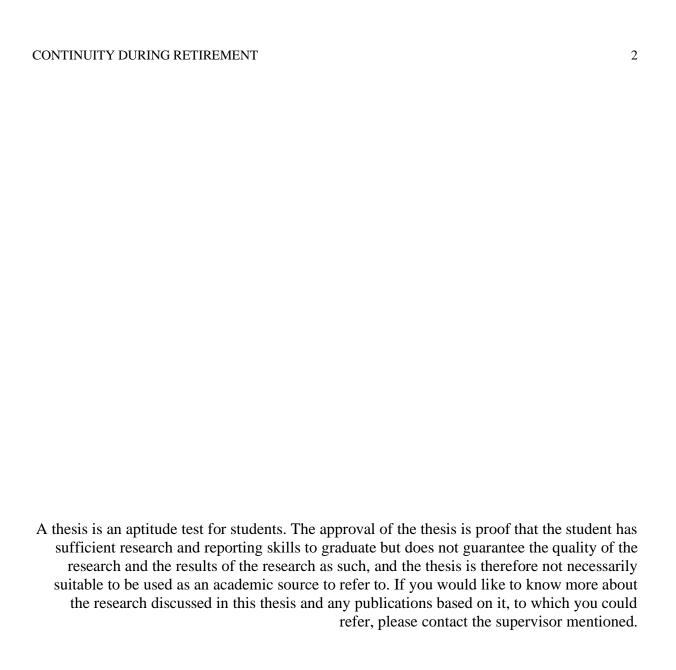


# Continuity During Retirement: Leisure Activities and Social Relationships as a Buffer for Well-Being

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#### **Abstract**

It is unclear to what extend and through which mechanisms transitioning from work to retirement affects retirees' well-being. In a systematic literature review this study investigates the potential of continuity theory to provide a theoretical framework to explain retirement effects on well-being. In line with continuity theory, the present study identified 18 longitudinal studies that investigate continuity variables (such as leisure activities, relationships, and social interactions) in the context of retirement and well-being. In addition, it is proposed that financial support and functional health act as prerequisites to continuity. The study found that there is some evidence that continuation of leisure activites, relationships and social interactions positively affects well-being after retirement. Moreover, it was found that finances and health are important for well-being; however, it was not possible to make a causal connection between finances and health and the continuity variables due to lack of data. It is concluded that the empirical literature shows support for continuity theory as a useful framework for investigating the retirement transition. Limitations and suggestions for further research are discussed.

*Keywords:* retirement, retirement transition, well-being, health, continuity theory, leisure activities, social relationships

# Continuity During Retirement: Leisure Activities and Social Relationships as a Buffer for Well-Being

Today, we have a generation growing older than any generations before them. Life expectancy has reached an all-time high through improved living conditions and better health care and is estimated to keep on growing ("Life expectancy", 2021). Consequently, people still enjoy life far beyond the general retirement age, and retirement has become a big part of life. Often retirement is seen as an idyllic state that people have been working towards for years. After a long time of employment, with retirement comes room to pursue interests and follow one's passion (Bernard, 2014). However, retirement may leave a significant gap in their lives for others (Rouleau, 2021). Some people may have found their passion already in work; others may view accomplishments in their job as a life goal (Rouleau, 2021). Therefore, giving up one's job may feel like the loss of a big part of what gives people joy and a sense of meaning daily.

The scientific literature surrounding the topic also reflects this discrepancy between retirement as a positive and negative life event. Several papers found either no significant results or reported different effects on well-being or health depending on the conditions before or during retirement (e.g. Noh et al., 2019; Stenling et al., 2020). There are several influencing factors mentioned in the literature, like social support, finances, voluntary or involuntary retirement, to mention just a few. However, researchers seem to come to different results (e.g. Hansson et al., 2019; Richardson & Kilty, 1991; Syse et al., 2017). While some studies report decreases in well-being after retirement (see Hansson et al., 2019; Liu et al., 2019) others found increases (see Carr et al., 2020; Olds et al., 2018; Syse et al., 2017). A possible explanation for the contradicting results is the different measurements of well-being used; however, even studies using similar measurements reached different conclusions (see Hansson et al., 2019; Weber & Hülür, 2020). Considering the vast amount of people in

retirement and those that will follow in the upcoming years, it is crucial that we unravel some of the literature to better understand how to facilitate well-being during retirement.

