

Aging and Positive Psychology

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Keywords:

Anxiety, Cognition, Depression, Positive Psychology, Successful Aging

Received: Oct 01, 2021

Accepted: Oct 05, 2021

Published: Oct 07, 2021

DOI:

10.14302/issn.2474-7785.jarh-21-3979

Abstract

Background

Aging, a state often associated with poor emotional health status greatly impedes life quality and independence for many.

Aim

This mini review examines the potential of the concept of positive psychology as an active approach to fostering successful or more successful, rather than suboptimal aging.

Methods and Procedures

Articles that addressed the current topic

of interest and were located in the PUBMED, Medline, Web of Science, PsycINFO and Google Scholar electronic data bases were carefully sought and analyzed and presented in narrative form.

Results

Various forms of positive psychology appear to provide a safe efficacious evidence based approach for purposes of ameliorating various degrees of anxiety and depression and for improving cognition, life quality, and health well-being in diverse subgroups of older adults

Conclusion

More research to examine who might benefit most from this highly promising form of intervention, and in what respect appears to have considerable merit in light of the growing populations of older adults and few intervention options to help them to age optimally and as successfully as possible.

Introduction

Aging, which is generally accepted as an inevitable state of organ and tissue declines, and one frequently associated with one or more chronic health conditions, commonly induces feelings of anxiety, depression, fear and beliefs in limitations, rather than perceptions of confidence and control in many older adults. However, the idea that one can still not only engage early on in life in health protec-

tive behaviors, but can actively pursue the idea of aging 'successfully' or a state where life quality, autonomy, self-efficacy, and feeling purposeful can be maintained, improved or optimized appears to be gaining support. Indeed, a considerable body of psychology as well as medical research has examined and tested not only whether thoughts can be changed, especially among older adults, often believed to hold intractable views, but whether those who are more optimistic than not can experience more rather than less healthful aging states, including a better coping capacity, and a reduction in perceived stress and stressors.

Given the growing need for health providers to assist older adults to avoid preventable illnesses and to enable them to cope effectively with chronic illnesses, and find meaning and purpose in life, which are positive features of 'successful aging', it appears there is some merit to examining if a focus on positive aspects of their experiences, rather than the negative or unchangeable issues will be more helpful than not. In particular, and in light of the severe impact of excessive reactive anxiety and depression on overall motivation, as well as health seeking, autonomy, self-perceptions, adherence, and ultimately on physical health, overcoming or mitigating remediable factors underpinning depression and anxiety appears highly desirable [1]. Moreover, psychological strategies that can improve one's ability to foster a state of resilience, rather than a negative downward spiraling state of health and well-being [2] may have immense health implications for both the aging adult, as well as the practitioner.

In this regard, this mini review elected to selectively focus on establishing if there is some evidence to support the view that one or more possible benefits are likely to be evidenced in response to persistent active efforts to apply strategies that engender positive thoughts as opposed to the sole use of pharmacologic approaches to alleviate age associated negative mental health states. While other modes of intervention such as cognitive behavioral therapy or group therapy, or community based education may be helpful in this respect [3], it is possible

that some cases of severe chronic mood conditions need to be overcome first by more direct interventions such as those produced by a change or modification of the individual's thought processes at the outset. In other cases, travel, service, and mobility restrictions should not impede the application of efforts to foster optimally successful aging. Since quality of life may be severely jeopardized by chronic mood disorders, as well as associated with emergent cognitive challenges such as anxiety, sadness, and sorrow that emerge with age, and that these emotional states may be prevented, attenuated or reversed, it was believed line of inquiry would prove fruitful to examine.

Indeed, this idea is not novel, and has been proposed for some time by Seligman [4] and others. In addition, the idea does not only pertain to cognitively alert older adults, as is sometimes believed. Evidence concerning one European research initiative for example, illustrates the progressive awareness of the benefit of such non-pharmacological approaches in the prevention of dementia and the relevance of taking into account the psycho-affective dimension in endeavoring to improve mental health and well-being of older adults [5]. Benefits are also not dependent on the presence of complete physical or cognitive health attributes as shown by van Leeuwen et al. [6]. In many cases, cognitive based attributes such as feeling proud, feeling valuable, feeling positive, making the best out of life, being able to accept unchangeable situations, having peace of mind, feeling happy, and having faith are some favorable attributes that can be employed to alter or nullify or counter balance one or more associated negative emotional or reactive responses, despite any prevailing harsh realities.

