goals than goals that may involve others, such as family or friends.

It was beyond the scope of this study to specifically assess clinical depression outcomes, but we believe this line of research may have useful implications for clinical settings. For example, in line with patient self-management principles and person-centered care, care providers may be able to obtain more insight into their patients' problems by eliciting their possible selves. Furthermore, they might also be able to better motivate patients to adhere and engage in care plans. Before application to clinical practice, however, additional research that includes a larger, and more diverse, sample is needed. Possible selves embody and reflect cultural elements that may influence late-life transitions and aging. For example, Waid and Frazier (2003) found that Hispanic older adults were more likely to report social-related/family-related possible selves in comparison to White elders. Researchers and practitioners should be aware of and sensitive to the unique differences in possible selves repertoires among underserved and understudied populations. The motivational mechanism by which possible selves may relate to clinical outcomes may also vary in diverse populations.

Strengths and Limitations

There are several limitations to consider when evaluating the results of this study. First, the small sample size limited statistical power; however, we were careful to keep statistical models parsimonious to account for this issue and were still able to establish significance. Future studies should include larger trials in which the complex interactions between gender, age, and possible selves could be investigated in more nuanced detail. Second, because this was a cross-sectional, exploratory study, we were not able to establish causality. There is a bidirectional relationship between perceived

health and depressive mood; as such, future researchers should attempt to establish the temporal sequence between depression and generation of possible selves. Third, the measurements used in this study were based on self-report; future researchers may want to include additional objective assessments of physical and mental health when examining the relationships between goals and clinical outcomes. Finally, the homogeneity of the sample may also limit some generalizability. Nonetheless, the purposeful sampling of community-dwelling older adults is also a strength of this study. Prior research in this area has relied upon convenience samples or college students, making them particularly less generalizable to an older adult population. This sample is also reflective of older adults living in rural communities, who are often underrepresented in research and differ considerably from urban-dwelling older adults (Bowman, Hooker, Steggell, & Brandt, 2013). We also found that conducting face-to-face interviews was beneficial to the study. Although it was possible that conducting interviews on personal health information may have inadvertently evoked a social desirability bias or resulted in an underreporting of sensitive data, this method was more efficient for collecting complex data (e.g., the ability to clarify abstract constructs such as “possible selves”) from older adults. Moreover, despite potentially underreported depressive symptoms in this study, a significant link between depressive symptoms and possible selves was established.

Conclusion

Possible selves are a malleable and dynamic aspect of one’s identity that reflect important developmental changes across the life span and have implications for general well-being, mental health, and mood. Although the selection of social-related goals (as measured by possible selves) was not associated with depressive symptoms in this study, the selection of health-related goals was an important factor linked to fewer reported depressive symptoms among older adults. More specifically, a prevention focus (i.e., having more feared self-images related to health) was connected to fewer depressive symptoms, indicating that for some older adults, a focus on disease prevention (vs. health promotion) may be a particularly adaptive mental health strategy to minimize age-related losses in later life. This research contributes to the empirical knowledge regarding the connections between goal processes and depressive symptoms in older adults; however, further investigation into the motivational power of prevention versus promotion self-regulatory mechanisms is needed.

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