

Chapter 3

Aging with Purpose: Developmental Changes and Benefits of Purpose in Life Throughout the Lifespan



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3.1 Purpose as a Contributor and Correlate for Healthy Aging Across the Lifespan

Purpose is a dynamic construct that fluctuates in prevalence throughout the lifespan, but consistently predicts desirable outcomes regardless of one's age. *Sense of purpose* can be understood as the extent to which one feels that they have personally meaningful goals and directions guiding them through life (Ryff, 1989), while a *purpose in life* refers to those specific goals and directions (McKnight & Kashdan, 2009). Purpose is not viewed as simply a goal one must achieve before moving onto another, but an overarching theme that penetrates the various smaller obtainable goals that one pursues throughout their lives (McKnight & Kashdan, 2009; Hill, Burrow, Brandenberger, et al., 2010). As described by Damon, Menon, and Bronk (2003), one's purpose in life should, in fact, not be easy to attain, if attainable at all. By this definition, one's purpose in life would not solely be to have a child or to feed the homeless at a soup kitchen. One's purpose in life can be understood as more of a general orientation, like to spend time with and care for one's family, or to help those in need. By considering purpose through this perspective, purpose reflects something that one is able to constantly pursue and take esteemed steps toward achieving, without being in a position of completing a distinct objective and being left purposeless.

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Much like the Big Five personality traits discussed throughout this volume, sense of purpose in life shows relative stability over time, and exhibits discernible developmental trends across the lifespan. For instance, adolescence is typically marked by the genesis of the purpose exploration process, where individuals try to find their purpose in the midst of trying to find themselves and their place in the world (Bronk, Hill, Lapsley, Talib, & Finch, 2009; Burrow, O'Dell, & Hill, 2010). Emerging adulthood is a continuation of this process, with some having already identified their purpose while others continue their search (Bronk et al., 2009; Sumner, Burrow, & Hill, 2015). As people transition into middle adulthood, most have committed to their purpose in life, creating a stabilization of a relatively higher sense of purpose during this period (e.g., Ko, Hooker, Geldhof, & McAdams, 2016; Pinquart, 2002). However, when entering older adulthood, many report a lower sense of purpose than their middle adult peers (Karasawa et al., 2011). As situations change in the midst of retirement, death of loved ones, and diminution of physical and mental abilities, many individuals experience a decrease in sense of purpose or the loss of their purpose in life altogether.

While the presence and prevalence of purpose throughout the lifespan changes, its inherent value remains consistent. Regardless of where one is developmentally, higher levels of purpose consistently predict desirable mental, emotional, and physical health outcomes. Sense of purpose can foster benefits concurrently, meaning that individuals with a higher sense of purpose also tend to experience more desirable outcomes in the midst of their developmental period. However, the extent of purpose's value is also forward reaching, insofar as it may foster positive transitions throughout the lifespan developmental process. Throughout this chapter, we will review developmental changes in sense of purpose across the lifespan and highlight current research underscoring the benefits of purposefulness on health and well-being. Furthermore, we will discuss the mechanisms that shape these associations between purpose and positive health outcomes, as well as potential methods to harness a purpose for those who have yet to develop or have lost one. We will begin by discussing the purpose development process, typically experienced during adolescence and emerging adulthood, and the associated identity development and well-being outcomes. From there, we will discuss the developmental trends of purpose within the context of middle and older adulthood, and the cognitive and physical health outcomes with which it is concurrently and longitudinally associated. We will conclude this chapter by discussing potential pathways to assess mechanisms and correlates of purpose, as well as to introduce new research questions in the purpose and healthy aging literature.

3.2 Developmental Trends in Purpose During Adolescence and Emerging Adulthood

Adolescence is a delicate time in individuals' lives where they experience and maneuver their way through difficult developmental processes. Identity development tends to occur in earnest at this time, during which an adolescent tries to understand and figure out who they are (Kroger & Marcia, 2001). This process is understood as a time in which individuals explore and commit to various components of their identities, whether *personal identities*, in which a person determines the aspects of themselves that are unique from others, or *social identities*, in which a person determines their association with particular in-groups (Brewer & Gardner, 1996; Sim, Goyle, McKedy, Eidelman, & Correll, 2014). During this process, individuals both *explore* potential avenues that encompass who they are before they *commit* to aspects that best describes their identities (Kroger & Marcia, 2001). The exploration and solidification of one's self-concept and identity is a prime component of adolescence.