The aim of this paper is to test a theoretical framework that may explain the factors that decrease and those that increase retirees' well-being, by that contributing to our theoretical understanding of the effects of retirement on well-being. In addition to that, I want to inspire future empirical research on the conditions for positive retirement in the hope of gaining valuable insights into the practical implications of well-being during retirement. I propose an extension of the continuity theory as a theoretical framework for well-being after transitioning from work to retirement.

Connecting a theoretical framework to retirement transition and well-being addresses two problems in the current literature. First, while several research papers on the effects of retirement on well-being exist, there is little consensus among them. By systematically analysing the research so far and comparing it to a theoretical framework, this review aims at giving a concise overview of those factors that contribute to well-being after retirement. Second, there is a lack of theoretical support for several research papers and those who apply theories draw on several different ones. Commonly found are resource-based models, role theory, life-span development theory or continuity theory. While it is not clear whether these theories are effective or not, it shows that they all focus selectively on different aspects surrounding retirement. What makes continuity theory stand out from the others is that it can be used to include all kinds of surrounding factors within the framework (i.e., behaviours, social relationships, finances etc.). With continuity theory, this paper offers a theoretical framework to explain differences in well-being for retirees by analysing the current literature in light of influencing factors around work. As the name of the theory already says, the main focus here is on those factors that people continue from work to retirement. Furthermore, I will extend the theory to include two predictors of continuity that may explain some of the

contrasting findings in the literature. According to Kelly (1993) both functional health and financial support are requirements to continue behaviours from work to retirement. The importance of the two factors is also reflected in the number of studies on retirement and well-being that include either one or both health and well-being as variables in their research (e.g. Calvo et al., 2013; Carr et al., 2020; Hansson et al., 2019; Weber & Hülür, 2020).

# **Continuity Theory in Old Age**

Continuity theory is one of several theories on successful ageing in developmental psychology (Sigelman & Rider, 2018). A critical distinction between continuity theory and other developmental theories (e.g. discontinuity theory) is that continuity theory views changes that people undergo over the course of their life span as gradual and quantitative (Sigelman & Rider, 2018), meaning that things change in degree but stay fundamentally the same. For example, in their younger years a person gradually grows physically and mentally, learning new movements and skills, but when they get older that growths slowes down: they start to forget some of the skills and get more selective in their movements; a constant but gradual change. In contrast, other theories view changes as abrupt; some even speak about developmental stages (see discontinuity theory). While there is no consensus among scholars which theory better describes human development, there are several empirical papers on retirement transition supporting continuity theory (e.g. Halleröd et al., 2012; Hessel, 2016; Richardson & Kilty, 1991). Based on this, the current research will investigate whether continuity theory holds as a plausible framework explaining changes in well-being before and after retirement.

Based primarily on findings from human development in older ages (Lange & Grossmann, 2014), continuity theory is assumed to provide a compelling narrative of life before and after retirement. Originally, continuity theory was developed based on findings that in their older years, individuals seem to show consistency in their personalities (Lange &

Grossmann, 2014). This consistency does not mean that personalities will never change from a certain age on, but it means that those changes will be gradual and more quantitative than qualitative (Sigelman & Rider, 2018). For example, a person high in extraversion will still be extraverted in old age, but he or she may not be as strongly extraverted in their 70s as they were in their 20s. Additionally, the personality trait often stays the same, but its expression may change with age (Sigelman & Rider, 2018).

