



Exploring Loneliness in Shanghai

A Quantitative Survey among Young Migrant Workers

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I hereby declare that, in line with the Faculty of Arts' code of conduct for research integrity, the work submitted here is my own original work and that any additional sources of information have been duly cited.

Content table

Content table	
Acknowledgements	ii
Introduction	1
1. Literature review	5
1.1 Definition of loneliness	5
1.2 Causes and effects	8
1.3 Loneliness in China	10
1.4 Socio-demographics	14
1.5 Social support	21
2. Theory and methodology	25
2.1 Conceptualization	25
2.2 Instruments	27
2.3 Current research	28
3. Results	37
4. Discussion	47
4.1 Main findings	47
4.2 A different approach to loneliness?	52
4.3 Limitations	53
4.4 Future directions	54
Conclusion	55
Summary	57
Bibliography	60
Appendix	76
Informed consent	7 <i>6</i>
Questionnaire	78
List of tables	67
List of figures	68

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Introduction

Loneliness is considered one of the most underestimated social problems of our time. It is a subjective feeling, invisible from the outside, which makes it difficult to know at first sight whether a particular group of people is lonely or not, and whether it is a problem or not. Nevertheless, loneliness influences one's mental well-being, and can lead to lower self-esteem, depression, complete isolation from society, or even suicide. In a succinct poem, Colin Killeen describes loneliness as follows: "[...] It is controversial; it is little discussed. It is emotional; it is non-feeling. It is overawing; it is numbing. It is taboo; it is there." To quote another exceptional researcher, Arthur Kleinman describes in a pertinent manner why the taboos around mental health in China should be combated in particular: "Stigma reveals social injustice and social suffering imposed on marginalized groups by the entire society; conversely, stigma demonstrated the widespread apprehension in society at large. In today's China, social injustice and suffering are tolerated, accepted and even legitimized as if they are the price the country has to pay for becoming a richer and stronger modern nation."

Professor Keming Yang argued that loneliness results from the process of perceiving, understanding and evaluating the social relations between the self and others, and is therefore a social problem. Since loneliness in a networked society is a relatively recent phenomenon, not many loneliness studies have been conducted from a sociological perspective. Accordingly, this thesis adopts a more socio-cultural approach on this topic. Bianca Fox noted that we are living in the most connected time in human history and yet an unprecedented number of people seem to feel isolated. It has been more prevalent in today's societies than ever before as seen in the media, sepecially in times of COVID-19 and lockdowns. Occasional feelings of loneliness have become chronic, mainly in metropolises. The urban city is lively and bustling; a place where people can come together. In a popular Chinese series called *Nothing but Thirty*, which is about young women in Shanghai, one of the characters named Wang Manni shared how she felt after having lived in Shanghai for eight years already: I feel like, Shanghai is a really good place. It's really big. But sometimes I feel like, this place is too big. I feel like I'm so far away from everyone. It's so hard for me to see someone. She is one of the many young migrant workers in Shanghai who left

¹ Hawkley & Cacioppo, 2010; McClelland et al., 2020.

² Killeen, 1998, p. 762.

³ Kleinman et al., 2011, p. 256.

⁴ Yang, 2019, p. 32.

⁵ Yang, 2019, p. 24.

⁶ Fox. 2019.

⁷ Qiu & Liu, 2019.

⁸ Barreto et al., 2021; Qi et al., 2020.

⁹ 三十而已 (Nothing but Thirty), Episode 27, 2020.

their family and friends in the countryside to look for better job opportunities in the city in order to increase their quality of life. Despite the great importance of this subject for all mankind in its great number, it is surprisingly under researched in psychology.

This study attempts to provide a better image of the experience of loneliness among these migrant workers in China's biggest populated city, Shanghai. The main research question is: How prevalent is loneliness among different socio-demographic groups and how does this relate to different sources of social support? This thesis is divided into two parts. The first part is a brief overview of the existing literature, focussing on the research that is relevant to this study. It contains five sections, of which the first synthesizes both subjective and objective definitions of loneliness; the second section emphasizes the importance of this problem by summarizing the causes and effects for both mental and physical health; the third section takes a closer look at loneliness in China and which cultural factors must be taken into account when conducting research; in the fourth section, the focus is put on the socio-demographics of the lonely, with special attention to the new generation migrant workers; and in the last section, social support is linked to the topic of loneliness. One remark has to be made regarding the term 'migrant workers': it may not be very suitable for the group this thesis focuses on, due to its associations with workers in manufacturing and construction sectors. Yet, there is a paucity of research among the new generation migrant workers, who have different lifestyles and aspirations from the older generation. Too keep it simple, this thesis sticks with the term 'migrant workers' to refer to Chinese people from outside Shanghai who decided to move to and settle in Shanghai to work in any sector.