Just as one works through the identity development process, so does one work through the purpose development process. Previous research has used identity development frameworks to understand this purpose process, marked by *purpose exploration*, searching for one's purpose, and leading to *purpose commitment*, or identifying and committing to one's general purpose in life (Bronk et al., 2009; Sumner et al., 2015). Research has found purpose exploration and commitment to be closely related to the processes of identity exploration and commitment among adolescents, with purpose exploration being negatively related to identity commitment (Burrow et al., 2010; Hill & Burrow, 2012). Moreover, when following individuals over time, adolescents who increased on identity commitment also reported an increase on purpose commitment (Hill & Burrow, 2012). However, change in purpose commitment was positively associated with change in purpose exploration. These findings lend themselves to an important developmental story: As one begins to narrow in on and commit to a purpose in life, they may also begin to explore the depth and various pathways that this purpose in life may provide.

In addition to considering the trajectories and implications of purpose in adolescence, researchers have also investigated whether adolescents are able to grasp the construct of purpose itself, and if their conceptualization of purpose aligns with the operationalization set forth by researchers. In order to address this concern, one study asked both public and private high school students to define what purpose in life means (Hill, Burrow, O'Dell, & Thornton, 2010). Participants' responses were coded to determine whether they reflected five purpose orientations common in the purpose in life literature: foundation and direction, happiness, prosociality, religiosity, and occupational/financial goals. Nearly all participants (98%) mentioned at least one of these orientation themes in defining purpose in life, with having a foundation or direction being the most prevalent theme in these high school students' definitions (82%). In fact, about 70% of participants mentioned multiple themes in their definition of purpose, illustrating their understanding that purpose is not

necessarily a one-size-fits-all construct. This study illustrated that purpose is both understood by and important to adolescents, building upon previous research suggesting that adolescence marks the beginning of many individuals' search for purpose (Bronk et al., 2009; Burrow et al., 2010).

The process of exploring and identifying one's purpose in life continues from adolescence into emerging adulthood. While adolescence is generally understood as occurring between the ages of 12 to 17 and emerging adulthood the ages of 18 to 25 or 30 (Arnett, 2000), there is fluidity in these developmental experiences. Because of these blurred categorizations, previous research evaluating purpose trajectories across these age ranges has taken a couple different approaches, sometimes considering these ages more holistically while other times separating them into "adolescence" and "emerging adulthood" more distinctly. With this in mind, we will discuss the benefits of purpose during these periods, while noting similarities and distinctions for each when appropriate.

3.3 Purpose Promotes Adaptive Development during Adolescence and Emerging Adulthood

Purpose has been deemed an important tool and asset that aids adolescents in navigating positive development (Bronk, 2013; Burrow et al., 2010; Damon et al., 2003). The benefits of purpose in adolescence and emerging adulthood are generally demonstrated with respect to psychological outcomes, with purpose aiding in the promotion of positive well-being (Bronk et al., 2009; Mariano & Savage, 2009). Positive correlates of purpose during this time period are identity development, life satisfaction, subjective well-being, and general affect (Bronk, 2012; Bronk et al., 2009; Burrow et al., 2010; Burrow & Hill, 2011). Furthermore, there are adaptive dispositions associated with purpose, like conscientiousness and grit (Hill & Burrow, 2012; Malin, Liauw, & Damon, 2017), that can aid an adolescent or emerging adult in attaining or maintaining these desirable states (Hill, Edmonds, Peterson, Luyckx, & Andrews, 2016).

The importance of these developmental processes goes beyond being able to claim one knows who they are and what their purpose is—the differences in these exploration and commitment outcomes have critical implications for the individuals in each stage. For example, findings regarding the connection between purpose exploration and well-being have presented a mixed picture thus far. When considering purpose exploration, some research has found that searching for a purpose is associated with higher life satisfaction in both adolescents and emerging adults (Bronk et al., 2009). Other studies have found that purpose exploration had no relation to well-being outcomes such as positive affect (Burrow et al., 2010), and actually predicted lower life satisfaction and higher negative affect in emerging adults (Sumner et al., 2015).