Aim

In light of the importance of achieving optimal health for all, and enhancing wellness opportunities for older populations, this mini review sought to establish, if in an age of high uncertainty and enormous post COVID-19 health and economic challenges, whether the application of positive psychology is plausible, and if so, whether this

approach can help to mitigate some of the excess health burden that is being evidenced among the elderly in all parts of the post pandemic globe environments.

A parallel aim was to establish whether the attributes of resilience, autonomy, acceptance, the ability to cope to achieve personally valued goals, and perceived self-efficacy for coping with life are likely to be strengthened through the application of one or more positive psychology approaches, regardless of the older adult's physical health and socioeconomic status.

Rationale and Relevance

By 2030, the numbers of older adults in the United States and elsewhere will soar. However, not all will age successfully, even if they have no distinctive co-morbid health condition. On the other hand, this rapidly increasing number of older adults will probably have high rates of chronic diseases, which may be barriers to the achievement of a fully functional life, even though this is not evidenced by some. However, without some tools that can be applied universally, at low cost, and with no side effects, the principle and vision of 'successful aging' for all is likely to fail. Approaches that look at the glass as half full, plus those that heighten acceptance and self-image, and perceived control are likely to be more advantageous than not in this regard in our view.

Materials and Methods

To examine the aforementioned premises, we attempted to locate salient data housed on PUBMED, PsycINFO, Medline (Ebsco), Web of Science, and GOOGLE SCHOLAR using the key terms, *Positive Psychology and Healthy/Successful Aging*. All modes of publication were deemed acceptable in this regard if they addressed one or more of the topics of interest noted above in some way and there were no yearly or methodological restrictions. The most salient articles, book chapters, or books, related to the current theme were duly downloaded and examined and those deemed noteworthy are highlighted here in narrative form. All modes of application employed in the various research studies were accepted as valid, as were

all definitions of anxiety and depression and positive psychology. Moreover, since the article was designed to serve as a general one to introduce the topic, rather than a systematic review, it did not consider any of the currently reported research endeavors in depth, but rather the goals was to present a snapshot of the prevailing trends in this realm and the potential of this modality for clinical purposes.

The term positive psychology was largely employed to examine interventions, treatment methods or intentional activities aimed at cultivating positive feelings, positive behaviors, or positive cognitions believed to enhance well-being and ameliorate depressive symptoms [7] as opposed to the hypothesized negative scenario depicted in Figure 1 below.

Search Results

General Observations

According to Stoner et al. [8], traditional models of aging have commonly tended to approach the subject from a negative view point where themes of dependency and decline are common. In contrast, a growing database shows that positive psychiatry and psychology, which involves the scientific study of the strengths and capabilities of individuals in the context of protecting their well-being, can yet be applied to older adults in the form of hope, humor, integrity, and gratitude, among other emotionally associated strategies that can help maintain cognitive well-being [9]. As outlined by Park et al. [9], the goal of positive psychology is to not to eliminate standard health affirming interventions, but to complement and extend traditional problem-focused psychology approaches that have proliferated in recent decades. Although often ignored, it is an approach concerned predominantly with efforts to create positive psychological states, such as happiness, by harnessing positive psychological traits, such as talents, interests, strengths of character, positive relationships, and positive thoughts in place of negative responses as a result of uncontrolled stress, depression, anxiety, fear, and neuroticism [5].

ATTRIBUTES OF AGING →	ADVERSE IMPACTS-	OUTCOMES
Loneliness	Excess stress	Decreased coping ability
Anxiety/fear	Sleep challenges	Injury risk increases
Depression	Lack of motivation	Deficient self-care
Disability	Excess disability	Dependence
Pain	Chronic pain	Opioid usage
	LOW LIFE QUALITY	LONGEVITY DECLINE

Figure 1. Schematic of anticipated aging impacts and outcomes in the presence of various negative psycho-affective attributes of cognition such as fear, depression, anxiety, and pain coupled with the absence of efforts to heighten positive thoughts and regardless of actual health status.