In the second part, the thesis explains the current research method and the results, followed by a discussion of the findings, limitations, and suggestions for future research. Based on the previous literature study, data were collected by means of a quantitative study in the format of an online survey in order to find an answer to the my research question. The survey consists of the Chinese version of existing questionnaires on loneliness and social support. As far as I know, these have not been conducted yet among migrant workers in Shanghai, which makes the current study to be the very first to do so. Based on past findings of research on loneliness, it is hypothesized that relationship status, employment status and gender are related to loneliness, resulting in higher levels of loneliness in people who are male ¹⁰ compared to female, single compared to those in a relationship and unemployed compared to employed people. It is worth pointing out that more than marital status, relationship status is more likely related to one's level of loneliness. Secondly, I expect that a lack of social support from friends and significant others has a stronger negative influence on loneliness than lack of support from family. The

10

¹⁰ In this study, the term 'gender' refers to the individual's concept of themselves, regardless their sex assigned at birth.

third hypothesis assumes that there is a significant correlation between the length of one's stay in Shanghai and loneliness: the longer one has been staying in Shanghai, the higher the loneliness level will be. Altogether, these are interesting assumptions that have not yet been explored thoroughly in the loneliness literature about China.

As Kleinman proposed in his book, government policies, market activities, and social institutions constitute the surface of changing China, but the emotional and moral experiences of Chinese can only be found in deep China (i.e., within the Chinese people). This thesis germinates from the effort to take a closer look at one facet of this deep China: experience of loneliness among young migrant workers. Hereby, this thesis show, among other Western researchers, how general psychological research can be used in a useful way in a specific Chinese context. On the basis of the obtained quantitative data, this research tries to provide a greater insight into the mental well-being with regard to loneliness and social relationships based on the participants' answers. However, the results are influenced by history effects (i.e., external events that can influence the scores of the participant) such as Chinese New Year and Labor Day, and cannot be generalized for all migrant workers in China, nor for a long period of time. This thesis describes the main findings of this study specifically in Shanghai, in order to provide valuable information for future researchers, social workers and policy makers.

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¹¹ Kleinman et al., 2011, p. 3.

¹² By using the term 'Western', I refer to people participating in cultures that stem from counties clustered in northwestern Europe and societies of British descent (e.g., the United States, Canada and Australia).

¹³ Gravetter & Forzano, 2021, p. 214.

1. Literature review

There is a growing body of literature on loneliness in general. The topic has been approached from a variety of angles and has inspired researchers not only in psychology and medicine, but also sociology. This includes scientific research on the theoretical framework, its relation to cultural values, sociodemographic variables, social support, and so on. This chapter gives a brief overview of the existing literature, focussing on the research that is relevant to the research questions of this thesis. The first section outlines the most frequently adopted definitions of loneliness and discusses important related concepts. The second section discusses the causes and effects of loneliness to emphasize its impact. Given the fact that the focus of this study is on China, the third section therefore provides a background of the Chinese culture and modern changes in China that could affect the feeling of loneliness. The fourth section takes a closer look at the studies on Chinese migrant workers in Shanghai, whose loneliness have received too little attention. The final section discusses the relation between perceived social support and feelings of loneliness among migrant workers.

1.1 Definition of loneliness

Loneliness is a universal feeling among human beings. ¹⁴ Sociologist David Riesman pointed out that inner changes are strongly intertwined with changes in the environment. The feeling of loneliness is thus contextual and varies with mobility, technology, changing demographics and the emergence of an economy based on service and consumption. ¹⁵ Despite its importance and despite the fact that most people intuitively know what loneliness is, this feeling is surprisingly difficult to define. How should loneliness be defined and is loneliness always a problem?

A first definition of loneliness by the *Oxford English Dictionary* is that one is lonely when one is alone.¹⁶ There is a widespread narrative that being alone is sad and something to avoid. According to Janet Younger, "[1]oneliness is the feeling of being alone in spite of longing for others. The lonely experience a sense of utter aloneness as well as aimlessness and boredom"¹⁷. Even though this is a very subjective description, it is also a powerful one that appeals to many lonely people. Yet, being alone is not always a problem. On the contrary, sometimes it is essential. Colin Killeen dove into various concepts that have been confused with loneliness. They may look the same at first sight, but actually have a vastly different

¹⁴ Yang, 2019, p. 2.

