A Comparative Study of the Happiness Paradox

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PhD dissertation

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Summary Statement

1. Introduction

The original PhD-project – A comparative study of the happiness paradox – was intended as a comparative and qualitative study based on large amounts of semi-structured and in-depth interviews. Unfortunately, due mainly to limitations imposed by the Covid-19 pandemic, access to data became highly challenging, and so the research focus has been shifted from the explanation of the happiness-income paradox to older adults' wellbeing, with the methodology mostly centering around theoretical work (especially Confucianism), and use of existing data coming from two existing studies of older adults' wellbeing in Denmark, supplemented by in-depth analysis of a small number of samples from Shanghai and Danish care homes, and a survey conducted in Denmark.

The present study is not a typical comparative study from the technical perspective, rather perhaps in a philosophical, theoretical sense. I am well conscious of the shortcomings of the sometimes asymmetrical methodological approach that became necessary because more original data were available from Denmark. However, I still think study has been able to shed light on 1) the fundamental similarities and differences in the understanding of happiness and wellbeing in China and Western countries and 2) specific factors that assumedly (or possibly) contribute to happiness or lack of happiness in China and Western countries.

The fundamental difference between Chinese and Western countries in terms of happiness and wellbeing arguably lies in the culturally specific philosophical underpinnings of the understanding of happiness, especially Confucian philosophy in the Chinese case. The core principle of Confucian philosophy is human-heartedness, where filial piety and intergenerational relationships are seen as the root. This connection between happiness and intergenerational relationships prompted a specific focus on the case of older adults. It was also due partly to a realization that the case of older adults exemplifies certain issues and trends very vividly (since older adults have long-term experiences of changing forms of life and cultural standards and are known to be especially sensitive to wellbeing-related issues).

2. Background

Happiness is a topic of perpetual importance and discussion; as society has progressed, happiness has become an increasingly common pursuit for many people. As pointed out in Maslow's hierarchical needs theory, once basic material needs have been satisfied, people pursue higher psychological security and satisfaction (Taomina & Gao 2013). It is hard to imagine affluent people do not aspire to a life that contains fulfilment and happiness.

In the last two decades, since positive psychology was introduced into the field of psychology, there has been a growing body of academic research on happiness. Historically, the study of human psychology was dominated by the darker or the negative side of human nature and behaviour. This is despite the fact that research findings, such as risk factors, determinants, and behavioural interventions, had been successfully applied to the prevention of psychological or behavioural harms (Lee & Theol 2014). However, exploring the positive aspects of the human psyche and studying the factors associated with happiness are probably more conducive to enhancing people's wellbeing.

As well as a growing interest in the topic of happiness among academics, it is also an area of growing discussion among policymakers because it can be seen as a manifestation of the political, economic, social and psychological conditions under which people live (Pacek & Radcliff 2008; Radcliff 2001). Happiness is now a widely used indicator in the assessment of policies in many areas such as quality of life, healthcare, public health and social services (Veenhoven 2008). For example, the use of happiness as a reflection of the quality of life and national wellbeing seems to be becoming a focal point of health and economic policy debates. Policymakers are urged to consider not only economic indicators but also happiness as an indicator of national development decisions when assessing the state of society (Hagerty & Veenhoven 2003).

It is traditionally believed that economic growth is a way to improve wellbeing (Headey 2019; Sarracino & O'Connor 2021; Stelzner 2021), and economic growth is perceived to be a crucial objective of fiscal policy. However, further attempts to raise the material standard of living apparently do not necessarily boost wellbeing. An apparently strong indication of this is the so-called paradox of happiness, which was first proposed by the American economist Easterlin in 1974. The paradox consists of two opposing but simultaneously valid propositions: that growth in personal income significantly increases national happiness, and that growth in the national

economy does not necessarily correlate with an increase in subjective happiness over time. Crudely speaking, money do not seem to make people happy (Easterlin 2017; Weiman et al. 2015). Since then, the hypotheses proposed in the paradox have been the subject of attention of many researchers (Kaiser & Vendrik 2019; Yasar 2018).

To date, the happiness paradox has been investigated in the following aspects. Firstly, it has been debated whether the happiness paradox is real. Secondly, assuming that it is, there has been an inquiry into its possible causes. And thirdly, it has been discussed whether it is still possible to improve the wellbeing of the population.

Most of the existing theoretical explanations are based on the influence of a single factor on wellbeing, such as monetary income, which is a relatively one-sided approach. Income only predicts a small proportion of the variance in wellbeing (Mikucka et al. 2017). Recent studies have examined income equality, educational attainment, social capital, marital status etc., as further variables in the relationship between income and happiness (Bartolini et al. 2013; Ferrante 2017; Kennedy & Ruggles 2014; Okulicz-Kozaryn & Mazelis 2017; Wang et al. 2015). It seems that while income growth can contribute to happiness, the positive effect of income on happiness is offset by the negative effect of other factors, resulting in a stagnant appearance of income growth and happiness (Bhuiyan & Szulga 2017). It is also worth noting that despite significant differences between countries in terms of basic national conditions, institutional environments, economic levels and traditional cultures, the results of happiness surveys of residents of most countries seem to demonstrate the happiness paradox (Beja 2014; Clark 2016; Easterlin & O'Connor 2020; Opfinger 2016).

There are, however, notable differences between countries, and some anomalous patterns. Among a number of striking cases, the case of China seems a particularly puzzling. China's rapid economic development has led to an increase in the population's income, but the reported happiness over the last three decades has dropped in spite of massive advancements in material living standards[1]. This phenomenon contradicts the conception that the growth of income from low living standards results in increased happiness (Brockmann et al. 2009). However, in other

[1] Easterlin also studied the happiness of Chinese residents and found that it has been declining since 1990, reaching a low point between 2000 and 2005 before slowly rising again. Based on this, he proposed that the happiness paradox seen in developed countries such as Europe and the US, also existed in China, although it may have taken a longer time for the phenomenon to become apparent there (Brockmann et al., 2009; Chan & Lee, 2006; Chen & Davey, 2008; PK, 2010).

parts of the world, high income and Gross Domestic Product (GDP) levels are still correlated with a remarkably high level of self-reported happiness (Proto & Oswald 2017). Denmark is a particularly striking case. So, what are the causes of this difference? Why is the happiness paradox seemingly manifested in China to an extraordinary degree, but much less so in Denmark?

Culture is deemed to be an important factor (Diener & Lucas 2000). Cultural differences cause variations in the factors people rate important for their wellbeing (Haybron 2008; Inglehart & Klingemann 2000; Lu & Gilmour 2004; Ye et al. 2015). Studies have found that in Eastern cultures, such as the, Chinese happiness is significantly influenced by mutual relationships (Ho & Cheung 2007; Uchida & Ogihara 2012), with particular emphasis on spiritual enrichment. Spiritual fulfilment is an important element of happiness (Lu 2001; 2010; 2017; Slingerland 2000) for Chinese people, and fortune and misfortune are interdependent[2] in this context (Lu & Gilmour 2004). Moreover, traditional Confucian culture preaches the spirit of hard work and resilience. In a collectivistic society, even in times of economic hardship, the pursuit of happiness has been criticized as hedonism or avoiding hardship. This is significantly different from the attitude to happiness in Westerners.

In Western psychology, subjective wellbeing (SWB) is an approach widely used to assess people's mental health and quality of life, which has been developed on the basis of a hedonic understanding of happiness (Wallace & Shapiro 2006). The SWB scale evaluates whether there is a presence of positive and negative emotions over a certain period of time, as well as evaluates life satisfaction. It thus applies notions of both affective (emotional) and cognitive (judgment-based) wellbeing and combines them into a complex, but still subjective and hedonic measure. The understanding of happiness characterized as hedonic is consistent with the fundamental spirit of modern Western culture, which is associated with hedonism, individualism, liberalism and modernity (Joshanloo 2013).

It is one of the guiding ideas of this dissertation that different conceptions of happiness may be at least partly responsible for the otherwise puzzling results, and especially for the difference between China and Denmark. Identifying and analyzing such conceptions may contribute to explaining the apparent happiness paradox.

[2]To elaborate, the interdependence could be traced back to the ancient philosophy of *Yin-Yang*, saying, from the perspective of cosmology, that everything within the cosmos follows the principle of an endless, recyclable and changeable process, between well-being and ill-being. Lu (1998) further interprets happiness and unhappiness as "Happiness is dependent on unhappiness, while unhappiness is hidden in happiness"

A second potentially relevant cultural difference is that family relations are valued more highly in traditional Chinese culture. As expected, there is little research on the influence of family relations on older adults' wellbeing factor in Western countries, while in China the impact of "filial piety" culture have been assumed, and also shown, to have a significant effect on older adults' happiness and wellbeing. The number of children, the status of older adults, whether they cohabitate with a spouse and the degree of filial piety are all factors that may play a role (Tang 2008). Older people who do not have children or relatives often experience loneliness, depression and abandonment, and these emotions have a strong negative impact on their wellbeing (Ichimura et al. 2017). Additionally, the various intergenerational supports that older people receive can contribute to their wellbeing. Living with their children and receiving daily care and support from them had a significant impact on improving their feelings of wellbeing (Wu 2021; Yuan et al. 2021).

To summarize, the happiness paradox provides an occasion to go deeper into the philosophical aspects of happiness by conducting a comparative study in different cultures, taking China and Denmark as comparative subjects in this study, as little research has been devoted to this field before. The two countries have been selected because one of them exemplify that wellbeing may be connected to high income and the GDP level (as seems to be the case in Denmark), but, as exemplified by China, it can also decline in spite of rising income. Apart from monetary income, it is worth exploring what factors may influence or be associated with happiness and lack of happiness in both societies today.

The population to be studied in this study are older Chinese people and older Danish people, in particular, those moving into care homes, who are facing challenges such as rapid social change, family changes, declining physical functions and illness (Song 2014; Sun et al. 2020; Connelly et al. 2015). Are these older adults happy? What factors are associated with wellbeing in older age? Are there variations in happiness among different cohorts of older adults?

On the other hand, research in this area is fundamental for the development of policies to enhance the happiness of China's elderly population. As happiness does not seem to have increased in line with economic development in China, it is worth exploring what factors may influence or be related to happiness. Additionally, now that one of the primary goals of the Chinese government is to pursue the happiness of its people, increasing happiness has become an important social objective. Its meaning has gone beyond mere individual perception and is closely related to the

structure of society as a whole, with many scholars of sociology and economics also becoming increasingly involved with enhancing happiness (Helliwell & Aknin 2018). However, the majority of current studies are based on population data from Western countries (Karmiyati & Amalia 2018; Kumar & Dixit 2017), with relatively few comparable studies in China, highlighting a need to study the happiness of the elderly population in China.

3. Research Question

Does the difference between apparent happiness levels in China and Western countries, especially among the older part of the population, reflect different conceptions of happiness or of the significance of intergenerational relationships?

4. Literature Review

4.1 Chinese Conceptions of Happiness

Happiness is an ancient topic that has been understood in various ways by different people at different times. The only thing that seems to remain the same is the eternal pursuit and exploration of happiness. Happiness is generally seen as an extremely and ultimately desirable and satisfactory state, while the specific connotations and value of happiness differs widely.

Hedonism is the philosophical idea that happiness is the ultimate pursuit. However, this view is not favoured in the Eastern tradition (Annas 2000). In Eastern cultural contexts, optimism and pleasure are considered temporary and marginal and cannot be used as a measure of happiness. Eastern cultures generally ignore physical pleasure and promote the pursuit of pleasure by curbing the desire to avoid sacrificing virtue. Pain and negative emotions are not entirely bad and are considered to contribute to spiritual development (Belliotti 2004; Chan 1963; Chen 2006). This means that hedonism is not the underpinning for the definition of happiness in Eastern cultures.

In China, the concept of happiness is closely associated with traditional Chinese culture, where there is no specific definition of happiness. Mainstream Chinese culture does not seem to advocate the pursuit of happiness and joy, nor has there ever been a school of thought that considers the pursuit of happiness as a goal and motivation in life.

Chinese culture is synonymous with its worries, especially Confucianism, which advocates the pursuit of sainthood and benevolence, is a very different view from the Western hedonic view

of happiness that focuses more on individual feelings and the pursuit of wisdom and goodness alongside the pursuit of happiness. Additionally, Chinese culture is more focused on collective perceptions and feelings and does not advocate the pursuit of individual happiness and wellbeing as individualistic cultures do, which places greater emphasis on the importance of emotions (Ho & Cheung 2007). Even with the vicissitudes of the world and the many hardships of fate, most Chinese people are still able to maintain a rational and active pursuit of a happy life in the midst of sensual life. Zehou and Lambert (2019) refers to Chinese culture as "the culture of joy" due to the cultural and psychological structure of the Han people, suggesting that the psychological structure in which traditions have been accumulated with joy is part of the cultural character of the Chinese people. Ancient Chinese philosophers often interpreted happiness in relation to virtue, believing that a person is happiest when they have achieved their perfect virtue (Zehou & Lambert 2019). This is positively related to the fact that culture may be an important force in constructing the meaning of happiness (Lu 2007). Culture can influence or even dominate people's subjective experience of happiness and wellbeing (Lu et al. 2001).

Knowledge, learning and responsibility are important Confucian values (Alitto 2009). Confucianism emphasizes the important balance between self-cultivation and self-restraint, which sometimes leads to an emphasis on self-denial and asceticism. The Confucian emphasis on self-cultivation should be aimed at acquiring social virtues (Devettere 2002).

On the other hand, compassion, love and attention to the wellbeing of others are considered Confucian pursuits for happiness (Zhang & Veenhoven 2008). This is mainly reflected in having a harmonious family, cultivating ethical gratification, and facing adversity and difficulties with a calm mind. From the perspective of Confucianism, happiness is achieved by upholding virtues, being strict with oneself, and maintaining a harmonious balance with everything. In this conception of happiness, positive emotions and pleasure are not particularly stressed (Gilgen & Cho 1979). On the contrary, they should sometimes restrain their desires and even sacrifice their lives in pursuit of moral righteousness. The responsibility that Confucianism mentions can be divided into two kinds, one is the responsibility of the role, while the other is the responsibility of morality. Both kinds of responsibilities are related to morality. For example, if adults do not fulfil their duties as sons, such as filial piety, they will be morally censured. In Eastern contexts, filial piety is perceived as an important symbol of stable family harmony (Luo 2019; Nie & Jones 2019). Yet, social expectations and family obligations are often seen as limitations that hinder the full

expression and realization of human potential in Western cultures (Christopher & Hickinbottom 2008).

In short, Confucianism argues that human happiness requires both material security and more spiritual and moral fulfilment, and cannot be divorced from the subjective inner self-cultivation of the individual but relies more on the orderly harmony of society as a whole (Luo 2021). In the Confucian view of happiness, Tu (1998) points out that Confucian ethical culture places great emphasis on the role of reason in the moral life of human beings. By rationality, they meant primarily moral rationality, which combines truth and goodness. It has always been the claim of Confucian ethical culture to temper people's sensual desires with moral reason. The Confucian concept of happiness is based on the moral theory of consistency between virtue and happiness, and the value of happiness is to be happy with the satisfaction of moral reason.

The spiritual dimension of happiness and satisfaction is higher than the material dimension of pleasure. The levels of human desire are diverse, but Confucians all see the pursuit of moral righteousness as a high level of desire satisfaction. In their view, one cannot take the mere pursuit of profit as the starting point for behaviour, and the one-sided pursuit of material gain does not bring spiritual pleasure and happiness (D'Ambrosio 2019; Hornsey et al. 2018). The pursuit of moral and rational satisfaction such as benevolence and righteousness brings to man infinite and pure psychological pleasure and enjoyment. This pleasure of moral and rational satisfaction is the greatest happiness of all.

In Chinese society, older adults were traditionally supported by their children, and as such, the more children they had, the more resources they received. Their wellbeing is significantly influenced by the relationship between children and them as well. Nowadays, social retirement resources have become an important part of the retirement force, and the function of family retirement has diminished. Zhan and Montgomery (2003) concluded that the number of children had a significant positive relationship with the overall family financial support provided to older adults. The greater the number of children, the greater the likelihood of competing for demonstrations among the offspring, with the filial behaviour of one child influencing the performance of the other children. Filial piety is like a contagious disease among children, with the overall effect of bringing about increased intergenerational support for their parents. Although the number of children had a significant positive effect on the total amount of intergenerational support received by older people, the average amount contributed by each child decreased. Zimmer

and Kwong (2003) indicated that the higher the number of children, the higher the probability that an older person would receive daily care; however, when the number of children increased to a certain level, it no longer increased but gradually plateaued to a fixed level. There is an old saying in China "more children, more happiness," and for many older adults, with their traditional values, the filial piety that is held in the highest esteem is that their children continue the family line.

4.2 Western conceptions of happiness

The historical study of Western happiness thought includes two main perspectives: horizontal studies and vertical studies (Joshanloo 2013; 2014). From a longitudinal perspective, the discussions surrounding happiness in the West spans three time periods: the Greco-Roman period, the Middle Ages, and Modern times. The thinkers of the Greco-Roman period focused on happiness and life in the city-state, a period in which the idea of happiness was a comprehensive development of human thinking about their own happiness (Lafitani 2011; Summer 2002). In the European Middle Ages, the theme of happiness was centered around the relationship between human happiness and God, and was mainly derived from the interpretation of happiness by Christian theologians (Classen 1998; Helliewell 2019; Tatarkiewicz 1976; Wieland 2002). In Modern times, Western happiness thinking gradually expanded its scope to include the relationships between material interests and moral principles, the individual and others, and between the individual and society. It was this period which saw an unprecedented prosperity in the development of studies around happiness thinking. In modern Western society, some approaches to human happiness are rather pessimistic, in that instead of taking a positive approach to solving human happiness dilemmas, a negative approach is taken to escape from the reality of the happiness problem (Argyel 2013; Diener & Oishi 2005; Franklin 2010).

According to Kesebir and Diener (2009), moderation is the key to attaining happiness, as it leads to increased pleasure and enjoyment, and therefore people must control their behavior and regulate their psychology for their own happiness. Rationalists emphasize rationalism as a guiding principle, which involves abandoning the pursuit of materialism and enjoyment, and focusing more on the pursuit of the inner design of man, ultimately penetrating happiness into the heart or soul of man.

Utilitarian happiness is closely related to sensualist happiness, but the theories and perspectives used by philosophers differ, resulting in two distinctive theories of happiness

(Gauthier 1967; Veenhoven 1988). Utilitarianism is an ethical theory typically based on hedonist understanding of happiness (Viner 1949; Driver 2009). As an example, Jeremy Bentham proposed the principle of happiness maximization, arguing that the fundament goal of life and politics is the pursuit of maximum utility. His pleasure theory conceives of happiness in terms of experiencing pleasure and avoiding pain with emphasis on the subjective feelings of people. This theory of happiness is one of the most representative philosophical schools of thought on Western happiness, alongside that of Aristotle. Bentham's ideas influenced not only ethics, but also economy, and even today, similar ideas of happiness continue to drive social progress (Veenhoven 2003).

The expansion of the utility theory and the psychological measurement of experiential utility carried out by Kahneman (1999) contributed to the development of behavioural economics. Kahneman divided happiness into two parts. Experienced happiness refers to people's satisfaction with their emotional state at a given moment in time, and remembered happiness, which is an overarching subjective evaluation of life. The former is based on experience, while the latter is based on recollection (Kahneman 2011). Diener et al. (2002) analysed the subjective evaluation of life as a whole and of the subjective experience of emotions at a given moment in time, with particular reference to the subjective wellbeing (SWB) theory, which later combined affective and cognitive happiness into a more hybrid notion of "hedonic" wellbeing.

SWB is commonly discussed in academic literature. Diener (2000) defined happiness from three aspects. Subjectivity includes a person's subjective feelings, which are independent of external criteria; positivity refers to the ability to experience positive emotions, and integrativity, which is their feeling about their life as a whole rather than a single occasion. SWB also refers to the degree to which people positively evaluate the overall quality of their current lives. This degree consists of the "affective component" of happiness, which includes positive and negative feelings, and the "cognitive component", which is people's assessment of their overall satisfaction with life (Veenhoven 2003).

The most researched area of SWB in older people has explored which factors most affect SWB. A review of previous research revealed that current research has focused on both subjective and objective factors. In addition, a researcher found that the existing studies have mainly focused on the factors and mechanisms influencing SWB of older people, of which the main ones were gender, age, education level, marital status, physical exercise, recreational activities, health, interpersonal relationships, self-efficacy and social support (Wang 2016). The core element of

SWB is the continuity of happiness. Life satisfaction and individual mental outlook are two of the more stable aspects that can be utilized for measuring the SWB of the elderly population (George 2006). Critics of the SWB-approach argued that the results obtained by this construct may be predetermined by researchers to a larger extent, instead of the participants' own perspectives (Pavot & Diener 2008).

As a contrast and supplementary approach to the SWB-approach, eudaimonic wellbeing (EWB) conceives of happiness as being more of "feelings of personal expressiveness", more concerned with values, meanings and self-realization as such, as an activity (Watermann et al. 2003; 2008; 2010;). However, when it comes to how it has been applied to empirical research, it appears to be more related to subjective experiences (or pleasures), self-expression and self-development which might still seem to reflect aspects of individual psychology, "a virtual synonym for positive psychological functioning" (Ryan & Deci 2001; Delle Fave et al. 2011), rather than as a reflection of the essence of eudaimonist philosophy, in particular, the ethics of Aristotle, which stresses the specific qualities associated with one's nature. Critics of the EWB-approach claimed that this construct may or may not come up with pleasures or feeling good.

In contrast to the dominant approaches, this study adopts the understanding of happiness in a more holistic approach, focusing on older adults' own understandings and perceptions in different cultural contexts. The theoretical picture of older adults' wellbeing painted by Klausen (2019) is employed, in which older adults' proclivity to proximal variables is emphasized, obtaining wellbeing by adjusting their judging standards accordingly and controlling their emotions.

4.3 Possible influencing factors

Apart from the conceptions of happiness, the possible factors influencing the wellbeing of older people are numerous and can be broadly described at three levels: the national level, the societal level and the individual level. Each dimension has an impact on older adults' wellbeing, but to different degrees. In addition, there are several factors that influence the wellbeing of older people in general.

4.31 Economic factors

The economic factor is in some ways the most obvious factor affecting the happiness of older people. Those who are more financially stable and have a higher standard of living have a higher happiness level, better economic conditions and a reliable income which all help to improve their happiness and wellbeing (Diener 1997; Max-Neff 1995; Howerll & Howell 2008).

In terms of the relationship between income and wellbeing, from a traditional economics perspective, higher wealth income should correlate to higher wellbeing simply because a higher income provides more choices to pursue personal preferences and accommodate the desires of older people. However, the "happiness paradox" tells us that this is not always the case. Research conducted between 1970 and 1990 showed that happiness in America did not increase significantly in line with rapid economic growth, but instead fell by almost four percentage points, and in the UK, there was no significant change in happiness (Blanchflower & Oswald 2004). Inflation has a significant negative effect on the happiness of older people, which has been corroborated by studies in different countries. Alesina and Rodrik (1994) found that inflation caused a significant decline in the happiness of Americans, Graham and Pettinato (2001) suggested that the happiness of people in developing countries also declines with inflation.

4.32 Social support factors

Both social support and social networks can have a significant impact on older people's wellbeing, exerting both positive and negative effects, but as a result, it may lead to a net-zero effect as the two may cancel each other out. Individuals who receive support from friends, neighbours and spouses exhibit a higher level of wellbeing (Tu & Yang 2016). Another study concluded that active participation and inclusion in society are key factors in the development of older people's wellbeing (Wang 2016). Chalise (2010) suggested that active participation in society, integration and return to society, improving spiritual culture, taking the initiative, participating in activities, and expanding the sphere of life can all increase the wellbeing of older adults. Also, older people with religious beliefs who regularly participate in social activities have higher levels of wellbeing (Elham et al. 2015). Disengagement from social behaviour is not advocated as the way to be as participation in social activities has a positive effect on the SWB of older adults. Active participation in society, social support and integration into social development all lead to higher levels of wellbeing (Tian 2016).

4.33 Demographic factors

Existing research findings on the differences in wellbeing indices between males and females among older people are not entirely consistent. Older women were shown to have lower levels of happiness and higher levels of depression than men in one study (Lucas & Gohm 2000). However, although Pinquart and Sörensen (2001) reported that women showed lower levels of happiness than men, this difference was found to be negligible. Therefore, it can be concluded that the level of happiness among older people is unlikely to be significantly related to gender.

Findings from various countries demonstrate that marital status plays an important role, and that married life has a positive impact on the wellbeing of older adults (Diener 2000). Those with a spouse had significantly higher wellbeing than those without (Zhou et al. 2015). Among widowed older people, men had a higher level of happiness than women. However, results from international social research on the effects of education on older people's wellbeing have been more divergent, possibly due to the adverse role of education, i.e. an older person with a good education will be more likely to experience anxiety than those who are less well educated (Clark & Oswald 1994). Overall, research on the effects of education on older people's wellbeing has pretty much drawn similar conclusions, that older people with higher education are happier and have higher well-being scores than those who have never received an education.

4.34 Health status factors

Health status has a significant influence on the happiness of older adults. Over time as society has progressed, the scope of health discussions has widened and is no longer limited to physical health but also incorporates mental and social health (Lee & Salman 2018). The better the overall health status of an individual, the higher their happiness level. A person in a healthy state is more likely to experience episodes that bring about happiness and joy, and thus generally feel more strongly about their overall happiness state (Carmel et al. 2017).

4.35 Filial piety factor

The study by Lu et al. (2001) discussed the relationship between filial beliefs and SWB in terms of intergenerational relationships. It showed that the stronger the filial piety beliefs of the offspring, the higher their own happiness and the happiness of their relatives. However, the filial beliefs of the parental generation had no effect on either their own or their children's wellbeing. Stafford

(1992) showed that children with high filial beliefs tended to be more active and interacted more with their parents, and hence those with high filial beliefs were more likely to be happy than those with low filial beliefs. People with high reciprocal filial beliefs had closer and more affectionate relationships with their parents. A cross-age study of filial piety by Chong and Liu (2016) claimed that both the filial commitment of younger generations and the continued support they provided to older parents influenced their SWB in later life. Due to the influence of Western democratic and egalitarian values, authoritative filial piety, like, perpetuating the family lineage and shouldering family financial responsibility, is declining in contemporary Hong Kong, and such filial piety may have had a negative impact on wellbeing. Filial piety is currently more reciprocal, i.e., mutual rather than authoritarian, and thus is more conducive to harmonious intergenerational relationships.

Milevsky et al. (2007) found that reciprocal filial beliefs positively predicted life satisfaction, whereas authoritative filial piety did not. Mutual filial piety among adolescents was related to social competence and self-esteem, such as adolescents with high mutual filial piety beliefs were more likely to adapt and compete in society and have better life satisfaction than those with authoritative filial piety beliefs. In a study by Chen et al. (2020) on the relationship between filial piety and SWB, it was found that reciprocal filial piety increased happiness and decreased depression and anxiety, while authoritative filial piety increased depression and anxiety. Additionally, reciprocal filial piety enhanced emotional psychological wellbeing, while authoritative filial piety decreased. These findings all confirm that reciprocal filial piety positively predicts SWB, whereas authoritative filial piety does not. Chen (2014) stated that reciprocal filial beliefs had a significant positive direct effect on life satisfaction, and that there was a significant mediating role between reciprocal filial beliefs and life satisfaction in interpersonal relationship harmony. In addition, the relationship between filial beliefs and social interactions among adolescents found that positive perceptions of filial piety enhanced emotional connection and reciprocal expressions, contributing to social interactions and intergenerational relationships.

5. Theoretical Framework

5.1 Filial piety and generativity

Individual wellbeing in each background is always embedded with cultural imprints. Compliance with goals valued by culture or subculture is beneficial to wellbeing. Cultural beliefs influence a

person's choice of goals and sources of happiness (Inglehart & Klingemann 2000). In contexts where individualistic cultures are prized, such as in North America and Western Europe, individuals often distinguish themselves from others. Feelings and emotions concerning oneself, therefore can predict life satisfaction. However, in collectivistic cultures, the emphasis is for individuals to remain in harmony with others.

The schools of thought on happiness are all based on the philosophies of their respective schools, each with their own differing values, which means that there are different means of achieving them. As Confucianism has long been deeply rooted in people's minds, its social influence and modern value far exceed those of other schools of thought, and the Confucian view has become the basic framework of the traditional Chinese view of happiness.

As a product of the Chinese spiritual world, filial piety has important research value. Chan and Tan (2004) defined filial piety as a set of cultural designs for the harmony, unity and continuity of the family, adapted to agricultural, economic and social life. As industrial and commercial societies replaced agricultural societies, the content and form of filial piety were bound to change as well. However, filial piety has survived because it pursues ultimate spiritual values, such as the notion of continuity and immortality.

In China, traditional Confucianism and filial piety have a long history, where filial piety has been a traditional virtue of the Chinese people since ancient times, and is seen as a positive quality. Intergenerational support is one of the main focuses of research on filial piety. Intergenerational support is a two-sided mutually beneficial relationship between one generation and another, referring to financial and emotional support as well as sharing experiences in daily life (Tang 2016). Apart from the typical bottom-up relationship between the young and old, the top-down pathway consists of generativity and filial expectations. According to Erikson (1997), generativity refers to the old feeling a strong need to and a special concern for the young. And filial expectations refer to the social attitudes of older people toward their adult children in terms of meeting their needs, undertaking filial obligations, and in particular, their expectations of filial support (Van de Pas et al. 2005). Filial expectations can reflect the extent of filial support expected by parents from their children.

Literature research on filial expectations revealed that current research focused on two aspects. Firstly, it explored the impact of older people's filial expectations on their psychological health and SWB. One example of this is how older people's filial expectations of their children

affected their sense of loneliness, such that the higher the filial expectations, the lower the levels of loneliness. According to Khalaila and Litwin (2011), there was a significant negative correlation between filial expectations and depression, with higher levels of filial expectations being linked to lower levels of depression among older adults. Moreover, older adults' filial expectations demonstrated a significant positive predictive effect on their SWB levels solely through the mediation of parent-child support (Yeh 2006).

On the other hand, there are differences in the expectations of filial piety among older people from different cultural contexts. The expectations of older people in individualistic cultures are that children and their parents will maintain their own independence, including autonomy over their own lives. In the United States, most older people tend to be more optimistic about their physical, psychological and life situations than they actually are, and have lower expectations of filial piety from their children (Walz & Mitchell 2007). However, in a collectivistic culture, older people have a preference for their adult children to meet their needs by providing them with as much support as possible (Laidlaw et al. 2010).

5.2 Attachment theory

The concept of attachment refers to the initial emotional connection with the primary caregiver during infancy. This early special emotional connection with the caregiver extends throughout the life of the individual (Melges & Bowlby 1969). Attachment is a "cradle to grave" process for all human beings.

Attachment in old age refers to the emotional connection between the older person and their primary attachment partner (usually a spouse or child). Old age is a late stage of life development typically characterized by cognitive ageing and increased dependency. As a result, older people's attachment differs from other age groups, particularly in terms of the diversity of their attachment partners. Research findings show that, compared to adults in other age groups, older people may have parent-child attachment, grandchild attachment, symbolic attachment and pet attachment. This can occur in addition to the attachment objects they share with other age groups and is due to changes in their social roles, interpersonal interactions and family structures (Cicirelli 1983; 1995).

Children and spouses are the most important objects of dependence for older adults; however, as older people's social functioning decreases and their scope of interpersonal interaction

narrows, family members, especially adult children, tend to become the main sources of social support for older people. If older people receive high levels of support from their children in return, they will experience higher levels of self-esteem and feelings of gratitude, which will enhance their SWB. This has also been demonstrated in studies, where older people's attachment to their adult children has had an impact on their SWB, partly mediated by parent-child support (Tian et al. 2020).

Bowlby and Ainsworth (2013) argued that everyone's early experiences in their family of origin would influence attachment performances throughout that individual's life. Infants gradually develop a mental working model of themselves and others through their initial contact with their caregivers. This internal cognitive model of the other and the self not only influences the individual's future behaviour during interpersonal interactions, but also serves as a prototype for the individual's later interpersonal relationships (Bowlby 1988). In addition, the internal working model of attachment shows that attachment reflects the individual's intimate relationships throughout their life span, from birth to death. It has been suggested that both the infant's relationship with early caregivers and the interpersonal relationships in adulthood belong to the same attachment system, which primarily regulates the emotional dimension of the relationship model. Attachment patterns formed early in an individual's life can influence attachment styles later in adulthood (Snow 2013).

