



The role of purpose in the stress process: A homeostatic account

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ABSTRACT

The accumulation of evidence that having a sense of purpose contributes to greater health and well-being has vastly outpaced investigations into why this is so. Here, we offer a novel functional account for the demonstrated benefits of purpose by characterizing it as a resource that maintains psychological homeostasis. We posit that a sense of purpose recenters conscious attention toward prospective and overarching aims, thereby limiting the magnitude of disruption to well-being caused by the proximal stimuli. By attenuating reactivity to proximal events both stressful and uplifting, a sense of purpose facilitates greater stability in health and functioning over time. We leverage this mechanistic account with specific examples found across areas of psychological science and outline questions to guide future research.

1. Introduction

Scholarship on purpose in life embodies qualities that are both timeless and nascent. Timeless, insofar that the case for cultivating and pursuing a purpose has been argued persuasively for centuries. From the ancient works of Aristotle and Aquinas to the formulations of Frankl and Erikson, a reliable consensus is that having a sense of life direction satisfies a core human motivation and offers guidance for navigating one's circumstances. Yet scholarship remains nascent, as gathering empirical evidence of the value of purpose is a relatively recent pursuit, with studies linking it with greater physical health (Kim, Delaney, & Kubzansky, 2020; Scheier et al., 2006), psychological and social well-being (Ryff & Singer, 2008; Weston et al., 2021), cognitive functioning (Boyle et al., 2010; Dewitte et al., 2019; Windsor, Curtis, & Luszcz, 2015), income and net worth (Hill et al., 2016), lower levels of stress and allostatic load (Zilioli et al., 2015), and even greater longevity (Cohen, Bavishi, & Rozanski, 2016; Shiba et al., 2022). A notable feature of purpose research is that across the diverse guilds of psychological inquiry in which it is explored, findings uphold the view that a sense of purpose is a valuable resource.

Despite repeated demonstration as a psychological asset, explanations as to why having a sense of purpose is valuable remain curiously elusive. Most definitions of purpose do not lend themselves to a fluid elucidation of what this sense precisely does in the consistent manufacturing of positive outcomes. Neglecting mechanisms through which purpose makes life better leaves empirical blind spots and complicates efforts to translate scientific inferences into real-world interventions. Here, we advance a functional explanation of capacities

attributable to having a sense of purpose. Specifically, we contend that purpose maintains psychological homeostasis by recentring one's conscious attention towards a more prospective and overarching focus, causing everyday stimuli – such as stressors, challenges, and even uplifting experiences – to become less disruptive to the maintenance of well-being. Support for this capacity comes from a convergence of theoretical arguments for purpose as a form of pragmatic prospection (Bronk & Mitchell, 2022), and neural imaging studies linking purpose with greater connectivity in brain regions implicated in self-awareness and processing of interoceptive information about bodily states (Lewis, Kanai, Rees, & Bates, 2014) and less stress and conflict-related regulatory burden when making decisions (Kang et al., 2019). These neural mechanisms align with behavioral evidence that purposeful individuals report greater consideration of future consequences (Hill, Edmonds, Peterson, Luyckx, & Andrews, 2016) and show less impulsivity during reward-discounting tasks (Burrow & Spreng, 2016).

In the sections that follow, we situate our functional explanation within extant findings on sense of purpose in life across the psychological literature, with an emphasis on stress processes. By illuminating this mechanism, we hope to provide a foundation on which the collection findings from diverse lines of purpose inquiry can be interpreted and motivate more targeted future investigations. To begin, we consider what it means to have a sense of purpose.