Although limited in terms of numbers of studies to examine this contention, Chetelat et al. [5] state that the findings that do exist are quite encouraging and show for example, a positive effect of meditation training on cognition, especially on attention and memory, that is found to impact brain structure and function especially in frontal and limbic structures and insula. In this regard it was specifically shown that gray matter volume and/or glucose metabolism was higher in six older adults expert at meditation compared to age-matched controls. It is also possible that the type of meditation, its frequency, and focus, as well as outcome expectations can be influential in this respect as observed by Cotter et al. [10].

Moreover, as alluded to by Cotter et al. [10], older adults do seem to possess particularly well-preserved emotional regulation abilities and cognitive processes that can be influenced favorably by meditation to induce positivity and better cognitive control in the face of chronic health challenges, as identified by Moore et al. [11]. The practice of meditation may also impact the rate of cellular aging [12], plus the acquisition or maintenance of a state of positive mental health in cases of post traumatic stress syndrome among older adults [13]. On the other hand, the failure to mitigate unrelenting existential anxiety can be expected to

severely impair one's ability to find meaning, whereas cultivating meaning is potentially a primary method that can be applied to address suffering, while allaying existential anxiety, and promoting possible flourishing (and potential growth) [14].

Cabrita et al. [15] who investigated the relationship between positive emotions and the functional status of older people living independently found that longitudinal studies ($n = 4$) tended to provide significant evidence for an interaction between these two factors. This suggested that a higher frequency in the experience of positive emotions might be associated with lower functional limitations. In this respect, it appears mindful aging approaches that attempt to foster positive expectations may serve as a protective factor that enhances the extent of healthy aging in multiple realms [16]. These realms include: mental and physical chronic health conditions, sleep quality, loneliness, posttraumatic stress disorder, cardiovascular conditions, diabetes, rheumatoid arthritis, Parkinson's disease, and chronic pain [17]. While this may warrant involvement of the cultivation of openness, curiosity, and non-judgment to one's thoughts, emotions, and sensations, whether they are positive or negative, the results are noteworthy when considering the limited number of tools available to

promote positive aging expectations that can support healthy aging.

Initially, and well highlighted by Seligman [4] optimism [18], a cognitive concept implicating 1) the study of positive emotions (checking satisfaction with the past, happiness in the present moment and the hope for the future); 2) the qualities/positive traits (especially strengths and virtues such as: flexibility, self-control, courage and wisdom) has observable benefits as far as older adults aging successfully goes. Indeed, positive psychology, which seeks to activate the health promoting effects of good feelings in people's lives, and looks to enhance and extend aspects of their thoughts to foster a higher life quality and possibly the prevention of future pathologies or their severity, may have a profound beneficial effect on elder depression and death associated anxiety, among other positive outcomes [19].

According to Seligman [4] and others, knowing one's personal weaknesses, while relevant, is not enough to promote prevention of its possible cumulative and adverse aging effects. However, a more positive way of thinking about one's situation that is more focused on one or more positive elements, rather than solely on prevailing negative attributions, was deemed more likely to advance rather than deter a situation of healthy human aging. This basically involves the active discovery of the individual's strength based qualities, along with an effort to activate these strengths on a consistent basis, plus the adoption of more favorable, rather than less favorable perceptions of their situation throughout their remaining lives. That is, active efforts that seek to highlight the older adult's character strengths, such as creativity and hope, as well as their individual talents, rather than only negative emotions and thoughts about their prospects, especially in challenging situations can possibly reduce frustration, while increasing tolerance and a sense of acceptance as well as of circumstances.

What the Research Shows

Among the highly diverse sources of empirical study related to the current topic, optimism-the

expectation that good things will happen-is one dimension of positive psychology that has emerged as promising. In particular, optimism is linked to the practice of healthier behaviors and reduced disease risk taking. Growing research also indicates that those older adults who portray higher optimism levels, tend to also portray lower mortality rates. As well, James et al. [20] noted higher optimism was associated with an increased likelihood of healthy aging, thereby suggesting that optimism, a potentially modifiable health asset, merits further research for its potential to improve health in the context of aging.

In support of this idea, Kubzansky et al. [21] report that facets of positive psychological well-being, such as optimism, are prospectively associated with the seven metrics of cardiovascular health and improved outcomes related to cardiovascular disease. Moreover, individual-level interventions, such as mindfulness-based programs and positive psychological interventions, have shown promise for modifying psychological well-being, as well as anxiety in those with medical conditions [22, 23], such as heart disease [24].