5.3 Socio-emotional selectivity theory

It may be assumed that the happiness of older people would decrease as they age due to the death of friends and relatives, poorer health, a fixed income and increased social isolation. However, according to recent reviews and several large-scale empirical studies, this does not appear to be the case, and the happiness of older people does not seem to be adversely affected by the ageing process. Paradoxically, happiness increases with age, and the socio-emotional selectivity theory provides a possible explanation for this. The theory postulates that although health and income decline with age, older people are emotionally wiser and thereby selectively focus on events that contribute to their wellbeing and choose to partake in events and experiences that provide them with rewarding social interactions (Carstensen et al. 1999).

The socio-emotional selectivity theory comprises three theoretical presuppositions. Firstly, social interaction is crucial to human survival, and their interests and social attachments evolve.

Secondly, people are inherently motivated, and their behaviour is guided by their goals, and thirdly, people have multiple or even opposing goals. Assessing goal choice is influenced by whether the time is perceived as sufficient or limited (Carstensen et al. 1999).

The socio-emotional selectivity theory is a theory of motivation that spans one's lifetime, which implies that as time becomes more limited with increasing age, the priority of their goals changes (Mather & Carstensen 2005). Time perception influences choice and the pursuit of social goals, "Goals always exist in a temporal context, and goal choice is fundamentally dependent on the perception of time" (Charles & Carstensen 2004). Social goals are divided into two functional categories. The first are those related to the acquisition of knowledge and directed towards learning acquired behaviours in the social and physical world. In short, people acquire knowledge and social skills through social interaction. The second is related to emotional management and refers to the emotional states achieved through interaction with others, including the desire to find meaning in life, acquire intimate emotion, and feel socially fulfilled. When the perceived time is open-ended, goals are more likely to be prepared, such as information gathering, experiencing novel events and expanding knowledge. However, if there is limited perceived time, emotional goals take priority.

Compared to younger people, older adults often visualize their futures as finite and feel that there is limited time to pursue their goals. When perceiving time, older people differ from younger people in that they live in the "present" time and are more realistically oriented, whereas younger people tend to focus on the distant future. The cognitive assessment of time plays a key role in the weighing up and execution of goal-specific behaviours by helping people balance their distant and immediate goals and adapt them to specific situations. The perceived finiteness of time leads to a preference for emotionally balanced and emotionally meaningful goals (Löckenhoff & Carstensen 2004; Wallace & Shapiro 2006).

6. Methodology

The dissertation is article-based and has been work in progress. The Covid 19-pandemic made the original plan for a larger qualitative, comparative study unfeasible. Due to the pandemic, it became impossible to get access to, and interview the participants; studies in China became impossible as well. This prompted a shift towards more theoretical work (i.e. with Confucianism), use of existing

data and in-depth analysis of small samples, and supplemented with a quantitative study. The core of this study is not aimed at statistical representativity, and the qualitative section is based on semi-structured interviews and open-ended questions.

The data used in this study come from two existing studies of the wellbeing of older people in Denmark. The first Danish study ("Elderly Wellbeing and Alcohol") was conducted with a total of 31 interviews, including care recipients, relatives, care managers and workers from five municipal care homes. This study adopts five interviews with care recipients. The second Danish study ("Older Adults Well-being During the Corona Crisis") was conducted with 17 interviews, 3 of which were used in the analysis. Because of limitations caused by the Covid-19 pandemic, I was unable to make a parallel interview in China as comprehensive as in the Danish studies. A total of nine interviewees aged over 60 years were recruited from a care home in Shanghai. I am conscious that this asymmetrical methodological approach has been less than optimal.

Interpretative Phenomenological Analysis (IPA), a qualitative approach to the study of how people make sense of their lived experiences, was adopted in this study to further analyze the data at hand, with a specific emphasis on those lived experiences which are significant and particular to individuals (Smith et al. 2009). IPA follows the phenomenological philosophy of Husserl (1970), who advocated a "return to the thing itself", where the "thing" referred to the content of lived experience. IPA targets a systematic and careful reflection on one's daily experience, centering on "the embodied, cognitive, emotional and existential dimensions of being-in-the-world" (Smith et al. 2009). Hermeneutics has also had a significant impact on IPA. Analysis of IPA always involves interpretation with the subject trying to make sense of their own lived experience, and the role of the researcher to make sense of the subject's understanding of their experience (Smith 2004).

Phenomenology is both a philosophy and a research method. In philosophical terms, phenomenology is commonly taken to refer to the study of the structures of experience and consciousness. Phenomenological methods are especially well-matched to "capture the subtle interrelations between factors and penetrate beyond prejudice-laden reports and utterances" (Klausen 2019). As a research tool, it refers to studies that aim to investigate the subjective perspectives of the participants and tap into their lived experiences. Multiple interpretations of an experience constitute the main principle of phenomenology. Phenomenology, therefore, relies on unique personal experiences, even though it may aim at describing their common structures and content. This distinctive information provides an experienced and complete sense of what it means

to be human. Research data is collected and obtained by intensive, semi-structured or unstructured personal interviews over a long period of time. It is essential to conduct multiple interviews with each participant as one wants to explore their lived experiences and generate interpretations through interviews. However, the quality of the interview information is closely related to the interviewer's communication skills and the interviewee's ability to express themselves. Moreover, it is important to bear in mind that IPA is fundamentally a subjective research method; thus, different analysts processing the same data may interpret it differently.

Consistent with the purpose of this research, which is to identify the constructs of filial piety and its contribution to the wellbeing of older adults, qualitative phenomenology was chosen as the research method. The phenomenological approach aims to understand the in-depth lived experience (Smith et al. 2009), with a goal of providing detailed insights into filial piety situations among older adults. IPA provides a theoretical and methodological perspective for this research. Interpretation of the purposeful meaning of life itself in the universe by giving explanations to the life experience provided by the interviewees.

During the interviews, older people may be influenced by social approvability or social face (mianzi), which could result in biases in their responses concerning their children's filial piety and the support they actually receive. This, to some extent, may affect the validity of the experiment. In addition, the final part of the study uses a questionnaire to further develop the study in-depth and supplement the previous qualitative study. And the structural equation model (SEM) was employed to evaluate the model fitness.

7. Findings

The following chapters will present the happiness-income paradox and findings of the four papers in the context of contemporary China and Western countries.

7.1 The happiness-income paradox – the overemphasis of income

Conventional wisdom has it that the higher the economic level, the higher the level of happiness. As described earlier, however, both psychological and economic studies have confirmed in recent years that despite many countries having experienced significant increases in levels of economic

income, corresponding national happiness levels have not increased as expected, and even more surprisingly, have declined in some cases (Marar 2003).

In the social comparison theory, an individual's level of happiness is measured against the level of happiness of others (Ashkanasy 2011). This is one popular explanation of the apparent happiness paradox: If the population becomes wealthier overall, the relative position of the individual is not necessarily improved, and so the individual may judge herself to have become no happier than before, even though her objective circumstances seem more favorable. Easterlin and O'Connor (2020) argued, similarly, that individual happiness levels do not increase in line with personal income levels, due to changes throughout the human life cycle in social comparison and happiness adaptation. In reality, changes in monetary conditions occur rapidly with complete adaptation, while non-monetary conditions change more slowly and often with incomplete adaptation (Beja 2014). Therefore, the happiness adaptation of non-monetary conditions tends to have an erosive effect on the happiness effect of monetary conditions. In economics, social comparison theories are the counterpart to relative income theories. These theories take the level of income as a starting point and argue that individual utility is related not only to the absolute level of income but also to the relative level of income (Liao 2021). After all, it is common for people to compare their personal income with that of others.

Human happiness, at least as it is operationalized and measured, is subjective in nature, and thereby the outcome of these comparisons is bound to significantly influence the level of happiness. Bearing this in mind, the relative position when compared to others is generally of more importance than the absolute level of one's income. It is for this reason that increasing average social income does not necessarily result in a significant rise in the happiness level. It follows that an individual's level of wellbeing is generally comparable to their own income level, but often does not correspond with the average social income level. In this case, the average income level of society also correlates to the level of social climbing. In other words, the wealthier a society becomes, the higher the level of climbing that is reached, such that the income-to-happiness curve begins to plateau, or can even shift downwards to a declining level of happiness (Schwartz & Schwartz 2014).

People usually focus their attention on the economic factors that affect happiness, such as income and consumption, to the detriment of many non-economic factors that may also affect happiness (Headey et al 2008). These include family and friendships, physical and mental health,

rights and obligations, freedom and equality, and political participation. However, the influence of economic factors on human happiness is a single consideration and has its boundaries, so by only focusing on them and neglecting to consider non-economic factors will inevitably lead to one's subjective wellbeing to languish or plateau at a certain level. In particular, if economic factors such as income and consumption, are negatively correlated with those non-economic factors, then any increase in economic levels will inevitably lead to a decrease in non-economic factors that affect happiness. In other words, the positive effects of economic growth are offset by the negative effects of non-economic factors, thus giving rise to the paradox of increasing economic levels without an increase in happiness. This is evidence that economic growth itself has a dual effect, both positive and negative (Clark et al. 2008). Among those non-economic factors, culture is an important one.

7.2 Findings of the four papers – explanations from the cultural perspective

7.21 Confucius' concept of happiness – the emphasis of virtuous character Ren

Ancient Chinese philosophy has always had a profound influence on Chinese people, not only in the past but also in the present. It influences the development of Chinese culture and shapes the mentality of Chinese people and modern concepts. To understand the connotations of contemporary Chinese culture and the spirit world of the Chinese and how they contrast with the Western way of thinking, then the core philosophies in ancient China need to be explored, in particular Confucius' principles. This allows a deeper understanding of what constitutes a good life filled with happiness, Chinese mentality and concepts, and other influencing factors.

Ancient Chinese philosophy is divided into three primary schools: Daoism, Buddhism and Confucianism. While none of the three schools contain a clear definition of happiness, they all mention *le* in their books. The Daoist and Buddhist views of *le*, both of which transcend social boundaries ("other-worldly") (Fung 1966), differ from those of Confucianism. Daoism believes that nature should be followed, where *le* is a sort of spiritual balance, neither happy nor sad, but rather the integration of individual time with the universe. Buddhism, on the other hand, states that *le* is to transcend human beings, destroying everything and thereby helping people forget pain, which allows them to obtain a peaceful state of mind, and pursue a kind of nothingness. This bears resemblances to some western doctrines.

In contrast to the aforementioned two schools, the core principle of Confucianism[3] is "roaming within the bounds of society" (Fung 1966), maintaining that individuals live in the real world and therefore should pay more attention to existential affairs. Unlike Aristotle, Confucius did not have an ultimate goal, who pursued a state of being as a way to produce happiness (Aristotle 1999).

Ren is another item which is closely related to *le*. Confucius stated that only those who possessed the character of *ren*, could *le* spontaneously emerge. Individuals, without the character of *ren* are neither able to endure hardship for long periods nor obtain *le*. Only those who have the character of *ren* have the perseverance to endure hardship for long periods and ultimately enjoy *le*. In Confucius' philosophy, *le* is thus a byproduct of possessing the character of *ren*. *Ren* first appeared in the Analects, which stated that while *ren* was an accessible state to achieve, the relatively tricky part was maintaining it.

Scholars have not yet reached a consensus view on the nature of *ren*, which is described as a moral concept and a state of mind - a compound and complete virtue. *Ren* has been interpreted with various meanings, which include a feeling, a virtue, a kind of ability to cultivate and "human heartedness" (Liang 2019). In the Analects, it is perceived as an innate characteristic of human beings, corresponding to the subtle influence of society. Being in opposition to this state gradually makes people indifferent and insensitive, which is reflected in Confucius' criticism of his students. The overriding interpretation of *ren* is a gentle and pure state of mind where the correct way forward and a positive attitude are more important than other interpretations, which roughly equates to Mencius' compassion and Wang Yangming's conscience (feeling a sense of guilt whenever one has done something inappropriate regardless of the compounding reasons). This aspect of *re*n is considered as the primary pathogenesis that is the most critical. *Ren* is not merely the merit of a single aspect, but the comprehensive ability of many aspects to complement each other, which is the origin of all virtues. Understood from this perspective, Confucius's view bears more similarities to the existentialist concept of real existence, similar to that of Kierkegaard (Kierkegaard 1992), who saw the foundation for a good life as a unity of self-understanding and moral attitude, and less similar to Aristotle's belief that virtue is not a matter of personal attitude.

[3] The use and interpretation of Confucianism presented in this study have been based on both the Chinese original *Lun Yu* (Analects) by Yang Bojun (杨伯峻) and the philosophical English translation by Ames and Rosemont (1998).

This highlights a big difference between Chinese and Western conceptions of happiness and helps clear up misconceptions about what constitutes a good life in the Chinese context.

Through the interpretations of Confucianism, we have provided with some insights into why contemporary Chinese people report a lack of happiness compared to previously, in that it appears that they are still far away from the state of *ren*. Although society has progressed with social conditions steadily improving, these advances appear not to have benefited the cultivation of qualities associated with *ren* such as conscience, innocence or ritual propriety, and people have gradually tended to ignore these values. In other words, there is a conflict between human nature and rationality in modern society. Since China's reform and opening up to the world, the Chinese way of life and social customs have been deeply impacted by western culture and standards. Even if the impact is not as profound as one imagines, it may still have created a tension between their various self-understandings and evaluations, which in itself can be a source of unhappiness. This phenomenon has been similarly described in research, the rural peasant's happiness is more intense than that of urban achievers, further confirming Confucius's ideas about *ren*. Although living in conditions of poverty are clearly not romantic or desired, it is apparent that farmers who have been least affected by western cultural erosion and modern progress have retained a primitive spirit, which seems to lead to them being more content and happier with what they have.

According to research, the happiness-income paradox can be explained as happiness which is largely determined by external factors. People's original heart-mind gradually becomes less responsive and numb, due to the erosion of society and other materials, and so it is more difficult to obtain happiness compared to the initial stages. Overall, while personal wealth has accumulated dramatically, it has also become increasingly difficult for people to achieve what genuinely satisfies them. This prompts us to consider whether the accumulation of material wealth can be transformed from a quantitative change to a qualitative one, and therefore contributing to the quality of life. Confucius maintained that it was not reasonable to excessively pursue the maximization of personal interests as the accumulation of wealth was likely to lead to more negative effects. He was particularly concerned about the negative effects on one's character. In this sense, Confucius stated the stability of happiness is not affected by fluctuations, no matter how grave the external environments might be.

Confucius' happiness may be explained from three dimensions. The first level could be happiness (*le*) with the virtuous characteristic of *ren*, which is a kind of psychological affirmation,

no matter what we do, we follow our original heart-mind. In this dimension, *le* is considered the byproduct of *ren*, which can be thought of as a balance between one's psychology and innate desire. This happiness is a consciousness that represents the innate desire and joy of being alive. Even in the face of difficult living conditions, Confucius was still able to feel at ease, for he enjoyed the happiness of being alive and did not harbor long-term negative emotions. Happiness, in this sense, was a more stable emotion. The second level was the psychology of learning and self-improvement. This suggests that when a person is fully engaged in an activity, they are unaware of the passage of time and reach a balanced mental state. The third level was no matter how grave the surroundings may be, one must have a bottom line and firm moral principles to obtain a self-cultivation ability. Confucius claimed that happiness lay in nature, and was concerned with how to maintain the balance between his mind and the material wealth of society.

The Confucian concept of happiness differs from the western, more or less hedonistic concepts of happiness. The main concept of Confucianism centers around stability, which lies in the innate harmony of nature. Thus, when engaging with society and participating in activities, they should maintain their original heart and moral bottom line. The happiness-income paradox may also be true to some extent, because Chinese people may not be satisfied with the material things they possess, or their income may not allow them to reach their desired satisfaction level. In contemporary society, success and wealth are increasingly becoming more closely linked, so this dissatisfaction is understandable. It also echoed Confucius' perspective that wealth and status may not equate to happiness. The imbalance between happiness and income reflects a lack of moral guidance for modern Chinese people. In a recent study, happiness increased with income, which is more of a superficial enjoyment and contrary to traditional Chinese culture. Although China has been traditionally regarded as a collectivist culture, with economic success and the influence of the family planning policy, people are gradually focusing more on their own self-interests. It is a tendency of individualism which has created tensions between society and the younger generation's moral education, further confirming that the Confucian influence on the contemporary Chinese is weakening. Such self-doubt is crucial in the search for true Chinese happiness.

There are essential differences between the Chinese concept of happiness and that of the West, such that it may be inappropriate to evaluate the happiness of Chinese people by western standards. While it may seem more appropriate to use Chinese standards to judge happiness levels,

these standards can be seen as too generalized as they are based on the core principles of Confucianism and do not take into account the cultural context. Chinese people may assess their happiness according to traditional, Confucian notions, and so rank themselves lower, even though they do have many of the things in life which are assumed (from a Western, SWB-perspective) to be conducive to happiness. In Confucian perspective, the virtuous character *ren (human-heartedness)* is strongly associated with happiness, and filial piety is seen as the root of the virtuous character *ren*. In this sense, filial piety appears remarkably linked to happiness, in particular, older adults' happiness and wellbeing.

Cultural context also likely matters in another, albeit related, way. The data on which this study was based – and which seem to support the particularly puzzling version of the happiness-income paradox that relate to China – may not be reliable, or at least not have the significance usually ascribed to them. Cross-cultural comparison may be difficult, because Chinese people do not value the SWB-like kind of happiness studied in surveys as highly as Westerners (and so may think they are doing well, according to their own lights, even when ranking themselves lower).

7.22 Filial piety and generativity

Filial piety and generativity appear to be important variables in alleviating or preventing loneliness, and hence promote wellbeing in older people. However, filial piety is a double-edged sword, in that on one hand, it can bring happiness to older adults, but on the other, it can be a source of unrealistic expectations and onerous obligations. Therefore, it is crucial to consider what is true filial piety and how best to strike a good balance. By analyzing of the research results obtained from Danish care homes, it was concluded that the concept of filial piety could be similarly applied to older adults cultivated in individualistic cultures, and the influence of different factors on filial piety were significant.

The study found that the intergenerational relationship had a positive impact on the wellbeing of older adults. During the interviews, virtually all the participants mentioned family life when talking about their perceptions of happiness and a good life. They believed that happiness was closely related to the quality of their family life, and that a good family life brought them greater happiness and wellbeing. Additionally, the findings showed that the understanding and care provided by the younger generation contributed to older people's wellbeing, with a poor

perception of the sacrifices made during the pandemic increasing their risk of a poorer predicament, and a good intergenerational relationship reduced loneliness in older people, which in turn reduced the negative impact on wellbeing.

This stereotype of individualism is prevalent in Denmark, with older adults perceiving that they should get less attention from their children and actively reduce their influence on their children's work and life. In China, where family is highly regarded as the most overarching principle, it is expected that children are to follow the tradition of filial piety and care for the older generation. The situation, however, is undergoing changes. In Denmark, while moral obligations require them to reduce their demands of attention from the younger generation, they still possess an innate desire to communicate with their children. In China, as the social situation is in a state of flux, the older generation is expressing less attention from their adult children, and are satisfied with a smaller amount of communication and gatherings with them. This is a kind of ambivalence that has emerged between the older and the younger. The comparison between the two cohorts revealed that the two groups were surprisingly similar in their life goals at the present stage despite their different cultural contexts. Both groups demonstrated a tension between the goal of a satisfying life and the concept of "rationalization," or in other words, what one desired to be compared to what one should be. The more subjective a person correlated with the degree to which a person was truly satisfied and what they really wanted to be. This attitude seems to differ from that implied by the concepts of filial piety and generativity, but can also be seen as an adaptation of these concepts to new roles and situations.

Although the participants in the Danish group strongly indicated that they did not expect many interactions with their children, they were still happy and enjoyed their interactions with them. They were eager to see their grandchildren, even though physical interactions with their grandchildren were often troublesome. The physical interactions they most eagerly anticipated were visits from their children and any care they provided. Both these effectively reduced their sense of loneliness and promoted their wellbeing.

The findings revealed that older adults had, over time, increased their requirements for the amount of interaction with their children they desired. They required not only a greater frequency of interaction and material support, but also increased interaction and communication on an emotional level. Furthermore, they attached greater importance to their children's attitudes. The purpose of the interactions and communications was to maintain the emotional connections

between older people and their children, and provide affirmation of and maintain long-term feelings for these connections. Due to the influence of obligations and responsibilities, older people reckoned that it was important not only to maintain communication with their children, but also to demand more fulfilment of their emotional needs and active participation. With increasing age, the desire for emotional fulfilment also grows, which is consistent with the concept of filial piety and human-heartedness. Filial piety as well as being a requirement of obligation and responsibility, allows a deeper level of communication, with genuine authenticity and positive attitude towards the older generation from the younger. This implies that filial piety is not unique to Chinese culture, but an emotional need reflecting the essence of human nature. Although they do not have high expectations, they still want to maintain emotional ties with their children. Moreover, the intergenerational relationship is not purely based on physical contact and interaction, but also on emotional connections.

Studies in China show that respect for filial piety was the most important factor for older people. According to the Confucian concept, filial piety for parents is not merely about respect, but reverence too. That is, it is not just about material and financial support, but attitudes and emotional investments. Furthermore, rather than unilateral behavior from the younger generation toward the older, it expressed mutual respect between the two sides. From the older adults' perspective, merely by taking into account the realities of their situation and needs were enough to demonstrate real respect. In particular, during the pandemic, older adults expressed greater demand for both physical and emotional needs. Emotional connection needs could be maintained through physical interactions and communications, while reverence required understanding and authentic emotions. As Confucius put it, "The family was the first unit to introduce normative concepts into the psychological structure of the individual, forming basic characters and patterns of reflection and reaction that would dye the moral phenomenology of the rest of humanity for its creations." While some behaviors may be seen as an emotional "investment," they are more likely to express tendencies that come naturally rather than performing functions which may have potential future benefits. The results revealed that more institutionalized forms of education and cultivation also help maintain filial piety and prevent its "erosion", and the importance of the intergenerational relationship had been effectively confirmed.

In current society, Confucius's assumption of filial piety has been challenged by the demands of the ruling class. Its main thrust was the sanctity of parental authority and superiority,

which is very different from Western ideas. Yet, if you merely consider it from the level of attitude and emotions, rather than obligation and responsibility, the concept could be acceptable in Denmark too. In addition, due to the diversity of life and occupations, the nature of expectations and interactions with children has changed accordingly. While filial piety is a matter of genuine interest and mutual respect, intergenerational relationships can be maintained and strengthened also through physical interactions supporting the older adults.

Achieving filial piety may seem easy on the surface, but when it is understood that it requires a genuine emotional bond rather than just a formal obligation to meet traditional expectations, it seems more difficult to accomplish. Modern living conditions add to the challenge of maintaining intergenerational relationships. Cultivating emotional attitudes requires more than simply conforming to traditional norms, and it is only by truly understanding what filial piety consists of, that it can truly benefit both parties, thereby contributing to the older adults' wellbeing. In separate studies from China and Denmark, both groups acknowledged filial piety, despite their cultural differences, and the tensions they experienced in a humdrum society. This cross-cultural human tendency was particularly interesting, however, there were signs that older Danes had a more paradoxical attitude, similar to that of the older Chinese, whose needs and expectations directly led to the development of harmonious family relationships and the creation of the virtuous circle.

7.23 Intergenerational support and older adults' wellbeing

In terms of older adults' happiness and wellbeing, the cohort moving into care homes are perhaps worthy of more attention, as the relocation of places where the majority could live may not only be viewed as an existential challenge, but also a chance to provide insights into the quality of life of human beings in the last stage. Therefore, the third paper explored how older participants viewed the quality of life in care homes. Four themes emerged from the results which were positive attitudes, positive environment, positive capability, and positive experience.

Attitudes may be able to predict the upcoming actions one would go through. This theory can be used in the case to predict how quickly older adults adapted to their lives after moving into care homes taking into consideration their previous attitudes. During the interviews, the participants were asked about their general perception of a good life in a care home. The majority mentioned positive attitudes toward the transition eases the moving process. This perspective also

implied that their willingness to transition into a new environment, learning how to adapt to it, willingness to make new friends, participating in new activities, and settling down into their new homes were all important factors. The findings were particularly evident in Chinese female groups.

In contrast to those with positive attitudes, others found it challenging getting used to the new environment and often ended up living a more unpleasant life. What hampered them most was their own negative attitudes which generally emerged from their fear of stepping out of their comfort zone. They were scared of moving forward, to carry out actions for improvements, and thus constrained themselves in a fixed mindset. This may lay down a more significant risk on the aspect of physical health of older adults, where their past mental health conditions also had a significant effect on their physical health.

A positive environment describes the environment where the older people are located, including both the geographical location and the institutional environment. This may, directly and indirectly, affect older adults' life quality. In this context, positive environments refer to the environments where older participants feel happiest. Some older Chinese participants mentioned they would prefer to choose a care home that was located close to their family, as although not living together, being close provided them more contentment with their lives in the care homes. Being surrounded by family strengthened feelings of a sense of belonging and being emotionally closer to the ones they love, which were both crucial to a happy life.

During the interviews, older adults frequently recounted they lived in warm institutional environments where a range of services and activities were readily provided which further improved their life quality. This strengthened their sense of being well cared for. Three key capabilities were frequently mentioned by older adults as sources of leading a good life, these were physical health, enjoyment of food, and learning to compromise. They all played important roles in the lives of human beings. As they age, older adults experience a higher risk of illnesses which could lead to various different pains and restrict their capabilities. If physical limitations occur, then older adults were likely not to be content with their lives even though all other requirements were met.

Learning to compromise was important to older adults in care homes. Harmony needed to be a mutual focus, and older adults needed to make concerted efforts to keep harmony in this community. Chinese culture emphasizes the importance of collectivism. In this case, older Chinese tended to collaborate more with each other. To avoid making conflicts and maintain social identity,

they usually tolerated other people by adjusting their behaviors and feelings based on the new environment. Their perception was that a harmonious environment brought about a more positive impact on their lives.

Lastly, a positive experience was another key theme mentioned by older adults. It included feelings, happiness, energy, pleasures, and fun from experiences in their previous lives as well as in the care homes. Some older Chinese mentioned that their relationships and lives with their families before had provided a stable and positive foundation which supported them in living a happy life in the care homes. They frequently shared their good memories and wonderful stories that happened with each other, and by doing so, their senses of security and happiness would be significantly aroused. Also, those who had extremely tough times during their young years often felt grateful and appreciative of their current quality of life.

Providing various activities also enhanced older adults' life quality in care homes. The activities should be new, fresh, fun, and interesting to older groups. Some older Chinese participated in new hobbies after moving into the care homes, while others helped more with the organization of activities. Happiness emerging from helping others enhanced their quality of life and helped maintain their mental health, as did reconnecting with the younger generation and being cared for by them with love. Young people also willingly requested the sharing of old stories for inspiration, gave older adults a sense of approval and value to their precious life experiences. Many older adults also felt that respect from the younger helped improve their quality of life. However, this could be presented by providing physical support instead of unrealistic work principles.

Whether by intergenerational support or any other devices that could facilitate older adults' happiness and wellbeing in care homes remained required further exploration. In the fourth paper, the relationship among smartphone use, intergenerational support – physical needs and emotional needs, and older adults' wellbeing were investigated through qualitative and quantitative methods. The results showed that the use of smartphones could positively promote older adults' wellbeing and their attitudes towards smartphone use, and intergenerational support regarding older adults' physical and emotional needs from the younger generation could also positively boost older people's wellbeing.

8 Conclusions

As economy and society are under continual development, the study of happiness and its relevant issue of the happiness-income paradox still prevail as major issues today. In reality, the pursuit of happiness by each individual contains a rich and profound content. There are many questions that are largely unanswered regarding the essence of human life, namely, what is the meaning of human existence? Is it the extreme pursuit of material gain, or is it purely spiritual enjoyment, or is it a cause of liberation for all mankind? Human existence is about realizing the value of one's life, but in what way. How does one seek out what is considered to be the happiness that provides the key to life's existence? The question is not whether or not to seek happiness, but rather the specific content of what each individual considers to be happiness. In essence, my empirical studies revealed that there are common patterns in people's happiness-seeking, such as that older adults more or less invariously seek and value intergenerational relationships, though they live in various social and cultural settings and have been influenced by different philosophical conceptions.

Despite people have differing views of what constitutes happiness, the pursuit of happiness is common to all human beings and is part of human nature. The all-round development of human beings is fundamentally an essential requirement for happiness. The question of what constitutes happiness is really about the value of human activities and the meaning of life, and it is inherently inseparable from the question of what the nature of man is.

In light of these real-life problems, it is of great theoretical, cultural and practical significance to study the nature of happiness and its realization path under the guidance of Confucianism. To my knowledge, little research explored the happiness-income paradox from cultural perspectives.

In this study it was shown how the Confucian conception of happiness fundamentally differs from the Western conceptions based on a hedonic understanding employed in happiness and wellbeing studies. The emphasis on happiness stability and how to maintain a harmonious status between individuals and the circumstances under which they live, reflects the fact that personal pleasures matter less.

The Confucian conception of happiness may have correctly predicted that happiness will decrease even though material wealth increases, both because some Chinese may be less satisfied with their material success (which has far from reached the satisfaction point, as the recent social flux has endowed income with seemingly magic power), and because different cultural conceptions and understandings of happiness were employed in the empirical studies (the Western

SWB-like notions of wellbeing are not regarded as highly as Chinese virtue-like conceptions, and so different perceptions may lead to different results). Understood this way, it may not be surprised that the Chinese rank lower in happiness studies considering that they may still evaluate their happiness based on traditional Confucian conceptions. Cultural conceptions may function as a double-edged sword, as, on the one hand, they can be a source of criteria that differentiates them from each other. On the other, they can be a source of pain that entangles individuals among different cultural and social identities.

Moreover, applying the core principles of Confucianism revealed that what really matters for happiness is interpersonal relationships, morality etc. In this case, the Easterlin Paradox is not shown to be itself caused by different cultural conceptions; but different cultural conceptions turn out to be more or less appropriate for capturing the factors that are important to happiness under different circumstances.

This study revealed that no matter which social context individuals live in, be it in China or Denmark, qualities such as "human heartedness", "filial piety", "generativity", etc. serve as authentic emotional bonds. Transcultural dispositions, closely associated with happiness and wellbeing, would not change with the passage of time. Individuals shared a high level of similarity in what constitutes a good life. The impact of family relations on individuals' wellbeing, which centers around harmony, stability, mutual responsibility and emotional care, remains significant. Those core values, however, needs to be well performed and applied in human lives. They may end up causing a burdensome sense of obligations to individuals under current living conditions, because modernity and industrialization make it challenging to maintain them. This is perhaps what Confucius called a state of "numbness", which refers to an increasing tendency to rely on external factors at the expense of fundamental principles and consciousness. And this is perhaps what Confucius perceived as being far from the path of true happiness, even though countless people have reported themselves to be happy when being in precisely this state.

Finally, this study should be regarded as an opening to new approaches to happiness surveys, especially in cross-cultural measurements. For example, should a particular kind of measure be treated as a generalized one to all circumstances and draw a "rationalized" happiness conclusion? And how to achieve and maintain genuine happiness under modern living conditions?

9 Significance of this study

9.1 Enlightenment of Confucian Conceptions of Happiness

Happiness, as the ultimate goal of human beings, is a necessary part of human life. Since the beginning of human society, the pursuit of happiness has been a conscious activity of human beings, who have created various favorable conditions in their attempts to attain it (Fetscher 1973). People of different generations, nationalities and genders have their own perceptions of what constitutes happiness. However, it has been proven that the realization of human happiness requires not only good material and social conditions, but also concerted efforts by individuals to continually strive to improve their own happiness levels (Pillay 2020). The ability to improve their happiness is achieved by incorporating these three main concepts: firstly, taking the Confucius idea of happiness (assuming that they are at root similar) as a guide and establishing the correct value concept and happiness concept, such as virtuous character "human heartedness", "filial piety" and the like, and focus more on the development of institutional arrangements and social welfare; secondly, learning to perceive happiness in the real life world; thirdly, constantly creating and developing happiness through the subject's own efforts.

9.2 Theoretical implication

Firstly, the actual human being is both the starting point and the destination of each research. The free and comprehensive development of human beings has become the core content. Thereby, in a philosophical sense, the essence of happiness is the free and comprehensive development of human beings, and by studying happiness it also helps advance philosophy research. In today's society, as the theoretical system of happiness research has not yet been fully established, it still leaves a wide scope for philosophy research. In-depth exploration of happiness can help to better grasp the laws and trends surrounding human development and promote the all-round development of human beings.