One of the most prominent advocates of continuity theory, Robert C. Atchley, argued that not only human personality shows consistency in old age but also activities, behaviours and relationships (Atchley, 1971). Atchley explains that most individuals have formed a solid image of what and whom they like around their 40s. Therefore, they are less likely than people in their twenties to experiment with new activities or new social relationships and stay consistent in those they already possess (Atchley, 1989, 1993).

# **Continuity for Successful Ageing**

From an evolutionary standpoint, continuity also seems to give an adaptive advantage. Older adults can face reduced cognitive and physical skills, making learning new things more difficult (Sigelman & Rider, 2018). However, we often observe older adults who still seem perfectly capable of performing everyday tasks. This is attributable to the fact that they often have a solid repertoire of procedural skills. These are skills that have been repeated so many times that they can be performed automatically, that is, without conscious thought. By relying on these procedural skills, older adults can perform just as well as younger adults at many tasks they have been practising for years (Sigelman & Rider, 2018). Consequently, to keep functioning well into old age, it is advantageous to continue behaviours and activities that were known before.

Another way of adapting to ageing is finding ways to moderate behavioural leisure while maintaining the values and meaning of the activity (Lawton, 1993). Just as with an

individual's personality, a person's interests may stay the same at their roots but may evolve in how they are expressed. Most active leisure activities (for example, contact sports or hunting) will be changed into successively less physically demanding behaviours, like fishing, spectator sports or reading about sports. This development of leisure activities, as described under the term "selective optimisation with compensation" by Baltes (1991), highlights the continuity of activities (optimisation) and the change in their expression (compensation). This purposeful continuation of behaviours has been argued to help retirees maintain a sense of continuity of the self and may satisfy a need for security in older age (Lawton, 1993).

All in all, continuity theory poses a compelling framework for adaptation to older age.

Therefore, it is proposed that continuity theory can explain the maintenance of behaviours throughout old age.

# **Ageing and Well-Being**

By helping individuals adapt to old age, continuity in behaviour is a means to lead a successful life after retirement. Various research (e.g. Haslam et al., 2008; Sokol & Serper, 2019) points to the importance of continuity of self(-identity) for well-being, which was argued to be achieved by the continuation of behaviours. In contrast, disruptions in the continuity of patterns are assumed to be associated with negative effects, such as lower mental health (Giuntella, 2021). These findings highlight the connection between continuity of behaviours and well-being.

Further evidence for the role of continuity for well-being can be derived from research around activity theory. Recent reviews of the theory conclude that there is ample evidence for the hypothesis that the more people in their later life engage in active behaviours, the greater their subjective well-being (Kelly & Ross, 1989; Kelly et al., 1987). Later research found that one specific type of activity seems to be especially beneficial for well-being. Kelly and colleagues termed this kind of activity "high-investment activity". High-investment activities

as the name already says require a lot of investment of effort and resources to acquire the necessary skill to participate in these kinds of activities. Consequently, they cannot be learned from one day to the other and need to be developed over time (Mannell, 1993). High-investment activities can therefore be assumed to have been present for a long time already, and the individual is proficient in them; in other words, they require commitment. The outcomes of these activities lead to an enhanced sense of competence and worth and thereby enhance well-being (Mannell, 1993). In his research, Haworth (1984, 1986) found that commitment to leisure activities led to enhanced quality of life and balanced out negative effects of being unemployed or retired on psychological well-being. Later, Shamir (1988) further elaborated that the positive effect of commitment stems from satisfaction in maintaining and presenting a valued self-image, which is in line with research on the continuation of the self (Lawton, 1993).

In a study by Mannell and colleagues (1988), the authors investigated the effects of different high-investment activities. Included were volunteer/home/family care and active leisure activities. The study found that those who engaged in these activities and were committed to them were generally more satisfied with their lives compared to those who did not participate in committed high-investment activities. These findings were also supported by two studies by Kelly and colleagues (Kelly & Ross, 1989; Kelly et al., 1987), who found that those who reported higher life satisfaction were also more likely to participate in different leisure activities classified as high-investment activities. From this follows:

Research question 1: Does the continuation of leisure behaviours from work to retirement lead to stable or enhanced well-being after the transition to retirement?