1.1. What is a sense of purpose?

No singular definition of purpose binds all relevant studies in the psychological literature. Thus, we see utility in narrowing our scope

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within this broader corpus to those characterizations that emphasize *sense of purpose* – the perceptible feeling that one’s life is imbued with significance and direction. With this focus in mind, most prevailing formulations stem from the seminal works of Frankl (1959), who viewed purpose as an inner motivation and sense that life is worth living – even during extreme stress or inescapable hardship. Likewise, Ryff (1989) situates sense of purpose as a core component of psychological well-being, asserting purposeful individuals have “goals, intentions, a sense of directedness, all of which contribute to feelings of meaningfulness and integration about the various parts of one’s life” (pp. 43–44). This focus on direction and intentionality carries through to conceptualizations of purposeful individuals as those who are highly engaged with their lives and find their daily activities to be worthwhile (Scheier et al., 2006). Indeed, McKnight and Kashdan (2009) believe purpose provides a “self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning” (p. 242). Thus, conceptually tethered to constructs such as meaning (Heintzelman & King, 2014), goals and strivings (Emmons, 1986), we contend a sense of purpose can be understood as a forward-looking, generative, and self-unifying motivation to pursue the aspirations that concern us most.

We believe that the prospective and overarching focus afforded by a sense of purpose elicits a homeostatic effect, in that reactivity to proximal events is minimized via dynamic feedback regulation to support a more consistent internal state. As such, a sense of purpose should confer protection against forms of stress or challenge that might otherwise undermine health, wellbeing, and optimal functioning. This does not imply that purposeful individuals are adorned with psychological “blindness” that limit the recognition of or attention to life experiences. To the contrary, a sense of purpose may enable individuals to encounter various stimuli without deviating substantially from their self-sustaining narrative. This is an especially important consideration given purposeful individuals may perceive an inevitable need to navigate a broad range of environments conducive to their pursuits. As a result, they may intentionally select experiences and circumstances that are stressful, yet appraise them as worthwhile challenges rather than threats – a distinction with both clear physiological signatures (Blascovich & Mendes, 2000; Mendes et al., 2002) and differentially effective coping strategies (e.g., *shift-and-persist*; Chen, McLean, & Miller, 2015). As keen examples, in previous work we have shown that having a sense of purpose can modulate feelings of distress otherwise reported by individuals traversing – or even imagining traversing – socially uncomfortable settings (see Burrow & Hill, 2013; Burrow, Stanley, Sumner, & Hill, 2014) or daunting physical environments (Burrow, Sumner, & Hill, 2016).

We believe a mechanistic process of *recentering* is at the heart of the consistency that drives purposeful homeostasis. Our notion of recentering is akin to flexibly changing the focal center of gravity from one’s immediate environment and experiences to those more aligned with downstream expectations and desires. While recentering does not physically remove a person from their proximal settings, it allows one to consciously alter the relative weight placed on present circumstances as being less influential to their desired aims. Thus, recentering operates as form of feedback regulation capable of controlling behavioral responses to circumstances and experiences – a fundamental process that underlies any homeostatic system (Billman, 2020).

Whereas the ability to optimally allocate one’s finite resources has been nominated in past work as a means by which purpose buffers stress and stress responses (e.g., McKnight & Kashdan, 2009), recentering offers a novel and markedly different account that is more intuitively aligned with the empirical literature on purpose. In other words, it is unclear how resources are scaled to address the vast array of stressors and uplifting experiences encountered in everyday life. For example, which resources and in what amount are necessary to attenuate stress experienced while sitting in heavy traffic, learning of a failed academic exam, or when one has been targeted by discrimination? And are these the same resources required to subdue positive affect reactivity to learning that one has aced an exam or received a compliment? By

contrast, individuals who recenter these experiences within the broader scope of their life aims may view setbacks or uplifts in the broader context of their more meaningful pursuits.

An additional note on what makes our homeostatic explanation unique is the supposition that sense of purpose attenuates unhealthy responses to both negative and positive stimuli. To the extent that purpose recenters one’s focus toward future fulfillments, it should also down-regulate the need for immediate pleasure. Thus, reactivity to negative and responsivity to positive stimuli must be equally acknowledged in any explanation of sense of purpose as conferring the capacity to self-regulate health and wellbeing.