Regarding purpose commitment in adolescence and emerging adulthood, the findings are more consistent and much more positive. Purpose commitment is positively associated with life satisfaction, positive affect, and happiness in adolescents (Bronk et al., 2009; Burrow et al., 2010; Burrow & Hill, 2011). Furthermore, while identity commitment is also related to various well-being outcomes, purpose has been shown to fully mediate the relationships between identity commitment and well-being aspects, such as positive and negative affect (Burrow & Hill, 2011). Purpose also has been described as an important component in initiating the transition from adolescence to emerging adulthood (Hill & Burrow, 2012), as well as a motivator of positive transitioning between these stages (Hill, Burrow, Brandenberger, Lapsley, & Quaranto, 2010). Some have even found that purpose is connected to the desirable personality traits that aid in optimal youth development, such as generosity, gratitude, and compassion (Malin et al., 2017; Mariano & Savage, 2009) as well as mature development such as conscientiousness (Hill & Burrow, 2012). While purpose commitment and identity commitment are intertwined processes, purpose commitment is the powerful promoter for adolescent psychological health.

Purpose commitment also has desirable outcomes for emerging adults, with people experiencing greater life satisfaction, well-being, and positive affect, as well as lower levels of negative affect (Bronk et al., 2009; Hill, Burrow, & Bronk, 2016; Hill, Sumner, & Burrow, 2014). Once again, emerging adulthood follows similar patterns as adolescence, with purpose completely mediating the relationship between identity commitment and psychological well-being (Burrow & Hill, 2011). Purpose commitment is a significant contributor to greater life satisfaction, higher positive affect, and lower negative affect, when compared to markers of identity commitment and exploration of both identity and purpose (Sumner et al., 2015). In other words, being committed to one's purpose in life has been found to be a greater contributor to well-being than identity commitment. Purpose has also been shown to predict well-being in emerging adulthood even when controlling for covariates such as the Big Five personality traits (Hill, Edmonds, Peterson, et al., 2016). Even after adjusting for other powerful psychological health contributors, purpose continues to show its relevance and prowess as a contributor to adolescents and emerging adults' mental health.

In addition to promoting positive outcomes such as psychological well-being, purpose is also associated with a number of characteristics that may in turn facilitate positive youth development. For example, both adolescents and emerging adults who report having a purpose also report higher levels of hope (Bronk et al., 2009; Burrow et al., 2010), defined as a combination of *pathways*, which is the belief that there is a means to reach one's goal, and *agency*, which is the belief that one has the necessary motivation to utilize those pathways to reach one's goal (Snyder, Rand, & Sigmon, 2005). Furthermore, when university students reported a higher sense of purpose and positive affect at the beginning of the semester, those who reported higher initial purpose levels were more likely to gain on grit over the semester (Hill, Burrow, & Bronk, 2016). These associations may help elucidate mechanisms that may partly explain the consistent connections between purpose and psychological health for adolescents and emerging adults.

Though the purpose research in these age groups focuses on outcomes associated with optimal youth development and psychological well-being, the implications of purpose development during this time may extend throughout the lifespan. Indeed, finding a purpose early on can foretell later psychological, physical, and cognitive health benefits. Next, we will evaluate the implications of purpose later in the lifespan.

3.4 Developmental Trajectories of Sense of Purpose in Middle and Older Adulthood

Whereas adolescence and emerging adulthood are viewed as periods of fluidity in purpose exploration, middle adulthood is typically marked by greater stability in sense of purpose over time. However, several studies have suggested that sense of purpose in life begins to decline in the latter half of the lifespan, with older adults showing diminished purposefulness compared to younger counterparts. A meta-analysis of over 70 studies on sense of purpose in middle and older adulthood reported a small age-related decline in sense of purpose beginning in midlife, with these changes being more pronounced following retirement age (Pinquart, 2002). One potential explanation for this trend is that sense of purpose may be closely tied to our major life roles, which may decrease with advancing age and after retirement. Older individuals often face a number of unique challenges to their purpose such as retirement, declining health or functional ability, widowhood, and changes in social structure. Each of these events has the potential to influence the type of goal pursuits in which an individual engages, and therefore, the loss of these could lead to a less salient sense of purpose in older individuals.