According to Avey et al. [23] positive psychological dimensions can mediate between stress reactions or stressful responses and well-being while Hoyt et al. [25] find that emotional processing can significantly predict changes in ill-health, such that at higher levels of emotional processing, may be associated with an increase in depressive symptoms over time, depending on the nature of the person's stress perceptions. Thus older adults with chronically high perceived stress might benefit from interventions that target emotion-regulating coping processes [25].

Craciun et al. [26] who studied aging in precarious circumstances and whether positive views on aging would make any difference found that even in challenging circumstances having a positive view on aging appeared to compensate for insufficient resources. In terms of gratitude as a positive attribute, Cunha et al. [27] found that compared to a similar control group,

exposure to a gratitude intervention managed to heighten the extent of the subject's positive emotional state, their subjective happiness and their life satisfaction, while reducing the extent of any prevailing negative emotions or accompanying symptoms of depression. This change was observed to be greater than that observed in the control groups in relation to positive affect.

Smith and Bryant [28] who studied the effects of enhancing positive perceptions of aging by having subjects savor rather than ignore or regret life lessons, found that after controlling for baseline happiness, health, gender, and age, participants who savored valuable life lessons reported greater positive perceptions of aging and life satisfaction, compared to participants in the untreated-control group. These findings were taken to suggest that savoring valuable life lessons is a promising approach for promoting favorable rather than unfavorable aging perceptions and emotions.

Hazlett-Stevens et al. [29] found the specific use of mindfulness mediation efficacious not only for mitigating chronic low back pain, chronic insomnia, and poor sleep quality often associated with negative affect, but the intervention also enhanced positive emotions, reduced symptoms of anxiety and depression, and improved memory and executive functioning. It also appears to foster adaptive strategies for reducing stress and its adverse effects on mental health status as a whole [30], as well as depression and possible biological aging processes in the elderly [30, 31].

In addition, a role for the concept of the 'acceptance of situations that have occurred or are ongoing, albeit negative', similarly appears to provide for a more sustainable state of emotional health than those associated with persistent negative thoughts and failure to accept what cannot be altered [32]. Among middle-aged and older adults, Choi et al. [33] found that engendering positive expectations, as opposed to negative expectations did appear to have a bearing on all cause mortality that was especially relevant among those of higher ages-who tended to be more negatively oriented. Nguyen et al. [34]

found that among a diverse body of older adults, the agreed upon attributes holding optimistic views as well as acceptance tended to be highly agreed upon healthy aging attributes. Acceptance may also produce a resultant reduction in depression and worry, as may setting goals accordingly, and modifying these as indicated to minimize distress [35].

Accordingly, a meta-analysis of 51 such interventions with 4,266 individuals conducted to examine positive psychology interventions, found these do indeed significantly enhance well-being and decrease depressive symptoms. In addition, several factors found to impact the effectiveness of positive psychology interventions, such as depression status, indicate that early, rather than late intervention is indicated, and that the delivery of positive psychology interventions in home settings is effective even if the individual ceases to practice this [7, 36]. This was also the finding of Carr et al. [37], Gorlin et al. [38], Cohn et al. [39], and Bolier et al. [40].

Positive psychology approaches, which can also be incorporated alongside cognitive behavioral therapies and others for ameliorating depression [41], may according to Appleton [42] be especially helpful for improving subjective life quality and for fostering positive mental health states among older adults, a group anticipated to double from 40.2 million to 88.5 million people within the United States by 2050. Appleton et al. [42] also proposed that positive psychology approaches may help to foster a condition of affective balance associated with better cognitive and subjective health in older adults regardless of the presence of persistent pain states [43]. Significant increases in self-efficacy and morale are also anticipated [44], as are possible decreases in loneliness, and possible cognitive inflammatory states and physiological dysregulation [45], and depression [46].