Secondly, people's aspirations and the pursuit of a happy life are never-ending, especially in the light of the ecological, social and spiritual crises that occur with globalization, raising awareness of the need to continue to develop and explore more deeply the study of happiness. In other words, scholars should place high value on the study of the Confucius happiness theory, from both the perspective of theoretical development and practical problems. However, compared to other Confucius' principles and theories, the theory of happiness currently receives far less

attention than it warrants. For this reason, this study which is based on the development of both the individual and of society, is taking the essential connotation of happiness as the object of study. From this logical starting point, it will attempt to explore a reasonable path to happiness through an in-depth study of the generation of happiness and a profound reflection on the dilemma of happiness, thus exploring more deeply the thoughts of Confucius conceptions of happiness.

9.3 Practical implication

First of all, the degree of human happiness is a direct reflection of the state of social development, but at the same time, the state of social development is also governed by the degree of human happiness. The study of the nature of happiness and the path to its realization can thus provide theoretical guidance to modern people in their pursuit of happiness, allowing them to realize its true meaning and finding the path to its realization. Overall, it will serve to provide better guidance for the healthy development of people and society. It is particularly important when a country's economy has reached a high level of development that people are directed towards the best fitting concept of happiness.

Secondly, happiness is closely related to the development of people's lives and societies. However, with increased industrialism in modern times, common problems faced by all human beings, such as resource scarcity, environmental degradation and psychological diseases, are becoming more profound. A study on the nature of happiness and the path to its realization will help people to focus on the harmonious co-existence of man and nature, the harmonious development of man and society, and the harmonious health of man and himself in the current situation of modern social development, and thereby help solve the common problems faced by mankind today.

Lastly, national policies and institutions are normative standards set by those in power to realize established interests. Reasonable state policies are not only conducive to the positive and healthy development of people, but also to the stable and orderly development of society. Happiness is as much about human development as it is about social development, so the study of happiness can provide an important theoretical backbone for those in power to formulate national policies, so that any social plans, guidelines and policies can be scientifically formulated and implemented more effectively. To sum up, whether it is conducive to the promotion of people's

wellbeing is also an important criterion for measuring the scientific effectiveness of a country's policy system.

9.4 Future research implication

Perhaps a co-existence of both Confucianism and Marxism provides clues to a solution. Apart from the aforementioned cultural differences, differences from the political system are elements that are largely ignored or downplayed. It is widely acknowledged that Marxism has had a deep impact on contemporary Chinese politics. Political systems not only affect human happiness indirectly through economic, cultural and ecological aspects, but there are also other important factors that more directly affect human happiness. Within the political system, democracy, equality and fairness are all crucial aspects that arguably affect human wellbeing (Rothstein 2010). Even if widespread democracy, equality of status and social justice are not strictly speaking necessary for happiness, they can be assumed to be pervasively instrumental. Therefore, in order to achieve true human happiness, the political system of society must probably be improved (Esaiasson et al. 2020).

In contemporary China, there is a large gap between urban and rural people's happiness and life satisfaction, which is influenced not only by economic development factors but also by the unequal social and political status between urban and rural residents, coupled with unfair income distribution policies and systems. It perhaps explains why contemporary Chinese people frequently report unhappiness, as they may not be satisfied with their institutional arrangements and social welfare policies. Economic growth, rational institutional arrangements, and inclusive welfare policies are all fundamental to the achievement of national happiness.

Chinese culture has been profoundly influenced by Marxism, which seems to be completely different from Confucianism and other traditional Chinese forms of thought. However, on closer inspection, the difference is not so big. Both Confucianism and Marxism acknowledges the importance of a material basis for happiness; both see it as necessary, but not sufficient, as true happiness requires freedom to realize one's full, human potential. And importantly, both emphasize the intimate connection between institutions, social relationships and individual happiness. This may explain why Marxism does not seem to have destroyed traditional Confucian notions in the Chinese population, and how the two systems of thought are now able to coexist. Man lives in the reality of historical processes, who creates in being and exists in creation. To

realize the capacity of one's own values and the happiness of human beings in real life, it is necessary to look at it not only in terms of categories, but also perhaps consider the value of co-existence more important than the principle of "the survival of the fittest".

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11. Article 1

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The Happiness-Income Paradox and Western and Chinese Conceptions of Happiness

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Abstract

The rapid growth in income during recent decades in China (and other "tiger economies") has not been accompanied by an increase, but rather a temporary reduction, in the level of self-reported happiness. This so-called happiness-income paradox has caused much discussion, mostly related to happiness economics and research methodology. In this paper, we add a complementary, more philosophical perspective by considering the differences between typically Western conceptions of happiness, which inform the empirical happiness studies that have been used to identify the paradox, and traditional Chinese conceptions, especially that of Confucianism. An examination of the Confucian view of happiness serves both to highlight aspects of a good life that may have been lost during the recent economic boom and to identify deep-rooted cultural assumptions that may still influence the way contemporary Chinese tend to judge the quality of their life.

Introduction

The so-called happiness-income paradox, first described by Easterlin (1974) (and also known as the "Easterlin Paradox") appears to have been particularly strikingly exemplified by a number of countries with fast-growing economies, among them not least China. The case of China, which

seems puzzling even when taking into account possible shortcomings of Easterlin's research, provides a good occasion for philosophical reflection on happiness research. Different conceptions of happiness might be involved in the paradox, in different ways. Identifying these conceptions and their possible roles might help to explain it, thus complementing existing explanations from economic methodology and psychology (e.g. Weiman et al. 2015). It may be argued, in line with other criticisms of research based on self-reported life-satisfaction (e.g. Haybron 2008), that the results of happiness surveys are less than completely reliable, because they measure superficial and highly context-sensitive judgments rather than real, genuine or "authentic" happiness. Hence it deserves consideration whether contemporary Chinese people might actually be happier than the empirical studies indicate. Maybe they still conform to traditional, less subjectivist notions of happiness, and only fail to meet the criteria of the life-satisfaction approach. Yet it is also possible to take the results more or less at face value, and accept that there is negative, or at least not clearly positive, correlation between income and happiness in contemporary Chinese society, but explain this apparent paradox as a result of the abandonment by recent generations of Chinese of more traditional notions of happiness, or traditional ways of life.

We will explore both lines of thought, in a tentative way. We do not claim that any of the two hypotheses is true, only that both are possibilities that ought to be taken seriously, and that sensitivity to different Western and Chinese conceptions of a good life is relevant to understanding the current "happiness situation" in China.

I. The happiness-income paradox and the case of China

The core of the happiness-income paradox is the apparent lack of a positive correlation between income growth and average life-satisfaction in the population (Easterlin 1974; cf. Weiman et al. 2015). Put very crudely, it appears that money do not make people happy. This is contrary to basic assumptions in economy, where money is seen as the key to not just more consumption, and so more pleasure and preference satisfaction, but also to enjoying a wider range of options – and so should be strongly correlated with happiness and well-being.

The crude summary is too simplistic, however. There *is* evidence, as Easterlin himself already noted, of *some* positive correlation between material wealth and happiness. Wealthier countries score better than poorer in terms of life-satisfaction. Likewise, high-income groups also consistently report higher life-satisfaction than low-income groups. The paradox pertains more

specifically to the *dynamics* of income and happiness. It consists in the observation that *over time*, life-satisfaction does not increase as income grows. This seems paradoxical not just because it is at odds with basic assumptions in economics, but also because the *synchronic* relationships between income and happiness should make one expect a positive correlation over time as well. If richer people tend to be happier than the less rich, why don't the less rich get happier when they get richer?

The paradox has been explained in terms of changing aspirations (Easterlin 2001), the importance of relative position (which might stay the same, even though one becomes more wealthy) and hedonic adaptation (the general tendency to return to a certain baseline of happiness in the face of both positive and negative changes (Weiman et al. 2015)). It has been criticized for being based on insufficient or poor quality data (Veenhoven & Hagerty 2006; Stevenson & Wolfers 2008) and confusing the absence of evidence for a link between income and happiness with evidence for its absence. Some even contend that it has been refuted, at least partially, after better data have become available and subjected to stricter analysis (Veenhoven & Hagerty 2006; Deaton 2008), arguing that there is in fact evidence of a significant increase in happiness.

We will not, however, take a stand in this debate (which has been referred to as the "happiness wars"). We will not call into question that there is seemingly substantial evidence for a lack of a positive correlation between income growth and happiness, at least in some countries and for some periods of time (something which is conceded by most critics of the paradox). One relevant upshot of the debate is, however, the acknowledgment that early research on the relationship between income and happiness failed to separate different dimensions of happiness (Weiman et al. 2015), and, especially, that results were obtained with different *conceptualizations* of happiness, and that different kinds of *questions* display different results (Graham et al. 2010).

While it is an open question to which extent there is a general happiness-income paradox, there are a number of particularly striking cases of lack of, or even negative correlation, between economic growth and happiness. They are cases of so-called "tiger economies", that is, countries which have recently undergone very rapid economic growth and also enjoyed a massive improvement in material living conditions. India and Egypt,[4] for example, both exhibit a puzzling

[4] We use the term "tiger economy" here to denote all countries which have enjoyed a significant improvement in material living conditions, restricting it neither to Asian countries nor to countries recognized as having been commercially succesful.

pattern of a relatively steady growth in average income accompanied by a seeming decline in happiness. China is another vivid example. China's real GDP multiplied over five times between 1990 and 2015; in the same time, however, self-reported life-satisfaction (a measure of subjective well-being) declined. Though it started to recover from about 2005, it is considered doubtful whether the recovery has been large enough restore the former level of subjective well-being (Easterlin, Wang & Wang 2017). Different time series data differ on this point, though all show a more or less U-shaped pattern.

The pattern might seem puzzling, or even paradoxical, when viewed from the point of view of economics. Yet a number of likely explanations are at hand. For one thing, it might be seen as a typical *transition* phenomenon, as countries which have undergone rapid and deep societal changes (typically linked to a change from centrally planned to market economy, as in post-communist Europe) generally tend to show a decline in subjective wellbeing (Grün & Klasen 2012). Rapid economic growth often leads to more uncertainty as to future living conditions, greater inequality, erosion of social bonds and traditional values. Several of the standard, general explanations of the happiness-income paradox, like those in terms of changing aspirations or standards of comparison (for example due to media exposure), also appear to be readily applicable to the case of China as well.

However, even if the development need not be considered paradoxical, it is still intellectually and practically challenging. The available explanations remain speculative or based on superficial correlations (or both). The apparent lack of a positive correlation between material living standards and subjective wellbeing merits closer scrutiny. Though the results may not alter or even challenge the standard explanations, they may complement or deepen them, showing, for example, in more detail *how* economic and societal transitions, changing aspirations or standards of comparison influence subjective wellbeing. One might also dare to ask some more philosophical questions: To what extent *ought* contemporary Chinese to be happy? To what extent are they *really* happy? The very idea of applying such an absolute or "objective" standard may seem controversial, and we will only consider the philosophical questions cautiously. Still, we believe that they deserve to be raised also in this context, where speculations as to whether it really is *happiness* that is being studied and debated are rife, anyhow.

II. Western and Chinese happiness: Concepts and approaches

1. Empirical wellbeing research and Western notions of happiness

Empirical happiness and wellbeing research have focused mostly on *subjective* wellbeing in one form or another. The most widely used approach, and the one that has shaped most wellbeing economics (like the work of Easterlin) is the life satisfaction ("LS-") approach (see e.g. Pavot & Diener 2008). People are asked to complete a questionnaire with a small number of questions about the extent to which they are satisfied with their life as a whole, rating it on a numerical (e.g.) 7- or 10-point scale. Suspicions that such overall judgments may be subject to temporal and other biases, as well as theoretical ideas about the important thing being how good one actually *feels*, rather than how one *thinks* about one's life, have led to a parallel interest in the *affective* dimension of wellbeing (Kahnemann 1999; 2000). Tools for studying this, like the "day reconstruction method" (Kahnemann et al. 2004), have been developed, and "affective balance" has been added to life-satisfaction as a complementary construct, becoming part of hybrid notion of subjective wellbeing (SBW) (Diener et al. 2002) now widely used for studies of various causes and conditions for wellbeing.

Both approaches to wellbeing are often characterised as *hedonic.* This makes sense, inasmuch as they are both "subjective", albeit in a different sense (affective happiness does not depend on subjective *judgment* or evaluation, but on subjective "feel"). However, *hedonism* in the philosophical sense refers to the narrower view that wellbeing consists in a positive balance of pleasurable over unpleasurable experiences. And it is generally acknowledged that LS is a notion of distinctively *cognitive* wellbeing. Nevertheless, both approaches, and the general notion of *subjective* wellbeing ("SBW"), could be said to reflect a typically modern *Western* notion of happiness, akin to the one that has been championed by utilitarians and classical economists. For they conceive of happiness as being either about feeling good or about having one's preferences or expectations satisfied. They also conceive of happiness as being quantifiable. Perhaps most importantly for the comparison with Chinese notions, they conceive of happiness as a result or

"product" that can be achieved or brought about in all sorts of ways, where the "way" itself does not matter, and which is *de facto* contingent on a large variety of external circumstances.[5]

The "hedonic" (LS and/or affective happiness) conception has been contrasted with the so-called *eudaimonic* approach, which focuses on meaning and self-realization and defines wellbeing in terms of the degree to which a person is functioning well (Ryan & Deci 2001). This notion is also "Western" in the sense that it originates from ancient Greek philosophy, notably the ethics of Aristotle. As we will show, however, it resembles ancient Chinese notions of happiness in some respects. It seemingly differs from the typically *modern* Western conceptions in being less subjectivist, less individualist, less centred on feelings or preferences, and more concerned with the *conduct*, as opposed to the *products* or *gains* of life. Yet especially when considering how it has been operationalized and applied to empirical research, it still appears strongly centred on matters of individual psychology; and the emphasis on self-expression, self-development etc. (see e.g. Delle Fave et al. 2011) might seem to reflect other aspects of a distinctively modern, Western conception of a successful life.

2. Happiness in traditional Chinese philosophy: Emphasis on virtuous character

It might be thought that ancient Chinese philosophy is largely irrelevant to the "happiness situation" in contemporary China. Yet it is widely acknowledged that Confucianism and Daoism has had a deep and enduring influence on Chinese Culture (Ivanhoe 2012), and that the old philosophical traditions have molded even the meaning of modern concepts (Lu 2012) and shaped the mentality of Chinese people (Hwang 1996). Hence by interpreting the principles of Confucius[6] (Kong Zi 孔子, 551–479 BC), and exploring his perspectives on happiness and the good life, we might also learn something about the conceptual and spiritual underpinnings of contemporary Chinese culture and how far it resembles and differs from Western forms of thinking.

For elucidation purposes, it is necessary to introduce Chinese philosophy in a broad sense, as a means of paving the way to the fundamentals of Confucius' philosophy, which can be considered a spiritual foundation for Chinese civilization. There are three main streams of thought

[5] In *principle*, hedonic theories allow for the possibility that one might achieve happiness even in the absence of typical external causes (like wealth, achievements, societal status etc.). However, pleasurable experiences and positive affect is assumed to be, as a matter of fact, and in most individuals, contingent upon external stimuli; the same goes for life satisfaction.

in the history of Chinese philosophy: Daoism, Buddhism and Confucianism. Although none of them specifically define happiness in their writings, the term *le* (乐) seems to be more or less synonymous with "happiness". Daoism and Buddhism, in contrast to Confucianism, appear more "other-worldly", representing schools of thought that "wander beyond the bounds of society" (Fung 1966:7). In addition, these two schools teach that life is a source of pain and are motivated by an attempt to mitigate or eliminate suffering. They differ vastly, however, in their approach to how to avoid misery. The ultimate goal of Daoism as a philosophy is to follow nature. It emphasizes a sort of harmonious coexistence of mankind with the whole of nature, which is what makes up the universe – it is called "The Great Oneness [7](大一)" by the ancient Chinese philosopher, Hui Shi(惠施) (Fung 1966:2). Given that everything is encompassed by the universe, there is no differentiation between what is pain and what is happiness. The supreme *le* (乐), according to Daoism, is a state of spiritual balance – neither cheerful feelings nor sadness, but assimilating individual beings into nature in general.

By contrast, the philosophy of *le* (乐) (Buddhists refer to it as "sukkah") in Buddhism lays particular emphasis on transcending humanity – obliterating all that makes beings susceptible to pains, be they positive or negative, and acquiring a psychological state of tranquility, "emptiness(空)", or "nothingness" (Alitto 2009). This could be seen as an equivalent of Haybrons' notion of attunement (Haybron 2008; 2013), and also appears similar to ancient Greek notions of happiness as *ataraxia* (equanimity) championed by, inter alia, Epicurus, the Skeptics and the Stoics. According to the Buddhist doctrines, the status of supreme *le* (乐) could be achieved by leaving the practical world, turning to mountains or monasteries and the like, and living a contemplative and meditative life.

In contrast to Daoism and Buddhism, Confucius maintained that the humans belong in a practical world; they ought to care about personal affairs in the "this-worldly" (Fung 1966:7). Hence a central tenet of Confucianism is "roaming within the bounds of society" (Fung 1966:22).

[7] " The largest unit has nothing outside it. This is called the Great Oneness. The smallest unit has nothing within it. This is called the Small Oneness."-Zhuang Zi Tian Xia（《庄子 天下》 "至大无外，谓之大一，至小无内，谓之小一。"）

In the *Lun Yu* (论语)[8] (also known as the *Analects*; a book reporting Confucius' discourse which was compiled by his disciples), Zilu asks about how to serve the spirits and the gods, and Confucius answers: "*Not yet being able to serve other people, how would you be able to serve the spirits?*" Zilu asks again: "*May I ask about death?*" Confucius replies: "*Not yet understanding life, how could you understand death* (Lun Yu 11.12)"? Since we are predominantly human beings who are unable to leave the secular world, it is inevitable that most attend to the rules and principles governing worldly existence.

Unlike Aristotle, who asserted that the ultimate good is happiness (Aristotle 1999), Confucius never specifically claims that pursuing happiness is an ultimate goal. Yet he has also an ideal state in mind, which is centered on happiness emerging from pursuing one's "way"[9] (dao 道).

Confucius strongly linked a virtuous character, *ren* (仁), with *le* (乐), illustrating that only someone with the distinguishing characteristic *ren* (仁) can live in perpetual enjoyment (*le* 乐) and without anxiety. He stated that "*Those persons without ren (仁) are neither able to endure hardship for long, nor to enjoy* (*le* 乐) *happy circumstances for any period of time. Those persons with ren (仁) are content in being the state of ren (仁) ; wise persons (zhi 知) flourish in it.*" and in another episode: "*one with ren (仁) is not anxiety-ridden* (Lun Yu 4.2; 9.29)". It appears that *le* (乐) in Confucius could be the result that spontaneously ensues from *ren* (仁). While it seems conceivable that happiness, as understood by Confucius, could be achieved in other ways, it makes sense of speaking of "the" path, because of the very tight like between ren (仁) and happiness. According to Confucius, persons without ren (仁) are neither able to endure hardship for long, nor to enjoy (le 乐) happy circumstances for any period of time. On the other hand, persons with ren (仁) are able to endure hardship for long and enjoy (le 乐) happy circumstances for any period of time.

[8] The Confucian principles presented in this paper were chiefly based on the edition by Yang Bojun (杨伯峻). We have used the English translation by Roger T. Ames and Henry Rosemont, Jr. (1998), with the exception of the interpretation of *ren* (仁) and *le* (乐).

[9] Confucius once said, "If at dawn you learn of and tread the way (dao 道), you can face death at dusk"(Lun Yu 4.8).

With regard to *ren* (仁), it initially appears quite easy to attain. Confucius in *Lun Yu* (论语) declared that "*How could ren (仁) be at all remote? No sooner do I seek it than it has arrived* (Lun Yu 7.30)". It seems as if *ren* (仁), it would appear right away; it sounds like a relatively easy and simple task. Yet this is too simplistic. *Ren* (仁) has both a shallow and a more profound meaning. Confucius never casually evaluated his students as to whether they were in the state of *ren* (仁) or not, with the exception of his favorite disciple Yan Hui. He took particular pride in him, and in one episode stated, "*With my disciple, Yan Hui, he could go for several months without departing from ren (仁) thoughts and feelings (xin 心); as for the others, only once in a long while, might ren (仁) thoughts and feelings make an appearance* (Lun Yu 6.7)". Confucius did not even dare to consider himself to be a person with *ren* (仁) (Lun Yu 7.34). In this sense, *ren* (仁) appears to be a relatively difficult state to achieve.

There is no consensus about the nature of *ren* (仁). Scholars have proposed different interpretations, describing it, for example, as "perfect virtue (仁德)" as in Fung Yu-lan (1952;1966) or as a moral feeling that comes to those who follow the way (*dao* 道) as in Philip Ivanhoe (2013), yet others for instance, Liang Shu-ming (2019), interpret it as the original "heart-mind" (仁/心). The former are associated with a sense of nurturing, perceiving it to be the sum of all human virtues; while the latter concerns a natured capability, in which Liang construed it as "an all-encompassing, empty and impartial mind"(Alitto 2009), an ability to judge all that is right - a manifestation of human nature; the original state of one's mind; the most normal state that a person has. It has also been claimed by Wong (2017) to be an ethical capability that makes ethical judgement possible, and an original feeling of "transference' to nourish things as they come. However, Luo (2012) has contended that none of the above terms accurately capture the genuine Confucian notion of *ren* (仁), arguing that *ren* (仁) is a plural, integral, higher-order virtue with respect as its primary (but not sole) component. Nevertheless, this understanding of *ren* (仁) could perhaps still fit under the rubric of "perfect virtue".

Although Confucius did refer to *ren* (仁) with various meanings, be it a feeling or perfect virtue, he seemingly did not see them as having equal importance. It seems that the interpretation of *ren* (仁) as a natured capability outweighs that which sees it as a nurtured one. Some episodes

in *Lun Yu* (论语) clearly support this, for example "*It is a rare thing for someone who has a sense of filial and fraternal responsibility (xiao ti 孝悌) to have a taste for defying authority. And it is unheard of for those who have no taste for defying authority to be keen on initiating rebellion. Exemplary persons (junzi 君子) concentrate their efforts on the root, for the root having taken hold, the way (dao 道) will grow therefrom. As for filial piety and fraternal responsibility, it is, I suspect, the root of ren (仁)* (Lun Yu 1.2)". Apparently, *ren* (仁) could be understood as an innate feature or human beings, which could also take on a more negative form. Opposed to *ren* (仁) is a "numbness (insensitiveness 麻木不仁)," that gradually develops as we keep ourselves aloof from the state of *ren* (仁) when our heart-mind, little by little, becomes indifferent and callous, affected profoundly by our social-cultural experiences and other things. It occurs in an unconscious way, with subtle influences exerted by the environment in which people are immersed. We can use Confucius' reaction to one of his disciples to further illuminate the state of "numbness (麻木不仁)." In response to Zai Yu's inquiry as to why it was necessary to mourn a dead parent (an issue of filial piety), Confucius asked *Would you then be comfortable eating fine rice and wearing colorful brocade?" "I would indeed," responded Zai Yu. "If you are comfortable, then do it," said Confucius, adding that "When exemplary persons (junzi 君子) are in the mourning shed, it is because they can find no relish in fine-tasting food, no pleasure in the sound of music, and no comfort in their usual lodgings, that they do not abbreviate the mourning period to one year. Now if you are comfortable with these things, then by all means, enjoy them." When Zai Yu had left, "Zai Yu is really perverse (bu ren 不仁)! It is only after being tended by his parents for three years that an infant can finally leave their bosom. Then ritual of a three-year mourning period for one's parents is practiced throughout the empire. Certainly Zai Yu received this three years of loving care from his parents!" remarked Confucius* (Lun Yu 17.21).

In this case, Zai Yu took for granted the way in which he treated his parents; his heart-mind had been profoundly impacted by external issues, and was quite remote from the original state. In contrast, Confucius expresses a view of the "heart-mind" that is similar to Mencius'[10] "Ce Yin Zhi

[10] Mencius (Meng Zi 孟子 372–289 BC) was an important early Confucian thinker.

Xin (恻隐之心)[11]", implying that one has a natural ability to feel whether things are good or bad (this resembles later Western "sentimentalist" ethics, associated with the like of Hume (1978), Smith (2010) or Scheler (2000): for contemporary versions, see e.g. Nussbaum 2001; Prinz 2004; 2005; 2007). This was also interpreted by another of Confucius's followers, Wang Yangming[12], as *conscience* (良知) （Wang 1963:40). Our heart-mind will be ethically restless whenever we do something inappropriate, even if we have countless reasons to persuade ourselves that it is justified. Basically, this uneasy sensation could be perceived as a symptom the presence of *ren* (仁), as a kind of "moral compass", and without such uneasiness in the heart, one is seen as being remote from *ren* (仁). Confucius's *ren* (仁) invariably maintains a tender heart of innocence, that is genuinely sensitive to everything in the world – possessing the ability to empathise with others and having a positive attitude to, and right direction in, life. Confucius also once said: "*The authoritative person (ren 仁) alone has the wherewithal to properly discriminate the good person from the bad* (Lun Yu 4.3)". Obviously, he regarded this aspect of *ren* (仁) as *original heart-mind* (仁心) as more important than the other.

Understood like this, Confucius' notion of *ren* (仁) may seem to resemble still other notions from Western philosophy than those with which it has usually been compared. For it seems to refer primarily (if far from exclusively) to a kind of fundamental attitude, a willing to do the right thing, whatever that may be, which at the same times constitutes one's innermost self and self-understanding. This makes it less similar to the Aristotelian notion of virtuous character, and more similar to notions of authentic existence associated with existential philosophy. For while Aristotle did take virtuous character to consist in fairly deep and naturally grounded dispositions, he saw is as less a matter of personal attitude. By contrast, existential philosophers like Kierkegaard have seen a fundamental unity of self-understanding, self-approval, moral attitude and practical vocation as the basis for a good life (Kierkegaard 1992; Klausen 2018). This parallel does not speak against our hypothesis that Chinese notions of happiness may differ significantly from Western ones, as the existential philosophers' view have had only a marginal influence, and hardly no influence at all on the notions of happiness that have been employed in empirical research. It is

[11] Refering to *Gao Zi Zhang Ju Shang* of *Mencius* (《孟子》的《告子章句上》).
[12] Wang Yangming (王阳明 1472-1529), one of the Neo-Confucians representing the idealistic wing, who developed Confucian doctrines to a new height.

important, however, because it helps to correct the stereotype of Chinese notions of the good life as being one-sidedly collectivist or conformist. Interpreted this way, Confucius notion of virtuous character is actually less collectivist or socially conservative that Aristotelian virtue ethics.

On the other hand, Confucius' different replies to his disciples when responding to their enquiries about the conception of *ren* (仁) can probably be seen as an evidence that "perfect virtue (仁德) – like *li*(礼), *jing*(敬), *gong*(恭) – could be leveraged as a virtue *tool* which supplements the *original heart-mind* (仁心), especially when people are gradually departing from the status of *ren* (仁). For example, to Yan Hui, Confucius' answer is "*[t]hrough self-discipline and observing ritual propriety (li 礼) one becomes authoritative in one's conduct* (Lun Yu 12.1)"; to Zhonggong, "*Do not impose upon others what you yourself do not want, and you will not incur personal or political ill will* (Lun Yu 12.2)"; and to Fan Chi, "*At home be deferential (gong 恭), in handling public affairs be respectful (jing 敬), and do your utmost in your relationships with* others (*zhong* 忠)(Lun Yu 13.19)".

It can be seen that *ren* (仁) cannot simply be reduced to a good that everyone possesses, like *li*(礼), *jing*(敬) or *gong*(恭), but refers to the intuitive capability for distinguishing right from wrong, which can be the foundation of a more comprehensive, nurtured capability. This inborn capability brings together the making of a person by mutual enhancement in the areas of *li*(礼), *jing*(敬), *gong*(恭) and the like (Tan, 2003). In other words, the interpretation of *ren* (仁) as an innate capability is the root of that as a sum of all these virtues.

2. Virtuous character and the happiness-income paradox

The emphasis on *ren* (仁) as *the* path to happiness might to some extent explain why the Chinese have been reported to be unhappier than they have previously been. Seen from the perspective of Confucianism, it would seem that they have generally moved away from the state of *ren* (仁). This could either be a straightforward cause of unhappiness, granted that Confucius was right, or it could be a source of *reported* unhappiness, assuming that the ideal of *ren* (仁) is deeply ingrained in Chinese culture and, even if is not explicitly endorsed, still condition the self-perceptions and self-evaluations of modern Chinese people.

While there is no denying that society has been economically progressing, with remarkable advances in modern technology, this process has hardly been conducive to qualities like innocence, conscience or ritual propriety; and the social values that are essentially related to *ren* (仁) have been widely neglected. According to Alitto (2009), Confucius' *ren* (仁) is grounded on the "innate nature clinging to the idea of self," which fundamentally is the nature that makes humans human, but at the same time might be in conflict with that what makes humans "rational" in the process of modernization (where "rational" is understood as "tending to act self-interestedly"). It implied that the person who was inherently able to feel the enjoyment of life her entire life was happy. As long as she was able to survive, no matter what crises she encountered, she could strongly feel happiness simply by breathing and being present in the moment.

Since China implemented the open-to-the-world reform, Chinese social conventions have been encroached by ideals from Western culture. The gradual loss of values that have been constitutive of the identity of Chinese people may have contributed to making them less sensitive and consequently less able to enjoy life. And even if it has not had quite as fundamental an impact, it may have created a tension between their different standards of self-evaluation, likewise leading to a reduction in their reported happiness). A survey on the *2004 Report on the Quality of Life of Chinese Residents* showed that nearly 80% of Chinese residents felt happy in life, and rural residents were happier than urban ones (Ru et., 2005). A similar phenomenon, that is now termed the "happy peasant and frustrated achiever" problem, has been identified based on research in Peru and Russia (Graham, & Pettinato 2002). Confucius seemed to have addressed this when speaking of different aspects of *ren* (仁), saying "*[b]eing firm, resolute, honest, and deliberate in speech is close to authoritative conduct (ren 仁)* (Lun Yu 13.26)", but also "*It is a rare thing for glib speech and an insinuating appearance to accompany authoritative conduct (ren 仁)* (Lun Yu 1.3)", with the former referring to the status of *ren* (仁) in peasants and the latter in achievers. Though one should be wary not romanticize difficult living conditions, it is not unlikely that peasants and rural residents have retained a life directed by something akin to "the original heart-mind", while achievers and urban residents may have been deeply influenced by the more and more complex contexts surrounding them, with outward social customs and replacing deeper or lasting notions of what life itself was supposed to be about.

3. Confucius' notion of Happiness – le (乐),

As suggested above, one explanation of the happiness-income paradox might be that pleasure is contingent upon external matters, and that our initially sensitive and receptive heart-mind has been modified to eventually become insensitive. Standard happiness economy proceeds from the assumption that higher income diversifies one's opportunities and choices and so maximizes preference satisfaction (Weimann, et. al, 2004). But apart from problems about hedonic adaption and insatiable preferences (with more wealth comes a wish for still more), there can also be reason for to doubt that mere accumulation, that is, mere quantitative maximization of pleasures or goods, can ever be transformed into sufficient quality of life. In any case, Confucius was highly critical of accumulating, or merely striving for, material wealth: *"To act with an eye to personal profit will incur a lot of resentment"* (Lun Yu 4.12). This is not just a point about the negative instrumental side effects of gaining personal profit. Confucius seems primarily concerned with the effects that striving for material wealth will have on one's character. According to his line of thought, one's mind will be gradually affected by this focus on quantifiable goods; the innate heart-mind becomes, bit by bit, merged with these values, and in the end, loose themselves without noticing or necessarily feeling any pain in the process. This may be one of the sources of the apparent unhappiness documented by recent empirical studies.

Confucius maintained the importance of happiness *stability*, be it in an affluent or an impoverished situation. For example, Confucius once remarked: "*I am happy (le 乐) with eating coarse rice, drinking only water, and lying down with my bended arm for a pillow. To me, those riches and honours are floating clouds if they are acquired by unrighteous means* (Lun Yu, 7.15)". Also, in response to one of his disciples, Zigong's, inquiry about whether it is virtuous to be in the state of being "*poor but not being adulating, rich but not being arrogant*," Confucius answered: "*That's fine, still not as good as the poor are happy (le 乐) and the rich are courteous (li 礼)* (Lun Yu, 1.15)". In addition, he highly praised the way of happiness that Yan Hui, his favorite disciple enacted: "*Incomparable indeed was Hui. A handful of rice to eat, a gourdful of water to drink, and living in a mean street: these, others would have found unbearably depressing, but for Hui's happiness (le 乐), they made no difference at all. Incomparable indeed was Hui* (Lun Yu, 6.9)".

As can be seen, Confucius' level of happiness, as well as that of Yan Hui, is described as being not prone to fluctuations, no matter how grave the external situation may have been.