# **Prerequisites: Income and Health**

Unfortunately, sometimes the continuation of leisure behaviours can be disrupted or terminated indefinitely. The main reasons for that are financial or health issues (Kelly, 1993).

Old-age poverty is a serious issue in several developed countries, with the United States reporting that in 2019 4.9 million people (8.9%) aged 65 and older were living in poverty (Li & Dalaker, 2021). In Germany, 11% of the population aged 65 and older was described as income poor in 2005; since then, the numbers have consistently risen to 14.6% in 2017 (Bäcker & Kistler, 2020). The lack of financial support inevitably limits or prevents engagement in many leisure activities.

Another significant issue is health problems. Not only are retirees often faced with health issues due to old age, but low income is also associated with poor health. In a systematic review on old-age poverty, Kwan & Walsh (2018) found that all studies relating old age poverty to health outcomes reported that poverty was significantly associated with reduced health. This association was found for both physical health (Chi & Tucker-Seeley's, 2013; Ko et al., 2014) and mental health (Gray et al., 2008), with poverty increasing the likelihood of depressive symptoms (Kim et al., 2013). With declining health, many older adults have to reduce their leisure activities, and the upkeep of social relationships may become more difficult (Kelly, 1993). As such, Kelly (1993) described financial support and functional health as "prerequisites" to continuing activities in old age. Therefore, it is proposed:

Research question 2: Are financial support and functional health predictors for the continuation of activities and subsequently well-being (such that lack thereof hinders engagement in well-being-promoting activities and behaviours)?

# Methods

# **Literature Search**

The current research focuses on literature from a more extensive study project focused on work transitions and well-being. Relevant papers were searched for until November 2020 using the following databases: PsycINFO, ERIC, SocINDEX, MEDLINE, Business Source

Premier, and Web of Science. Articles were limited to the languages English, German and French. The databases were searched for the following keywords (and variations thereof): work transition, job change, school to work, reemployment, retirement, turnover, well-being, health, depression, employee, organisation; using the operators AND/OR. After this initial search, search criteria were refined to list studies with two or more measurement times by adding the following keywords (or variations thereof): longitudinal, two-wave, panel, repeated measure. The search identified 7831 articles, which were screened for eligibility. Duplicates were removed, which left a total of 4985 articles in the end.

# **Inclusion Criteria**

Studies were included in the broader study project according to the following rules. First, articles had to have conducted quantitative research; other types of research (e.g., case studies, qualitative studies, commentaries) were excluded. Second, to be included, studies had to investigate well-being and/or health and a transition into, within or out of job roles; mere intentions or attitudes did not count. Third, articles had to measure well-being more than one time, i.e., not measuring it pre-transition once and then predicting job transition from that. Fourth, all papers had to be human-related. Fifth, voluntary work and mortality did not count as viable variables.

For the current research, a further selection of articles filtered out those papers that did not research retirement as a transition, leaving a total of 76 articles. From these articles, two different searches were conducted: The first one was aimed at finding all the articles that used continuity theory as a theoretical framework, leading to eight articles. The second search filtered out all papers from the remaining ones that examined concepts relevant to continuity theory (e.g., leisure activities, relationships, etc.), yielding ten additional articles. The final number of articles is 18.

# **Coding**

The variables and covariates used in each paper were listed to further extract those variables relevant for the theoretical model. After an initial screening of the relevant variables, I determined five different categories of variables ((1) leisure activities, (2) personal relationship, (3) social relationships, (4) financial constraints, (5) health constraints) and coded the papers on each of them based on inclusion status (1 = yes; 0 = no). Furthermore, the time and type of measurement was coded and whether the variables were measured at more than one time point (1 = yes; 0 = no). For a complete picture of the variables the operationalization of well-being was documented. Moreover, the papers were coded according to whether they used continuity theory as their theoretical framework or not, showing that almost half of the papers (n = 8) referred to continuity theory.