¹⁵ Fox, 2019, p. 157.

¹⁶ Yang, 2019, p. 2.

¹⁷ Younger, Janet. B., "The Alienation of the Sufferer", Advanced Nursing Science 17:4 (1995), p. 59 cited in Killeen, 1998, p. 763.

meaning. If these concepts are put on a continuum as in Figure 1, with loneliness on the more negative end, aloneness would be more positive: this term indicates that someone prefers to be by themselves. Another concept similar to loneliness is solitude, which carries a more optimistic note. One can be in solitude to reflect, to rest and replenish one's energy. It is a completely voluntary act, a healing experience which brings self-fulfilment when needed.¹⁸ Empirical evidence of Louise Hawkley et al. also suggests that lonely people do not differ from the non-lonely in the amount of time they spend alone. This shows that loneliness can be clearly distinguished from the objective state of solitude, social isolation or being alone.¹⁹

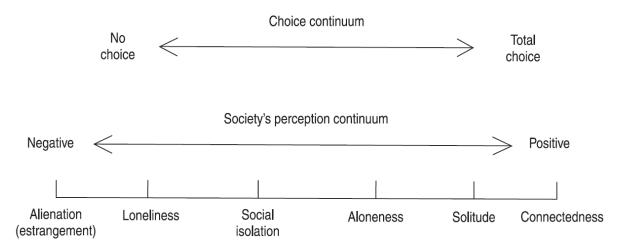


Figure 1. Alienation-connectedness continuum (including the importance of choice and society's perception of the concepts).²⁰

In the more academic literature, Letitia Peplau and Daniel Perlman's definition of loneliness is frequently cited in various studies: "[it] is the unpleasant experience that occurs when a person's network of social relationships is significantly deficient in quantity or quality". While referring to the evolutionary theory of loneliness, KU Leuven's postdoctoral researcher Marlies Maes and her colleagues state that it is necessary to form and maintain social relationships for the survival of people's own genes. It is more usual to experience a transient form of loneliness rather than a chronic one, for instance, when there is a change in circumstances which you have to adapt to. Therefore, one may simply accept loneliness as a part of life without experiencing negative, unpleasant emotions regardless of the deficiency in quantity or

¹⁸ Kileen, 1998, p. 764.

¹⁹ Hawkley et al., 2003.

²⁰ Killeen, 1998, p. 765.

²¹ Peplau & Perlman, 1998, p. 571.

²² Cacioppo et al., 2015.

²³ Maes et al., 2020.

quality of social relationships. Even so, this does not mean that loneliness does not warrant serious attention: a transient and mild form could develop into a serious and chronic one in the long run. A certain discrepancy between one's wants and reality could induce negative feelings, such as anxiety, depression and even suicidal ideation.

Psychiatrist Carl Jung also rejected the association with being alone: "[1]oneliness does not come from having no people around, but from being unable to communicate the things that seem important to oneself, or from holding certain views which others find inadmissible." Yang pointed out that people can still feel lonely in crowds, because they are surrounded with undesired people and no one to relate to. This can even occur within a family, at school or at work. In short, he explains why loneliness occurs in the following logical sequence: one has certain social relations (objective state), which are deficient or unsatisfactory (cognitive state) and this perception leads to loneliness (emotional state). When this emotional state becomes a psychologically painful experience that can, but not necessarily will, lead to other medical implications, loneliness should be considered as a problem, or at least as a signal that one is not feeling well. Yang even argued that this individual experience is also a social problem. Not only does it have social origins, but serious social consequences as well, which means that it is a problem for the society as a whole. Page 19.

In short, in order to facilitate research on loneliness, there is a need for an objective definition; but as Killeen put it, given the fact that loneliness is a subjective feeling, a subjective aspect in the description could give us a more overall picture of loneliness.³⁰ To this point, a synthesized definition of loneliness can be: a perceived deficiency of communication opportunities in any area (i.e., social, emotional, professional, etc.) both in quantity and quality. Yet, there are complex factors involved, which means that it should be studied not merely from a psychological perspective, but also from a social and cultural perspective. In the following section, the antecedents and consequences of loneliness are described to better understand the epidemiology of loneliness.

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²⁴ Jung, pp. 388-389.

²⁵ Yang, 2019, p. 92.

²⁶ Yang, 2019, p. 3.

²⁷ Yang, 2019, p. 9

²⁸ Yang, 2019, p. 32.

²⁹ Yang, 2019, pp. 29-30.

³⁰ Killeen, 1998, p. 763.