However, a major limitation of this area has been the reliance on cross-sectional data. The studies synthesized in the above meta-analysis each report mean-level differences between younger and older age groups, but do not reflect how sense of purpose may change within individuals over time. This is concerning as cross-sectional comparisons across age-heterogeneous samples may greatly inflate age-related effects and do not account for the influence of between-cohort differences (see Hofer & Sliwinski, 2001). As such, longitudinal designs are needed to make claims about within-person changes in purpose over time. More recent research using longitudinal data has found that sense of purpose does decline with advancing age, though this is not the case for all individuals. Using two large longitudinal studies, Springer, Pudrovska, and Hauser (2011) examined change in sense of purpose across a 10-year interval in young, middle, and older adult age cohorts. They observed a small decline in sense of purpose between assessments, particularly among the oldest age group. Similarly, Hill and colleagues (2015) assessed within-person changes in sense of purpose among older men across a 3-year span but found little mean-level change over time. Finally, one study found that retired individuals in the Health and Retirement Study experienced a mean-level decline in sense of

purpose over an 8 year period, though there was significant individual-level variability in purpose change over time (Hill & Weston, 2019). An important finding in these studies is that there is considerable heterogeneity in the changes in sense of purpose of adults over time. In other words, though purposefulness may show slight mean-level declines approaching older adulthood, not everyone follows this trend—many individuals show relative stability or even growth in purposefulness over time.

Given the differences in individual trajectories of change in sense of purpose, an emerging literature has sought to examine factors that may influence how individuals change in purpose over time. One such precipitating factor may be physical health, as many studies have reported that better health and physiological functioning are associated with higher sense of purpose (see Piquart, 2002). Declining health may limit the ability to engage in goals central to a purpose, causing individuals to feel helpless and directionless. This may be particularly true for ailments with a sudden onset or those leading to disability. For example, one study of longitudinal changes following stroke onset observed declines in sense of purpose over time relative to pre-stroke purpose levels, with diminished physical and cognitive functioning predicting a lower sense of purpose (Lewis, Brazeau, & Hill, 2018). However, this was not the case for individuals who had suffered a stroke several years prior to baseline, suggesting that after a period of time some patients return to relatively stable levels of purposefulness. Though events such as retirement or the onset of a health condition may disrupt past roles contributing to one's sense of purpose, older individuals may adapt to derive purpose from other pursuits.

In the face of accumulating age-related losses, individuals may engage in compensatory strategies to optimize their functioning and continue to pursue similar goals (Baltes, Staudinger, & Lindenberger, 1999). Recent research following adults around the transition into retirement found that frequent engagement in a number of physical, social, cognitive, and prosocial leisure activities mitigated against decline in purposefulness over an 8-year span (Lewis & Hill, 2019). Further, the benefits of leisure activity engagement were more pronounced among newly retired individuals, suggesting that living an engaged lifestyle may help individuals compensate for loss of roles in other areas of life. Similarly, older adults may rely on social support to pursue purposeful aims despite accruing role losses. The Piquart (2002) meta-analysis found that social factors such as social network size and relationship quality were among the strongest predictors of sense of purpose in middle-to-older adulthood. In addition, longitudinal research in individuals around the transition into older adulthood has found that perceived social support from one's spouse, children, and friends helps to buffer against decline in purpose over an 8-year period (Weston, Lewis, & Hill, 2019). As such, though several studies have observed age-associated changes in sense of purpose, not all individuals are destined to decline in purposefulness as they age. Factors such as activity engagement and social support might help individuals preserve sense of purpose, allowing them to continue to garner benefits from purpose into older adulthood.