1.2. Purpose and personality psychology

Purpose research holds a unique and multifaceted place in the personality psychology literature. On one hand, purpose has been difficult to isolate singularly within the different levels of personality (McAdams, 1995; McAdams & Olson, 2010), insofar that it has been conceptualized as a disposition (being relatively stable and cross-situational nature), a characteristic adaptation (as it organizes one’s goals, daily activities, and engagements), as well as part of one’s life narrative. Moreover, building from Neo-Socioanalytic perspectives on personality (e.g., Roberts & Nickel, 2021), purpose is integrally tied to personal identity and often is cultivated through recognition of one’s personal strengths and capabilities. Efforts to describe purpose development (Hill, Pfund, & Allemand, 2023) have played upon these hierarchies to describe stability versus change in purpose in a manner similar to past personality development frameworks (e.g., Allemand & Flückiger, 2017). A resulting view is that purpose research holds firm connections in personality psychology.

To simplify these connections, it is perhaps easiest to focus on *sense of purpose* as the focal unit of consideration. Sense of purpose measurement provides a valuable opportunity to examine between-person differences with respect to personality profiles, addressing the question of which personality traits are associated with a greater sense of purpose. From the Big Five perspective, meta-analytic work demonstrates that individuals higher on conscientiousness, extraversion, openness to experience, agreeableness, and emotional stability tend to report a greater sense of purpose (Anglim et al., 2020). Work often has focused on the first two traits, emanating from when Goldberg and colleagues (Goldberg, 1999; Hofstee, De Raad, & Goldberg, 1992) first suggested “purposefulness” as the label for a blend of high extraversion and high conscientiousness. This sentiment aligns with the notion that being purposeful reflects a tendency toward greater organization and goal directed activity, paired with the agency and energy components of extraversion. Although associations with Big Five traits have been evidenced as moderate in magnitude, research also suggests that sense of purpose is not reducible to simply the Big Five (Anglim et al., 2020).

Put differently, there is something unique about assessing sense of purpose that cannot be fully captured with common Big Five measures. When considering the nature of purpose, three conceptual differences appear critical to understanding the differences. First, having a sense of direction is conceptually unique to purpose relative to those traits. Second, while conscientiousness involves goal-setting and planfulness, it does not capture whether said goals and plans are personally important, or if they are building toward a broader life aim. Third, although extraversion includes being active and energetic, agency in pursuit of goals appears central to sense of purpose (Bronk et al., 2009). Put together, these factors point to how purposeful individuals are focused and directed in a manner that provides personal identification, by outlining what an individual finds more important and worthwhile. These elements too are critical to understanding why sense of purpose has proven valuable for understanding affective reactivity to events and experience.

2. Sense of purpose and homeostasis

The term homeostasis has its origins within physical health and wellbeing, generally referring to the ability for one to maintain a baseline level of a given physiological characteristic (e.g., hormones, body temperature), through regulating reactivity to an event. Cannon (1932) initially employed the term to describe the body's ability to deal with a stressor or respond to a threat, and then return to normal functioning. Building from this definition, it is not that having a sense of purpose enables one to avoid stressors altogether. To the contrary, past work suggests that individuals higher on sense of purpose experience similar numbers of daily stressors (Hill et al., 2018) and even may report more daily stressors in some life domains (Hill, Best, & Cardador, 2021) than lower purpose counterparts. Instead, motivating our homeostatic account focuses on evidence regarding how individuals mitigate or manage responses to events when they occur, or ambiguous events that could be considered as particularly stressful or uplifting in ways that are reflective of feedback regulation processes.