Superficially, Confucius led a life that closely resembles that of an ancient Stoic. Like the Stoics, he did not resist a wealthy life categorically, rather insisted that the basic needs of human life should satisfied in accordance with ethics (Luo 2019 claims that Confucius' happiness consists mainly in ethical pleasure, that is, in the satisfaction of ethical desire). However, he took happiness to be dependent upon the nature of human beings through which it was obtained, and cared for a positive emotional state, whereas the Stoics is thought to have strived for indifference to, and extinction of, the emotions (though this interpretation has been contested; the Stoics may have been closer to Confucius' view in merely advocating emotional moderation and stability (see Baltzly 2019).

As such, Confucius' happiness may not have been derived from the satisfaction of external matter, but from the affirmation of mind and ethics – with "an all-encompassing, empty and impartial mind" in the process of meeting the innate desires (Alitto, 2009). Generally speaking, Confucius' happiness (*le* 乐) may be composed of three dimensions: At the very bottom level lies happiness (*le* 乐) with *ren* (仁), which is a sort of psychological affirmation (*xin an* 心 安) – being at rest in any situation, basing happiness upon the original heart-mind by following what the inborn nature desires. In the middle lies happiness that comes from being immersed in activities, where a person is motivated by her persistence in craving for knowledge; and in the highest level is a sort of "ethical spontaneity", where the person freely follows her way (dao 道), without moral or emotional perturbance.

Concerning the first dimension, *le* (乐) could be thought of as an accompaniment of *ren* (仁), which is a psychological disposition corresponding to innate desire. As mentioned above, *ren* (仁) is an appropriate balance between one's mental self and innate desire, so when individuals have achieved this state, *le* (乐) will naturally follow. At this level, *le* (乐) is a state of awareness that is crucial for the survival of a living being; it is an optimistic mindfulness that emerges from inborn desires as a result of feeling the pleasures of surviving and coping with life. It is not influenced by externals but is a matter of pleasure supervening "innate desire clinging to the idea of self." According to an episode in *Lun Yu* (论语), Confucius remained mentally unperturbed, even though he was suffering from a severe predicament (during the tough period in Chen Cai 陈蔡), where

food sources were lacking, but he was mindful of the fact that biological life continued and there was nothing else that was more important than life. In daily activities, he enjoyed the pleasures derived from the satisfaction of basic desires, which, as above mentioned, were different from leading an ascetic life – as the former could be seen a natural process, whereas the latter was a matter of artificially self-restricting activities. Confucius was capable of feeling pleasure anytime, anywhere, as did Yan Hui.

This level of *le* (乐) might be compared to a child's happiness. Also the happiness of the happy peasants and rural residents mentioned above seems to exemplify it. Whenever negative emotions emerge, such as sadness or anger, they as dismissed as "easy come easy go." In *Lun Yu* (论语) it is reported that "*On a day when Confucius had wailed in grief, he would not sing* (Lun Yu 7.10)". However, by the next day, he would immediately return to a normal state, without even being slightly emotionally disturbed by other things. In fact, *le* (乐) may not be conceived as a conscious state, but rather as a capability. For it seems that Confucius had successfully transformed "feeling pleasure" into the function of "being pleasant". This capability would remain unchanged, whatever the vicissitudes of his past life, be it affluent or impoverished. This is a further way in which Confucius' notion of happiness resembles Haybron's contemporary "emotional state" theory of happiness (2008), which likewise take happiness to a propensity rather than an occurrent mental state, and emphasizes emotional stability (for partial criticism, see Klausen 2016)

The second dimension is happiness with engagement in learning, a psychological experience of self-growth and discovery, representing a level of *le* (乐) arising from the perpetual craving for knowledge, by combining one's ability to "be pleasant" ability with taking on a challenging task. Confucius reportedly said "*I was not born learned. I simply love ancient things and diligently seek knowledge from them* (Lun Yu, 7.20)". "*To quietly persevere in storing up what is learned, to continue studying without respite, to instruct others without growing weary – is this not me?*" (Lun Yu, 7.2). "*How would I dare to consider myself a sage (sheng 圣) or an authoritative person (ren 仁)? What can be said about me is simply that I continue my studies without respite and instruct others without growing weary* (Lun Yu 7.34)". "*It is better to love knowledge than just to know about it; it is even better to take pleasure out of knowledge than just to love it* (Lun Yu, 6. 20)". Clearly, the implication is that the pleasure that comes from knowledge is superior. Consider also

the passage: "The *Duke of She asked Zilu about Confucius, but Zilu did not reply. Confucius said, "Why didn't you just say to him: As a person, Confucius is driven by such eagerness to teach and learn that he forgets to eat, he enjoys (le 乐) himself so much that he forgets to worry, and does not even realize that old age is on its way?*" (Lun Yu 7.19)". This suggest that when a person is fully engaged in an activity, she does sense the passing of time, and has achieved a state of mind comparable to what has in modern psychology been termed *flow*, characterized by intrinsic motivation and self-forgetfulness (Csikszentmihalyi, 2008).

The first two dimensions of happiness put significant emphasis on following the original heart-mind. However, humans reside different societies with different conventions. Hence Confucius had to add further aspects to his description of the way (dao 道), in order for moral desire to be compatible with the inborn heart-mind (inborn desire) (Luo 2019). In *Lun Yu* (论语), Confucius states how he wants to be able to *freely follow the dictates of his own heart-and-mind, without overstepping the boundaries of what is right* (Lun Yu, II,4)". Apparently, this is a state of ethical spontaneity and harmony, in which his happiness arises from enjoying making perpetual progress toward possessing *ren* (仁) and assimilating conventional morality to one's personal principles. This level of happiness is not an emotional cheerfulness, but rather a sort of permanently acquired capability of for self-cultivation. This shows similarities with the "capability approach" of Amartya Sen, which is likewise presented as an alternative to "hedonic" notions of wellbeing (Sen, 1992). As the third level of happiness is also about a maintaining a harmonious relationship, Confucius' view closely matches what is seen as a distinct feature of Chinese culture (Lu & Gilmour 2004), among all of the members, including the old and young and that they get to live a life without worry.

In sum, it can be said that Confucius saw happiness as dependent on human nature and on "walking the path of happiness"; he did not aim to "end the game of life", but rather tried to enhance the possibilities for its continuation and follow his way (dao 道) (Carse, 1986). However, the challenge is how to maintain the balance he required, especially in contemporary societies dominated by the concern for material wealth.

III. Conclusion

The Confucian notion of happiness differs markedly from the Western "hedonic" notions of wellbeing used in empirical research. It emphasizes long-term stability, harmony between a person's inborn proclivities and, being immersed in activities, maintaining a fundamental moral attitude. All of these aspects have been emphasized by certain Western notions as well, but not in the specific combination, and mainly by strands of Western thinking about happiness that have remained alternative or marginal.

As we noted in the beginning, the standard explanations of the happiness-income paradox may be at least partially right. Indeed, there may be rather straightforward explanations. That the Chinese are less satisfied with their material success may reflect the fact that average income has not reached its satiation point. Wang (2013) suggests that Chinese are not affluent enough. This is plausible, considering that the recent societal changes have made income more salient and important for success. But it is also plausible that some Chinese are less satisfied with the "way" to they have achieved their wealth, especially in the absence of appropriateness (yi 义). In fact, both factors may be at work at the same time: the wealth is perceived as insufficient, and the way it has been obtained as unsatisfactory or inappropriate (consider again Confucius:) "*Wealth and position gained through inappropriate (buyi 不义) means – these are to me like floating clouds" (*Lun Yu 7.16).

The happiness-income paradox may reflect a loss of fundamental orientation, or a growing dependency on highly contingent factors. That reported life-satisfaction has risen somewhat again during the last decade is not evidence against this. It can be a sign of a kind of more superficial "hedonic adaptation", that is, the adoption of standards of self-assessment more in tune with "hedonic" measures and less tied to the more traditional notions. The numbness (麻木不仁) that Confucius thought would result from abandoning virtuous habits may also be such an adaptation effect, which prevents contemporary Chinese people both from enjoying the simple pleasures *and* from experiencing this as a painful.

China has been, and is still, viewed as a collectivistic culture. But this seems also to be changing. Cai, Kwan, and Sedikides (2012) have recently noted an increasing preoccupation with self, an indicator of individualism, in young Chinese adults as a result of the one-child only policy, increasing urbanization, and higher socioeconomic status. This might explain the negative findings (the "paradox"), as it has probably led to widespread self-doubt, anxiety and restlessness. But it might also explain the recent, (allegedly) somewhat more positive findings, as it indicates a gradual

abandonment of the Confucian ideal and an adaptation of new standards of successful living. Whether the findings should be seen as being really positive depends, again, on the extent to which one adopts a Western, "hedonic" notion of happiness. On the traditional Confucian notion, they should probably be seen more as a symptom of people having strayed from the path of true happiness.

Our reflections should be seen as a prelude to new kinds of empirical research, which are strongly needed in order to obtain real knowledge of the "happiness situation" in China. It may be of some help to supplement the use of "hedonic" measures, like life-satisfaction or affective happiness, with "eudaimonic" measures that appear closer to traditional Chinese notions of happiness. But even these may still be so foreign to the Chinese notions, for example by being more individualist and more centered on original or outstanding accomplishment, that they have to be further modified or supplemented with still others.[13] Qualitative studies that are not committed to special notions in advance may be what is mostly needed, in order to obtain deeper knowledge of the interplay between culturally induced notions, self-understanding, standards of self-assessment and actual events and experiences in the life of contemporary Chinese.

Finally, one fundamental difference between the Chinese and the Western approaches to happiness needs to be emphasized. The widely reported "unhappiness phenomenon" was never much of an issue in Chinese society. The very preoccupation with maintaining and controlling happiness, with gaining experiences and achievements, seems to be distinctive of the Western, rather than the Chinese approaches. Hence in spite of the apparent evidence for a happiness-income paradox, it might be argued that the happiness situation has remained fundamentally the same. The Chinese, it could be said, are still broadly conforming to Confucius' ideal of being immersed in activities and "walking the path of happiness" without caring much about how far this meets certain standards of achievement – *being driven by such eagerness to teach and learn that he forgets to eat, he enjoys (le 乐) himself so much that he forgets to worry, and does not even realize that old age is on its way" (Lun Yu 7.19).* They may be unhappy according to Western notions, but not particularly unhappy *about* this.

[13] A recent study (Margolis et al. 2020) shows that different wellbeing measures are far from perfectly correlated, and that empirical findings based on one particular type of measure may not generalize to all types of wellbeing.

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12. Article 2

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Filial Piety, Generativity and Older Adults' Wellbeing and Loneliness in Denmark and China

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Abstract

The article considers the potential of intergenerational encounters and family and social ties for alleviating loneliness and promoting older adults' wellbeing. Loneliness has been widely recognized as one of the factors that are most deeply and pervasively detrimental to older adults' wellbeing. We combine theoretical reflections with a comparative study of older adults in Denmark and China. Both countries have to deal with an aging population and growing number of cases of isolation and loneliness in an increasingly individualized society. They differ, however, with regard to how far they have developed a system of institutionalized care, as well as with regard to their culture-specific views of family life and parent-child relationships. We apply the notions of filial piety, known from Confucian philosophy but often misinterpreted as conservative

and conformist, and generativity, to qualitative studies of older adults in Denmark and China. The great potential of intergenerational ties is confirmed. Our study also shows that filial piety is still highly valued, in both China and Denmark, and can be maintained even in a highly individualized society. There is, however, considerable uncertainty among both older adults and their younger relatives as to what is required and what can be expected; realism, and an emphasis on the quality, rather than the quantity of interaction, may be sensible coping strategies, but can also lead to unnecessary acquiescence and self-abnegation. Our study also serves to distinguish different aspects and effects on wellbeing of intergenerational relationships.

Keywords: Intergenerational encounters and wellbeing; generativity; older adults; loneliness; filial piety; comparison of Denmark and China; Chinese philosophy; interpretative philosophical analysis

1. Introduction

Loneliness has been widely recognized as one of the factors that are most deeply and pervasively detrimental to older adults' wellbeing. Modern theories of psychosocial development and ancient Chinese philosophy both give reasons to expect that intergenerational encounters and close family ties may help to alleviate loneliness and provide older adults with a sense of living a meaningful and satisfactory life. In this paper we combine theoretical reflections with a comparative study of older adults in Denmark and China. Both countries have to deal with an aging population and growing number of cases of isolation and loneliness in an increasingly individualized society. They differ, however, with regard to how far they have developed a system of institutionalized care, as well as with regard to their culture-specific views of family life and parent-child relationships. We will focus on the Confucian concept of filial piety and the modern idea of generativity, asking whether and how they might contribute to alleviating the problem of loneliness among older adults. Our study also serves to distinguish different aspects and effects on wellbeing of intergenerational relationships.

While the notion of filial piety comprises a wide variety of attitudes, practices and obligations, and has often been associated mainly with rituals, conventions, material support and care, we will focus especially on the dimension of emotional ties and emotional support. We do so

because we are targeting an emotional predicament, viz. loneliness, but also because we take the Confucian notion of filial piety to be at root more about attitude and emotional bonds than outward reverence or material support (see Sung 2001 for similar observations), and not least because the emotional and qualitative aspects were strongly emphasized by the participants. We also note, however, that emotional and practical aspects of care are often intertwined, and that the apparently one-sided emphasis on emotional bonds comes with certain qualifications.

2. The spectre of loneliness and the promise of filial piety and generativity

Loneliness has been defined as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (Perlman & Peplau 1981). Together with e.g. smoking and alcohol consumption, it has been shown to be a hugely detrimental factor, imposing threats leading to poor mental health, quality of life (Holt-Lunstad et., 2015), declining cognitive function (Zhong et., 2017) and increased mortality (Luo et., 2012).

Due to large and rapid improvements in living conditions, the world is aging. But as it does so, the level of loneliness experienced by older adults is also rising. In China, for example, the prevalence of loneliness in older adults increased from 15.6% in 1992, to 29.6% in 2000 (Yang & Victor 2008); it was reported to be 28% in a study by Luo and Waite (2014). On the other side of the earth, evidence from recent studies shows that 10 to 20% of the elderly in Northern and Western Europe suffer from loneliness (Hansen & Slagsvold 2016); and in another study comprising of 767 older adults, 17.9% aged 65 years and above reported feeling lonely (Due et., 2017). These figures make clear that loneliness knows no borders nor differentiates between nations. Some have claimed that the problem is due to the insufficient care systems provided by the state for its citizens (Jackson & Liu 2017), but the figures indicate that countries with advanced care systems do not fare significantly better.[14]

Loneliness has been found to be associated with social changes. In China, the availability of the traditional family all-round care, of which the Confucian notion of filial piety (xiao 孝) is the pillar – children are obligated to live with and take care of their aging parents (Chu et., al 2011)

[14] As Jackson & Liu (2017) also make clear, it is a matter of not only the quantity, but also the quality of the care in question. It is debatable, however, whether a system of institutionalized care, no matter how advanced, can meet all the needs of an older adult.

– is significantly influenced by social transitions which has been attributed to the one-child only policy, the decline of the family household structure, and increasing migration and urbanisation (Liu 2017; Zhang & Goza 2006; Cheung & Kwan 2009). A rising sense of individualism, particularly in the younger generation, coupled with a significant increase in life expectancy in the older generation (Jackson & Liu 2017), has resulted in a disproportionate decrease in the availability of family care (Flaherty et., 2007); the family may not be able to provide the necessary support for older adults. Yet families remain the primary source of welfare and support to the elderly in contemporary China, with support from the state care system usually seen as the last resort (Shang and Wu 2011; Lin 2014).

Along with these changes, what is perhaps more distressing for the older adults is the emotional negligence that they can encounter from their adult children. According to Lao et al., (2019), adult children often consistently refuse to visit parents living in care homes, some even leaving periods over one year between visits. As such, a deeper cause behind the emergence of loneliness in the older adults may be the weakened emotional connection between them and their adult children in the traditional family care unit and a certain "numbness" among people in the homogeneous and standardized state care system, which has come about as a consequence of modernization.

A public care system can be seen as double-edged sword which can be leveraged equally for good or evil. Aging alone in the homeplace or in state care homes are the two distinctive alternatives for older adult care in western countries, and this is also a growing tendency in China. Several recent studies show that the proportion of older persons living alone is steadily increasing world-wide (UNPD 2013; UN 2017). This is an understandable norm in the context of limited family care provision, or at least, where there is no necessity for immediate care. Some hold that aging in the home might increase the opportunity to engage with friends and family, whereas others suggest that it might be a source of negative experiences of loneliness and social isolation (Evans 2007). Making older adults live at home as long as possible is preferable for policy makers, at least from an economic point of view, as it significantly reduces the cost of health care if the elderly opt out of institutional care (Sixsmith et. al. 2008). In addition, those living in care homes score higher in terms of depression and hopelessness than those living at home (Ron 2004). Some form and degree of institutionalized care is clearly unavoidable in modern societies; the question is whether and to what extent loneliness among the elderly is also unavoidable.

Institutionalized care is usually good at satisfying basic practical needs, whereas it may be less good at supporting older adults' emotional and existential wellbeing. It also adheres to the principle of universalism. This might make it less well suited for addressing particular conditions and experiences, which are presumably important factors in loneliness and depression.

According to Klein et al. (2017), older people without a partner, and living alone without children, exhibit a greater degree of loneliness than others. In contrast to this, in familistic cultures, people tend to emphasize and expect strong ties within the family and community. One might assume that such cultures prevent loneliness by promoting social integration. A similar assumption is supported by the notion of generativity that was coined by Erik Erikson as part of his psychosocial theory of personal development. Generativity refers to a special concern for younger people and felt need to contribute to the next generation, which develops during middle age and becomes stronger as the person grows older (Erikson 1997).[15] Seemingly, there are differences between the notions of filial piety and generativity, as the latter also includes a concern for the younger generation beyond one's own family, and the emphasis is on how older people care for the younger, rather than the other way around. Yet both filial piety and generativity obviously entails a mutual relationship (see below), as older people can only take part in the lives of the younger if they are given the opportunity to do so, which requires attention and respect from the young, and not least from the children.

Studies of the influence of family relations on older adults wellbeing have been relatively sparse in Western countries, probably because they do not match the dominant values and assumptions – e.g. that authentic and existentially satisfying emotions are not essentially related the parent-child relationship, but instead belong to marriage, sexuality and friendship (Giddens 1992; Gabb 2008; Jamieson 1998, 2011), or that close family ties and obligations are an obstacle to individual emancipation and self-realization (though the notion of generativity has inspired a number of empirical studies, e.g. McAdams et al. 1993; Pratt et al. 2008; Villar 2012; Ehlman & Ligon 2012).

[15] Erikson actually assumes that generativity becomes *weaker* in very old age, due to a general loss of energy and reduced ability to adapt and change (1997, 112). But he seems to refer rather to the ability to actively *perform* generativity; the felt *need* can be assumed to remain and possibly intensify, and Erikson even says that "it would be worse than death" if one should "redraw altogether from generativity … from caring for and with others" (loc cit.).

By contrast, there is a large volume of Chinese literature that touches upon this topic. In Chinese familistic culture, Confucius' core principle "filial piety (xiao 孝)" serves as a norm for the relationship between older adults and their adult children. To Confucius, the mere core of parent-child love is based on a mutual relationship, in which the love from the parent to a child comes naturally and does not have to be learnt or taught; likewise it is obvious when observing little children that they show a special affection for their parents. This natural biological bonding, however, tends to be gradually withered away as the children grow up and are then in pursuit of their own independence, and their focus shifts to the needs of their own children, rather than caring for their parents (Ni 2010: 80). Furthermore, from a biological perspective, filial piety is not necessary for the evolution of the human species (Ni 2010: 80). That the natural basis is not strong enough to ensure filial piety may be a main reason why Confucius underscored this notion. According to him, the essence of filial piety is human-heartedness (ren 仁), a matter of personal life and attitude, rather than of social norms of natural inclinations.

As noted in the introduction, we have studied filial piety mainly in the context of emotional support, and we have focused on co-residence and keeping company. We do take emotional support to be central to the very notion of filial piety, as we interpret it (see sections 4.iv and 5 below), and its importance was strongly confirmed by our findings. The participants were being asked about keeping company, visits from family members etc., and most of them were living alone or in a care home without a partner or other family members, which may have tended to make topic of co-residence particularly salient. However, without being further prompted – see below on the bottom-up approach to data collection – the participants almost uniformly pointed to the importance of emotional ties.

3. Research design and method

The present study compares Denmark and China for several reasons. First, Denmark is widely regarded as having established one of the most admirable and perfected state care systems in the world, while China is still in the process of developing such a system. Secondly, they represent markedly different perspectives on family life and parent-child relationships. In China the ideal has been a holistic, harmonious and close-knit relationship among family members, centered around parents, couples and children, with an expectance of mutual concern (parents showing kindness to children and children respect for their parents). In Denmark the ideal relationship

appears more restricted and one-sided, centered on couples and small children, with few or any responsibilities of adult children towards their older parents. Moreover, the prevalence of loneliness among older adults in Denmark and other Western countries with an advanced state care system might serve as a cautionary tale to those who are still struggling to establish one: apart from perfecting the care system, what else can be done to help alleviate loneliness and otherwise support the immaterial welfare among older adults? Finally, but not least, we would like to take seriously the possibility that the high expectations associated with strong family ties may increase feelings of loneliness if these expectations are not met (Johnson and Mullins 1987; Jylhä and Jokela 1990; Silverstein et al. 1996). Placing a high value on close family ties may accentuate feelings of loneliness in older adults in countries with high rates of widowhood, decreasing fertility rates etc. (Flaherty et al. 2007).

Some might think that findings from Western and Non-Western countries are not comparable, because of the different cultural contexts and social background knowledge (Yan et., 2014). We agree that these factors are crucially important, seeing them as part of what needs to be studied rather than obstacles to comparative studies, but think that a mixed-methods-, but predominantly qualitative approach enables us to take them sufficiently into account.

Our study is methodologically complex and unconventional. It is based on qualitative data collected by ourselves and student assistants in the context of two other studies of wellbeing of older adults in Denmark, and on the findings of a number of similar Chinese studies as these have been described in research articles and reports. Due to the Covid 19-pandemic, we were not able to carry out a parallel interview-based in China ourselves, as had been originally planned. We are aware of the shortcomings of this asymmetric methodological approach. It can be justified, however, by the fact that there is a greater abundance of extant studies from China; hence what we do is mainly to measure and test our original findings from the Danish studies against existing knowledge about the Chinese case. Moreover, the Chinese studies on which we rely are based on very similar data collection and analysis methods. Perhaps most importantly, the Chinese publications contain extensive quotations from the interviews.

While all the studies on which we base our analyses are characterised by a bottom-up approach, with semi-structured interviews and open-ended questions, one of the two Danish studies targeted the wellbeing of older adults during the Covid-19 pandemic, and this particular

context is likely to have prompted a special focus on loneliness and the role of social and intergenerational contacts.

As for the specific research designs, the first Danish study (Klausen et al., 2020) consisted of a total of 31 semi-structured interviews conducted with care recipients, care workers, relatives and managers from five municipal eldercare units (comprising both resident and home care); the present study uses the interviews with care recipients (5 in total). The group-specific interview guide was developed by the research group based on preliminary impressions from field observations at the care unit. The second Danish study consisted of 17 interviews conducted with older adult (64-97 years old) with different backgrounds and in different living arrangements, including three in residential care. Each interview (in both studies) lasted between 30 and 60 minutes, were recorded and fully transcribed. Both studies were inspired by Interpretative Phenomenological Analysis, a methodology designed to explore the specific experiences of participants in the given context (Smith 2009; 2015). Transcripts were closely read several times, notes were made from these, and emergent themes identified based on the notes. The analysis was informed by our special interest in intergenerational relationships and loneliness. While IPA also has a "hermeneutic" aspect, recognizing the active role of the researcher in making meaning comprehensible by translating it and encouraging the application of psychological concepts (Pietkiewicz & Smith 2014), we are aware that our analysis may have been hypothesis- and concept-driven to an extent that is not typical of the IPA method. It should be noted, however, that not just the analyses but the participants' own descriptions matched the philosophical and psychological notions very closely, in some cases almost verbatim. Hence the use of theory did not, in this case, involve any substantial reconstruction or represent an 'etic' or outsider-, as opposed to an 'emic' or insider-, perspective. The language and emphasis of the theory seemed to be continuous with the language and perspective of the participants. On the other hand, the present study should not be seen as one-sidedly empirical, as it crucially involves the interpretation and application of philosophical notions.

On the Chinese side, we have made most extensive use of Lou & Ng (2012), who conducted semi-structed interviews with 13 older adults living alone. Data were analysed using a "hermeneutic" approach; as in the first of the Danish studies, interviews were supplemented by field notes. The study of Zhang et al. (2019), which we use more marginally, consisted in interviews with 10 older adults with mild to moderate dementia and 14 family caregivers; it also

employed Interpretative Phenomenological Analysis. Lou & Ng (2012) conducted their study in Hong Kong; while there may be some differences as to the pace and level of modernization, and even to cultural background, between Hong Kong, Taiwan (which also figures in the broader literature we have drawn on) and mainland China, we will allow ourselves to ignore them and treat all the studies as uniformly Chinese.

It should be noted, however, that the evidence from China comes mainly from a metropolitan, and even cosmopolitan, area (Hong Kong), where the transformation of values, including the meaning of filial piety, is likely to have been much more thoroughgoing than in rural China.[16] Hence we do not make a comparison between Denmark and China in general, but only between the urban and more developed parts of China and Denmark, focusing particularly on areas where individualization has already taken place. Since a large part of the population in China still lives in rural conditions,[17] and individualization may not have gone very far even in many urban areas, we do not take our findings to be representative of the Chinese population as such, nor do we make any claims as to the prevalence of particular living arrangements. We are interested in filial piety and generativity under conditions of individualization. This is important because the trend towards living alone is significant, anyhow,[18] so the case of urbanized, more or less individualized Chinese has exemplary value.

4. Findings and themes

i. *Intergenerational relationships matter*

A very pervasive theme that emerged in all parts of our study was that intergenerational relationships do seem to be a central factor in older adults' wellbeing. First, in the Danish studies, the participants often answered questions about their own current wellbeing by referring to their former life and accomplishments, including not least their family life, to the present situation of their children and grandchildren (how well they were doing at the time; what had become of them),

[16] Thank you to a reviewer for raising this issue

[17] For a study of intergenerational relationships in contemporary rural China, see Liu (2017)

[18] According to Liu et al. (2020), the proportion of elderly adults living alone in China has increased from 16.7% in 1993 to 27.9% in 2007 (see Lexi et al. 2015 for further statistics indicating a similar trend). In Denmark, 38 % of the older (+65) population lived alone in 2020 (interestingly, although the absolute number is higher than ever, the proportion has been decreasing since 2000, due to a general increase in life length of both men and women (Pabst 2020).

and to how much contact they had to them (the frequency of visits etc.). An 82-year-old male insisted on sharing his view of his personal happiness, which he saw as consisting in "*having chosen the right path*", with respect to both work and marriage (the latter "*no less than two times!*"). A 102-years old female care resident, Gudrun, also spontaneously emphasized what family life had meant to her, and also pointed to the death of a son and the serious illness of another as events that could still disturb her otherwise positive outlook. Reminiscing about treasured life episodes with her adult daughter contribute greatly to lifting Gudrun's mood. Even a 64 old male, who described himself as having deliberately chosen to live alone, and as not being lonely, but just "*being myself*", nevertheless defined happiness as "*an ordinary, good life … in which one is together with one's family or friends …*".

Secondly, the interviews made during the Covid 19-pandemic showed that it matters to older adults, and to their sense of wellbeing, how much it seems to them that they are cared for or recognized by the younger generation in a more general, not necessarily personal way. Carelessness among the younger generation – behaviours that put others' health, especially that of the oldest, at risk – or a lack of awareness of the sacrifices made by the older generation in order to maintain public health and keep society working, was perceived as a source of irritation that added significantly to their predicament. On the other hand, getting a sense of contributing to a good, transgenerational cause (and being recognized as such) served to mitigate the negative effects of being isolated, changing the feeling of loneliness into an experience of being alone in more meaningful, implicitly connected and thus more bearable way. This may have less to do with filial piety as such but highlights the importance of generativity (and see below (v.-vi.) on mutual respect as an element in filial piety, and the intertwining of aspects of filial piety and generativity).

ii. Tensions and ambivalence: Wanting interaction, but not expecting too much

The Danish participants – especially the oldest ones – were keen to play down the importance of receiving attention from their Children, though not seldom these remarks sounded not as if they did not really want such attention, but rather as an attempt of coming to terms with what they considered inevitable, anyhow, as well as reflecting a moral obligation to not being a burden to one's children and not to interfere in their lives and decisions. This supports the assumption that

older adults in Denmark subscribe to individualist values. But the ambivalence as to the actual consequences of individualism also shows that it is not perceived as unproblematic.

Chinese culture is assumed to be more familistic and less individualist (see e.g. Lou et al. 2008). Yet it has been noted that it has also become more individualist in recent times, (Chow 2009; Yan 2009), not just leading to increased neglect on part of the children, as mentioned above, but also making parents increasingly concerned about not burdening or interfering with the lives of their children, not unlike the attitude found in older Danes. Quantitative studies have shown that the older generation now expect even less filial concern from the younger generation than the latter expect themselves to provide (Hsu et al. 2001; Cheng & Chan 2006). In contemporary Chinese society, this seemingly weakened relationship between older adults and their adult children, in terms of intergenerational support and life satisfaction, is more pronounced in urban areas than in rural parts, which chimes with findings in Wu (2021) that there is a rural-urban divide. It does not, however, seem to strongly influence the role of cultural norms (in particular that of filial piety) in moderating the effects caused by modern development. This is consistent with existing research (Yuan et al. 2021) showing that older adults still expect care and attention from their adult children, and that various kinds of intergenerational support, like, co-residence and daily care, do contribute to their well-being.

Traditional understandings of filial piety, such as perpetuating the family lineage of male heirs and assuming financial responsibility, may have transformed partially, due to a transition in economic structure, into more reciprocal forms (mutual understanding and respect – see v. below), in the current Chinese society. A widowed 77 years old Hong Kong woman, revealed in an interview that she preferred living separately from her married daughter because this could bring "freedom" to her and she could thus avoid potential conflicts with her son-in-law: *I don't know whether my son-in-law would like to live with me or not. Maybe he likes me today; but who knows what will happen tomorrow* (Lou & Ng 2012, 10). An older male confessed that *now I have limited expectations toward my children. We had tea gatherings several times a year. I feel satisfied. They are all busy and have their own life* (Lou & Ng 2012, 10f.) Especially the reminder that children are busy and have their own, assumedly more pressing, concerns, closely echoes views uttered by the Danish participants. The examples also show how older Chinese try to form "realistic" – that is, moderate – expectations as part of a coping strategy, adapting to the new situation brought about by societal changes (Lou & Ng 2012; Klausen et al., 2022).

Still, there is ample evidence that a lack of attention from the younger generations can feel painful even among the assumedly more individualist and thoroughly adapted Danes. Ketty, a 75 old female, serving herself as a voluntary aid in eldercare, describes it like this: *Because if you are older and sit at home, then you go to pieces … that is the problem when you get older … your children have children, and then their children have children too. And then they get busier, and then their children busy as well, like it was for us. There are some older people for whom it happens really fast, bang! – then they are not in focus anymore. They feel marginalized ["driven out on a siding "].* This points to disappointment rather than easy acceptance, and to the difficulties of adapting, especially to sudden changes. Helle, a 86 old female repeatedly says that she "won't complain" about the infrequency of visits and phone calls, acknowledging that "*people have enough* [to do] *nowadays*", but also clearly describes the phone calls as being sometimes too few and answers evasively when being asked if she is satisfied with the contact she presently has to her children. One of the participants who most emphatically pointed to visits from his children as a central key to his own wellbeing, 68 years old John straightforwardly answered "*yes*" when asked if he would like to see them more often.