For completeness, the papers were further coded for study design to ensure that all studies fulfil the requirement of being longitudinal research, which they did. Coding of the research design revealed that this sample consists of two-wave, multi-wave or panel studies in combination with interviews. In addition, the observation period and number of waves, as well as demographic characteristics (sample size, mean age, % female, country of data collection) were noted to check for systematic differences.

# **Analysis**

The selected studies will be analysed as a systematic literature review and summarised under the following categories: (1) leisure activities, (2) personal relationship, (3) social relationships, (4) financial and health constraints. Table 1 provides an overview of the studies including the indicator of well-being, number of measurements and an indicator whether health or finances are measured. In addition, there is a brief overview of the most important results, which I will discuss in more detail in the following.

# Harvest Plot

Number	Reference	N	Well-being Indicator	Number of Measurements <sup>a</sup>	Health/Finances included? (Yes=1, No=0)	Relevant results
285	Richardson & Kilty	222	Happiness & life	2	1	High relationship satisfaction associated with stable w-b
	(1991)		satisfaction			Stable income associated with improved w-b <sup>b</sup>
425	Fitzpatrick et al. (2005)	61	Retirement satisfaction, quality of life	1 (comparison)	0	Activities and w-b stay largely the same; stable social involvement
708	Patrick et al. (1982)	73	Anthropometric and radiographic measures	1 (comparison)	0	Inactivity led to muscle loss
724	Hansson et al. (2018)	3471	Life satisfaction	1	1	High social support in combination with good health and financial resources led to increase in w-b
911	Liu et al. (2019)	2364	Depressive symptoms	3	1	Social participation positively associated with w-b Financial status and health positively associated with w-b
1224	Hessel (2016)	139683	Self-rated health	1	1	Relationship status no effect
1512	Fernandez et al. (1998)	749	Depressive symptoms	1	1	Health higher and limitations in activities reduced after retirement Social support positively associated with w-b Health and income positively associated with w-b
1989	Ryser & Wernli (2016)	1348	Negative affects & positive affects	2	1	Relationship status no effect for men; social interaction no effect Health or finances no effect
2221	Dingemans & Henkens (2014)	1248	Life satisfaction	2	1	Stable relationship associated with constant or increased w-b Changes in health no effect; financial change associate with reduced w-b
2417	Halleröd et al. (2012).	589	Global well-being	2	1	Finances and health positively related to w-b
2444	Heybroek et al. (2015)	724	Life satisfaction	1	1	Social support no effect; being in a relationship associated with maintaining high w-b Good health related to maintaining high w-b
2531	Crowley (1986)	1200	Well-being (physical and mental)	2	1	Being in a relationship positively associated with w-b Good health and financial resources positively associated with w-b
3201	Wang (2007)	N1: 994 N2: 1066	Psychological well-being	2	1	Being in a relationship associated with maintaining high w-b Health decline associated with reduced w-b; change in earnings no effect
3362	Maurer & Chapman (2018)	118	Life satisfaction	1	1	Being in a relationship associated with continuous high w-b Health but not finances positively related to w-b
3389	Topa et al. (2017)	275	Life satisfaction, well-being	1	0	Social support positively associated with w-b
3607	George et al. (1984)	N1: 1845 N2: 235	Subjective well-being	2	1	Retirement associated with more activities and more time spend with friends and stable or increased w-b For men changes in income, for women not
3656	Steffens et al. (2016)	848	Quality of life	1	1	Social support predicted w-b; relationship status no effect Finances no effect
4195	Mosca & Barrett (2016)	2373	Depressive symptoms	2	1	Inability to engage in activities associated with less w-b; social change no effect Income no effect; lower health associated with less w-b

Note.

aNumber of measurements of continuity variables (activities, relationships, social support)
bw-b stands for well-being

#### **Results**

# **Leisure Activities**

From the five studies including leisure activities three measured them at only one time point and two provided at least two measurements of activities. For the results I will first always review those papers that measured the variable once and then look into those measuring it at two or more time points to identify potential differences.