2.1. Sense of purpose as a mitigator of experimental stress reactivity

To start, one can consider the extant literature on sense of purpose when someone is exposed to a stressor in the laboratory. Although there are only a handful of studies on this front to date, they have considered sense of purpose across several common experimental stressors. First, when employing temperature-based stressors, individuals who report a stronger sense of purpose show greater habituation to extreme conditions such as extreme hot or cold temperatures (Smith et al., 2009). Second, greater sense of purpose has been associated with more adaptive physiological responses to stressful visual stimuli. In one study (Schaefer et al., 2013), participants viewed images containing negative imagery, and researchers measured their eyeblink startle reflex during presentation and recovery. Individuals reporting a stronger sense of purpose showed better emotional recovery. Similarly, in another study, participants with a less firm purpose in life tended to exhibit more excessive responses to an anxiety-producing video (Ishida & Okada, 2006).

Third, research also has linked sense of purpose to adaptive responses in the face of the Trier Social Stress Test (Kirschbaum, Pirke, & Hellhammer, 1993), one of the most popular experimental stressors employed in the field (Allen et al., 2017). In one study (Fogelman & Canli, 2015), adults with a stronger sense of purpose had a quicker return to pre-stress levels of cortisol. Central to our homeostatic explanation, sense of purpose was unassociated with initial cortisol levels or how individuals reacted to the stressor test. Instead, it was primarily predictive of the accelerated physiological recovery of individuals following the stressor. In sum, it appears that a sense of purpose may hold homeostatic functions insofar that having a direction for life helps individuals return to their norm in the aftermath of an experimental stressor, whether with respect to temperature-based, visual, or social stressors.

2.2. Sense of purpose as a mitigator of daily stress reactivity

The homeostatic function of having a sense of purpose may be particularly evident in its capacity to mitigate individuals' reactivity to daily stressors. Interestingly, a greater sense of purpose does not appear to eliminate or reduce stressor exposure (Hill et al., 2018). However, in that same study, participants were asked to report on their affect and physical symptoms each day, in addition to whether they experienced a stressor. In general, when people who reported a stressor, they also tended to report more negative affect and physical symptoms than on days when they reported no stressor exposure. These findings align with the typical stress reactivity effect, insofar that individuals tend to feel worse when they experience a stressor. Past research with this sample has demonstrated that how much individuals react to stressors predicts later health consequences (Leger et al., 2021; Leger et al., 2022).

As such, it is important to note that sense of purpose predicted reduced personal consequences from daily stressors (Hill et al., 2018). Specifically, individuals with a stronger sense of purpose experienced reduced increases in negative affect and physical symptoms on days when they reported a stressor. It is worth noting that participants were only asked to report their affect, physical symptoms, and stressor occurrence at the end of the day, and therefore one cannot make strong claims about whether affect or physical symptoms were directly tied to the stressor(s) experienced. However, paired with the experimental findings above, it appears that sense of purpose may help individuals rebound from stressful days.

2.3. Sense of purpose as a mitigator of reactivity in naturalistic situations

Another source of evidence for a homeostatic account comes from work considering how people react when placed in a real-world situation that could yield stress or anxiety for some individuals. One example comes from work on how individuals navigate experiences with diversity. In one study (Burrow & Hill, 2013), passengers on a commuter train were asked to report on their anxiety at each train stop. Unbeknownst to them, a confederate was in the train car with them, reporting on the train composition at each stop. Passengers reported greater anxiety at stops when their ingroup received less representation. Put differently, passengers were more anxious when their ingroup was in the minority, even when the demographic representation of a train car likely held no impact on the individuals' health or wellbeing. However, this stop-based anxiety effect was reduced for individuals that reported greater dispositional sense of purpose. At the end of the ride, participants then reported on composition of the train. It is critical to note that sense of purpose was unrelated to participants' accuracy with these reports. As such, these findings suggest that purposeful individuals were not simply "blind" to the diversity of the train car (i.e., they were as likely to realize the event in question), but rather that they were less likely to be stressed by the train car composition.