3.5 Purpose Promotes Desirable Health Outcomes throughout Adulthood

A myriad of research has highlighted the value of having a sense of purpose in life in fostering positive health outcomes in middle and older adulthood. Purpose is associated with reduced risk of physical disability (Boyle, Buchman, Barnes, & Bennett, 2010), cardiovascular conditions such as stroke and myocardial infarction (Kim, Sun, Park, Kubzansky, & Peterson, 2013; Kim, Sun, Park, & Peterson, 2013), Alzheimer's disease and mild cognitive impairment (Boyle et al., 2010; Boyle et al., 2012), and mortality (Boyle, Barnes, Buchman, & Bennett, 2009; Hill & Turiano, 2014). Another recent study showed that purpose in life is associated with lower levels of glycosylated hemoglobin, a marker of long-term glucose regulation associated with elevated risk for Type-II diabetes, cardiovascular disease, and mortality (Boylan, Tsenkova, Miyamoto, & Ryff, 2017). One proposed mechanism for the association between sense of purpose in life and positive health outcomes is that purposeful individuals may be more likely to pursue a number of health-protective behaviors. For instance, individuals higher in sense of purpose report more frequent engagement in moderate and vigorous physical activities (Hill, Edmonds, & Hampson, 2017; Holahan, Holahan, & Suzuki, 2008). This research is supported by recent findings linking higher sense of purpose with accelerometer-measured physical activity and general movement throughout the day (Hooker & Masters, 2016). Additional associations have also been observed for vegetable intake, sleep quality, and dental care (Hill et al., 2017; Kim, Hershner, & Strecher, 2015). Purpose also appears to predict health behaviors in the context of health care utilization and treatment adherence. Purposeful individuals are more likely to utilize preventative medical screenings such as cholesterol tests, mammograms, pap smears, and prostate exams (Kim, Strecher, & Ryff, 2014). Together, these findings point to purposeful adults taking a more active approach to their health through a number of health-promoting behaviors.

Another avenue of research involves the association of sense of purpose with coping and physiological reactivity to stressful experiences. Several studies have found that individuals higher in purpose report more positive reactions in response to stressors, including fewer depressive symptoms and less engagement in avoidant coping strategies (e.g., Wang, Lightsey, Pietruszka, Uruk, & Wells, 2007). Additional findings have documented a relationship between sense of purpose in life and more objective measures of stress response. For example, one study showed that purposeful individuals experience reduced heart rate variability after being presented with a stress-inducing video, with those higher in purpose reporting less anxiety and a more rapid return to resting heart rate (Ishida, 2006). A related study examined emotion recovery in adults presented with negative picture stimuli through eye blink response, a measure sensitive to emotional state in response to stressors (Schaefer et al., 2013). Similar to the previous findings, those higher in sense of purpose exhibited better emotional recovery after viewing the negative stimulus. Moreover, those higher in purpose have shown to have consistently lower salivary levels of the

stress hormone cortisol throughout the day (Ryff et al., 2006). Taken together, these findings suggest a healthier stress response profile: when stressors are no longer present, purposeful individuals are able to quickly reduce autonomic activation and return to a resting state.

Extending beyond health behaviors and stress reactivity, sense of purpose is associated with healthier biological risk profiles assessed via several inflammatory and functional biomarkers. Sense of purpose is related to a healthier cardiovascular risk profile, including lower levels of inflammatory cytokines, higher levels of high-density lipoprotein (“good cholesterol”), and down-regulation of pro-inflammatory genes (Fredrickson et al., 2015; Ryff et al., 2006; Zilioli, Slatcher, Ong, & Gruenewald, 2015). Additionally, individuals reporting a higher sense of purpose have been found to have significantly lower levels of soluble interleukin-6 receptors, a cytokine receptor which serves to amplify the inflammatory response (Friedman, Hayney, Love, Singer, & Ryff, 2007). One recent study by Zilioli et al. (2015) showed that sense of purpose predicted reduced allostatic load—a composite measure of several biomarkers representing functioning across a number of physiological systems. This index included markers of lipid metabolism such as body mass index and cholesterol levels, inflammatory cytokines such as interleukin-6 (IL-6) and C-reactive protein, and parasympathetic nervous system activity. Therefore, the finding of decreased allostatic load in purposeful adults reflects reduced physiological strain on immune, cardiovascular, and other bodily systems, suggesting that these individuals may be less prone to diseases resulting from chronic wear on these systems. Beyond these biomarkers, purpose also is longitudinally related to better grip strength and faster walking speed (Kim, Kawachi, Chen, & Kubzansky, 2017), two functional biomarkers known to predict cognitive change and dementia risk in late life (MacDonald et al., 2017).

Further underscoring its benefits for adult development, a growing literature has linked purpose in life with greater cognitive health. Middle and older adults reporting a higher sense of purpose perform better on several cognitive assessments including measures of executive functioning, memory, and processing speed (Lewis, Turiano, Payne, & Hill, 2017; Windsor, Curtis, & Luszcz, 2015). A number of potential mechanisms may account for these between-person differences in cognitive functioning. Higher sense of purpose is moderately associated with educational attainment and socioeconomic factors that may support cognitive ability (Hill, Turiano, Mroczek, & Burrow, 2016; Pinguart, 2002). Further, purposeful individuals may benefit from increased engagement in complex cognitive tasks associated with purpose-driven goals, leading to improved functioning through cognitive enrichment (e.g., Hertzog, Kramer, Wilson, & Lindenberger, 2008). Considering non-normative cognitive development, prospective studies have found that more purposeful individuals have a reduced risk for developing mild cognitive impairment, Alzheimer’s Disease, and other forms of dementia (Boyle et al., 2010, 2012). Sense of purpose may reduce risk for cognitive impairment by contributing to the cognitive reserve capacity of older adults. Cognitive reserve reflects the brain’s ability to compensate for pathological changes such as brain injury or neurodegeneration, allowing some individuals to maintain cognitive functions even when