#### One Measurement Point

Hessel (2016) found that better well-being and less limitations in activities were observed after retirement; however, the author did not measure the relationship between leisure activities and well-being. A similar situation is found in the study by Fitzpatrick and colleagues (2005). The authors reported consistent engagement with activities and stable well-being following retirement but did not assess the relationship between these two variables. A direct association between activity and well-being was reported by Patrick and colleagues (1982), indicating that inactivity is associated with less well-being. However, it should be noted that objective measures of body composition were used to measure health, which do not necessarily need to relate to subjective well-being.

# More Than One Measurement Point

Only one study out of five found an increase in activities after retirement which was associated with stable or increased well-being (Geroge et al., 1984). However, another study reported that a decrease in activities led to less well-being (Mosca & Barrett, 2016), thereby approving my first research question that engagement in leisure activities leads to stable or improved well-being.

# **Personal Relationships**

Eleven papers in the sample include a measurement of personal relationship status of which three measured relationship status before and after retirement and eight measured it only at one time point.

#### One Measurement Point

Out of the sample five studies found that being in a relationship is associated with maintaining high well-being (Crowley, 1989; Heybroek et al., 2015; Maurer & Chapman, 2018; Richardson & Kilty, 1991; Wang, 2007). Furthermore, three studies found no effect of relationship status on well-being (Hessel, 2016; Liu et al., 2019; Steffens et al., 2016). One study showed somewhat mixed results. According to the research by Ryser & Wernli (2016), relationships had no effect on well-being for men, however, for women living with a partner led to reduced well-being. Although the results of the papers are not unanimous, there seems to be evidence for the positive impact of relationships on well-being.

# More than One Measurement Point

In the study by Crowley (1986) it was reported that men who were consistently in a relationship experienced no negative effects of retirement on well-being compared to those who did not have this kind of resource. The same results were also reported by Dingemans and Henkens (2014). However, it should be noted here that they only found stable or increased well-being for those participants who stayed in a relationship, not for those who stayed single, suggesting that the positive effect of continuity may be based on being in a relationship as the baseline. Mosca & Barrett (2016) found that the death of a child/spouse/parent had a significant effect on well-being, but relationship status in general was not measured, which sets them apart from the other studies. It can be concluded that being in a relationship throughout the retirement transition seems to act as a buffer for well-being; however, the results also show that continuously being single seems to have no such effect. These results only partly support research question 1, showing that the effect on well-being may depend on the type of behaviour that is continued.

# **Social Interactions**

The sample includes nine papers that measure social interactions in some form. Out of the nine only three papers have measurements at more than one time point.

# One Measurement Point

Four papers out of six found a positive association between social interactions and well-being (Fernandez et al., 1998; Hansson et al., 2018; Steffens et al., 2016; Topa et al., 2017). One study found that social involvement and well-being stayed largely the same after retirement (Fitzpatrick et al., 2005) and one study found no effect (Heybroek et al., 2015). These results show great support for the positive effect of social interactions on well-being.

# More than One Measurement Point

Out of the three studies that measured social interactions at more than one time point only Liu and colleagues (2019) reported a positive relationship between social participation and well-being. In the other two articles the researchers found no significant effect for social interactions on well-being (Mosca & Barrett, 2016; Ryser & Wernli, 2016), thereby not supporting the proposition that continued social interactions lead to stable or increased well-being.

# **Financial and Health Constraints**

In total, 15 studies included either finances, health, or both in their measurements. Out of these, seven studies measured one or both variables more than once.

# One Measurement Point

Three studies measured both health and well-being and found that they had a positive association with well-being (Hansson et al., 2018; Liu et al., 2019; Fernandez et al, 1998).