Another example comes from research examining how individuals appraise potential physical obstacles in the world. In another study, college students were asked to report on their perception of a large hill on campus (Burrow, Hill, & Sumner, 2016). All students were queried before they ascended the hill to get to their classes; therefore, everyone was exposed to the same potential stressor. Similar to the findings for train composition accuracy, sense of purpose here was unrelated to participants' stressor appraisal, both in the form of perceived slope of the hill and the effort needed to overcome it. However, sense of purpose attenuated the association between these two perceptions. For students higher on sense of purpose, their slope appraisals were less linked to the extent to which they felt the hill would require more effort to ascend. Although sense of purpose was unrelated to stressor exposure or appraisal, it appeared to help people avoid being overwhelmed (e.g., higher perceived effort) when they saw the slope as steeper in nature. Bringing these studies together, it appears that sense of purpose played a conceptually similar role in two real-world scenarios (public transportation and navigating physical daily obstacles); namely, sense of purpose helped people avoid experiencing negative reactivity to these ambiguous, potentially stressful events.

Before closing this section, it may be helpful to consider our homeostatic account against a wider backdrop of stressors that could naturally occur. Because evidence of mitigated stress response and faster recovery has been shown across a generous array of stressor types, we believe the homeostatic effects of purpose are likely to remain somewhat constant across minor or seemingly mundane stressors as well as large or more significant ones. Yet, where deviations in our account may be most detectable are those in which the source of stressor is most closely aligned with the content of one's purpose itself. For instance, it is reasonable to imagine that a person whose purpose concerns supporting their family would find the estrangement of a family member especially stressful. In such a case, the stronger their sense of purpose the less likely

it may be to mitigate stress responses. At play here is a more intricate commentary on the interactive role of purpose content and sense of purpose in the stress process. These two facets of purpose (its content and the degree to which it is sensed) have not been well integrated in the existing research literature (Burrow et al., 2021; Hill & Pfund, 2022). Thus, predicting the functional robustness of our homeostatic account across different types and sources of stress that may align topically with the substantive contents of individuals' purposes awaits investigation. For instance, although strategies to describe a given purpose content as "noble" or "ignoble" are inherently problematic (Burrow et al., 2021; Hill & Pfund, 2022), it may be the case that homeostasis plays out differently for individuals whose purpose content is viewed as more or less aligned with societal norms.

2.4. Sense of purpose as a mitigator of positive event responsivity

Notably, this buffering effect has also been demonstrated in the context of responses to positive or uplifting experiences. Returning to the daily event literature, having a greater sense of purpose attenuates gains in positive affect on days when individuals report positive events (Hill et al., 2022). While people on average feel more positively on days with such events, participants with a stronger sense of purpose exhibited smaller affective responses to positive events. It also appears that positive events hold less of an influence on next day's affect as well for those individuals higher on sense of purpose. One explanation is that sense of purpose may be related to reporting more positive events in general. As such, it may be the case that sense of purpose helps people avoid getting overwhelmed or overly excited by positive daily events, in part because they expect to anticipate more in the future. Alternatively, it could also be more simply that purpose supports states favoring equanimity – or the retreat from any extreme emotional states or an openness to a balance of states. In this way, a sense of purpose may correspond positively with various aspects of the experience of mindfulness, though more thorough empirical work on this possibility remains needed (Crego et al., 2021).

Research also has replicated the interaction between sense of purpose and positive events on positive affect, using data from the first weeks of the COVID-19 pandemic (Hill et al., 2021). This work suggests that even in negative, largely stressful contexts, purposeful individuals avoid extreme levels of reactivity to positive events when they occur. Finally, the mitigating role of sense of purpose has been considered in the context of receiving positive feedback online. Researchers examined the connection between the number of likes individuals received on Facebook, in correlational and experimental studies (Burrow & Rainone, 2017). In both cases, participants' self-esteem was positively associated overall with social media likes. However, the association between these variables was attenuated for those participants who reported a higher sense of purpose. Again, it appears that sense of purpose lessens the amount one responds in the face of a positive event. In this case, that lack of responsivity could be viewed as adaptive, as potential problems associated with having one's self-esteem be strongly contingent upon social media experiences have been well-documented (Alfasi, 2019; Triêu, Ellison, Schoenebeck, & Brewer, 2021).