Alternately, based on many years of study, one can expect mental health declines as well as a decreased sense of well-being, satisfaction and overall life quality of the older adult population that can exacerbate poor mental as well as physical health, if efforts to counter

Table 1. Sample of empowerment-based positive psychology strategies directed at emotional regulation, and the generation of positive self-perceptions, and beliefs and affect that can learned as well be applied alone or in combination

ATTRIBUTE	FINDING	GROUP
Acceptance	Accepting mental health issues fosters better mental health	Ford et al. [32]
Appreciation	Related to life satisfaction and positive mood	Adler [50]
Courage	Courage is an important psychological resource	Santisi et al. [51]
Creativity	Creative activity can impact health	Fox et al. [52]
Gratitude	Associated with subjective well-being	Yoo [53]
Hope	May improve health related life quality	Wipplod and Roncoroni [54]
Humor	May promote well-being/reduce isolation	Morse et al. [55]
Mindfulness	May impact immune health positively	Black et al. [30]
Optimism	Optimism/psychological resilience help reduce pain	Thompson et al. [56]
Pleasure, engagement, meaning	Increases well-being and reduced depression	Gander et al. [57]
Self-compassion	May benefit mental health/life quality	Kima nd Ko [58]
Self-esteem	Can protect against fears concerning loneliness	Rossie et al. [69]
Spirituality + religion	May slow cognitive decline in dementia	Agli et al. [60]
Visualizing best self	May help to increase/sustain positive emotion	Sheldon et al. [61]
Zest for life	May help avert depression	Glasberg et al. [62]

these adverse emotions are not forthcoming. For example, one program termed 'The Art of Happiness', an 8-week intervention, that was conducted at two senior centers showed that compared to the control group, participants in the active group, experienced significantly less perceived stress, and were significantly calmer and less tired than before the intervention. Results from this study were taken to support the fact that positive psychology approaches may be highly valuable for purposes of enhancing older adult populations wellbeing [47] and are health promoting in the context of aging related challenges [48, 49]. A sample of selected benefits attributable to these approaches is indicated in Table 1.

Discussion

While aging is inevitable, increasing evidence suggests aging as a negative state does not have to be a foregone ordained experience of downward spiraling events and perceptions. This review explored the degree to which positive psychology a broad term applied to encompass approaches that draw on positive thoughts and beliefs regardless of negative situations can serve as a primary as well as a secondary and tertiary preventive tool in the context of efforts to attain a state of successful aging as discussed by Pandey and Garb [63]. As such, evidence appears to imply that regardless of age and health condition, a more positive outlook involving active efforts on behalf of the aging adult has a sufficiently strong bearing on their ability to attain an optimally healthy aging state, high energy levels, overall satisfaction, and motivation. In this regard, one or more positive thoughts applied on a regular basis may help to improve overall mental and physical health attributes, while mitigating damage attributable to persistent unrelenting or adverse negative/stressful health situations and others [63]. Since this is an important goal of many practitioners as well as aging adults themselves, fostering older adults to adopt a positive frame of mind as far as possible is likely to foster greater overall life satisfaction and productivity than not [46, 64]. Moreover, those who 'feel good', will tend to have higher health benefits all factors considered, when compared to those who focus solely on negative

emotions [65].

In sum, as discussed by Araujo et al. [66] the study of aging through the lens of positive psychology as proposed initially by Seligman [4] appears to allow both the practitioner or provider, as well as the client, to look beyond the decline normally associated with advancing age and to consider rewarding experiences and strategies that can help to promote a meaningful aging state, rather than one of despair, distress, despondency, and mood disorders. Moreover, addressed sooner rather than later, early interventions may not only help to ably preserve an optimal mental health status and well-being among aging adults, but may extend longevity [67, 68], enhance compassion [69] along with increased feelings of love, closeness, or trust, while reducing negative feelings of stress, nervousness, and being overwhelmed, a finding also supported by Hodgetts et al. [70] and Barton et al [71]. Smith et al. [72] note that among older adults, a greater ability to savor positive experiences and higher resilience also predicted greater happiness, lower depression, and greater life satisfaction. Indeed, research shows that positive psychology offers a fertile ground for exploration and application, but that even a small change in one dimension affecting life quality positively might have a considerable impact on others that can foster health vicariously speaking [6].

That is, rather than focusing on the older person's weaknesses or future anticipated weaknesses, for example, frailty, depression, anxiety, or fears, activating their strengths and reserve capacities [3] by harnessing one or more attributes of positive psychology, an umbrella term for the application of various positive emotions, appears to be a highly promising complementary approach to advancing the idea of 'successful aging'. A growing number of well controlled studies imply positive psychology as a global strategy does tend to produce favorable measurable outcomes in multiple spheres, including important psychological, physical, and cognitive spheres of well-being [73]. Indeed, altering an older adult's health beliefs and stance from a maladaptive reactive one in the face of their aging challenges, to a more