In both groups we thus find a tension between an objective, "rationalized" notion of a satisfactory life, corresponding to what one could (and ought to) reasonably expect; and a more subjective, reflecting how far one is really satisfied, and how one would really like things to be. We also find a tension between individualist and more familistic or communitarian values. Interestingly, we find in the Chinese an increased sense of moral obligation from the parents towards the children, which probably also reflects the changing social circumstances, viz. an awareness that children have careers to tend to and face competition and uncertainty, and that their own children and intimate relationships may require more attention from them. A 65 years old female said: *I don't bother my children with my problems, and I feel very satisfied with this* (Lou & Ng 2012, 12). She gained wellbeing from her sense of shielding her children from potential worries, not unlike the satisfaction gained by older Danes during the Covid 19-pandemic from knowing that they were not burdening, but rather helping the rest of society. This attitude might seem to differ from what is implied by the notions of filial piety and generativity, but it can also be seen as an adaptation of these notions to new roles and circumstances (see the discussion below in Section 4)).

iii. Physical interaction matters

In spite of the apparent tendency in older Danish adults to not (wanting to) expect much from their children and grandchildren in terms of concrete, personal interaction (visits; observance of care duties etc.), it emerges clearly from the studies that such interaction is in fact valued very highly and perceived as crucial to alleviating loneliness. An older male, Jens, emphatically asserted how glad he was when he received a (rare) visit from his children and his grandchildren, even though the grandchildren could be irritatingly noisy; he explained the rarity of the visits with the fact that his son-in-law has a foreign background: … *well, I don't really know. I tried to quiet them* [the small grandchildren] *down.* [Interviewer:] *But you were glad to see them?* [Jens:] *Oh yeah, oh yeah, yes! They live [far away], so you don't get to see them every day.* [Interviewer:] *Do you keep track of how they are doing?* [Jens:] *No, I don't really hear from them, I don't know. They don't keep me informed. He's German, and you can feel that. He speaks Danish quite well, but it's like "their private life is no one else's business, they keep it to themselves".*

While Jens obviously values (and sincerely misses) the actual visits, he also indicates that what he wants most is the concrete manifestation (or "proof") of attention in the form a visit, and the opportunity to *see* his grandchildren (as well as being kept informed about their life), whereas he experiences the interaction with the grandchildren as challenging. Others likewise indicate that brief encounters can make a large difference. A 72 years old female tells that during the Corona crisis, she nevertheless managed to visit her daughter, "*where we sat outside and had coffee, and sat a large distance [from one another], and it was nice enough to just … see the grandchildren.* A pervasive theme in the Covid 19-related study is that the lack of physical contact – as the older adults are no longer allowed to hug their children and grandchildren – is perceived as a serious loss. We also found several examples in the study of older adults receiving institutionalized care that help with practical tasks, like ironing clothes or getting around, is also valued as a tangible proof of concern and attention. Rita, a 85 years old female receiving care at home, said that "*It's so nice of the children, all three of them, to come home and accompany us when we need to go shopping for groceries once a week. And we need to go to the hospital to get checked up on, and when [my 91 years old husband] needs to go somewhere (he has a pacemaker), they drive here and pick him up and get him where he needs to go. We can't say anything else about them (the kids), other than that they help us a lot, even though they have their own kids to look after too.*"

iv. Attitude and authenticity[19] *matters (most)*

By looking closer at the examples that show the importance of physical contact and practical help, we come to see that it is not so much about the quantity of interaction, and still less about the solving of actual practical task (despite in some cases, the participants associate the meaning of being filial with family togetherness by reflecting in daily interaction). The latter could in many cases have been solved just as well, or even better by professional caretakers (though there are significant examples, also in the Danish findings, that the institutionalized care system is not able to identify or meet all the practical needs, and that older adults receiving regular support from there relatives can be better off also in a material sense, for example when it comes to mobility). Chinese studies likewise indicate that urbanization and growing affluence has shifted filial expectations from material and everyday practical assistance to emotional support (Hsu et al. 2001; Cheng & Chan 2006).

The main point of the visits and practical activities, as described by the participants in our studies, is to maintain and demonstrate an emotional bond between the older adults, their children and their grandchildren (in some cases also reaching beyond the family), and to leave in the older adult a lasting impression of, and certainty about, this bond. There is a marked tendency in both the Danish and Chinese older adults to not wanting their children to keep in touch just because they feel obliged to. They crave for authentic engagement. This is in part explained by the theory of socioemotional selectivity, which suggests that, as time diminishes, the elderly have an increased need for meaningful and emotionally significant experiences and events, rather than for the material and instrumental goals that become dominant in late adolescence (Carstensen 1992). More importantly, this is in accordance with the original notion of filial piety *(xiao 孝)*, which connects it closely with the notion of "human-heartedness" *(ren 仁)* (e.g. (*Analects*[20] 1.2) and sees it more as an indicator of a fundamentally good character and attitude than a formal obligation or prescription of specific actions (see further in the discussion below (Section 4)).

This theme also indicates that filial piety is not only a traditional Chinese notion entrenched in Chinese society, but reflects an emotional need embedded in human nature, which may have

[19] Liang (2019) construes filial piety as more of a type of emotion that entails a sense of authenticity (zhenqing 真情), as a striking contrast to what traditional scholars interpret as sheer obeyance of ritual performance.

[20] All translations of the *Analects* are from Ames, R. & Rosemont, H. (1998).

become more manifest in recent generations of older adults. While older adults may be careful not to demand or expect too much, there seem to be an increased desire for an authentic emotional bond with adult children. A divorced 65 years old female told, with marked enthusiasm, that the Covid 19 pandemic had served as a test of the depth and sincerity of her children's feelings toward her, and was thrilled to notice that they had passed the test, and that the otherwise difficult situation had helped them to concentrate the interaction on what is most important, and engendered a new directness and informality: "*There are not so many – reservations now. That's fabulous … And my children … they have confirmed me in [my assumption] that, well, the really want me … And that has been terrific. It was fantastic! … It meant that, well, then we just take it as it comes, because … there is some out there …* [Interviewer:] *So it's your close family that you have felt the most?* [Interviewee:] *Yes … yes … gold! It can never be bought for money.*

That genuine filial piety is associated with an appropriate mindset was also shown by Jens (see above), who hoped to have more contact with his grandchildren "*later on, when they have become a little smarter [*or *"wiser"]. Maybe they get wiser with time.* This both expresses a notion that one needs to understand and for oneself the value of intergenerational encounters, and a sense of generativity in that Jens wished to become a genuine part of his grandchildren's life and thoughts. The older adults want the interest to be driven by genuine concern for them as persons.

It has been pointed out that in China (and perhaps still more in Western countries) "a new logic of intergenerational exchange" operates under a dynamic that "if parents do not treat their children well or are otherwise not good parents, then the children have reason to reduce scope and the amount of generosity to the parents" (Zhang 2009). Older adults seem to be acutely aware that the relationship should not be based on reciprocal benefits (and still less on "tit for tat"-thinking), and strongly averse to this logic. A study of intergenerational relationships in contemporary urban China by Kuan (2015, 149) suggests that the parent-child relationship can be more authentic "by removing expectations of payout and return, by removing the pollutions of economic behaviour", a point that could be said to reflect Confucius' golden rule: "To act with an eye on profit will incur a lot of complain" (*Analects* 4.12))

However, there is at the same time a sense (evidenced by the Danish studies) that more interaction, and especially more authentic interaction, could be beneficial to all involved, and so that the children and grandchildren would gain from it as well – though the "currency" is in this case emotional, rather than material (viz. subjective wellbeing). Ketty (see above) underlined that

she got much satisfaction out of voluntarily helping the still older and weaker members of her community, sharing in their experiences and needs. This again tallies with the notion of filial piety: it is not about acting out of formal obligation, but rather about finding authentic pleasure in doing one's filial (and in this case civic) duties.

Similarly, those receiving care are especially keen at ensuring that their children are seeking contact because they like to. 102 years old Ada was pleased to tell that "*(…) My daughter gladly comes along. And if she sees something, e.g. a play at the theatre advertised in the newspaper or something like that, she'll ask me if we should go and see it.*" Ada takes pleasure both from the joy she perceives in her daughter and the fact that her daughter spontaneously suggest that they should do something together. It was similarly revealed in an interview with an old man with dementia in China that this "togetherness" appears to entail a sense of security: "*I have one son, he is filial. He would send food and other stuff, whatever I need. I have no daughter. He buys clothes for me whenever he sees others wearing things that might suit me.*" (Zhang et. al. 2019*),* 2625. This is consistent with Nel Noddings' notion of care, understood as an attitude which is entrenched in the needs occurring in a particular personal relationship, and which is recognized and appreciated by the receiver *as* caring (Noddings 2013, 30); the person cared for must be "received not by formula, but as an individual" (Noddings 2013, 47). Thusly understood, care is not provided by simply following rules for action, as the central need may not be met in this way.

Authenticity also seems to matter when it comes to how older adults deal with their needs and expectations (see *ii.* on tensions and ambivalences). Although parents increasingly crave emotional bond with their adult children, it seems that they often have no idea of how to turn this emotional need into actual practices and behaviours. They also seem prone to suppress their emotional needs or even feeling shameful about them. This could be said to indicate that they fail to be authentic to themselves, not really understanding or identifying with their own inner experiences and values (Taylor 1992; Klausen 2018). But it should also be noticed that this apparent inauthenticity is driven by a genuine (albeit perhaps misguided or exaggerated) concern of the parents for their children – and that maintaining, and standing by, the importance of emotional bonds between parents and children can be difficult under contemporary societal conditions.

v. Mutual respect matters

Quantitative studies from China indicate that the aspect of filial piety that is most consistently important to older adults' wellbeing is respect (Cheng & Chan 2006). This tallies with the original Confucian notion, that stresses not only respect but reverence: *"Nowadays being filial is taken to mean only material support for one's parents. But even dogs and horses are supported in that way. Without reverence, what is there to mark the difference?" (Analects 2.7*, compare also Sung 2001*).* As the contrast with material support shows, reverence is also understood as being a matter of attitude and emotional bonding, rather than fulfilling specific obligations; moreover, it does not signify a hierarchical or one-way relationship, but rather one of *mutual* respect. And mutual respect may, with Taylor (1992: 49), be seen as entailing a sense of mutual *understanding* that is based on "equal recognition" of each other.

An interesting example from our studies that illustrates how respect is more about understanding each other as persons, and less about acting in accordance with traditional norms and expectations, was given by a care home manager. She recounts how the son of a retired doctor, who had used to be dressed impeccably, was shocked by seeing his father, who had recently suffered a stroke, now sitting in his wheelchair in jogging pants and a loose shirt. *" ... but he didn't need a suit now, it would have been very uncomfortable and impractical ... [the son] didn't understand that his father needs now were different.* The care home manager made a connection between respect and authenticity, as she took it to entail an openness towards and acceptance of the other person as such, as well as an acknowledgement of one's (e.g. the child's or caregiver's) own limited knowledge and resources. She saw it as a lack of respect for the older citizen if carers believe that they know everything already, and a sign of respect to let the older citizens talk and decide for themselves. She also saw respect as a key to maintaining wellbeing in the care home residents: "*it's ... because you respect them as the beings they are ... if you can meet them where they are, they actually get a lot more positive.* This again is consistent with Noddings' (2002: 60) observation that people tend to concentrate too strongly on culturally shaped and superficial needs, overlooking the more authentic or deeply rooted ones.

That a perceived lack of respect from their children can have a strong impact on the wellbeing of older adults, also in Denmark, is illustrated by a case shared by the manager of a public home care service. "*There's this woman, in her mid-70's, whom her daughters got to move from the harbour and uptown ... she hasn't been outside for quite a long time, and I think that she actually didn't want to move and that she's angry over having been moved. She's getting thinner,*

she doesn't eat anything and doesn't take her medicine. So her daughters are extremely worried. But she simply does not want us [from home care service] to come and help. She simply does not want it." This may of course be evidence of problems and mechanisms other than a lack of respect.[21] The very experience of leaving her familiar environment may also have been a significant cause of the woman's negative reaction; though the manager did seem to think that she was dissatisfied with being treated paternalistically. The case also indicates that the woman has preference for assistance – and genuine understanding – from the woman's own children, over the institutionalized and standardized care she has been offered.

The importance for wellbeing of respect from the younger generations in a more impersonal, general sense was also underlined by the participants in the study of older adults during the Covid 19-pandemic, whose wish for being acknowledged as vulnerable, and for responsible health behaviour, seemed to express a concern for more than just their physical safety.

vi. Filial piety, generativity and mutual enhancement

It emerges from our studies that the different dimensions, aspects and manifestations of filial piety and generativity are intertangled and mutually enhancing. Emotional bonds are demonstrated and maintained by practical actions and face-to-face contact. Respect requires and is fuelled by understanding and authentic emotions, and so on. As implied by the notion of generativity, there is evidence that emotional bonds can be established through a variety of intergenerational interactions. 86 years old Helle told about bonding with her grandchildren and its effect: *"the twins … one of them has a handicap, she recently had surgery again … I have been babysitting them a lot. You form kind of a relationship with them. It is also them who visit the most … they were also there when my husband [who suffered from dementia] passed away. They had to. … They took it quite easy, but then they have also taken part in the life we have had, since lived so close by. They came along and visited him, for that's what they had to*. This again echoes the interpretation of Confucius' filial piety by Ni (2010), that "the seed of filial piety exhibited in little children's affection toward their parents can wither away if it is not nurtured by education and cultivation". People tend to forget the importance of the intergenerational bond as they grow up, hence it needs to maintained and reinforced. The example demonstrates that the cultivation may start with very simple ways of making contact and forming habits. As Sarkissian (2019) notes, for

[21] As pointed out by a reviewer

Confucius "family is the first unit to introduce normative notions into an individual's psychological fabric, forming the basic dispositions and patterns of reflections and response that will color the rest of the person's moral phenomenology". While Helle's actions may again be seen as a kind of emotional "investment", they are more likely to be the expression of a natural inclination, something that is done not merely for the sake of later benefits, even though these will likely also be obtained.

Interestingly, Cheung & Kwan (2009) claim to have shown also "that educational policy and practice can be a means to sustain filial piety in the face of modernization" (179). This might seem to indicate that more institutionalized forms of education and cultivation also contribute to maintaining filial piety and prevent it from "eroding". But Cheung & Kwan use financial support for elderly parents as the prime indicator for filial piety (184), and it is hardly surprising that this correlates with a high level of education. Though they may be right that seeing financial support as an expression of filial piety "is not contentious in China", it is also likely that under modern conditions, financial support rather compensates for a lack of genuine filial piety, or simply reflect the growing affluence of well-educated urban dwellers. Besides, several of the older Chinese interviewed by Zhang et al. (2019) emphasized that although filial piety is related to practical support, it is not about money.

vii. Gender roles

There are some slight, but not insignificant indications that even in the Danish cases, the participant's daughters seemed to be more "filial", or at least more frequently involved in the provision of daily care services to parents. Cases where daughters had failed to maintain contact, or not shown appropriate respect, were noted more often. There was also some very positive mention of daughters-in-law, whereas sons-in-law where described more negatively (or at least as non-filial). This is similar to an observation by Shi (2009), in a suburban community in north-eastern China in terms of the gendered practice of filial piety, suggesting that generally daughters are in charge of the increased emotional care and practical support required by their parents – and expected to be so, which vividly resonates with the Chinese saying "A daughter is like a little quilted vest to warm her parents' heart" (Shi 2009). Here, generativity seems to be a more inclusive notion, as participants obviously also took comfort from knowing that their sons were doing well (or were negatively affected if they were not).

5. Discussion

The findings clearly confirm the importance of intergenerational relationships, but many of them might also seem to call into question the relevance of the more specific concepts of filial piety and generativity. For they appear to either not match the ideals and experiences of older adults, or to have become unrealistic in light of recent societal developments – or even detrimental to wellbeing (as a potential source of disappointment), and this not just in Denmark, but also in contemporary China. This impression can be corrected, however, by more careful interpretation of both the findings and the concepts.

First, Confucius' assumption of filial piety has often been distortedly construed in an authoritarian manner, as a requirement of "unconditional obedience", "filial obligation" or "traditional, conventional behaviour". It has been seen as centering on the idea of "the sacredness of parental authority and the superiority of parents" (Zhang 2009), and as entailing a duty respect, obey and give support to parents (Watson 2004). Thusly interpreted, in stands in stark contrast to the values of autonomy, independence and self-development, and so appears almost incompatible with especially modern Western thought, but also ideas that have taken root in Chinese society. If, however, it is understood rather as a fundamental attitude and authentic emotional bond, and not as a set of formal obligations, then it seems to be still very strongly valued and wished for, perhaps more than ever, not only in China but also in Denmark.

Second, the findings do indicate a change in expectations as well as in the actual possibilities for close intergenerational contact, due to more individualized lives and career paths and increased mobility. But they also indicate that close intergenerational relationships can still be forged, maintained and even strengthened (as under the Covid 19-pandemic), with moderate amounts of physical contact or practical support from the children (though some amount of contact and support is clearly needed; and help with practical tasks is strongly appreciated, albeit also as a sign of sincerity of attitude). Again, this is because filial piety is mainly about authentic interest and mutual respect, which can still be demonstrated under current conditions. And it is because generativity is about *somehow* playing a part in each other's lives and being mindful of each other, though it also needs some practical and material basis, as for example the need to contribute the younger generation can only be satisfied if there is sufficient interaction. Rather than showing that

the ideals of filial piety are old-fashioned or impractical, our findings show them to be compatible with contemporary norms and adaptable to typical circumstances of modern urban life.

6. Conclusion

Filial piety and generativity do seem to be potent factors in preventing or alleviating loneliness in older adults, and therefore important, if not crucial to promoting older adults' wellbeing. While this is not surprising it itself, our study has, with use of in-depth analysis of qualitative data and the application of philosophical notions, highlighted different forms, manifestations, conditions and understandings of these phenomena. It has shown them to be surprisingly compatible with contemporary social trends, but also evidenced how modern living conditions, in both China and Denmark, can make it difficult to maintain intergenerational relationships, and how the price in terms of reduced wellbeing, for parents but possibly also for children, can be higher than is usually recognized. There are also indications that the emphasis on filial piety can be something of a double-edged sword, as it can be a source of unrealistic expectations and a burdensome sense of obligations.

More significantly, we found a tendency in many older adults to curb their expectations in order to prevent disappointment and avoid burdening their children. While this can be a sensible, perhaps to some extent an indispensable coping strategy, we found evidence that it might take on exaggerated forms, supressing a genuine need rather than positively adapting to the circumstances, and causing a more acquiescent and self-abnegating attitude than is actually necessary. Achieving filial piety may be less problematic or burdensome than it seems. When filial piety is understood as an authentic emotional bond, rather than a formal obligation to meet conventional expectations (an understanding that accords with the traditional Confucian notion, as we interpret it), it seems to be a fairly realistic goal.

This does not mean that filial piety is easy to achieve. Fostering an emotional attitude can be more demanding than simply conforming to conventional norms; emotions are fleeting, fickle, complex and difficult to control, though they can be cultivated and supported. But it does not demand of the children that they curb their career or make significant sacrifices in terms of the own wellbeing; and it is a matter of quality rather than quantity (though we also found evidence that some kind of tangible proof of authentic concern, and even observance of duties, is also required; purely empathic concern and long-distance relationships does not suffice). The need for

real interaction is also entailed by the notion of generativity, which requires opportunities for older adults to really contribute to the wellbeing of younger generations). And it is filial piety in this particular sense (as an authentic emotional bond) that is most desired – by parents and children alike, though to different degrees – and which seems to have the largest influence on wellbeing and be most effective at alleviating loneliness.

The findings from China and Denmark were surprisingly similar. This might seem to indicate both that filial piety and generativity is a fundamental, trans-cultural human disposition (as predicted by both Confucian philosophy and developmental psychology) and that the two societies are converging in terms of experiences, expectations and actual living conditions. It is particularly interesting to note that the Danish older adults expressed hopes and expectations of filial piety and generativity no less strong than the older Chinese, in spite of their different cultural backgrounds. Though the Chinese have been raised in culture that emphasizes collectivism and harmony, and the Danes in a culture that is assumedly more individualist, and where care is seen as being less of a personal or family-related obligation, something like the Confucian ideal of filial piety (*xiao* 孝) seemed to be acknowledged by both groups. While both also experienced a tension between this ideal and the mundane realities, there were signs that the Danish older adults experienced it as more paradoxical, as a genuine clash of values (and also showed more surprise at experiencing the strength and value filial piety), whereas the Chinese took it to be due mostly to recent changes in the societal circumstances, to be coped with pragmatically, and less of a value dissonance.

While our findings point to the importance of promoting close intergenerational relationships, we cannot conclude that specific forms of eldercare are especially preferable or problematic. As we have noted, institutionalized care has become a practical necessity, and so is probably living alone, at least under current conditions. Moreover, we have found that it is possible to achieve filial piety and reap the benefits in terms of wellbeing and alleviated loneliness even under these circumstances, also in care homes and in situations where parents and children live far

apart. Besides, we have not studied cases of intergenerational co-residence and so have not been able to take into account possible negative side-effects of such arrangements.[22]

Nevertheless, our findings should serve as a general caution to countries that are currently moving towards highly institutionalized and individualized care. It is noteworthy that there is now also a movement in Denmark and other Western countries to re-establish intergenerational contact and experiment with forms of partial co-residence (Tapper 2019; Hernandez et al. 2020; Vang 2020). A further lesson may be that when it comes to understanding and promoting the factors that support wellbeing most profoundly, one should not shy away from taking seriously notions that have a conservative ring to them or have to do with obligations and values. Confucius' saying "*Filial piety (xiao 孝) and fraternal love – they are the root of human-heartedness (ren 仁), are they not? (Analects 1.2)"* may sound archaic and lofty, but turns out to reflect the needs and expectations of modern-day older Danes and Chinese alike fairly directly. Cultivating sufficiently harmonious family relationships, and creating a virtuous circle within the family[23] that reinforces generativity, under modern conditions of life, without impeding other fundamental goals and values – that sounds like a tall order, but seems to be far from impossible.

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[22] However, Xu et al. (2019) found that intergenerational co-residence had no effect on older adults' subjective well-being.

[23] We would also like to emphasize that there is nothing in the notion of a "family" as we use it, nor in the notion of filial piety, that limits it to particularly traditional family structures or gender roles. The notion of generativity is explicitly not related to kin relationships.

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13. Article 3

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Life Quality in Care Homes: Chinese and Danish Older Adults' Perspectives

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Abstract

The demand for care homes appears to be emerging as a key future trend in response to the burgeoning population of older adults, with the need for care provision increasing accordingly. Life quality, happiness and well-being are important factors associated with the care of older residents. This qualitative study explores how older adults moving into care homes view their life quality, from their own perspectives, in two quite different cultural contexts, Chinese and Danish. Older care residents in Shanghai and Denmark participated in the study by means of semi-structured and in-depth interviews. An interpretive phenomenological analysis approach was used for data analysis. Four interrelated themes were identified: positive transfer; positive environment; positive capability and positive experience. The findings demonstrated that older adults considered their quality of life as the result of a dynamic process. Their pursuit of a harmonious status, centered on "change" as the core value, which encompassed both the simplicities and complexities of life. Both older adult groups cared more about their emotional wellbeing, which focused mainly on positive emotions being stimulated while negative emotions were shunned. In the situations

when they were "harmonized" by society systems, there was an important emotional thread which continued throughout their whole life that was strongly associated with life quality which was the relationship with family members – be it in the past, present or future.

Keywords: Older adults' wellbeing; Happiness/wellbeing; Life quality; Care homes; Interpretative phenomenological analysis; Cross-cultural comparative study

Introduction

The burgeoning population of ageing older adults is well recognized. In China, by 2050, the number of adults over 65 years old is projected to account for 26.9% of the total population, according to a recently announced report (National Statistical Bureau of the People's Republic of China 2019). Similarly, in Denmark, it is estimated that this cohort will reach up to 25% of the Danish population by 2040 (Mandag Morgen 2010). These numbers crystallize the picture that societies are ageing, which at the same time highlights issues that are causing concern. Furthermore, the pace at which this change is occurring is particularly rapid in China, as compared to developed western countries (Chu & Chi 2008).

Alongside this, the demand for long-term care is escalating (Eurostat 2016). Institutional-based care has been the dominant form of long-term care for the elderly who need care the most in western nations, whereas this is a growing tendency in China (Feng et al. 2011). The rationale behind this can be an increased dependency on others due to a decline in cognition, the prevalence of acute health crises (Johnson & Bibbo 2014), insufficient provision of specialized care in community-based settings (Kao et al. 2004), and a disproportionate decrease in the reliance on the traditional home-based informal care which engenders new forms of outside assistance to be explored. On the whole, these have been viewed to be as a result of profound demographic shifts and socioeconomic changes (Gu et al. 2017) – the shrinking proportion of the younger generation, as well as the burgeoning of small nuclear families and "empty-nest elders" (Feng et al. 2011; Chu & Chi 2008).

In addition to these changes, which themselves are associated with a degree of uncertainty, the relocation to a nursing home may be viewed as a huge existential challenge for most older adults, as it implies the abandonment of the old and familiar, but stable, homeplace and life patterns. Research suggests that old people may fear entering care homes more than dying itself, as they presume that their inner needs will often not be met by the environment (De Bellis 2010). Newer residents often tend to vocalize their feelings of being abandoned and isolated – be it by family or society (Yeboah et al 2013; Yu et al. 2016). Others are likely to experience complex emotional adjustments, with the emergence of a suspicious understanding of the world, and self (Sullivan 2017). What is more distressing is that these negative experiences are likely to give rise to psychological effects, such as loneliness and depression, which in some cases, score higher than for elders in community dwellings (Ron 2004). Consequently, this is associated with a higher than normal level of suicidal thoughts (Kaneko et al. 2007), and additionally, with the increase in the prevalence of dementia comes the loss of many fundamental human qualities (Baltes & Smith 2003). On the surface, this cohort in care homes appear to have a different quality of life than other older adults, and what constitutes a "good life" seems to be a counter-intuitive and counter-stereotypical account. It is necessary for us to fuel growing concerns on the quality of life of this cohort as with the increasing elderly population, comes an increase in demand for care homes.

It is suggested that culture should be taken into consideration when assessing the quality of life among older adults in nursing homes, as it may account for variations (Albertini et al. 2007; Bekhet & Zauszniewski 2014). In China, for example, living with their adult children and receiving family all-round care are the most desired expectations that are traditionally valued by ageing parents. The familism and collectivism are a reflection of the Confucian values of "filial piety" (Chu et al. 2011). On the other hand, institutional care facilities have been historically reserved for "the Three No's, those with no children, no income and no relatives" (Chen 1996). Furthermore, the practice of filial piety is currently ensured by law, in that "children who have come of age have the duty to support and assist their parents" (Yang 1988; Wu et al. 2005). As such, it seems that the transition to nursing home care is a contradiction to the entire social cultural expectations of family caregiving and a violation of filial piety obligations (Chang & Schneider 2010), and thus might explain the strong negative association with the quality of life perceived there by the elderly.

As is the norm in countries with Confucian traditions, family solidarity and mutual dependency are more significant than individualism and privacy, and supportive families have long been identified as a condition for happiness, even though it can be provided without co-residence. Some elders have claimed in verbatim that the change in their living arrangements into care homes was not their decision, which has led to variations in their integration and wellbeing after they moved there (Wu et al. 2009). Other research supports the view that Chinese cultural patterns of values such as harmony, balance and collectivism have somewhat hampered the residents' ability to establish new relationships with their peers and staff members; in addition, elders often downplayed the importance of issues such as autonomy, lack of privacy and the like (Lee 1999; Lee et al 2002), and hence they experienced a more tedious, monotonous and lonely life (Chuang & Abbey 2009). These might be strongly associated with a negative impact on their quality of life.

In seemingly individualistic cultures, there are still expectations in terms of family support (though mostly of emotional support), with those who need care being most likely to receive it from care homes or through home care. As a result of modernization, the emergence of the modern welfare state has developed hand-in-hand with the nuclear family and has impeded intergenerational family interactions (Albertini et al. 2007). Despite that, certain forms of family support do still exist. In European cultures, there generally exists a net downward flow of both financial and social support from the older to the younger generations, rather than vice versa (Albertini et al. 2007), and maybe a consideration that affects older people's wellbeing when transferred to care homes, coupled with the reduced contact from their family. Therefore, there is now also a movement in Denmark and other western countries to attempt to re-establish intergenerational contact (Tapper 2019; Hernandez et al. 2020; Vang 2020). The transfer to care homes, where routines and harmony are usually overweighed, and the values of independence, practical autonomy, rationality, and personal decisions which are cherished by individualism can often be strongly limited (Kehyayan et al. 2015). Consequently, this has led to some (Higgs & Gilleard 2015) to suggest that residential care homes can be regarded as a negative lifestyle choice. Although there is a growing awareness of the culture change movement in nursing homes, which aims to boost the quality of life of residents by focusing on person-centered care, an empirical base has yet to be generated (Zimmerman et al. 2014). The proportion of older people in care home

suffering from mental health issues such as depression, remains high. According to one report (Jongenelis et al. 2004), almost 8.1% of nursing home residents suffer from major depression, 14.1% suffer from minor depression while a further 24% has sub-clinical depression, despite advances in care facilities.

Although there have been countless studies conducted on the nursing home experiences of older people in western countries, they were usually carried out from particular perspectives, such as languages, religion, and the like (Krizai et al. 2018). Thus, there remains a paucity of research available on the quality of life in elderly care homes. Besides, the studies that have been performed have almost exclusively been limited to a single country and focused on variables such as social relationships with fellow residents, autonomy, social support, and the like (Bergland & Kirkevold 2005; Cooney et al. 2009; Custers et al. 2012). Little research has been devoted to the quality of life of the elderly in care homes in different cultural contexts. Therefore, the focus of this article is to present a comparative study which aims to address this gap by exploring how older people moving into care homes view their quality of life, from their own perspectives, and exploring it from two quite different cultural contexts, Chinese and Danish. The former implying a cultural expectation towards family connection and other characteristics associated with collectivism, whereas the latter indicating preferences towards individualism, in which values linked with autonomy and differentiation are emphasized. Some have argued that countries with different cultural backgrounds are not comparable due to their complexity attributes (Yan et al. 2014), however, it should be seen as an opportunity to investigate the similarities and differences instead of an obstacle to performing such a comparative study.

Earlier studies have indicated that the care home environment can be detrimental to the well-being of older adults (Tuckett 2007), and focused mainly on the conceptions of quality of life or a good life based on psychological theory. However, these studies were often confined to predetermined variables which may have limited the ability to gain an understanding of what a quality life means from both a holistic and in-depth view. This study aims to bridge that gap by directly asking care residents questions such as, “What do you think is a good life?,” “How does your life compare to your idea of a good life?,” and “Tell me about a recent situation where you

felt especially good or bad?" This should provide a better basis for gaining an understanding of what matters for the quality life for older adults.

Perception of Life Quality

In this paper, "life quality" is used in a holistic sense, a comprehensive understanding of how older adults themselves understand life quality in the context of care homes - a "view from the inside." This construct covers both "hedonic" wellbeing (typically known as subjective wellbeing in empirical studies), and a more objective understanding of the "good life," which is in congruent with optimal functioning championed by positive psychologists (Keyes 2005, 2007; Deci & Ryan 2008; Seligman 2011).

There is a large amount of research on wellbeing in general and a good life in social science literature, noticeably in psychology. Psychologists have attempted to associate the good life with two distinct yet overlapping approaches – hedonic wellbeing and eudemonic wellbeing (Deci & Ryan 2008), in which the former defines the good life in terms of happiness, life satisfaction and "affective balance" -- a hybrid notion of subjective wellbeing (SBW) (Diener et al. 2002). However, the criteria for a good life in SBW approach has remarkably been predetermined by researchers rather than by the elderly themselves, as researchers intended to measure it with self-reported life satisfaction (Pavot & Diener 2008) as well as the "day reconstruction method" (Kahnemann et al. 2004). By contrast, the eudemonic wellbeing approach refers to the good life as being more concerned with meaning, values and self-realization, which may or may not be accompanied by feeling good or having one's preference satisfied (Ryan & Deci 2001; Urry et al. 2004). Yet, there is the train of thought that these may serve to confuse, rather than clarify what comprises a good life in old age (Meek et al. 2010), on the presumption that their definition was formed from a series of predetermined variables that were measured on the basis of current psychological theories, such as the emphasis on self-development or self- expression and these might still appear to reflect other constructs of a successful life (Delle Fave et al. 2011).

Hence, psychologists have depicted the good life as an optimal functioning in its zenith by uniting the above mentioned two approaches (Keyes 2007; Park & Peterson 2009; Seligman 2011).

However, the vast majority of existing research has generally targeted young and middle-aged cohorts, with relatively few studies focusing on older adults, let alone those living in care homes. There is the possibility that the elderly in care homes may hold a more sophisticated understanding in terms of what constitutes a good life than those identified in extant studies.

In contrast to more dominating approaches, this study focused on giving priority to the older adult's own understandings and particular psychological dispositions, conceiving wellbeing holistically. Klausen (2019) painted a rich theoretical picture of older adults' wellbeing, which emphasized older people's tendency to give priority to proximal variables in their current environment, and their capability to obtain wellbeing via adjusting their judging standards as well as by controlling their emotions. The qualitative methodology described in the next section was chosen because it avoids imposing any specific notion of wellbeing and is sensitive to the differences and subtleties of the older adults' own understanding (including differences and subtleties due to cultural factors, which are especially pertinent to a comparative study like this). It also serves to complement existing wellbeing research, which is predominantly based on life satisfaction surveys. In keeping with the methodological approach, the study was not hypothesis-driven, but the holistic and process-oriented (Klausen, 2018) understanding of wellbeing, as well as the critical view of standard notions of a good life in old age, has served as theoretical background and informed the interpretation of the findings.