2.5. Interim summary

Taken together, although these findings employ a variety of samples and methods, a singular mechanistic account appears viable for them all. Namely, we conclude that having a sense of purpose affords homeostatic regulation, insofar that it enables individuals to be less affectively responsive to events as they unfold. Returning to Cannon's (1932) definition, it again is not that purposeful living is stress-free or without challenge. Instead, the findings outlined above point to how a greater sense of purpose may enable individuals greater capacity to deal with said stressors, given they can recenter their focus away from proximal events and toward their broader direction in life.

3. Homeostasis as a mechanistic account in health and work

If a sense of purpose promotes the ability to regulate reactivity to negative, positive, and ambiguous events in daily life, such a homeostatic function would hold profound consequences across multiple life domains. As noted above, the most proximal benefits may be demonstrating insofar that it provides a mechanistic account for how sense of purpose may promote psychological and affective wellbeing. Below, we outline how homeostasis can help explain why sense of purpose can yield benefits with respect to health and work, two domains that have been critical points of inquiry within personality psychology (e.g., Ferguson, 2013; Friedman & Kern, 2014; Furnham, 2002; Mäkikangas et al., 2013).

3.1. Sense of purpose and physical health

The assumption that psychosocial resources influence physical functioning is central to the study of health psychology. In this vein, having a sense of purpose in life predicts a wide array of health outcomes, such as lower risk for cardiovascular events including heart attack and stroke (Cohen, Bavanski, & Rozanski, 2016), greater vitality and perceived health (e.g., Scheier et al., 2006), as well as markers of inflammation (Friedman, Hayney, Love, Singer, & Ryff, 2007). Moreover, purpose appears to uniquely influence physical health, relative to other constructs frequently grouped together in the category of psychological and subjective well-being. For instance, purpose in life scores predict lower mortality risk even when controlling for constructs like positive affect, negative affect, and positive relations with others (Hill & Turiano, 2014), or components related to having a sense of meaning in life (Krause, 2009). Demonstrating the profound benefits of purpose, its effect on longevity holds when controlling for known predictors of mortality, such as health conditions, physical disability, and education (Boyle, Barnes, Buchman, & Bennett, 2009), appears to be of similar magnitude across the adult years (Hill & Turiano, 2014), and does not appear culturally-specific given that it has been replicated in non-American samples (e.g., Sone et al., 2008; Willroth et al., 2021).

Such findings are particularly valuable for our homeostatic account of purpose because they suggest that cultivating a purpose predicts better health across multiple measures of physical functioning. They also begin to rule out several counterarguments, and potential mediators of the relationship between purpose and health. Indeed, existing research demonstrates that purpose predicts long-term physical health above and beyond its potential influence on educational attainment, more proximal health conditions, and psychological well-being. As such, it is important to move beyond these as the sole explanations for the link between purpose and health, and to consider the potential for purpose to promote health through maintaining homeostasis.

One noted mechanism is to consider how homeostasis plays out within the context of preventive health behaviors. Past health psychology work has implicated behavioral homeostasis in considerations of dietary behavior and obesity (e.g., Marks, 2015; Piko & Brassai, 2016), insofar that individuals may be at risk for disordered eating when their dietary behaviors fall out of balance, such as in the case of over-indulgences. Sense of purpose may play a role here in allowing people to avoid cues for overeating in the moment (i.e., social pressures or stress responses), and instead motivate them to recenter their focus on the longer-term implications and their ultimate life aim. In support, multiple studies now demonstrate that individuals with a higher sense of purpose tend to engage in healthier lifestyle behaviors (e.g., Hill et al., 2019; Hooker & Masters, 2016; Kim et al., 2020). Moreover, sense of purpose is associated with using more adaptive regulation strategies to regulate stressors and anxiety (Lohani et al., 2022; Pfund et al., 2023), and avoiding the use of food or drink to cope with a stressor. As such, by invoking homeostasis as a framework, health researchers can gain insights into the wholistic process by which purpose, stress, health behavior, and physical health all operate in synchrony to avoid

imbalances.