widespread pathology is present (Stern, 2002). Research by Boyle et al. (2012) examined longitudinal changes in sense of purpose and cognitive functioning in older adults who also underwent brain autopsy upon death. They found that even after adjusting for markers of reserve such as education, purpose in life moderated the association between Alzheimer’s pathology (amyloid plaques and neurofibrillary tangles) and cognition. In other words, more purposeful individuals exhibited higher cognitive functioning even when they displayed the neurological hallmarks of the disease. Though it is not clear why purpose is associated with cognitive reserve, the authors suggest that having a strong sense of purpose may promote goal pursuit and engagement in mentally stimulating activities.

3.6 Conclusion and Future Directions

In sum, purpose in life appears to contribute to improved health outcomes across multiple domains, implying that purpose works through a multitude of physical, psychological, and behavioral influences to promote health (see Fig. 3.1). Moreover, purpose has been shown to predict positive health outcomes even after adjusting for factors such as personality, psychological well-being, and demographic factors (e.g., Boyle et al., 2010; Hill & Turiano, 2014). From adolescence to older adulthood,

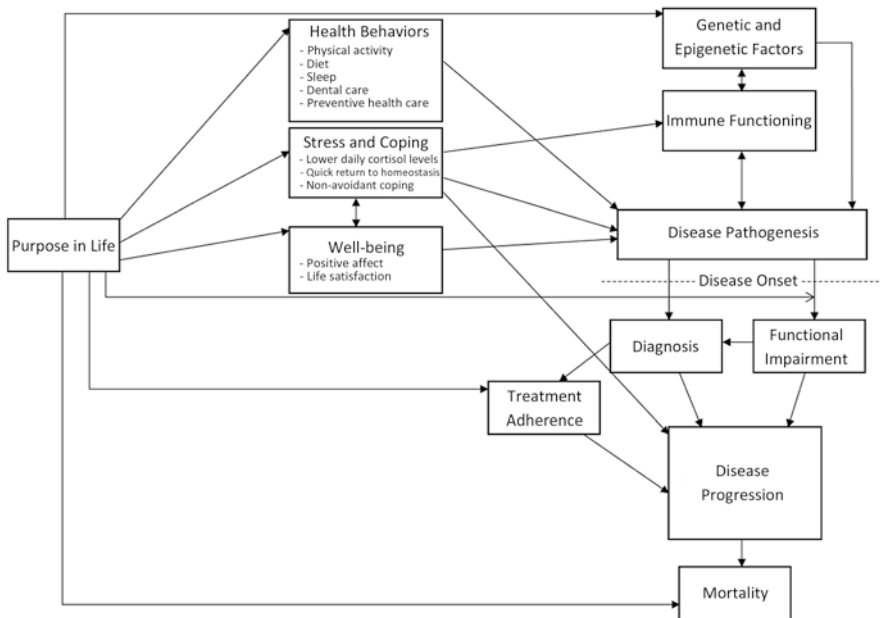


Fig. 3.1 Theoretical and empirical foundations for the role of purpose on physical, psychological, and behavioral outcomes

purpose predicts desirable outcomes for those who have it. That said, there are still many opportunities to both understand the how and why of purpose.

3.6.1 Future Directions for Research on Adolescents and Emerging Adults

The majority of the adolescent and emerging adulthood literature has focused on the psychological and developmental benefits of purpose, such as life satisfaction and identity development. While these findings are important to understand well-being and growth within these individuals, there is room to expand upon various research questions that are prevalent in purpose research on middle and older adults. For example, sense of purpose is positively associated with both better health behaviors and better health outcomes in older adults. Understanding that purpose is a lifespan developmental process, perhaps evaluating these same outcomes earlier on in the lifespan will further elucidate the mechanisms underlying associations between sense of purpose and health outcomes later. Furthermore, those who commit to a purpose in life earlier may experience better health outcomes later in the lifespan than those who commit to a purpose in life later on, given that they are more likely to engage in positive health behavior habits at an earlier age. If purpose promotes valuable health behaviors throughout the lifespan, it then becomes even more important to understand the strength of these associations when individuals are able to commit to a purpose in life at an earlier age.