Methodology

Qualitative studies provide a detailed insight into the many complexities associated with factors that influence quality of life, from the perspective of older adults (Stathi & Simey 2007). This study will focus on comparing the life quality of older adults in care homes in China and Denmark for the following reasons. Firstly, both countries have very similar ageing populations, not only in the proportion of their ageing populations, but also in the tendency and necessity of them needing to move into care homes, as well as similar degrees of urbanization, though the rural-urban divide may still be more significant in China than in Denmark, and institutionalized care has a longer history in Denmark. Secondly, from a cultural perspective, both countries appear to have strikingly conflicting values in terms of collectivism versus individualism, and different perspectives on

family life. Hence, it seems prudent to discover whether older adults share any similarities when moving to seemingly comparable care homes, although as the national contexts differ, it may help to understand how culture-specific factors influence the quality of life perceived by them. Some researchers (Bengtson et al. 2003; Palmore 1983) have stated that the proportion of the ageing population, the extent of urbanization, as well as culture are essential variables to consider when carrying out cross-cultural comparative research on ageing.

The core of this study is based on semi-structured interviews and open-ended questions, which compared older adults in care homes in terms of the life quality in China and Denmark. The data from Denmark was based on eight semi-structured interviews, with participants aged between 74-95 years, conducted in a total of five municipal elderly care units. The interview guide devised was based on preliminary impressions from field observations at the care home. However, due to limitations imposed by the Covid-19 pandemic, we were unable to carry out as comprehensive a study in China as had been originally planned. A total of nine interviews, with participants aged between 74-95 years, in a care home in Shanghai were conducted. All the participants involved in this study were selected by care home managers. Purposeful sampling (Patton 2002) was adopted for the selection of older adults, after taking into account their age, gender, educational levels and whether they were cognitively capable of communicating. We are cognizant that to some extent there may be shortcomings with this asymmetrical methodological approach.

All the participants involved in the interviews were informed that participation was voluntary, and would not in any way negatively impact the quality of their care. Participants were asked questions regarding their values in terms of what contributes to better life quality, if they felt they experienced quality of life at present, and in what ways their caregivers were aware of the status of the participants' life quality. Interview questions included "What do you think is a good life?," "How does your life compare to your idea of a good life?," "Tell me about a recent situation where you felt especially good or bad?," and "How do you think the staff become aware of your day to day needs?" The interviews were conducted in Mandarin and Danish, as appropriate, and subsequently translated into English. In addition, a back-translation was made to check the validity. Each interview lasted between 30 to 60 minutes and were recorded with the informed consent of the participants, and then fully transcribed verbatim for analysis. The interviews were conducted in a quiet room and pseudonyms used throughout to protect the privacy of the participants.

Interpretative phenomenological analysis (IPA) was adopted to allow the real-life experiences that the residents associate with life quality to be explored, and shared practices and common meanings to be uncovered (Smith 2009; Smith 2015). Transcripts were read meticulously several times to obtain a complete holistic perspective, from which notes were made to ensure interpretations remained true to the participants' accounts, as far as possible. This was accompanied by reflexion on the researchers' attitudes and assumptions, as IPA not merely requires researchers to 'bracket' preconceptions, but also implies a "hermeneutic" understanding (Smith 2009; Smith 2015), recognizing preconceptions as ineliminable and not necessarily sources of bias, but something that has to be dealt with reflexively (for a deeper discussion on such methodological issues, see (Emiliussen et al., 2021)). Common emergent themes were identified based on these notes, which were further refined, condensed and categorized.

Findings

The interviews provided by the participants revealed four interrelated key themes: positive transfer (positive attitude as a good start; being mate with the room); positive environment (geographical living environment; policy environment); positive capability (physical health; enjoyment of food; learning to compromise); positive experience (previous life experience matters; agency; respect and emotional health). Each of these themes were further divided into several subthemes that influenced one another.

Positive Transfer

Taylor (1992) describes how an authentic act (where 'authentic' positive normative connotation) can be seen as an expression of an individual's underlying attitudes and genuine responses to feelings. This may indicate that a positive attitude can predict a positive transfer for older adults when moving into care homes.

Positive Attitude as a Good Start

Older residents were asked about their perceptions of the quality of life in care homes, and a prevailing theme that emerged was that a positive attitude (willingness to adapt) when transferring into a care home appeared to have a positive impact on their life quality after their relocation. This could be viewed as a change of abandoning traditional ways of life and embracing a new space. A positive attitude was considered by most participants as the most difficult to maintain, but also necessary and meaningful, as it might be conducive to the subsequent adaptation to their "new homes", as well as to their positive psychological state. This was particularly apparent in the Chinese group. As recounted by one elder who emphasized the importance of adopting a proactive approach to life:

"*If one willingly moves to a care home, he/she would be likely to easily accept the status quo and learn to adapt to the new environment including positively taking part in different activities. Otherwise, it would have been easy to think about it too much, which typically occurs in many older Chinese women. But I think, nowadays, changes are happening rapidly, it's very important to be adaptable to the environment." Female, 85 years. Chinese.*

Whilst the Chinese participants may traditionally view staying in their family homes as the ideal scenario, there is an increasing willingness to positively accept relocating to care homes. This is not merely as a means of minimizing loneliness and/or emptiness in the family home, and avoiding potential conflicts with family members[24], but also as a way of avoiding being a burden to their adult children which may give rise to psychological distress with feelings of guilt and shame. The Chinese participants also viewed it as a means of maintaining family harmony. All these factors may stimulate positive emotions, albeit in different ways and to varying degrees. Although for some, this may be an attempt to avoid negative emotions, others are more pragmatic, as recounted by one female resident who described new social contacts in the care home as a positive experience:

[24] Lin (2011) revealed that tensions between intergenerations with respect to family support might become catalysts for issues for older adults considering alternatives such as institutional care in urban China.

"I love warm places with many people, and I used to be lonely at home. My children were busy, and I rarely saw them. So, I moved here and now I am busy meeting new people. I feel I have more energy now." Female, 83 years. Chinese.

This highlights that it is not purely about avoiding the negative consequences of living alone that is important. It also tallies with the assumption by Haybron (2008) that emotions play a constitutive role in one's wellbeing, in particular positive emotions outweighing negative ones. It can impart a sense of hope for the elderly, especially if they have experienced deteriorating health that has required assistance coupled with a perceived lack of support from family. They also viewed a positive attitude regarding the relocation as a personal responsibility for them to ensure they made the best of their life.

"I was willing to move to a care home, because of my fractured legs. I disliked being a burden to my children. They were busy with work and their kids' education every day. And I believe you must have heard that 'no filial son at the bedside, in cases of chronic sickness'. To avoid potential conflicts among us, I prefer to be in a care home. Now, I am happy in the care home, being looked after by staff here. My adult children are happy too." Female, 83 years. Chinese.

"As to moving to care homes, some old people's thinking and concepts are old-fashioned. But, I am open-minded and don't care about others' comments. I was actively open to moving, and I like the services here." Female, 91 years. Chinese.

The Danish residents shared a similar view, that positive acceptance of a relocation, and support from family members might be beneficial to later life in a new home, although they did not share the same concerns as their Chinese peers due perhaps to their cultural differences.

"So, my daughter thought that now it was the time to move, as last winter I had a bad cold and things like that when I was alone up "there" (previous place of residence) then, so it seems now I should…" Female, 94 years. Dane.

Being mate with room

In contrast, it appears that those with a more passive attitude in accepting the transition, an unwillingness to move, may have instilled a strong sense of self-imposed constraints, which may negatively affect their life quality. The consequences of adhering to stereotypical perceptions lead to feelings such as the fear of being forced to live in a public domain which is not recognized as being home and give rise to a sense of lack control of their current life, both physically and psychologically. This may impose a greater risk on the physical health of older adults, as reflected in findings by Julius et al (2017), where the past mental health of individuals had a significant impact, direct and indirect, on one's physical health.

"If [I had been] opposed to relocation, this would be another case. Like my cousin, who is in her eighties, pretty conservative and prefers to be taken care of by her family members, and was forced to relocate to a care home by her adult children. The result is pretty negative: she ate little, disapproved of the facility, and refused all the help after the relocation. Every day she merely sat in her room alone, staring out of the window and having nothing to do. Finally, this exacerbated her health." Female, 85 years. Chinese.

This is consistent with the findings of Wu et al. (2009), where relocation to care homes was viewed as a process of "forced choice" where the older adults were victims of both the influence of traditional culture and modernization. The process not only invokes fear due to the loss of the previous familiar network, with personal emotions attached (as the older adults now have less access to their families and friends), "*I miss my children, especially grandchildren and feel sad about not seeing them grow up*," as one female Chinese resident mentioned, but also feelings of frustration towards the communication barriers encountered in their new surroundings. The inability to build new lasting relationships in the new environment can consequently lead to bottled-up emotions and feelings of being trapped in a prison, until one might succumb to some alarming physical symptoms[25] – like a "rage virus" in the body. Despite the older residents living with many other people in the care home, a feeling might remain of having no belonging or attachment to the home in one's own mind. A male resident depicted it as follows:

[25] Yap (1969) was the first to describe these untranslatable mental disorders as "culture-bound syndrome," that seemed to occur only in certain societies, in contrast to the usual mental illness that was experienced universally. Then Bhugra & Jacob (1997) suggested that these culturally bound behaviors were usually diagnosed with a limited appreciation of certain socio-environmental influences.

"*The nursing home is like a public place. Older people come and leave as they wish. There is no sense of home living here. To me, I am single and have no family members. All I want to do is merely survive here, nothing else. I don't often talk with others, I mostly stay in my room watching TV. "Male, 85 years. Chinese.*

This was similarly supported by another resident when she described her unwillingness to relocate to a care home as: "*I am scared to know that one suddenly dies nearby." Female, 84 years. Chinese.*

They viewed themselves as being homeless[26] and abandoned, and thus rarely participated in group activities or engaged in conversations with others. The consequences of not acknowledging care homes as home, albeit involuntarily, can thus be negative. It is likely to regularly impact on the residents' daily choices and behaviors, and lead to increasingly stronger feelings of isolation and loneliness, which tended to affect one's quality of life and wellbeing. This was found to equally apply to older Danes who frequently expressed psychological resistance when moving to care homes, either due to internal reasons, such as a fear of lack of autonomy, or an external reason such as feeling it was an unsatisfactory arrangement enforced on them by society to which, with no alternative options, they merely were expected to accept.

When questioned about whether he felt he had a good life in care homes, a 95-year-old male Danish care resident responded with: *"and I didn't have anywhere to go.....But it's not the home here... the home here*" which is another example demonstrating how the older resident disliked living in a care home, in this case after being frequently refused by the hospitals. In some cases, it's even worse:

"There's this lady, who's in her 70's, who by her daughters' will, now moved to (part of town) from down by the harbor. She hadn't been outside for a while, and I think that she actually didn't want to move, and that she's angry over having been moved. She's getting thinner, she isn't getting

[26] Chuang & Abbey (2009) portrayed older adults relocating to care homes as those who feel "cut off the root".

anything and she doesn't take her medicine. So her daughters are extremely worried. But she simply does not want us to come (and help). She simply does not want it." Female, 74 years. Dane.

This is in line with an earlier study by Lee et al. (2002) which found that the older adults' negative stereotypes of aged care were associated with their sense of well-being before their relocation, which intensified their subsequent suffering after moving into the care homes. Although unwilling to move to a communal environment, due to their increasing lack of abilities, some have no choice but to move to live with a group of strange people and a life that may be viewed as consisting of a number of regularly repeated daily trivial rituals. Unlike the Chinese cohort, where possible anxiety and concerns emerged as the biggest fear, the older Danes feared lack of privacy the most. The current collective life in the nursing homes draws a clear contrast with their previous life experience, where the emphasis is mostly on a more private life. However, they often counteracted these negative expressions with *"I cannot complain"* which was frequently uttered by many care residents. This phrase might be taken to implicitly suggest a certain level of dissatisfaction with life in care homes. Such "adaptive" reactions have been associated with self-abnegation or self-delusion by Sen (1999). However, they could also be viewed as genuine maintenance of life quality, a more positive kind of "hedonic adaptation" which enables having a good life with really nothing to complain about, adjusting expectations and standards to what the person actually has or can realistically achieve. This has been pointed out by Klausen (2019), who states that older adults' positive self-assessment of wellbeing can partly be explained by adaptation, especially in difficult circumstances, and that it can sometimes be seen as genuinely positive. Brandtstädter (2015) likewise argues that as individuals age, strategies of assimilative and accommodative coping may be utilized to foster resilience.

Despite relocating to care homes, the older adults still desired to maintain connection with their family members so that they would not be alienated from those with whom they were most closely connected emotionally. Both the Chinese and the Danish group seem to pursue harmony,

with the former focusing mostly on family-centered harmony and the latter on social systems harmony.[27]

Positive Environment

Positive environment decribes the environment in which the older adults are situated. This includes not only the geographical living environment, but also the institutional environment which may affect, directly and indirectly, quality of life. In this theme, life quality could be reflected with both easy access to the family home and acceptance that the institutional environment provides them with a sense of security for smoothing any potential challenges in the nursing home. According to attachment theory, attachment patters not only provide individuals with spiritual shelter, but also act as a base for psychological security, protection and assistance as individuals age (Snow 2013). In this sense, the particular interest in attachment to proximal variables (e.g. family members, home and the relevant symbols) could have become an important predictor for making a positive environment clearer into real life.

Geographical living environment

The geographical living environment in this context mainly refers to the satisfaction of the older adults with the environment in the narrowest sense. During the interview, it was found that those that moved to nursing homes nearby to where their family members resided expressed an element of happiness and life satisfaction.

In particular, the older Chinese have a strong desire to live nearby to their adult children and grandchildren enabling them to stay in contact, and also as a way of reducing the risk of being alienated by those who they are emotionally close to, and value highly. The feelings evoked by living closer to loved ones was likely to produce more positive emotions:

[27] This mainly refers to the harmony of the "social welfare system," as described by Jespersen (2004) where a prerequisite for its existence is collectively striving to create values such as "uniformity and conformity, innate solidarity, and exclusivity with regard to the outside world".

"*This care home is very close to my family home. It's very convenient for me if I want to go back home to get something I need. Also, my adult children could visit me easily, and bring me delicious homemade food as long as they have time. I like living here." Female, 85years. Chinese.*

Similarly, this was commonly found in older Danes, who preferred to choose care homes close to where their family members resided for the very reason that it would be easier for them to continue receiving attention from those who cared for them previously, and thereby experience more happiness:

"No. I came here this year. It was because my daughter, son-in-law and my granddaughter and her husband and family live here. My daughter thought that now was the time to move to this city, as last winter I had a bad cold and the like when I was alone up "there". … So it's also because I'm happy to be here." Female, 94 years, Dane.

Institutional environment

It can be seen from the interviews that a warm institutional environment, which has brought a lot of benefits and convenience, is conducive to improving the quality of life of the elderly. The satisfaction and requirements of this group are also directed to the optimization of the policy environment to a large extent. Older adults had feelings of being cared for by the services provided by care homes, as recounted by one female resident:

"*I am happy living here. We don't have to visit doctors in hospitals for them to prescribe if we need regular medicines for our illnesses. Because of the new policy, now we can directly buy medicine from here. It's pretty convenient for us." Female, 91years. Chinese.*

Likewise, despite being unsatisfied with the services provided by municipality, especially when taken into account with how they are treated, the older resident still held a positive attitude regarding the care home after his relocation. "*But one thing I know is that after I have come here (to the care home), life seems to be worth much than before*." He further expanded: *"Yes, I think it is great. And should I recommend [a care home] to someone, then it it's definitely [name of the*

care home]. Apart from the way I was treated by the municipal employees, I have nothing negative to say."

Some appreciated a safe environment that offers protection from falls and injuries. Others evoked the importance of the elements of facility design for their living conditions. These elements could be facilitators in fostering older residents' well-being in care homes.

Positive capability

The third main theme that was identified by older residents as contributing to quality of life was from the perspective of one's capabilities, which can be analyzed into three distinct subthemes: physical health, enjoyment of food and learning to compromise. There is long tradition for maintaining that the primary aim of human activities is happiness, in a sense that goes beyond pleasure and material welfare – that it consists not merely in enjoyment, but that people can "function well in life" (for a recent defence, see Kraut 2007). And various functions are perceived as highly associated with individuals' wellbeing. Hence, it seems warranted to assume that functions may play a role in highlighting the importance of positive capability, ahead of obtaining information from the participants (this, and the reflective awareness that it is an assumption on part of researcher, just as much as an empirical fact, can be seen as an example of the partially hermeneutic character of the study, though functions were mentioned by the participants without having been explicitly asked about).

Physical health

Most of the older adults interviewed highlighted that as they grow older, they are well aware of the obvious changes that occur in their physical strength, memory, reflexes, resistance and the like, and therefore the need to pay more attention to their own maintenance. The premise of a good life seems to be to have a healthy body and the need to work hard to achieve it. Some of the Danish older adults candidly mentioned the importance of physical health when answering questions about their perceptions on the quality of life.

"I feel like that. I haven't been severely sick or anything like that, in that sense, other than ordinary colds and such minor issues. That is, I have never had things that have been very serious." Female, 94 years, Dane.

"I have never minded getting old if you are healthy. ... Yes, it's probably there, if you think deeper about it. But I don't think so just I can think of it. Health, that's probably the most important thing." Male, Dane

While they concede that their bodily health steadily declines, they are more focused on the fact that they still retain their mentally capabilities. This accords with research by Schnittker (2005), which found that older adults' self-rated health corresponded more strongly with mental health symptoms such as depression, and less strongly with physical health conditions such as functional limitations and various chronic conditions. Likewise, physical health can be important to the Chinese older adults too; however for them, it is given less priority than other factors. In their replies, it was a happy family life that played a pivotal role in their perception of a quality life together with whether their children were filial to them. This included their adult children and grandchildren and encompassed involvement in their wellbeing (their health and how well they were doing with their work, life and so forth).

"*[A] good life? To me, a good life is I hope that the children and grandchildren in the family will be in good health. Nothing bad happens, then I would feel very happy. Well, now that I am older, I hope that the children will be in good health. I hope they are peaceful and filial to me, so that I would be very happy." Female, 91 years, Chinese.*

On the downside, one female resident spontaneously burst into tears when asked what a good life meant to her, and elaborated with the fact that she had lost connection with her daughter and how that deeply disturbed her.

Enjoyment of Food

The interviews conducted in the Chinese group showed that the ability to continue enjoying food mattered to the Chinese older adults in terms of contributing to the quality of life in care homes.

Both how much they can eat, and the quality of food, were highlighted as being important. As one 90-year-old female Chinese resident said "*To me, a good life also means you still can eat, because it means a very good fortune. Many older people, like my age, cannot eat, because of the diseases they suffer in one form or another*." The ability to eat is seen as an indication of the general "trajectory" of life, of whether things go more or less well overall. Additionally, some viewed meals as one of the most important daily activities in care homes. "*I am single, so I don't have to be anxious about anything else. My daily activities here are simple, focusing on eating, sleeping and watching TV*" as recounted by a male Chinese care resident. Another elderly female even depicted mealtimes as part of her daily expectations (about having something to look forward to) and thus contributing to her daily happiness with "*the moment going to canteen to enjoy delicious meals there*," and "*we have a quite good chef here. I am very satisfied with the food he makes every day*."

Similarly, some Danish participants seemed to share their Chinese peers' views in terms of enthusiasm for mealtimes. While there may be limitations in their activities compounded by changes in physical mobility, for some, they remained satisfied with their lives if they could compensate it with something else such as good food.

"But, I still have something to do here. I live here where we get something good and indeed a lot, to say at least, for my age. Also, I have always liked some good food and such, and made myself good food and things like that." Female, 94 years, Dane.

Another male Danish resident was even more direct and replied with "…*yes there needs to be good food*." "*.[...] and look how hard they [the caretakers] work. [...] There's nothing here [to complain about]…and we get such good food. Although I am no longer as good as eating as I used to be.[...] My mouth becomes dry."* in responding to what quality of life means to them. Although there may be different perceptions as to what constitutes good food, it nonetheless seems to play a key role in life quality for the majority of people.

Learning to compromise

The quality of life in nursing homes, when centered on harmony and consensus, seems to require the ability of compromise, be it through shared cultural habits or a more active social construction[28]. This category was mentioned extensively among residents in the care homes. Due to the emphasis on collectivism in Chinese culture, Chinese elderly residents tended to be more cooperative, compromising and non-confrontational to either protect their social identities (not losing face) or to maintain harmony within the care home (not bothering others). They often tolerated others, and adapted their own behaviours and attitudes to the new established norms and routines of the existing group, in order to avoid the emotional distress caused by potential conflicts with other residents. They also held the belief that harmony in the home is likely to increase their positive emotions on a daily basis. An older female described this scenario in the following excerpt:

"*My roommate is aged 90 plus. People normally at this age are nice and kind, but she is aggressive and often speaks bad words to me. Sometimes she makes noises while I am sleeping. I feel unhappy. But whenever I think about it, she is older than me, so I try to convince myself to tolerate for harmony sake. Also, life is not easy for such an old age. We should give her more empathy, less complaints." Female, 86 years, Chinese.*

The Chinese older adults tend to regulate their emotions and cognitive state by suppressing their inner voice or hiding their emotions (not sharing negative feelings such as worries with others) and by dismissing any discomforts with the attitude "*we are useless to the society anyway. Forget it, cherish everyday as a blessing to us at this age*." Otherwise, they dismissed any problems altogether by not even mentioning them. This equally applies to the Danish participants, who preferred to shy away from conflicts by making no complaints, in order to achieve their own goal: following the social rules while living in a collective life. The phrase "*I cannot complain*" is repeatedly mentioned among participants. A Danish male resident recounted: "… *whether I'm*

[28] Cultural habits mainly refer to how Chinese older adults maintain harmony among themselves, family members and society. However, more emphasis may be given to the family and how to avoid not being a burden to them. From the perspective of social consensus, the older Danes may point towards to not being a burden to society. This echoes the findings of Andersson et al (2008) who stated that the fear of being a burden encouraged older adults to hide their real feelings or suppress their inner voice, to maintain a façade of normality.

sitting on a chair or on this… As long as I can go to bed myself and get up again, I cannot complain." "I do not complain about being visited, but it is also entertainment when they do visit."

By quietly accepting their current status quo, they rationalize their behaviours to fit in, and in some cases, tolerate behaviours that would previous be seen as unacceptable such as disturbances from their co-residents. In the Danish group, an old lady recalled an occasion when another resident entered her room without knocking on the door which had made her feel rather uncomfortable. She had to accept it as the status quo, despite her reservations. The reasons for this could be lack of trust in others or the invasion of privacy.

Another example is an older male who lived with nine women in a section of a care home. He described how during discussions, the women tended to start quarrelling; as a coping strategy, he had quickly learned to avoid getting involved in these often petty discussions.

Interviewer: "So you're getting along well with the other residents?"
Older resident: "Yes, yes. We are ten residents. I am the only male [laughs] ... Yes, so I have to up to be careful with my responses sometimes. ... Otherwise ... it works well. At least I think so myself. That squabbling, I don't give much for that."
Interviewer: "So the others squabble (kævler)?"
Older resident: "Yes, they damn squabble. I have no interest in that."
Interviewer: "So you just keep out of that?"
Older resident: "Yes, I just keep out of that."

This example could also reflect a notion among the older adults that they *ought* to have nothing to complain about, whether it be health-wise or regarding their surroundings. Such perceptions also indicate that a sense of "learned helplessness" can occur when older adults are exposed to inescapable situations in which they gradually lose control of their lives, or fail to achieve desired outcomes. But as highlighted previously, it could also be viewed as a positively adaptive mechanism that help them achieving hedonic goals even as they grow older.

Positive experience

Positive experience was the fourth dominating theme to emerge when older residents were asked about their quality of life in nursing homes. It encompasses both the actual positive emotion experienced and the level of the interest generated from things that provide novelty, pleasure, comfort, happiness, invigoration, or warmth, including previous life experience, agency, respect and emotional health. While it must be taken into account that the particular interest in the role of emotions in wellbeing that comes from the theoretical background of the study could have played a role in making positive experience stand out so clearly, the tendency to emphasize it was significant and not due to any explicit priming or particular mentioning from the interviewer.

Previous life experience matters

Older adults in this subtheme used past perspectives to contextualize what their expectations of what a quality of life should be. Some Chinese participants referred to past experiences of their harmonious relationship with family members as a spiritual foundation which positively supported their current life quality in care homes. They frequently shared or reminisced about those precious memories in conversations with family members, which significantly aroused positive feelings and a sense of security in the older people. Even in the present time, situations where family members regularly visited or occasions when they are taken back to their homes on traditional holidays can greatly contribute to a better quality of life. In addition, those who had experienced previous hardships in life were more likely to have a relatively positive appreciation of happiness and appraisal of their life in the present, inasmuch as the hardships they had overcome had provided a historical backbone for comparison. An elderly male resident said: *"I cherish today's life very much, which is a hundred times better than what I experienced at a younger age, due to too many difficulties at the time*."

Similarly, in the Danish group, reminiscing about old times seemed to profoundly boost the older adults' contemporary moods. When a female resident was asked whether or not she still thinks about those previous life experiences and whether they made her happy, she responded with: *"Yes, I do often. Often when I sit and think, something comes out and then I wonder if they still exist and, you know, such different things*." Some residents also mentioned that the frequent visits by family members profoundly boosted their moods, not only as it reminded them about common

past experiences, but because it sometimes allowed them to "relive" them. This can be partially explained by the continuity theory, which suggests that when making adaptive choices, older adults attempt to maintain a certain continuity in their behaviors, values and attitudes, and to preserve a sense of self by adopting strategies which tie the past to the present (Atchley 1989; Atchley 2000). In addition, George (1996) emphasized that the frequency of exposure to previous life events had a lasting impact on one's subjective well-being and was reflected in attitudes, behaviors and the process of meaning-making in later years.

Agency

The provision of various activities that interest and entertain the elderly, and the support provided to attend these events, were perceived as crucial factors to improving the quality of life in nursing homes. Some Chinese residents revealed that they had developed new interests, such as playing majong, after moving into a care home, in order to maintain their mental quick-thinking. Others helped organize activities to help others in the nursing homes. Many regarded this as having a positive impact on their own well-being, as helping others brought them pleasure and a sense of purpose to their lives. A female resident recalled an activity she participated in:

"*Before the pandemic, our nursing home regularly organized for young people such as university students to come to talk to us. We were very happy to share our previous experiences with them. We had a sense of being recognized and worthy to the society. We are still useful*." *Female, 85 years. Chinese.*

"*If we care and help others when they are in need, they feel the warmth and are happy. We are happy, too." Female, 84 years. Chinese.*

In the Danish group, the interviews showed that most of the elderly people expressed that they would continue to participate in more recreational activities in the elderly care institutions, both to contribute to their positive emotional-being, and as a means of continuing previous life experiences. A 75-year-old Danish female recalled how helping others contributed to her enthusiasm towards life in a care home: *"… And it's helping others that helps me so much. … I have arranged trips for many others, and that was very fulfilling for me. Also they came to me to*

have it planned because it meant that they trust me." This was perceived by both the Chinese and Danish groups as a significant source of adding meaning to their lives when in care homes. It seems that life quality is associated with engagement with meaningful activities. They were highly motivated by these activities which enabled them to continue their current lifestyles in a positive fashion and gave them an awareness of the value of existence. A similar observation was made by Foster & Walker (2014), who emphasized having one's own activities as a significant element in active aging and maintenance of health.

Respect and Emotional health

The older residents pointed to life quality was more valued if respect was shown by the staff, demonstrated by taking meticulous care of their needs, and less so about them acting according to principles. That is, they appreciated not only having their physical care needs met, but also any emotional needs. Additionally, it seems that emotional well-being was an important indicator in reflecting the quality of life experienced by the elderly. Most elderly residents say that living in a care institution is more enjoyable, although there are some who have a more negative attitude. The following quotes demonstrate this, and were expressed in a pretty despondent tone:

"No. They say they're following up, but nothing's going to happen." Male, 68 years, Dane.

"No... they take no matter who it is. And they distribute the work out there. There is nothing special." Male, 95 years, Dane.

For the elderly, this does not necessarily mean that considerable effort in assisting them or taking care of them is required, because what they desire the most is more emotional attention from others, rather than purely material support. This is partly explained by the socioemotional selectivity theory which says that older adults tend to focus on a few key relationships as it helps them regulate their emotions better and maximizes any positive effects (Carstensen 1992).

"They are like my children. There are several times when I feel uncomfortable. They would come and show concern to me, asking whether I need any help." Female, 85 years. Chinese.

In some cases, meeting and understanding their specific requests can also boost the residents' mood. An example of this is having special meals prepared in accordance with the residents' preferences, as recounted by one resident:

"I like certain dishes. Sometimes I ask them if they can cook the dishes for me, they would do it, which makes me very happy." Female, 91 years. Chinese.

While living in an elderly care institution, with the companionship of peers, can reduce the loneliness of the elderly, some older residents tend to purposefully minimize their interactions with others. Together with the lack of emotional contact from their family members, this can serve to exacerbate feelings of loneliness. It has been challenging for these residents to integrate into collective life, which could be viewed as a consequence of their own personality or choices which may have been influenced by previous experiences. *"For many older people, it seems that very suddenly they are no longer in focus. ... The question is what kind of a person you are. Whether you seek out other people and want to be something to them."* as recalled by one elderly Danish female resident.

This again echoes the theme of "*positive attitude as a good start*" in which those who show a willingness to move tended to hold a more positive attitude, which was particularly instrumental to the process of a fulfilled and satisfied adaptation, as opposed to the less willing group, who held onto a desire to be attached to their previous home or lifestyle – be it physically or emotionally.

Limitations

There are a number of limitations to the present qualitative study. Firstly, the results were based on a relatively small sample size. It could also be criticized for the lack of geographic diversity, creating a risk that the participants' views may not represent that of older adults living in other facilities. Thirdly, as all the participants were selected by managers in the care home and had to consent themselves, some selection bias has been unavoidable. Lastly, the findings of the present study might also not be transferable and so the external validity might be questionable. On the other hand, qualitative studies may have their own standards of generalizability and replicability

(Nowell & Albrecht 2018). Detailed descriptions and interpretations were provided to give other researchers a full insight into how the data has been analyzed, but they are undoubtedly influenced by particular interests. The primary aim has been to explore the understandings of older adults from a cultural and subjective perspective to gain in-depth knowledge about how they perceive their life quality and the way it is related to the transition to a care home. Therefore, it can be assumed that the limitations do not render the findings and analyses insignificant, although further research is called for, not least a comparative study that explores the conceptions of life quality in more heterogeneous groups.

Conclusion

To my knowledge, previous comparative studies exploring the quality of life of older adults in care homes from their own perspectives in China and Denmark are relatively sparse. A key finding from this research was that older care residents in both countries shared a high level of similarity in their perceptions of quality of life, despite living in different cultural settings.

Socio-cultural values may nevertheless have a persistent impact on older adults' perceptions of quality life in care homes. In this study, older adults considered quality of life as a dynamic process in pursuit of a harmonious state, centering on "change" as the core value, which might be different from stability, confirming or at least compatible with a process-oriented approach to older adults' wellbeing (Klausen 2018), and also confirming the assumption that older adults may have, and live by, particular understandings and perceptions of quality of life (Klausen 2019). The foundation of Chinese culture is maintaining harmony – where family harmony as a core social unit is placed as a high priority (Chen 2016), with filial piety playing a pivotal role in family harmony, and it mainly centers around mutual responsibility, respect and emotional care between older parents and their adult children. In terms of collectivism, Chinese older adults have been stereotypically viewed as a homogeneous group who valued the importance of collectivity over individuality, without legitimate autonomous interests (Kuo & Kavanagh 1994).

Nevertheless, findings of this study showed that these same values of harmony were present in the perceptions and understanding of Danish older adults as well, although they were

sometimes expressed in a different form, such as at the level of social systems. Hence the assumption that cultural differences influence perception of quality of life was partly met, but also partly challenged; some cultural differences turned out to be more superficial. On the surface, creating harmony may be viewed as a potent solution to stimulate positive emotions, as it might protect their self-esteem. However, it may not be a remedy for solving core problems, but rather a means of shunning them. This may partly explain why older adults prefer to relocate to a care home near their family members, as family may impart a balanced sense of hope even though they are "harmonized" by society systems. Compared to other social relationships, the family bond may entail a better soil for cultivating love and the other natural affection that should be at the center of our lives, and at the same time, provide them with a sense of extended existence and fulfilment. Additionally, the ideal of family closeness may be more desirable for older adults in maintaining mental health.