3.2. Purpose in organizational psychology

A second domain of inquiry in which to seek evidence for the utility of purpose is organizational psychology. Several studies have investigated the role of constructs such as *calling* and *meaningful work*, both of which are reflective of whether employees feel a sense of purpose to their lives. There is evidence to suggest workers are not simply passive task completers but rather they are active crafters (Wrzesniewski & Dutton, 2001) of the types of tasks in which they engage. Recent work has pointed to *life crafting* as a critical route toward finding purpose in life (Schippers & Ziegler, 2019). With respect to homeostasis, recent theoretical work has noted that purposeful employees should be generally better at managing their work stressors, and stressors in the workplace should help guide employees toward understanding their personal purposes in life (Hill, Best, & Cardador, 2021). Namely, individuals should be wary of occupational experiences that yield a greater frequency of stressors that also are beyond their control; although purposeful individuals may experience more stressors in general, given they are challenging themselves, it should be taken as a sign that the given career is problematic if these stressors fail to fulfill one's personal direction and are overly burdensome.

Another connection to the homeostatic account comes in the form of how individuals avoid "bringing stress home." In order to mitigate stressors and reactivity in daily life, one must strive towards avoiding conflict between the workplace and other life domains (relationships, family, etc.), as well as find organizations to work for that hold similar long-term aims. Research has demonstrated that individuals who report higher sense of purpose tend also to report better work-life balance (Weston et al., 2021). One reason being, perhaps that purposeful individuals appear more adept at managing social relationships. Purposeful individuals report more positive relationships and greater social support across different partners (Pfund et al., 2021; Weston et al., 2021), which should attenuate the spillover of negative family events into the workplace. Indeed, sense of purpose has been related to lower reports of work-life tension and higher levels of work-life enhancement (Sutin et al., 2023).

Investigations specific to sense of purpose, and not related constructs like meaningful work or calling, in the occupational psychology have been more limited. As such, this area reflects a critical domain going forward for research to consider the recentering component of our homeostatic account. Purposeful individuals should be better able to recenter themselves when moving between life domains to prevent stress-spillover from one domain (e.g., work) to the other (e.g., family life). Although past work has typically considered sense of purpose and stressor occurrence writ large (e.g., Hill et al., 2018), it will be critical to understand the unique role sense of purpose may play in reducing any stress exacerbation that results from negative events occurring in both work and life on the same day.

4. Where do we go from here?

Our thesis is that through recentering one's focus from the present to more distal and overarching aims, purposeful individuals are better able to down-regulate reactions to proximal circumstances leading to personal homeostasis. With this explanation elaborated, researchers are encouraged to revisit past work and design novel studies guided by this interpretative framework to test our mechanistic account. In addition, we highlight three broader domains of interest that would benefit from more concerted research attention: the contents of purpose, the role of sense of purpose in social connections, and the cognitions that underlie a sense of purpose.

As most of the existing measures of purpose detect the degree to which individuals feel purposeful, they reveal little to nothing about the aspirational contents underlying these feelings. As alluded to earlier,

studies capable of extracting the subject matter of purpose will play an important role in refining our understanding of whether the influence of one's sense of purpose is moderated by its aspirational content. It remains largely unknown whether some purposes lead to healthier outcomes than others, or if all purposes serve their pursuers equally. Specific to a homeostatic account, it will be valuable to consider whether having a sense of purpose always mitigates reactivity, or if the domains of regulation are determined by the individual's purpose content. As an example, for individuals whose workplace is a central environment for purposeful activity, it may be that a sense of purpose holds the greatest homeostatic function for work events, in order to scaffold goal progress in the most purpose-relevant domain. Alternatively, one may expect purpose to hold *lesser* homeostatic influence, insofar that it may be more difficult to down-regulate from stressors when they occur in the pursuit of aims mostly closely tethered to one's purpose.