Furthermore, though a variety of well-being outcomes have been explored in the context of sense of purpose for these ages, the mechanisms behind these relationships still remain unclear. It is suggested that purpose is related to but distinct from well-being (Pfund & Hill, 2018), though the nature of this association could be valuably investigated through potential mediators such as hope and grit. Perhaps those who experience a higher sense of purpose are able to maintain greater well-being due to a better handling of obstacles that appear in their path. While a large section of purpose research has focused on adolescents and emerging adults, there are still many opportunities with depth and breadth to explore.

3.6.2 Future Directions for Research on Middle and Older Adults

Another future research avenue is evaluating how the content of one's purpose in life may predict one's ability to maintain purposefulness and avoid losing a sense of purpose with the transitions that many face in older adulthood. For instance, those whose purpose in life is more rooted in their work may be more likely to experience a greater decrease in sense of purpose following retirement, while someone whose

purpose in life is oriented more prosocially will be able to continue pursuing their purpose outside of their work so they are able to maintain a higher sense of purpose in the midst of these challenging transitions. With the potential loss of one's purpose in older adulthood, it is important to understand why some experience declining purposefulness as well as identify ways to help those who experience a loss find a purpose again.

Further, most of the previous research on purpose in adulthood has focused on mean-level trends over time (such as stability in midlife, decline in older adulthood) despite accruing research pointing to significant heterogeneity in longitudinal purpose change (e.g., Hill & Turiano, 2014; Hill & Weston, 2019). More work is needed to address individual differences in purpose change over time and identify antecedents of these changes. For example, techniques such as growth mixture modeling or latent class analysis (see Jung & Wickrama, 2008) offer promising avenues for exploring subpopulations with distinct purpose trajectories over time and would allow researchers to examine unique characteristics of these groups. Methods such as these could help to clarify why some individuals experience relative stability or even increases in sense of purpose leading into older adulthood, whereas others decline.

3.6.3 Future Directions Throughout the Lifespan

Considering the far reach of purpose's power, there is one final prominent theme of research that is necessary in understanding purpose. Though purpose has shown itself to be an important factor throughout the developmental lifespan, additional research is needed to investigate how to help individuals who have yet to find a purpose and how to aid in the rediscovery of purpose for those who have lost theirs. Moving forward, research should develop interventions and various purpose enhancing strategies to promote development and maintenance of a sense of purpose. Previous research has theorized three main pathways that may lead to a purpose in life: proactive engagement, social learning, and reactive development (Kashdan & McKnight, 2009). While none of these pathways need to be taken exclusively, future research could investigate both the efficiency and effectiveness of each pathway individually, as well as ways to promote specific pathways to purpose.

The first pathway to purpose is considered "proactive" because an individual seeks out various opportunities and avenues that will help them then narrow in on committing to a purpose in life. The second route, social learning, could lead to purpose commitment through mentoring opportunities that could enlighten individuals on goals accessible to them, as well as being surrounded by purposeful people that help one understand the power of purpose engagement. The third pathway, labeled the reactive route, refers to developing a purpose in life following the occurrence of an event, so a purpose that is spurred from a reaction. This purpose could take form in a variety of ways, such as experiencing a traumatic event and

wanting to help others who have faced similar experiences. Each of these pathways to purpose may look different depending on where one is in the lifespan. Those who are younger may be exploring opportunities unique to them while those who are older may have experienced purpose derailment (loss of their previously committed purpose) could be experiencing a reinvigoration of such from experiences of the past. Some potential opportunities to evaluate the effectiveness of these pathways in committing to a purpose in life would be to assess participation in community service activities for proactive engagement, mentorship support for social learning, and reflection on previous meaningful events for reactive development. These are a few of the numerous opportunities to understand how to help encourage individuals to both explore and later commit to their purpose in life, so they, too, can experience the variety of emotional, physical, and cognitive benefits associated with purposeful aging.

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