In the context of harmony, adaptive processes were adopted as coping tools by older adults in order to enhance their life quality. Quality of life in the transition to care homes was seen as characterized by having a positive attitude as a necessary basis combined with the ability to compromise. Although attitude change is difficult to achieve, it seems to be very important for securing wellbeing in the transitory phase and after, and is known that it can be fostered through strategies of communication, such as political speeches and advertisements, as demonstrated in the reinforcement theories of attitude change (Deaux et al. 1993).

In terms of harmonious pursuit, older adults' perspective on life quality could be seen as integrating both simple and complex not-conflicting values. Considerable weight was given to apparently small daily pleasures such as enjoyment of food, elation due to family member visits, and contentment with tailored care provided by staff. All these small pleasures appear to be strongly enhanced in complex environments, such as a warm family, institution and society, which are all potentially interlinked. Irrespective of the particular path they followed, be it finding comfort in memories, developing good relationships with others, participating in activities or acquiring respect from others, such activities provided the older adults with a more balanced sense of completeness and peace of mind.

Findings from this study also corrects the common misconception that often depicts older adults in individualistic culture as active and diverse care recipients, with the Chinese as a more homogenous group consisting of passive, vulnerable, conformist and/or dependent subjects. In the latter stages of life, the Chinese appeared more like equal human beings who expressed and interpreted their own understanding of what the quality of life should be like, within particular social structures.

The present study has implications for developing policies in the future, including tailored interventions, and meeting the unique needs of older adults, and thus improving their wellbeing. The findings suggest that family relations in the form of emotional bonds remain important and can also be maintained under and after the transition to a care home, and under conditions of modern life (Ren et al. 2022). The findings also indicate that the quality of the very transition phase matters significantly; positive and negative experiences related to past life stages or events continue to influence perceived quality of older adults, to a larger extent than recognized by standard approaches to wellbeing and aging (and thus again confirm the holistic and process-oriented approach; though prior sympathy for this approach may of course to some extent have influenced the interpretation). The study also indicates that further research is required that considers the values of harmony as the central role of older adults' perception of life quality. It also seems important to conduct future comparative studies with the use of diary studies that were followed up by a second interview to enrich data analysis and substantiate the findings from the present study.

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14. Article 4

Smartphone Use, Intergenerational Support and Older Adults' Wellbeing

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Abstract

This study takes the Danish retired older adults as the research object, investigating the interrelations among smartphone use, intergenerational support and older adults' eudaimonic wellbeing through quantitative and qualitative methods. The technology acceptance model (TAM) and semi-structured in-depth interviews were employed to evaluate whether the proposed hypotheses were confirmed. The results revealed that the use of smartphones as an information technology device had an impact on the path from the attitude toward use to actual smartphone use. Also, they had a positive effect on older adults' eudaimonic wellbeing. The findings demonstrated that the design and use of smartphones are in line with the physiological characteristics of older adults, and calls on them to use smartphones healthily. This study also confirmed that the physical needs and emotional needs of intergenerational support from children can positively promote older adults' wellbeing, even though in individualistic cultures, where intergenerational support perhaps matters less.

Keywords: Older adults' happiness/wellbeing; Smartphone use; Eudaimonic wellbeing; Intergenerational support; Technology acceptance model; TAM

1. Introduction

Numerous studies have been conducted on the theoretical concepts and influencing factors of happiness and wellbeing in older adults. Studies on influencing factors have mainly been carried out from psychological and sociological perspectives, with a focus on both subjective and objective factors. Subjective factors include personality traits and cognitive patterns (Fehring 1997; Weicht 2013), while objective factors include gender, age, education level, income level, health status and family life (Wang 2016). The present study aims at uncovering the role of a more specific and still underresearched, albeit increasingly pervasive factor, as it investigates the effects of smartphone use on the wellbeing of older adults, especially with regard to its role intergenerational relationships. This study aims, with the use of a questionnaire survey and in-depth interviews with retired Danish older adults, to explore whether there is a connection between smartphone use, intergenerational support and older adults' wellbeing in the Danish context. While the study is not comparative, it is carried out with the putative differences between Western and Chinese culture – the difference between individualism and familism, and different understandings of happiness and wellbeing – in mind.

Smartphone has become a ubiquitous device in modern society. The proportion of smartphone users is already reaching 45% of the population globally (Statista 2022), with the primary purpose of accessing the Internet. Earlier studies have demonstrated that Internet use has a positive impact on older adults' wellbeing (Amaral & Daniel 2018; Nef et al. 2013), but relatively few studies have been specifically devoted to exploring how the Internet boosts participants' happiness and wellbeing. As society gradually steps into the "5G" era and ageing community, it appears that the smartphone is becoming an increasingly necessary device for older people as a means for accessing the Internet. Some research has revealed that the smartphone use can contribute to improving quality of life and wellbeing of elderly population (Briede-Westermeyer et al. 2020). Also, Liu et al. (2021) indicated that the reasons older adults use smartphones are to meet the needs of emotional communication, access to knowledge and information, pleasure and self-realization. However, others have demonstrated that an over-dependence on digital device can reduce older people's feelings of belonging and wellbeing (Wilson 2018). It is thus necessary to investigate the impact of smartphone use on the wellbeing of older adults and how the smartphone contribute to their happiness and wellbeing.

It has been suggested that ageing, technology and social contexts are perceived as mutually intertwined and shaping each other (Greenhalgh & Stones 2010). And culture can influence or even dominate people's subjective experience of happiness and wellbeing (Lu 2001). Cultural differences can lead to variations in people's wellbeing (Haybron 2008; Inglehart & Klingemann 2000; Lu & Gilmour 2004; Ye et al. 2015) and the exchange of support between generations (Trommsdorff 2006). Older people's various attitudes towards smartphone use under different cultural backgrounds may affect the mechanism or pathway from smartphone to their wellbeing. In Chinese culture, where "filial piety" and familism are highlighted, studies have found that happiness is influenced most by interpersonal and environmental relationships (Uchida & Ogihara 2012; Cheung et al. 2006). Family members are connected through mutual interdependence, and it has also been found that appropriate bottom-up intergenerational support from adult children can positively promote the wellbeing of elderly persons (Author and colleagues 2022; Li & Guo 2022; Park 2021).

This differs from both the understanding and putative conditions of Westerners' happiness. Happiness is often understood more hedonistically in Western culture, which is in line with the fundamental beliefs and values of modern Western culture, individualism, liberalism and modernity (Joshanloo 2013; 2014). In individualistic cultures where independent orientations prevail, most scholars have focused on how older people use smartphones to construct social relations in their daily lives (Madianou & Miller 2013). In this sense, smartphones can be utilized as environments that shape users' behaviors (Bucher & Herlmond 2017). Nevertheless, these actions are conducted in the context of broad social support, rather than within the family context. This is understandable, as, in Western society, the shift of responsibility for taking care of older generation from the family to the welfare state is probably a primary reason for the separation of generations (Aboderin 2004; Bengtson & Putney 2000).

Therefore, it could be assumed that the mechanism from smartphone use to older adults' wellbeing via intergenerational support that delivers effective messages in Chinese culture in boosting older adults' wellbeing within the family context may not be generalized to family relations in Western culture that has shifted the context from family to society. This implies that older adults in Western developed countries may have different scenario in the family than their counterparts in China. With the increasing physical dysfunction, a loss of social importance and

rapid social changes, providing at least some support from family for older adults may counteract their losses and thus be conducive to their wellbeing.

The research question will be dealt with on a theoretical basis that integrates the core principle of filial piety in ancient Chinese philosophy and the modern sociological theory of planned behavior (Ajzen 1985; 1991; Kim et al. 2016) and a technology acceptance model (Davis 1989; Chen et al. 2018) into a more psychological framework.

The structure of the paper is as follows: Section 2 lays down the theoretical basis for the study. It outlines the notions subjective and eudaimonic wellbeing, opting for a version of the latter, introduces the Technology Acceptance Model that will be applied to smartphone use, and formulates a number of hypotheses motivated by theoretical considerations and findings of earlier empirical studies. Section 3 presents the mixed methods employed, describing the questionnaire used for the quantitative and the interview guide used for the qualitative part of the study. Section 4 describes the data collection and analysis. Section 5 presents the findings and demonstrates their statistical significance. Section 6 points to the limitations of the study. Section 7 concludes that all the hypotheses were confirmed. It emphasizes the complex interplay between technology use, practical support and emotional and personal relationships, and points to the somewhat surprising result that intergenerational support seems no less important in an allegedly more individualist culture like the Danish.

2. Theories and hypotheses

2.1 Older adults' wellbeing

In empirical studies, analysis of an individual's mental health and quality of life is primarily conducted in terms of subjective wellbeing (SWB), which has been developed on the basis of a hedonic understanding of happiness (Wallace & Shapiro, 2006). It is also a widely used approach to measuring older people's wellbeing in general. Bradburn (1969) has argued that positive and negative emotions are both components of SWB, and that they are separate dimensions of happiness. Diener (2009) proposed that SWB is an overall assessment of the quality of life based on an individual's own criteria. According to Kahneman (1999; 2000), the assessment of wellbeing should also take into account an individual's emotional experiences and it is important to include

criteria encompassing both positive and negative emotions. The combination of emotions (subjective feel) and evaluations (subjective judgement) are thus assimilated into a hybrid notion of "hedonic" wellbeing (Diener et al. 2002). Utilizing this approach, an older adult is generally considered to have a higher level of SWB, to the extent that positive affect is maximised and negative affect is minimised. This is reflected in the so-called U-shaped happiness-age curve, as SWB seems to increase after middle age. However, it has been argued that the results obtained may be primarily predetermined by researchers, rather than adequately reflecting older adults' actual quality if, as both self-reported life satisfaction (Pavot & Diener 2008) and the "day reconstruction method" (Kahneman et al. 2004) may be insensitive to human potentials. There is also a suspicion that the seemingly positive tendency reflects a lowering of standards or resignation on part of the older adults, rather than a genuine increase in wellbeing; for a nuanced discussion, see (Klausen 2019; Klausen et al. 2022)

Functioning both as a complement and a contrast to the SWB-approach, eudaimonic wellbeing (EWB) refers to a construct that characterizes happiness as "feelings of personal expressiveness" (Watermann et al. 2003; 2008; 2010). It is consistent with those behaviors involved in the pursuit of eudaimonic goals, with particular emphasis on meaning, values, "self-realization", "personal potentials", and "personal growth" (Ryan & Deci 2001; Ryff & Singer 2006; 2008; Waterman 2008). Critics of EWB have argued this construct may or may not be accompanied by feeling good, and it is more of "a virtual synonym for positive psychological functioning" (Ryan & Deci 2001). In contrast, or complementary to, the dominating approaches, which place emphasis on optimal functioning in individuals, Klausen (2020) proposed a more holistic view of older adults' wellbeing, noticing that wellbeing was achieved through the adjustment of standards and by controlling their emotions, giving priority to proximal variables that surround them.

EWB may be marginally associated with the essence of eudaimonist philosophy, notably the ethics of Aristotle, in which happiness is based on the pursuit of a number of specific qualities consistent with one's human and social nature, rather than subjective pleasures. To better reflect the philosophical understandings of eudaimonia, Watermann et al., (2010) developed a new scale by combining subjective experience and objective evaluations, with a particular emphasis on personal goals and growth, which might help enrich and deepen our understanding of the wellbeing of older adults. Previous studies have generally targeted the younger generation in terms of

personal growth, with relatively few research aiming at the older generation. Presently, the smartphone is emerging as a necessity for older people, although there may be a reluctance to accept it, as it can also be challenging for them to understand the devices and navigate the digital space. It can be employed as a behavioral goal for personal growth and development, consistent with the basic essentials of eudaimonic wellbeing by Watermann et al (2010).

In this study, a holistic eudaimonic wellbeing approach for older adults was adopted. This construct consists of overall life satisfaction, positive attitude and meaning in life. As such, this is still not markedly different from SWB. Since it is developed for use in empirical studies, it is still subjective in the sense of relying on respondents' self-reports and thus on their judgements but prompts them to focus on more objective aspects of their life. It is chosen here because its holistic character fits well with theoretical assumptions about the structure and elements of older adults' wellbeing (Klausen 2020) and because it seems less prone to charges of cultural bias (see (Author and colleague 2021) for a comparison of eudaimonic conceptions with traditional Confucian notions of happiness, which also points out, however, that the eudaimonic conception in contemporary psychology still reflects Western notions to some degree).

2.2 Technology Acceptance Model

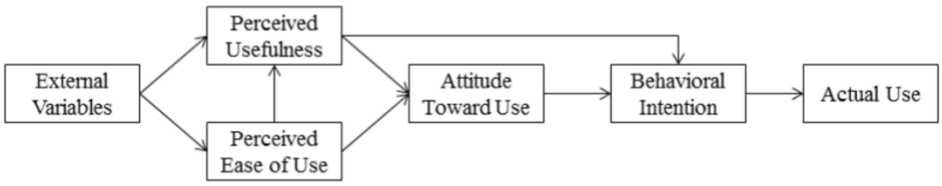
Based on the Theory of Rational Behavior and the Theory of Planned Behaviour, Davis et al. (1989) proposed the technology acceptance model (TAM see Figure 1). The original intent of the TAM was to describe the factors that influence mainstream computer acceptance, and it has been applied to the online consumer behavior context (Bruner & Kumar 2005). The TAM consists of two primary determinants: perceived usefulness, which is a response to the extent to which a person perceives that using a particular system improves his or her work, and perceived ease of use, which is a response to the ease with which a person perceives the process of using a particular system (Marangunić & Granić 2015; Surendran 2012).

According to the technology acceptance model, system usage is driven by behavioral intention, which is jointly determined by attitude toward use and perceived usefulness, and perceived usefulness is jointly determined by perceived ease of use and external variables. External elements influence the perception of usability (Lee et al. 2003). External variables are composed of system design characteristics, user characteristics, task characteristics, the nature of the development or implementation process, policy implications, organizational factors, and the like,

creating a link between the internal beliefs, attitudes, intentions, and individual differences, environmental constraints, and controllable distractions that exist in the technology acceptance mode (Holden & Karsh 2010).

Despite numerous studies on the analysis of external variables (see e.g. Venkatesh 2000; Venkatesh & Brown 2001) of the TAM, and although it has been widely applied in various fields (Cheng et al. 2015; Ho et al. 2013; Pai & Huang 2011), little previous research has included intergenerational support into the TAM-based model to explore the relationship among these variables. On the other hand, the attitude toward use construct was often excluded by many studies from the proposed model, in order to simplify it (see e.g. Gefen et al. 2003; Jin 2014; Venkatesh & Davis 2000). The behavior intention construct was taken out in this study, and therefore the simplified TAM was applied.

Figure 1: Technology acceptance model



2.3 Intergenerational support, perceived usefulness and smartphone use

The research hypothetical model is presented in Figure 2. With the advancement of technology, smartphone use is gradually becoming integrated into our daily lives. Electronic products, especially smartphones which allow access to the Internet, play an increasingly important role in everybody's lives – managing finances, spending leisure time, communication and assessment of health (Howells et al. 2014; 2016; Zemaitaityte & Katkoniene 2019; Zhang et al. 2013; 2014). The ease of connection brought about by the smartphone counteracts the limitations of time and distance between people and introduces a new social style of communication. As might be expected, different generations react to new things in different ways. A review of previous studies indicated that the rapid development of Internet technology and intelligent electronic products has

created a "digital divide[29]" between the younger and older generations (Gilleard & Higgs 2008; Huxhold et al. 2020; Norris 2001; Räsänen 2008; Serrano-Cinca et al. 2018). Also, Zemaitaityte & Katkoniene (2019) noticed that the emergence of smartphones allowed the Internet to penetrate into all aspects of life, but at the same time, they were becoming increasingly more sophisticated and difficult for older people to use. Although older people will naturally be curious about new things such as smartphones and the Internet, and studies have shown that the use of smartphone applications may reduce the cost for treating illnesses (Mansson et al. 2020), they can also be a source of anxiety and stress.

Currently, guidance on navigating and utilising smartphones and the Internet plays an essential role in bottom-up intergenerational support. Intergenerational support for older adults is generally seen as one dimension of family or social support, where functional and structural support have been mostly discussed (see e.g. Antonucci 1990; Oxman & Hull 1997). These two modes of support include financial reciprocity, mutual assistance in daily life (physical needs) and emotional support (meeting emotional needs) between one generation and another, as well as the number of children, gender, living arrangements and the process of sharing life experiences and resources (Wu 2021). Zhou (2015) put forward the concept of "digital back-feeding" in his research, recognizing that there were objective differences in learning and cognition between the old and the young. Older people are far less likely than young people to accept change including the use of new media. In this era of new media, in particular with recent, pervasive smartphone technology, children providing technical support to their parents in Internet and smartphone use are defined as "digital back-feeding"; it is assumed that the greater the amount of family feedback that occurs, the more harmonious the parent-child relationship is, and the greater the happiness of older adults (Zhou et al. 2015). In addition, according to the theory of planned behavior (Ajzen 1985) and findings of Shih (2004), users' attitude toward Intranet use is significantly influenced

[29] This notion has been partly debunked. The divide may be more complex and subtle, as for example, educated older adults or with higher incomes may be quite digitally savvy (see e.g. Peacock & Künemund 2007; Van et al. 2014; Serrano-Cinca et al. 2018) due to the different socio-cultural context where they are involved. Nevertheless, there remain exists a clear division, particularly amongst those aged over 65 if the older population are treated as heterogenous (see e.g. Statistics Finland 2010), and also, of the 70 percent of European residents who use Internet, there are 19 percent who has never accessed it (European Commission 2016).

by their perceived usefulness, which is also a construct that has been constantly showed to impact people's attitude of e-learning systems (Lee et al. 2013; Porter & Donthu 2006; Sipior et al. 2011; 2010). In another study, attitude toward use, functioning as a source of information, was shown to positively predict users' plans to act (Hagger et al. 2007). Based on these findings and assumptions[30], the following research hypotheses are proposed:

H1: *Perceived usefulness has a positive effect on the attitude toward smartphone use among older adults.*

H2a: *The intergenerational support of adult children regarding the physical needs of their retired older adults can improve their attitude toward use of smartphones*.

H2b: *The intergenerational support of adult children regarding the emotional needs of their retired older adults can improve their attitude toward use of smartphones*.

H3a: *The intergenerational support of adult children regarding the physical needs of their retired older adults can improve smartphone use.*

H3b: *The intergenerational support of adult children regarding the emotional needs of their retired older adults can improve smartphone use*.

H4: *The attitude toward smartphone use of older adults has a positive correlation with their smartphone use.*

2.4 Intergenerational support and older adults' wellbeing

Intergenerational support is a two-sided mutually beneficial relation (Chen & Silverstein 2000; Guo et al. 2017; Tian 2016). Apart from the common bottom-up, one-sided relationship from the younger generation to the older, the top-down intergenerational support may also contribute to older adults' wellbeing. Zhang et al. (2014) conducted an analysis of elderly people over the age of 65 in China and concluded that caring for their grandchildren improved older people's self-reported health scores. This is also implied by the notion of generativity, which refers to the older

[30] It should be noted however, that the positive effects of smartphone use on older adults' wellbeing are still mainly a theoretically based assumption, which has not been demonstrated empirically. Since the relationship is, anyhow, assumed to be mediated by a variety of factors, it should not be taken for granted. It is an especially open question to what extent a positive effect can be shown among Western older adults, both because existing studies have mostly targeted Eastern (not least Chinese) older adults and because Western older adults are assumed to be more individualistic, and also to assess their own wellbeing based on a more hedonistic understanding.

generation felt need to contribute to the younger (Erikson 1997). Possible explanations for this phenomenon have been suggested, fore example that older people can continue to support their adult children's daily lives by helping with household chores and caring for grandchildren, thus sustaining their own self-worth, self-growth and self-efficacy (Cong & Silverstein 2008; Goodman & Silverstein 2002) and increasing trust and emotional communication between elderly persons and the next generation (Ahn & Choi 2018; Arpino & Bordone 2014).

Also, the financial and physical contributions that older adults brought with them were a sense of satisfaction and achievement, which had a positive impact on their happiness (Albertini & Mantovani 2021). However, the top-down intergenerational support could, in some situations, have the opposite result. Schwarz et al. (2010) argued that assistance provided by older people to their children can enhance their subjective wellbeing merely under conditions of reciprocity. In Chinese society, one-sided support from the old to the young may generate a sense of failure and psychological pressure for the older generation, such as feeling as if they have not successfully raised and educated their children, which may significantly reduce their subjective wellbeing.

It has been pointed out that the bottom-up intergenerational support has a positive effect on the happiness of older adults, and those living with their adult children and grandchildren tend to enjoy higher subjective wellbeing and self-evaluated health status than those who do not (Liang et al. 2001; Wang et al. 2014). This equally applies to those living with other family members, i.e. spouses. The main beneficial effect of bottom-up intergenerational support appears to be a reduction of the negative emotions of older people. Thus, those without children or relatives for support were more likely to experience feelings of loneliness, depression and abandonment (Author et al. 2022; Author 2022). These negative emotions were not conducive to wellbeing (Ichimura et al. 2017; Li et al. 2014).

That older people actively accept the bottom-up intergenerational support can be seen as a manifestation of filial piety, which is a core principle of Confucianism (Fei 1992; Chu et al. 2011). The influence of filial may reflect differences between Chinese and Western cultures. There has been little research in this area in Western countries, where the cultural concepts of independence and freedom are promoted, and intergenerational dependencies and obligations are perceived as remnants of the past (for some indications that it is not uniformly so, see Author et al. 2022). In China, the impact of filial piety plays a role on the happiness index and the happiness level of

elderly people, who cherish and yearn for family affection. While in Western countries such as Denmark, intergenerational support supposedly matters less.

This study explores intergenerational support as an intermediary variable and asks whether the correlation between smartphone use and older adults' wellbeing is influenced by intergenerational support in a Danish context. It should be noted that the intergenerational support here refers to the bottom-up relationship, that is, from the young to the old. The following hypotheses are proposed:

H5a: *Intergenerational support from adult children regarding the physical needs of older adults can improve retired older adults' eudaimonic wellbeing.*

H5b: *Intergenerational support from adult children regarding the emotional needs of older adults can improve retired older adults' eudaimonic wellbeing.*

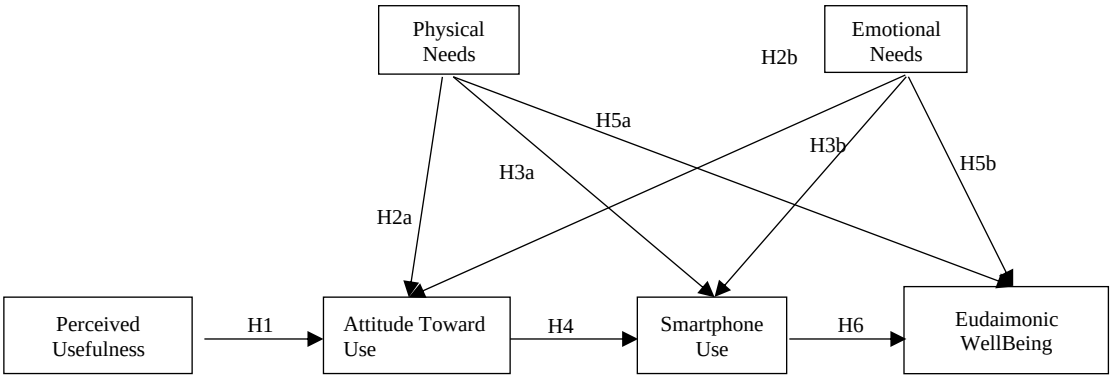
2.5 Smartphone use and older adults' wellbeing

Early studies on the influence of smartphones on older adults mainly focused on how to improve the life satisfaction of this age group with smartphones. By means of interviews and empirical analysis, the influence of electronic smartphones on the inner emotional needs and self-health of older people has been explored. Chen et al. (2018) conducted a survey on older people over 60 years old in China to estimate the impact of smartphone use on the wellbeing of the older adults. The results indicated that smartphone use did not significantly promote their subjective wellbeing. However, in a separate study comparing rural and urban samples, it was found that smartphone use of older adults in rural areas had a positive effect on their happiness, but this did not seem to be the case in urban areas. Mann et al. (2004) conducted research on smartphone usage and concluded that the frequency of smartphone use, the way the telephone was held and the layout of smartphone functions all had an influence on older adults' wellbeing. As such, proposals to improve the design of the phone were suggested, including increasing the size of the buttons, to accommodate the needs of elderly people. Ching et al. (2020) noted that although there is a huge demand for smartphones by older adults, there are many obstacles that hinder their more widespread use such as practical problems associated with user unfriendly phone designs. They suggested that it would be useful to have smartphone training courses and, in particular, courses designed to specifically target the needs of older adults. A questionnaire survey of older adults in

urban areas by He (2020) found that the attitude of this cohort and their willingness to use smartphones could influence the tacit intergenerational relationship with their children and further promote happiness. Based on this aforementioned research, this study will further discuss the impact of smartphone use on the wellbeing of older people, and propose the following hypothesis:

H6: *Smartphone use has a positive effect on retired older adults' eudaimonic wellbeing*.

Figure 2: Smartphone use and older adults' well-being research model



3. Methods

This study was based on a combination of qualitative and quantitative methods. Semi-structured interviews and open-ended questions were used for the collection of qualitative data, and a questionnaire adopted for obtaining supplementary quantitative data.

3.1 Questionnaire

In this study, a self-designed questionnaire was utilized to collect first-hand data about the correlation between older adults' wellbeing, smartphone use and intergenerational support. The basis for this questionnaire referred to the Questionnaire for Eudaimonic wellbeing (QEWB) proposed by Waterman et al. (2010) and relevant studies by Kim et al. (2016) and Chen et al. (2017) on perceived usefulness to attitudes toward smartphone use. Each aspect contained three items, scored on a numerical 5-point Likert scale, ranging from "strongly disagree" to "strongly agree", with a higher score reflecting a higher level of wellbeing. The three items for older adults' eudaimonic wellbeing were:1. I am satisfied with my current life, 2. I often felt happy in the past

week, and 3. Looking back, I had a meaningful life. For perceived usefulness, they were: 1. I think it is wise to use smartphones, 2. I think it is pleasant to use smartphones, and 3. I think I am capable of doing more with smartphones. Lastly, in terms of attitude toward smartphone use, the following three items were covered: 1. I am willing to share my life experiences with my relatives and friends on smartphones, 2. I am willing to learn to use new functions on smartphones, which makes me very confident, and 3. I will keep using smartphones.

Intergenerational support was conceived as having two aspects, physical needs and emotional needs (Kirchengast & Haslinger 2015). Each section consisted of three questions and a 5-point score scale, ranging from "strongly disagree" to "strongly agree". The higher the score, the more intergenerational support the individual has received. Questions about physical needs centered around: 1. My adult children often visit me, 2. My adult children often call or video with me over smartphones, and 3. When I have problems with my smartphone, my adult children will help me solve them. Questions about emotional needs included: 1. I hope to take care of my grandchildren, 2. I often think of my grandchildren, and when I think of them, I feel happy, and 3. I often feel happy about the achievements of my adult children.

Three questions were selected to measure the practical use of smartphones (Hagger et al. 2007), rated on a numerical 5-point scale from "strongly disagree" to "strongly agree", with higher scores indicating more common smartphone use. Questions included were: 1. I use smartphones to send messages, 2. I use smartphones for shopping, and 3. I have been using smartphones for a long time.

In addition to the above aspects, the study also collected the general demographic characteristics of retired older adults, which included gender, age, education, marital status, average time spent using smartphones per day, and family structure. Each participant, on average, took 30 minutes to finish the questionnaire.

3.2 Interview guide

The qualitative research was mainly based on in-depth interviews, and from retired older adults in Denmark. A total of 8 older people were interviewed in depth.

All were voluntary participants and in addition to questions concerning general demographic characteristics, interview questions included "Do you often use smartphones?," "What do you think appeals to you the most about smartphones?," "What do you mainly use your

smartphone for (planning bus journeys, booking seats/event registration, train/air tickets, online car hire booking, online banking)?," "How do you think your use of smartphones will affect your relationship with your adult children or grandchildren?," "Have you encountered any problems in the process of using smartphones?," "What makes you particularly happy in your life?," "Have you had anything troubling you recently?," " What kind of life do you want?" The interviews were conducted in Danish and subsequently translated into English for analysis, with each interview lasting between 30 and 60 minutes.

4. Data collection and analysis

The participants were retired older adults, over 55 years of age, who registered in older adults' services organizations in Denmark. Participation was voluntary. Tools used for data collection included SurveyXact. Data collection and interviews were conducted from September 2021. A total of 221 questionnaires were collected with 189 valid questionnaires remaining after eliminating those invalidated (partially completed questionnaires). This is in line with the recommended general questionnaire sample size (Lin et al. 1995), where it is generally agreed that at least 10 per estimated parameter is sufficient for analysis (Pohlmann 2004).

When analyzing the survey data, the structural equation model (SEM) was adopted to assess the fit of the model, and the two-step procedure as suggested by Anderson and Gerbing (1988) was followed. Firstly, the reliability, convergent and discriminant validity were evaluated in order to examine the construct validity and fitness of the hypothesized measurement model. Descriptive statistics to investigate the measurement items used in the questionnaire were included. Secondly, to verify the hypothesized relationships among the latent variables, the structural model was examined via the application of various fit indices. SPSS 25.0 and AMOS 24.0 were used as the statistical software.

5. Findings

5.1 Descriptive analysis

A total of 189 valid samples were obtained from the questionnaire survey, of which 49 (25.9%) participants were male and 140 (74.1%) were female. The majority of participants (n=69) were over 75 years old and accounted for 36.5% of the study group. The remainder consisted of 3

participants (1.6%) aged between 60-64 years, 49 participants aged between 65-69 years (25.9%) and 68 (36.0%) aged between 70-74 years. In terms of education, 36 (19.0%) had primary school/secondary school/lower secondary education with up to 10 years of school; 14 (7.4%) had skilled/vocational basic education/commercial college basic education/technical preparatory examination; 10 (5.3%) had higher general examination/higher preparatory examination/higher technical examination or equivalent; 103 (54.5%) had short (1-2 years) or medium-cycle (3-4 years) education and the remaining 26 (13.8%) had academic/medium-cycle higher education. When looking at marital status, 73 (38.6%) were married, 20 (10.6%) unmarried, 40 (21.2%) divorced, and 56 (29.6%) were widowed.

Smartphone use showed that 60 (31.7%) used it less than 1 hour per day, 74 (39.2%) between 1 and 2 hours, 30 (15.9%) between 2 and 3 hours, 13 (6.9%) between 3 and 4 hours, and 12 (6.3%) used it more than 4 hours per day. In terms of family structure, 147 (77.8%) participants lived alone (separated from their children), 28 lived alone (had no children), 13 lived with two generations together, and only one participant lived with three generations in the same household, accounting for 14.8%, 6.9% and 0.5%, respectively, as shown in Table 1.

Table 1: Socio-demographic information of the participants in the survey.

		Number of participants	**Percentage of Participants**
Gender	Male	**49**	**25.9%**
	Female	**140**	**74.1%**
Age	60-64 years	**3**	**1.6%**
	65-69 years	**49**	**25.9%**
	70-74 years	**68**	**36.0%**
	Over 75 years	**69**	**36.5%**
Education	Primary/secondary/lower secondary	**36**	**19.0%**
	Skilled/vocational/commercial college/technical	**14**	**7.4%**
	Higher general/preparatory/technical exam	**10**	**5.3%**
	Short or medium-cycle education	**103**	**54.5%**
	Academic/medium-cycle higher education.	**26**	**13.8%**
Marital status	Married	**73**	**38.6%**
	Single	**20**	**10.6%**
	Divorced	**40**	**21.2%**
	Widowed	**56**	**29.6%**
Smartphone use time	Less than 1 hour per day	**60**	**31.7%**
	1-2 hours	**74**	**39.2%**
	2-3 hours	**30**	**15.9%**
	3-4 hours	**13**	**6.9%**

	More than 4 hours per day	**12**	**6.3%**
Family structure	Lived alone (separate from children)	**147**	**77.8%**
	Lived alone (no children)	**28**	**14.8%**
	Two generation household	**13**	**6.9%**
	Three generation household	**1**	**0.5%**

Among the 8 old adults for whom in-depth interviews were conducted, 3 were male and 5 were female. Educationally 5 had been through higher education, 2 had vocational basic education and one had higher technical examination education. In terms of marital status, 6 were married, one divorced and one a widow. From the perspective of family structure, seven people lived alone separately from their children, and one person lived alone but had no children. Their per capita smartphone use time was around 3 hours per day, as shown in Table 2.