This discussion leads to a second direction for future work, namely the need to understand how social connections influence the homeostatic function of sense of purpose. One obvious target may be social relationships, given that purposeful individuals enjoy social ties that are both more supportive and of higher quality (Scheier et al., 2006; Weston et al., 2021), and report experiencing less social isolation and loneliness (Mwilambwe-Tshilobo et al., 2019; Pfund et al., 2022). In light of alarming national trends in the experience of loneliness (Department of HHS, 2023), work in this area could prove especially useful for identifying strategies for intervening on individuals capacity to connect with others perhaps through purposeful engagement. One test of our homeostatic account that could prove fruitful might involve investigating whether opportunities to articulate and pursue one's purpose are particularly useful for those high in dispositional loneliness. As research shows lonely individuals tend to engage in hypervigilant monitoring of social interactions (Hawkey & Cacioppo, 2010), enhancing purpose among those experiencing such feelings should redirect conscious attention away from immediate stimuli and toward more desirable downstream aims. If it turned out to play a mitigating function, the broad array of known behavioral, cognitive, and physiological correlates of loneliness would enhance the precision of learning of where precisely in the stress process a sense of purpose is effective.

Moreover, sense of purpose appears critically connected to having positive social interactions in daily life for older adults (Pfund et al., 2021). As such, it would be valuable to understand the dynamics of these associations, insofar that purposeful individuals may be better at regulating their emotions and reactions to social partners, as well as more efficiently allocating their time and resources to maintain positive relationships prosocial engagements. Similar claims are found in theories of developmental regulation that have spoken to the need to selectively engage (and disengage) with personal goals, which in turn has implications for sense of purpose (Haase, Heckhausen, & Wrosch, 2013).

Lastly, future studies should seek to better elucidate the cognitive underpinnings of feeling purposeful. The growing repertoire of benefits affirm the need to know how this sense is acquired in the first place. Do people believe finding or fostering this sense is entirely up to them, and do such beliefs contour the degree to which one benefits from or even cultivates this sense? These questions also invite greater consideration of the intimate connection between purpose and dimensions of self and identity. Given purpose's standing as a self-organizing and self-defining aim (McKnight & Kashdan, 2009), work is needed to uncover whether engaging individuals to think about their personal goals may help yield the homeostatic functions described herein. Further research attention also is needed with respect to the potential roles for future-oriented thinking and resource allocation within homeostasis. It seems feasible that individual differences in characteristics such as hope and optimism may shape how purposeful people may appraise challenges in everyday life, which may, in turn, inform their willingness to invest finite resource to reap downstream gains. Future inquiry on the cognitive front also can bring insights into the extent to which the homeostatic account proffered here is more or less unique to purpose, relative to related

constructs, such as sense of meaning, mattering, and coherence (Costin & Vignoles, 2020). If a homeostatic effect emerges merely by prompting individuals to consider proximal goals or to briefly draw coherent patterns from abstract stimuli, for example, then the fullest articulation of our homeostatic account may lack parsimony, be misleading, or worse - efforts to help individuals cultivate greater purpose may be inefficient or even costly.

In conclusion, the study of purpose in life concerns longstanding questions of strength, motivation, and vitality. At present, the idea of purpose is enjoying renewed appeal in personal, public, and scientific discourse. The empirical evidence thus far has been overwhelmingly in favor of purpose as a psychological resource, aiding in the maintenance of health and wellbeing. Where researchers have looked, they have routinely concluded that cultivating a purpose to be promotive of health and wellbeing. Our hope is that by providing a functional explanation for why having a sense purpose proves beneficial, we will encourage more precise and illuminating investigations into this psychological resource.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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