Another study measured only health and found a positive effect as well (Hessel, 2016). A study by Maurer and Chapman (2018) found the positive effect only for health but could find no significant effect for finances. Steffens and colleagues (2016) found no effect for finances

and Ryser and Wernli (2016) found no effect for finances or health. Only one study reported that good health was associated with maintaining high well-being (Heybroek et al., 2015), as compared to increasing it. These results suggest that health and finances are somewhat important for well-being.

# More than One Measurement Point

Out of the seven studies, three found that either income or health or both lead to improved well-being (Richardson & Kilty, 1991; Halleröd et al., 2015; Crowley, 1986). The remaining four studies found mixed effects. Two studies found no effect of finances but reported that lower health was associated with less well-being (Mosca & Barrett, 2016; Wang, 2007). However, a study by Dingemans and Henkens (2014) found the exact opposite, with changes in health having no effect, but financial changes leading to reduced well-being. The fourth study in this category by George and colleagues (1984) reported that for both men and women well-being was stable or increased after retirement but only women experienced no changes in income. It can be assumed from these studies that changes in health and finances can have an effect on well-being, but the evidence is not conclusive, thereby only partially supporting research question 2.

# **Discussion**

This systematic review analysed the evidence regarding the effects of continuity for well-being during retirement. It was proposed that continuity of leisure behaviours (activities, personal relationships, and social relationships) throughout the retirement transition would lead to stable or increased well-being. Moreover, it was questioned whether financial support and functional health could act as predictors for continuity.

From the 18 analysed papers, it was found that either engagement in activities, being in a relationship or having social relationships are associated with stable or increased well-being during or after retirement, lending support for the hypothesis that engaging in non-work

behaviours during the retirement transitions helps to keep a stable well-being or even improves it. Unfortunately, there are only few studies that measure continuity of those behaviours. From the papers that measured at least one of the continuity variables (activities, relationships, social interactions) before and after retirement, the majority reported that continuity is related to stable or increased well-being, supporting continuity theory for retirement. Furthermore, it was found that a reduction in continuity behaviours during the retirement process was negatively associated with well-being. These findings are in line with continuity theory, which states that discontinuity of behaviours leads to reduced well-being.

In total, 15 papers had a measure of either health or finances or both. The results strongly support the idea of health and finances being prerequisites for keeping well-being stable or improving it through the retirement transition. However, there are also some research papers that found no effect for one of the variables or both. It should be noted that most of these papers found no effect for finances rather than health. A reason for that could be that many behaviours can still be pursued with reduced income. In addition to that, a (negative) change in income may have a lesser impact than a (negative) change in health on the life of the affected. Unfortunately, none of the research articles looked at the effects of health or finances on the continuity of behaviours. Therefore, we can make no direct inferences as to whether health and finances are prerequisites to other behaviours or affect well-being directly, or both.

With regards to the proposed theory, there is evidence that continuity theory holds as a framework to explain changes in well-being through the retirement transition. With regards to the proposed extension, including health and finances, the results are not clear. While it is evident that both health and finances seem to play an important role for well-being, I could not identify their relationship with the continuity of behaviours.

I believe it is also necessary to address the difference between papers with multiple measurements and those with only one. When looking at relationships, it stood out that those papers measuring relationship status at more than one time point, found little support for continuity, but that being in a relationship itself was beneficial for well-being. The question therefore arises whether this may be an exception to continuity theory or whether the research so far is just not sufficient to find an effect. When it comes to social interactions it is interesting that most papers confirm that social interactions are important for well-being but when we look at those paper that measured it at more than one time point only one out of three found an effect. This begs the question how social interaction can have such an impact on well-being when a change does not have an effect. Here as well, the small number of papers available may be problematic for drawing conclusions and more research is needed to gain a better understanding.