strengths and asset based adaptive stance, may markedly help them to counter any aging related fears, anxieties, and negative beliefs. Older adults pursuing these varied positively oriented approaches may also be expected to experience less stress, a more productive, creative, meaningful aging process, and a happier healthier one. Moreover, applied in a customized way, elder depression and death associated anxiety may decline, while longevity may increase, as may the older adult's ability to cope effectively with new stressors and/or unanticipated events, for example COVID-19 pandemic lockdowns and isolation [19]. Continual efforts to consider these current ideas both in practice as well as well as broadening the scope and nature of the research to include mixed methods case and single sample study designs may provide even further insights into this potential for positive thoughts and actions to advance optimal health, even late in life, and in the face of multiple health challenges, that may otherwise be overlooked in the context of either controlled trials, or systematic analyses or both. More diverse, as well as longitudinal examination of the impact of early life adoption of positive perspectives and which approaches can be applied most successfully also warrants careful study of this perspective in light of

the current burden experienced by most aging cognitive adults, in a world where change is the normal, but interventions to preserve calm and dignity, and foster resilience that might be harnessed are few. These include but are not limited to. Box 1

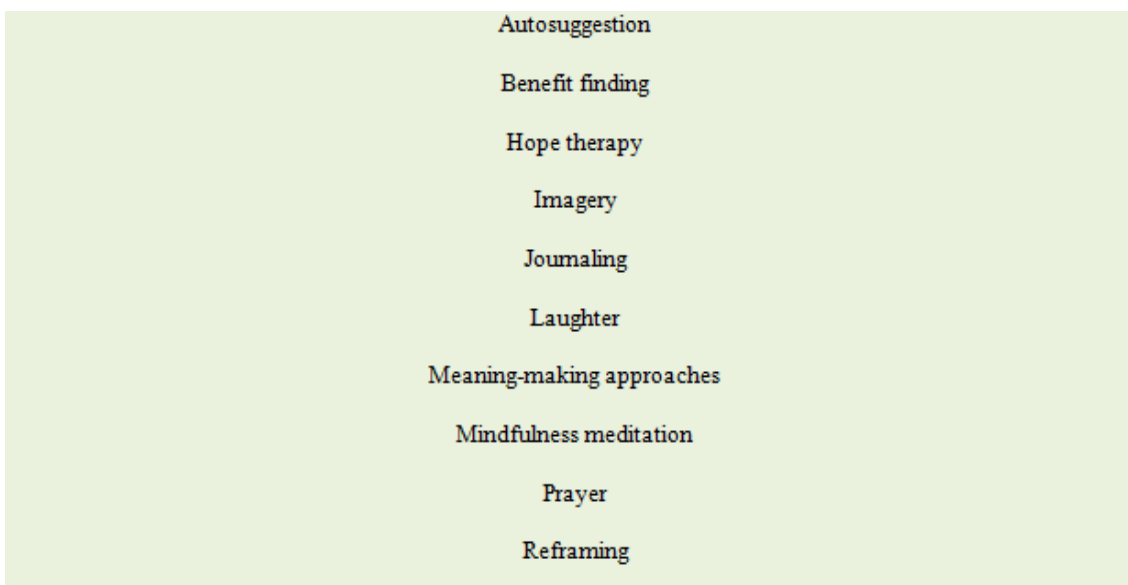
Conclusions

The application of positive psychology attributes offers a highly promising, safe, and potentially efficacious cost-effective approach for promoting health protection efforts and for harmonizing the negative and aversive complications of aging.

Applied alone, or in combination with other approaches, implied benefits of positive psychology approaches, include greater joy, contentment, and life quality, regardless of aging.

To be effective, an empathetic and skilled provider, and one who believes in the potential of positive psychology can potentially enable their older clients to achieve more effective states of pain control, heightened longevity, less depression, and dependence. Other outcomes that can be anticipated are enhancements in:

1. Life quality/adaptation
2. Improved relationships



Box 1. Positive psychology approaches that might be examined more specifically in diverse populations of adults of a broad spectrum of ages Sources: [5, 14, 17, 27, 74-78]

3. Happiness
4. Health status and immunity
5. Life satisfaction
6. Long-term behavioral maintenance/skills for generating them
7. Positive affect increases
8. Possible functional improvements
9. Resilience
10. Retention of dignity and personal identity
11. Stress control
12. Stronger will to live [5, 7, 30, 48, 67, 71, 72, 77]

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