Table 2: Information of the interviewees

Patient Number	Gender	Age (years)	Education	Health Status	Marital status	Family Structure	Smartphone Average Daily Use (hours)
1	Female	72	Medium-long advanced education	Healthy	Married	Lives alone (separately from children)	A few hours
2	Female	73	Higher education	Unhealthy	Married	Lives alone (separately from children)	A few hours
3	Female	65	Higher education	Unhealthy	Widow	Lives alone (separately from children)	6
4	Male	70	Electrician	Unhealthy	Married	Lives alone (separately from children)	A few hours
5	Female	67	Medium-cycle higher education	Healthy	Married	Lives alone (separately from children)	2.5
6	Female	70	Candidate scientist	Unhealthy	Married	Lives alone (separately from children)	3
7	Male	69	Bodyguard	Unhealthy	Divorced	Lives alone (no children)	A few hours
8	Male	69	Medium-cycle higher education	Unhealthy	Married	Lives alone (separately from children)	3

5.2 Reliability analysis

The Cronbach's Alpha coefficient was used to assess the reliability of this study. According to Chin (1998), all the Cronbach's Alpha value of multi-item constructs must be greater than 0.7, which indicates that the reliability of the scale meets the requirements with high internal

consistency, allowing further analysis. If it is less than 0.7, the questionnaire requires adjustment. In this study, the reliability coefficients of each dimension are detailed in Table 3.

Table 3: Reliability analysis

Variable	Cronbach's Alpha	Number of Items
Perceived usefulness	0.808	3
Physical needs	0.803	3
Emotional needs	0.874	3
Attitude toward use	0.876	3
Smartphone use	0.851	3
Eudaimonic wellbeing	0.808	3

Table 3 demonstrates that 18 items measured in this study correspond to 6 latent variables, and that the Cronbach's Alpha coefficient of each latent variable meets the basic criteria recommended of higher than 0.7 (Nunnally & Bernstein 1994). It thus can be concluded that the questionnaire used in this study has good construct reliability.

5.3 Common method bias

Table 4: Total variance explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.176	34.313	34.313	6.176	34.313	34.313
2	2.070	11.498	45.811	2.070	11.498	45.811
3	1.676	9.312	55.123	1.676	9.312	55.123
4	1.490	8.279	63.403	1.490	8.279	63.403
5	1.246	6.924	70.326	1.246	6.924	70.326
6	1.128	6.268	76.595	1.128	6.268	76.595
7	0.594	3.303	79.897			
8	0.517	2.872	82.769			
9	0.467	2.592	85.362			
10	0.434	2.410	87.772			
11	0.409	2.272	90.044			
12	0.370	2.056	92.099			
13	0.327	1.817	93.916			
14	0.273	1.514	95.431			
15	0.255	1.415	96.846			

16	0.222	1.231	98.077
17	0.178	0.988	99.065
18	0.168	0.935	100.000

Extraction Method: Principal Component Analysis.

The HARMAN approach was used to test the common method bias (Table 4). The analysis shows that the original cumulative contribution rate of the first factor was 34.313%, which is less than 40%, indicating that there was no serious common method bias problem among the variables.

5.4 Confirmatory factor analysis

All variables are modeled by AMOS 24.0, and validity was tested by confirmatory factory analysis (CFA), which is a theoretically grounded confirmatory technique. The analysis of CFA is driven by the theoretical relationships among the variables - including the observed and unobserved ones (Schreiber et al. 2006). The modeling diagram is demonstrated in Table 5.

Table 5: Factor loadings and convergent validity for each construct

		Construct	Factor loadings	CR	AVE
X11	<---	PU	0.765	0.810	0.587
X12	<---	PU	0.744		
X13	<---	PU	0.788		
X21	<---	PN	0.841	0.804	0.579
X22	<---	PN	0.679		
X23	<---	PN	0.754		
X31	<---	EN	0.919	0.878	0.706
X32	<---	EN	0.785		
X33	<---	EN	0.811		
M11	<---	ATU	0.836	0.877	0.704
M12	<---	ATU	0.808		
M13	<---	ATU	0.872		
M21	<---	SU	0.902	0.857	0.667
M22	<---	SU	0.791		
M23	<---	SU	0.750		
Y1	<---	EWB	0.828	0.813	0.593
Y2	<---	EWB	0.690		
Y3	<---	EWB	0.786		

AVE, Average variation extraction; ATU, Attitude toward use; CR, composition reliability; EN, Emotional needs; EWB, Eudaimonic wellbeing; PU, Perceived usefulness; PN, Physical needs; SU, Smartphone use.

Before conducting the test of goodness-of-fit, convergent validity and discriminant validity of the measurement model were evaluated. Fornell & Larcker (1981) determined in their study that for convergent validity, three requirements must be met. These are: (a), all the factor loadings for the

latent variables must be significant and greater than 0.7; (b), the composition reliability (CR) for each construct must exceed 0.7; and (c) the average variation extraction (AVE) must be over 0.5. These demonstrate that each variable has good convergent validity after all standards were met (Hair et al. 2014; Schreiber et al. 2006). The results in Table 5 from this study show that the normalized factor loadings of each measurement index of perceived usefulness, physical needs, emotional needs, attitude toward use, smartphone use, and eudaimonic wellbeing range from 0.679 to 0.919, the CR from 0.804 to 0.878, and the AVE from 0.579 to 0.706, which are all above the recommended threshold value. This indicates that each variable has good convergent validity, and that all the hypothesized constructs have reliable indicators.

5.5 Correlation analysis and discriminant validity test

Discriminant validity represents the degree to which a construct is different from other constructs, and the variance shared in the model is lower than the variance that the construct shares with its indicator (Fornell et al. 1982). Discriminant validity was evaluated by comparing the squared correlations between a given construct and other constructs, and respectively calculating their average variance. When the square root of the AVE is above the off-diagonal value of the relevant variable in the corresponding columns and rows, it indicates that the construct is associated strongly with its indicators than with the other constructs (Teo & Lee 2010). The test results of the correlation matrix are shown in Table 6. The bold numbers on the off-diagonal line are the square root of the AVE for a given construct, and the other numbers below the diagonal are the correlation coefficients between the constructs. In this study, each value for the reflective variables is above the off-diagonal squared correlations, indicating that the discriminant validity of this research was satisfactory.

Table 6: Correlation matrix and Discriminant validity (bold numbers in table)

	Mean	SD	PU	PN	EN	ATU	SU	EWB
PU	3.834	1.047	**0.766**					
PN	4.009	0.834	0.145*	**0.761**				
EN	3.734	1.035	0.286**	0.229**	**0.840**			
ATU	3.727	1.016	0.400**	0.345**	0.378**	**0.839**		
SU	3.871	0.965	0.317**	0.459**	0.381**	0.443**	**0.817**	
EWB	3.952	0.835	0.254**	0.367**	0.318**	0.316**	0.407**	**0.770**

ATU, Attitude toward use; EN, Emotional needs; EWB, Eudaimonic wellbeing; PU, Perceived usefulness; PN, Physical needs; SU, Smartphone use.

5.6 Structural equation modeling analysis

Structural equation modeling (SEM) is a widely used approach encompassing two components, a measurement model and a structural model, used in the investigation of the plausibility of theoretical models among latent variables (Hu & Bentler 1999; Schreiber et al. 2006). Only when both of the components pass the test can a complete SEM analysis be performed. In this study, SEM evaluation and analysis were carried out with AMOS 24.0 after testing the goodness-of-fit of the initial model, the fit results are shown in Figure 3.

Figure 3: Hypothesized structural equation model for explaining research use.

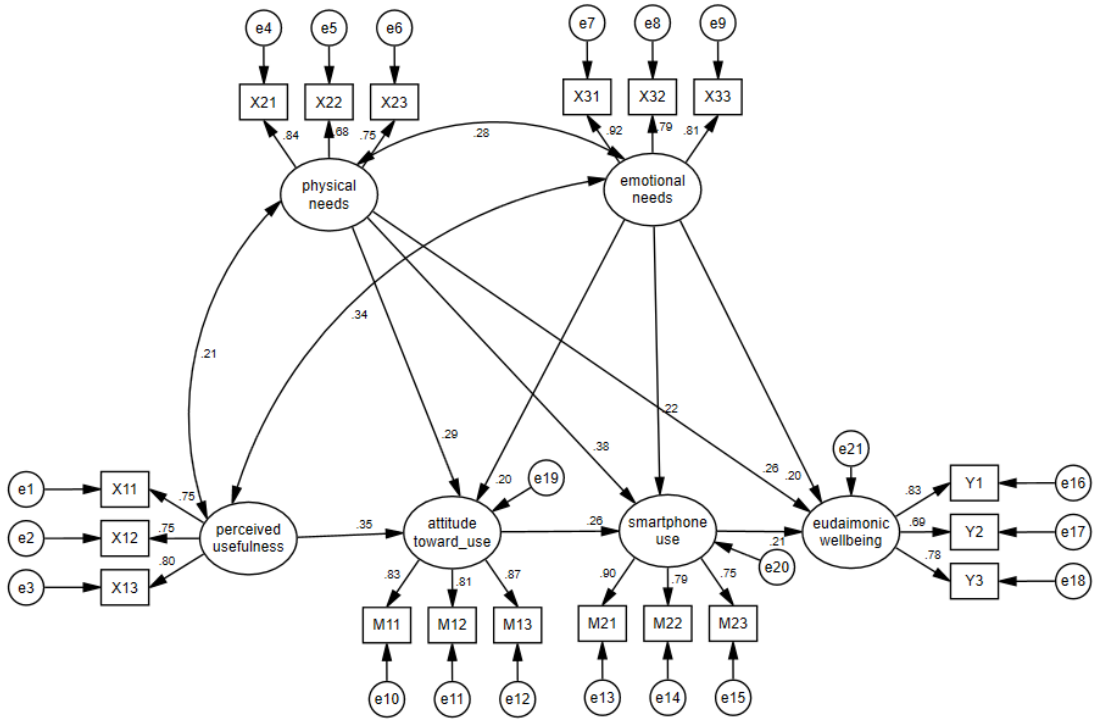


Table 7: Model indices for the hypothesized model

Model fit	CMIN	DF	CMIN/DF	RMR	GFI	NFI	TLI	CFI	RMSEA
Recommended values	-	-	<3	<0.08	>0.9	>0.9	>0.9	>0.9	<0.08
Measurement model	186.787	123	1.519	0.066	0.908	0.897	0.952	0.962	0.053

CFI, comparative fit index; CMIN, chi-square fit statistics; DF, degree of freedom; GFI, goodness-of-fit index; NFI, normed fit index; RMR, root mean residual; RMSEA, root mean square error of approximation TLI, Tucker Lewis Index

To assess the model fit, the structural model was applied to evaluate how satisfactorily the model can represent the data, and there are a variety of indices that can be utilized to assess this. The conventional rule of thumb generally suggests that cutoff values for chi-square fit statistics/degree of freedom (CMIN/DF) have to be less than 3; the goodness-of-fit index (GFI), the normed fit index (NFI), the comparative fit index (CFI) and Tucker Lewis Index (TLI) above 0.9 and the root mean residual (RMR) and root mean square error of approximation (RMSEA) less than 0.08 before making a conclusion as it otherwise would be a poor fit (Bentler & Bonett 1980; Bentler 1989; Cangur & Ercan 2015). It can be seen from Table 7 that CMICMIN/DF is 1.519, which is less than the recommended value of 3, the GFI, NFI, TLI, and CFI are all greater than the minimum standard of 0.9 and both the RMR (0.066) and RMSEA (0.053) are below 0.08, and therefore this hypothesized model can be considered as a relatively good fit based on the relevant criterion.

5.5 Analysis of hypothesis results

Table 8: Model path analysis

The hypothesis			STD Estimate (β)	Estimate	S.E.	C.R.	P	Result
H1: ATU	<---	PU	0.349	0.343	0.084	4.102	***	Supported
H2a: ATU	<---	PN	0.295	0.327	0.089	3.675	***	Supported
H2b: ATU	<---	EN	0.200	0.168	0.066	2.545	0.011	Supported
H3a: SU	<---	PN	0.381	0.461	0.102	4.535	***	Supported
H3b: SU	<---	EN	0.223	0.204	0.069	2.942	0.003	Supported
H4: SU	<---	ATU	0.255	0.278	0.091	3.070	0.002	Supported
H5a: EWB	<---	PN	0.265	0.268	0.103	2.587	0.010	Supported
H5b: EWB	<---	EN	0.205	0.157	0.066	2.372	0.018	Supported
H6: EWB	<---	SU	0.209	0.175	0.088	1.980	0.048	Supported

.***p<0.001

ATU, Attitude toward use; CR, Critical Ratio; EN, Emotional needs; EWB, Eudaimonic wellbeing; P, probability; PU, Perceived usefulness; PN, Physical needs; SE, Standard Error; STD, standard deviation; SU, Smartphone use

Given the robustness of the model fit, hypothesized relationships among the latent variables were tested in SEM. The hypothesized model is depicted in Table 8, which presents the results of the standardized path coefficients and path significances. Perceived usefulness has a significant positive effect on attitude toward use ($\beta=0.349$, $p<0.05$), physical needs have a significant positive effect on attitude toward use ($\beta=0.295$, $p<0.05$), emotional needs have a significant positive effect on attitude toward use ($\beta=0.200$, $p<0.05$), physical needs have a significant positive effect on smartphone use ($\beta=0.381$, $p<0.05$), emotional needs have a significant positive effect on

smartphone use (β=0.223, p<0.05), attitude toward use has a significant positive effect on smartphone use (β=0.255, p<0.05), physical needs have a significant positive effect on the realization of older adults' eudaimonic wellbeing (β=0.265, p<0.05), emotional needs have a significant positive effect on the realization of older adults' eudaimonic wellbeing (β=0.205, p<0.05), and smartphone use has a significant positive effect on the realization of older adults' eudaimonic wellbeing (β=0.209, p<0.05). Overall, all the constructs and hypotheses applied in this structural model are statistically significant, thus supporting all the hypotheses and verifying them as being reasonably sound.

5.6 Interview analysis

The interviews revealed that smartphones have become a relatively important communication tool between older adults and their children and other family members. It plays an important role acting as the main bridge which connects them.

Most of the eight respondents mentioned that the major issue encountered when using smartphones, which they often use as a tool to pass time, is security of keeping information. They learn to use some functions but others such as setting up social media apps require the help of the younger generation. The screen, missing the buttons, annoying battery life and security of keeping information are the primary reasons for some older adults being dissatisfied with the current smartphones. Other mentioned that the use of smartphones for long periods could lead to physical damage such as the cervical spine, shoulder pain and the like. As people age, it is usually accompanied by gradually declining physical health, such as poor eyesight and hand-eye incoordination, which also makes it increasingly difficult for them to use software. Therefore, a reasonable time limit on smartphone use is critical and worth paying attention to. Smartphones were primarily used for voice and video communications, followed by reading and seeking knowledge.

Participants communicate with their family members through video and voice calls, text messages and social media groups where they share photos and funny videos - these allow them to maintain closer contact with their children. Many confessed that the use of smartphones allowed them more time and opportunities to be alone with their children. Although this contact was not physical, by virtue of their children willingly providing more support and sharing life experiences with them, the older generation experienced a greater sense of independence and efficacy, which

echoed the findings of Schwartz (2010). The interview results were consistent with the findings in questionnaire survey. To sum up, from the perspective of older adults, smartphones facilitated their connection with their children by eliminating geographical and temporal constraints, allowing them to keep updated with the status of their family members anytime and anywhere, which significantly contributed to their quality of life and happiness. Meanwhile, the use of smartphones entailed them with a sense of freedom, meaning and spiritual satisfaction, and as a consequence, boosted their wellbeing in general.

6. Limitations

Despite efforts to be rigorous and cover all angles, there are still a number of limitations in this study. The first and foremost is that the generalizability of the results may be restricted. In terms of sample collection, although attempts were made to ensure representativeness of the geographical distribution, due to time and human resources limitations, the results were only obtained from older adults living in Denmark, and therefore may not well generalize to the wider population such as older people from other cultures, or even other Western countries. Further studies targeting the general population are warranted. Secondly, there may be some deviation in the research results. While the design of the questionnaire was based on a previous well-designed one, it was only a small-scale pre-survey, and the language translation and expression of the questionnaire needed to be improved and revised. Moreover, the findings were based on self-reported questionnaires, which may contain some self-selection bias as different interpretations may lead to variations in the results. Older adults' perspectives are generally more dynamic, and thus longitudinal studies are recommended as they may provide more insightful understanding into the older adults' behavior. Thirdly, the model used in this research may not be replicable in other contexts, and this study did not discuss the heterogeneity between older adults' smartphone use and eudaimonic wellbeing based on demographic controllable variables, such as age or gender. All these issues should be the focus of further investigation in future studies.

7. Conclusion and discussion

This is a study specifically targeting the Danish elderly population, seeking to analyze the interrelations among perceived usefulness, attitude toward smartphone use, smartphone actual use and older adults' eudaimonic wellbeing by adding the physical needs and emotional needs of

intergenerational support as external variables in the Danish context, where the notion of filial piety and intergenerational relationships are assumed to be less important. The technology acceptance model (TAM) was applied to evaluate the hypotheses and to examine whether the use of smartphones as an information technology device had an impact on the path from attitude toward use to actual smartphone use, and also if they had an impact on the dependent variable of older adults' eudaimonic wellbeing.

Hypothesis 1, that perceived usefulness has a positive effect on the attitude toward smartphone use among older adults was confirmed. The result is as expected, in that it echoes previously reported studies that attitudes affect behavior of use (Schepers & Wetzels 2007), and this relationship is assumedly not mediated by cultural factors. In addition, this study found that smartphones as the link tool, older people can get the bottom-up intergenerational support of both their emotional and physical needs met from their children, which can also improve their attitude towards the use of smartphones. Hypotheses 2a and 2b, that the intergenerational support provided by adult children concerning the physical or emotional needs of their retired older adults can improve their attitude toward use of smartphones, were thus confirmed.

In the in-depth interviews, the assumption that older people have some difficulties in using smartphones was confirmed, which echoes findings of Kirchengast and Haslinger (2015). Research results from Zhou (2015) on "digital back-feeding" in the Internet era were also confirmed by this study. The interactions between the older and younger generations created time and space for the use of smartphones. Moreover, intergenerational support can effectively alleviate the technical anxiety held by older people and help solve to a certain extent some of the general technical operation problems. Society may actively urge the younger generation to provide support and help the older generation in their use of new media technologies, and so form an autonomous and voluntary "filial support" as proposed by prior studies (Liang et al. 2001; Lang & Schütze 2002). Therefore, hypotheses 3a and 3b, that the intergenerational support of adult children regarding the physical or emotional needs of retired older adults can improve smartphone use were confirmed. Also, hypothesis 4 that the attitude toward smartphone use of older adults has a positive correlation with their smartphone use, was confirmed.

Hypothesis 5a and 5b, namely that intergenerational support from adult children regarding the physical or emotional needs can positively promote older adults' eudaimonic wellbeing, were confirmed. This conclusion is congruent with the results of prior research (Wang et al. 2014). Yet,

the result differs from what might be expected, due to cultural differences and different understandings of happiness and wellbeing in Danish and Chinese culture. The main benefits of bottom-up intergenerational support for older adults are to reduce negative emotions, increase life satisfaction, give them a more positive attitude, and give additional meaning to their lives. Growing attention has been placed on the contributory determinants of older adults' wellbeing, including efforts on the alleviation of physical and mental health problems, and determinants relating to happiness, life satisfaction, positive emotions, absence of negative emotions and the like (Rafnsson et al. 2014). This study confirmed that technical support provided by children to older adults can influence their attitude toward smartphone use. It also confirmed the effect of intergenerational "technical support" or "digital back-feeding" on the acquisition and improvement of older adults' eudaimonic wellbeing. This is an important finding because it may help to correct the stereotypical misconception that older adults in individualistic cultures are often depicted as independent and active care recipients. However, in the latter stages of life, these older Danes appeared more of a homogenous group who expressed their understanding of life as one that entailed a sense of family dependence and family solidarity. Furthermore, intergenerational support is self-enhancing, in that it strengthens the practical basis for personal and emotional exchange. This could also be seen as evidence that the practical (material) and personal (emotional) aspects of intergenerational support are intertwined and mutually dependent.

Hypothesis 6 that smartphone use had a positive effect on older adults' eudaimonic wellbeing was also confirmed. Smartphone use in older adults can positively promote their overall life satisfaction and meaning in life, therefore boosting their happiness. In terms of its function as an entertainment product, smartphones provided users with several services which met their inner needs (Mann et al. 2004). This result is consistent with previous research (Lu et al. 2021; Zhou 2015). Older people who used smartphones more proficiently and more frequently were more likely to adapt to changing times and embrace life, thereby enriching and deepening their understandings of happiness and wellbeing. The primary reasons for older adults to use smartphones were to meet the needs of emotional communication, knowledge and information acquisition, pleasure and self-realization. It integrated subjective and objective wellbeing, with additional emphasis on "fulfillment", "personal goals", and "personal growth". It can be said that it is the combination of subjective experience and objective evaluation that enriches and deepens the understanding of wellbeing of older people (Waterman et al. 2010).

During the interviews, it emerged that online communication, access to knowledge, and the most searched hashtags deeply attracted older people, and they felt a sense of joy after using smartphones.

In conclusion, the use of smartphones enabled older people to have a more convenient lifestyle and have a positive attitude towards life, although the transmission of intergenerational support is required. Overall life satisfaction and meaning in life were perceived as higher levels of happiness. In addition to the timely entertainment and pleasure brought by smartphones, their multi-level cognition, needs, situations and other factors such as social responsibility, personal achievement and individual development were interweaved and interacted to form multi-level and multi-dimensional timely feelings, which jointly contributed to their satisfaction and understanding of life (Ryff & Keyes 1995). The intergenerational support of children was an essential link for older adults to achieve satisfaction and meaning in life, even in individualistic cultures. Therefore, in order to ensure the physical and mental health of older adults, it would be beneficial for smartphones more suitable for older people to be developed, although it is essential this is coupled with education on the healthy and rational use of smartphones is also essential.

There are some policy implications that can be derived from the present study. It can be seen that the increasing popularity of smartphones and the relevant technologies have great potential to enhance older adults' wellbeing. Therefore, initiatives to boost older adults' access to these devices and associated training programs which they are actively encouraged to participate in should be advocated. Certain movements such as intergenerational technical support may be promoted, as tailed interventions, to meet the physical and emotional needs of older age groups, and therefore further contribute to their wellbeing.

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Author 2022

Author and colleagues 2022

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15. Appendix

15.1 Interview Guide for Article 3

Interview Guide

Research Questions	Interview Questions
Demographic/Starting questions	REMEMBER WRITTEN CONSENT Name? Age? How long have you been in the retirement home? How long have you been retired? Previous line of work? Education? Hobbies? Kids? Cohabitant/marital status? Relatives?
Interviewee's self image (maybe)	Tell me about your daily routine How would you describe yourself? How do you think others would describe you?
How is the idea of quality of life understood and how is it experienced?	Tell me about a recent situation where you felt especially well/good. Tell me about a recent situation where you felt especially bad.

	What do you think is a good life? / What do you need to have a good life? / What are the necessities for a good life? How does your life compare to your idea of a good life?
What part does alcohol play in your understanding of a good life/quality of life and how is it experienced in relation to it?	How have you used alcohol in your life? What part in your life does alcohol play right now – Why? What benefits are there with alcohol/alcohol use? What disadvantages are there with alcohol/alcohol use? How do you think you would feel if your use/access to alcohol was restricted?
In what ways are the caregivers aware/paying attention to the retiree's quality of life?	Can you tell me about a situation where a member of the staff especially attentive to one of your needs? How do you think the staff become aware of your day to day needs? How do you feel about/what is your approach to telling staff about a specific need or request?

Finishing questions	Thank you for participating Is there something you want to add or something you thought I forgot to ask about?

15.2 Interview Guide and Questionnaire for Article 4

Interview Guide

Interview Subjects: retired older adults

The interview is designed to investigate the relationship between smartphones use and well-being, and the intermediary role of intergenerational support, among retired older adults.

To collect data more thoroughly, the interview, when necessary, is translated into the native language by local collaborators; it is also audiotaped during the whole process, but, in a confidential way, and it may be destroyed after transcription. The interview takes approximately 30 to 60 minutes, and thus taking part in the research is voluntarily given a long time; however, it may help us unveil the compelling reasons behind the issue. Thank you for your cooperation.

Part 1 Background

No	Gender	Age	Education	Health Status	Marital Status	Family Structure	Average Daily Usage (hr.)

Part 2 Interview Questions

1. What do you think is the attraction of smart phones to you?
2. Which smart phone functions do you mainly use (reservation registration, ticket booking, online ride-hailing, online banking etc.)?
3. How do you think your use of a smart phone will affect the relationship between your children or grandchildren?
4. What problems have you ever experienced with the use of a smartphone?
5. What makes you particularly happy in your life?
6. Have you been worrying about anything lately?
7. What kind of life do you yearn for?

Questionnaire on the relationship between the use of smartphones and wellbeing of retired older adults

1. Basic personal information. Please tick "√" on the option you selected.

1.1. Are you retired?

① Retired ② Not retired (end questionnaire)

1.2. Have you used smartphones in the past year?

① Yes ② Not used (end questionnaire)

1.3. Gender

① Male ② Female ③ Other

1.4. Age

① 55-59 years old ② 60-64 years old ③ 65-69 years old ④ 70-74 years old ⑤ 75 and above

1.5. Education

① Primary school/middle school/real exam up to 10 years of schooling ② Vocational/EFG/HG/extended technical preparation exam ③ Student exam/HF/HH/HTX or equivalent ④ Short (1-2 years) or medium-long education (3-4 years) ⑤ Academic/long higher education

1.6. Marital Status

① Married ② Unmarried ③ Divorced ④ Separated (with spouse) ⑤ Widowed

1.7. In the past week, how long did you use smartphones on daily basis

① 0-1 hours ② 1-2 hours ③ 2-3 hours ④ 3-4 hours ⑤ 4 hours and above

1.8. Family structure (usually there are several generations living together in the family)

① Live alone (live separately from their children) ② Two generations live together ③ Three generations live together ④ Four generations live together ⑤ Live alone (no children)

2. Quantitative data table of the relationship between the use of smartphones and well-being of retired older adults.

Please tick "√" on the option you selected.

Smart phones usage	1=Strongly Disagree	2=Somewhat Disagree	3=Neither Agree or Disagree	4=Somewhat Agree	4=Strongly Agree
Perceived usefulness Kim et al. (2016)					
（1）I think it is wise to use smart phones.					
（2）I think it is pleasant to use smart phones.					
（3）I think I am capable of doing more with smart phones.					
Attitudes toward use Chen et al. (2017)					

（4）I am willing to share my life experience with my relatives and friends on smart phones.					
（5）I am willing to learn to use new functions on smart phones.					
（6）I will keep using smart phones.					
Smartphone use Hagger et al. (2007)					
（7）I use smart phones to send messages.					
（8）I use smart phones to shop.					
（9）I have been using smart phones for a long time.					
Older adults' EWB Waterman（2010）					
（1）I am satisfied with my current life.					
（2）I often felt happy in the past week.					
（3）Looking back, I had a meaningful life.					
Intergenerational relationship					
Physical needs Frider & Yvonne（2002）					
（1）My adult children often visit me.					
（2）My adult children often call or video with me over the Internet.					
（3）When I have problems with smart phones, my adult children would help me solve them.					
Emotional needs Kirchengast（2015）					
（4）I hope to take care of my grandchildren.					
（5）I often think of my grandchildren and feel happy.					
（6）I often feel happy for the achievements of my adult children.					

15.3 Interview Guide and Questionnaire for Article 4 Danish Translation

Interview Guide

Interview personer: pensionerede ældre voksne

Interviewet er designet til at undersøge forholdet mellem brugen af smartphones og velfærd, og hvilken rolle støtte på tværs af generationerne spiller for denne sammenhæng blandt pensionerede ældre voksne.

For at samle data mere grundigt bliver interviewet oversat til originalsprog af lokale samarbejdspartnere, når det er nødvendigt. Interviewene bliver også optagede. De er fortrolige og bliver slettede, når de er blevet transskriberet. Interviewet varer ca. 30 til 60 minutter. Længden af interviewet er også op til, hvor meget respondenten har lyst til at dele, selvom jo mere der ønsker at blive delt jo bedre kan vi forstå årsagerne bag problemet. Tak for dit samarbejde.

Del 1: Baggrundsinformation

Nr.	Køn	Alder	Uddannelse	Sundhedsstatus	Civil status	Familie-struktur	Gennemsnitligt dagligt forbrug af smartphone (timer)

Del 2 : Interview spørgsmål

1. Hvad tror du det er du godt kan lide ved smartphones?
2. Hvilke funktioner på din smartphone bruger du mest (opkald og sms, tage billeder og videoer, spille spil, mobilepay osv.)?
3. Hvordan tror du brugen af en smartphone vil påvirke forholdet til dine børn eller børnebørn?
4. Hvilke problemer har du oplevet ved brug af smartphone?
5. Hvad gør dig særligt glad i dit liv?

6. Har du været bekymret for noget på det seneste?
7. Hvilket slags liv ønsker du for dig selv fremover?

Spørgeskema om forholdet mellem ældre pensionerede voksnes brug af smartphones og deres trivsel

2. Baggrundsinformation. Sæt "√" ved den valgmulighed du vælger.

2.1. Er du pensioneret?

① Ja ② Nej (afslut spørgeskema)

2.2. Har du brugt en smartphone i løbet af det seneste år?

① Ja ② Nej (afslut spørgeskema)

2.3. Køn

① Mand ② Kvinde ② Andet

2.4. Alder

① 55-59 år gammel ② 60-64 år gammel ③ 65-69 år gammel ④ 70-74 år gammel ⑤ 75 år gammel eller ældre

2.5. På hvilket trin har du afsluttet din skolegang/uddannelse?

① Folkeskole/mellemskole/realeksamen op til 10 års skolegang ② Faglært/EFG/HG/udvidet teknisk forberedelseseksamen ③ Studentereksamen/HF/HH/HTX eller tilsvarende ④ Kort (1-2 år) eller mellemlang uddannelse (3-4 år) ⑤ Akademisk/lang videregående uddannelse

2.6. Civil status

① Gift ② Ugift ③ Skilt ④ Separeret (med ægtefælle) ⑤ Enkemand/kvinde

2.7. Hvor meget tid har du den seneste uge brugt på din smartphone om dagen?

① 0-1 timer ② 1-2 timer ③ 2-3 timer ④ 3-4 timer ⑤ 4 timer eller derover

2.8. Familiestruktur (normalt bor flere generationer sammen)

① Bor alene (bor seperat fra egne børn) ② To generationer bor sammen ③ Tre generationer bor sammen ④ Fire generationer bor sammen ⑤ Bor alene (har ingen børn)

3. Tabel over kvantitative data om forholdet mellem pensionerede ældre voksnes brug af smartphones og deres velfærd.

Sæt venligst "√" ved den valgte mulighed.

Brug af smartphones	1=Meget uenig	2=Delvist uenig	3=Hverken enig eller uenig	4=Delvist enig	4=Meget enig
Holdninger (Kim et al. 2016)					
（1）Jeg synes det er klogt at bruge smartphones.					
（2）Jeg synes det er behageligt at bruge smartphones.					
（3）Jeg synes jeg er i stand til at gøre mere med smartphones.					
Oplevet brugbarhed (Chen et al. 2017)					
（4）Jeg er villig til at dele mine livserfaringer/mit liv med min familie og mine venner via smartphones.					
（5）Jeg er villig til at lære at bruge nye funktioner på smartphones.					
（6）Jeg vil blive ved med at bruge smartphones.					
Smartphone brug (Hagger et al. 2007)					
（7）Jeg bruger min smartphone til at sende beskeder.					
（8）Jeg bruger min smartphone til at shoppe.					
（9）Jeg har brugt smartphones i lang tid.					

Velfærd (Waterman 2010）					
（1）Jeg er tilfreds med mit nuværende liv.					
（2）Jeg har ofte følt mig glad inden for den seneste uge.					
（3）Når jeg ser tilbage, så har jeg haft et meningsfuldt liv.					
Forhold på tværs af generationerne					
Fysiske behov (Frider & Yvonne 2002）					
（1）Mine voksne børn besøger mig ofte.					
（2）Jeg taler ofte med mine børn over internettet via telefon – og videoopkald.					
（3）Når jeg har problemer med smartphones, hjælper mine voksne børn mig med at løse dem.					
Følelsesmæssige behov (Kirchengast 2015）					
（4）Jeg vil gerne tage mig af mine børnebørn.					
（5）Jeg tænker ofte på mine børnebørn og føler mig glad.					
（6）Jeg føler mig ofte glad over mine voksne børns bedrifter.					