From the literature on health and finances, we can draw two interesting conclusions. First, the number of papers that found a positive association between health or finances and well-being points to the conclusion that some amount of health and finances needs to be given for good well-being. Whether this process is through engagement in continuity behaviours or not is another question, but there is evidence for an effect. Second, when looking at those papers that measured health or finances more than once we see that there seems to be some evidence that changes in health or finances also affect well-being. This could be support for the continuity theory. If we assume that behaviours often change because of health or financial changes, this will, in line with continuity theory, explain the change in well-being.

#### Limitations

The studies examined in this literature are mostly not measuring the continuity variables at more than one time point which makes it difficult to draw conclusions for continuity theory. In addition to that, none of the papers looked at the effect of health and

finances on the continuity variables which makes inferences speculative. In general, it is noteworthy that the sample for this literature review was extremely small. With only eighteen papers the evidence is small and should be regarded with caution.

With regards to the literature review itself, I only investigated one possible theory to explain the effects of retirement on well-being. However, there are several other theories found in the literature surrounding the topic (e.g., discontinuity theory, role theory, life-span development theory, etc.) that were not further explored in this review. The number of different theories begs the question whether one theory alone can successfully explain the variance in well-being after retiring. Other scholars have already suggested that a combination of theories may best explain the retirement transition (see Wang et al., 2011 for an example). One possibility is to analyse retirement as an interaction of both continuity and discontinuity. Theories like stage or role theory have long suggested that retirement can cause disruptions in life which can significantly affect well-being (Wang et al., 2011). Therefore, a more integrated approach that analyses retirement as a significant change in life accompanied by continuity of behaviours outside of work may be a worthwhile pursuit.

#### **Future Research**

One possible avenue for future research could be to test whether continuity theory also holds for the transition from or into unemployment. Theoretically, well-being should not be affected by the transition if all other things are continued. However, it is likely that with the transition come changes in finances. I would therefore predict a decline in well-being for a transition into unemployment based on the reduced income which can, according to earlier reasoning, hinder leisure activity pursuit (Kelly, 1993). Here, it could also be interesting to pay more attention to age. Continuity theory was developed to describe how older adults stay relatively persistent in their behaviours; hence it is possible that the theory is age specific. Future research could investigate its applicability to different age groups.

Another interesting transition to investigate considering continuity theory is a transition into bridge employment or voluntary work. It has been suggested that a more gradual transition into retirement can help older adults to preserve structure and maintain well-being by engaging in meaningful activities (Feldman & Beehr, 2011). Especially individuals who enjoyed their work have been found to engage in same career-bridge employment before complete retirement (Gobeski & Beehr, 2009).

Considering the sparse research on the topic, it is also suggested to take a better look at the relationship between continuation of behaviours and well-being to gain a more detailed picture of their influences during retirement transition. There are two facets of continuity behaviours that could be analysed in greater detail: number of behaviours and quality of relationship. The papers that reviewed relationships and social interactions indicate that being in a relationship and having social interactions is generally beneficial. Therefore, it may be possible that there is a certain baseline of being in a relationship and having a certain number of activities and social interactions that is necessary for well-being. Further research could be conducted to explore this idea and determine said baseline. Moreover, the quality of relationship could play an important role. Research has shown that kin relationships characterized by high emotional support and non-kin relationships characterized by instrumental support were both associated with higher well-being in older adults (Merz & Huxhold, 2010). Therefore, it may be of importance to not only determine the number of social relationships but also the quality of those relationships. Regarding finances and health as possible predictors, I believe that future research is necessary to gain a clearer picture of their influence on well-being. While it seems like both variables influence well-being, it is not clear whether they affect well-being directly or through other variables, like continuity variables. This may be explored in future studies.

# Conclusion

In conclusion, the present systematic review presents a way to integrate current research on the effects of retirement transition with continuity theory. The findings depict the potential of activities, relationships, and social interactions as predictors for well-being during the retirement transition and show the importance of finances and health. Several directions for future research are presented, among them extending the theory to other work transitions and putting more focus on the details of the continuity variables and their predictors.

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