1.2 Causes and effects

Maes et al. compiled several studies who suggest that loneliness is influenced by both genetic and environmental factors, and is significant for one's mental as well as one's physical well-being.³¹ The causes can be divided into two categories: characterological and situational causes. First, this section briefly describes the most important variables related to the individual. The second paragraph discusses the situational factors. As the research question focuses on the social aspect of loneliness, the focus is mainly on the situational elements throughout this thesis. Third, consequences in both Western and Chinese populations confirm the universal character of loneliness, as well as its importance.

To begin, there are characterological causes of loneliness. Susanne Buecker et al. carried out a metaanalysis on the relation between personality and loneliness, which shows that the different dimensions of
the Big Five personalities are all related to loneliness in a certain way. For instance, neuroticism is
positively related to loneliness, meaning neurotic personalities tend to feel lonelier. In contrast,
extraversion, agreeableness, conscientiousness, and openness are negatively related, meaning those
personalities will not experience as much loneliness. In other words, the average lonely person engages
less in social interactions (introverted), tends to have more interpersonal conflicts (less agreeable), is less
conscientious and open, and is more sensitive to social stressors (neurotic) than others. Out of those five
traits, lower extraversion and greater neuroticism showed the strongest relation to loneliness. However,
the question whether there is a unidirectional or bidirectional effect, is still open to debate.³² The average
lonely person may be more self-centred, but this could be due to loneliness as well. Loneliness can lead to
a lower self-esteem and vice versa, depending on the individual and their environment.³³ This shows that
the causes and effects regarding loneliness cannot be simply explained in one way.

Second, there are plenty of situational factors that could lead to a disruption in an individual's social network and eventually to loneliness as well.³⁴ A change in environment and social network can be due to moving to a new place, changing schools or workplaces, the loss of someone important, and so on. Moreover, divorce,³⁵ the loss of one's job, and similar events that could lead to both a lowered income and fewer social connections lowers one's subjective well-being as well. In addition to income, a job also provides the opportunity to come into contact with other people; it is a part of one's social life.

³¹ Maes et al., 2020.

³² Buecker et al., 2020.

³³ Vanhalst et al., 2014.

³⁴ Weiss, 1973, p. 73.

³⁵ Yang & Victor, 2008.

Conversely, to maintain social relations, financial resources are required.³⁶ Buying each other a drink now and then, going out for dinner with colleagues, buying small gifts for each other are all forms of reciprocity. This bidirectional relationship has led to research on consumer behaviour from a broader perspective. As money seems to be an important factor, researchers have studied the role of materialism in experiences of loneliness. When one's psychological needs are not met, people tend to compensate for this feeling with materialistic goods.³⁷ They cope with loneliness by spending more money, forming a vicious circle between materialism and loneliness. Rik Pieters found in other studies that materialism was negatively related to social engagement and therefore thwarted social relatedness.³⁸ Even so, other potential mediators and moderators have to be taken into account as well.³⁹

Research on the relation between loneliness and psychological well-being shows that loneliness can have detrimental consequences for both mental and physical health. According to Louise Hawkley and John Cacioppo, lonely people often display depressive symptoms, higher blood pressure, stress, cardiovascular health risks, personality disorders⁴⁰ and even suicidal ideation.⁴¹ Even more importantly, a meta-analytic review on the public health consequences of loneliness done by Nicholas Leigh-Hunt et al. shows increased mortality as well. ⁴² Additionally, experiencing loneliness can also have non-medical implications. Feeling lonely to a certain level can cause unhealthy behaviours, such as lower sleep quality, ⁴³ alcohol and/or drug abuse, eating disorders, and so on. ⁴⁴ Common studies on loneliness related to other topics in China often include risk on suicide, ⁴⁵ interpersonal trust ⁴⁶ and both internet ⁴⁷ and smartphone ⁴⁸ addiction. Interpersonal trust refers to a subjective judgement of the reliability of one's words and actions in the process of social interaction. To a certain extent, the level of interpersonal trust determines whether personal relationships and social interactions can develop healthily, according to Lin Yan. ⁴⁹ Whereas Lin Yan's study did not find a significant relationship with loneliness, Ken Rotenberg et al. did find a significance. In particular, they found that lonely people adopt a more negative attitude to

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³⁶ Yang, 2019, p. 143.

³⁷ Chan et al., 2006.

³⁸ Pieters, 2013.

³⁹ Ang et al., 2013; Kim, 2014.

⁴⁰ Hawkley & Cacioppo, 2010.

⁴¹ McClelland et al., 2020.

⁴² Leigh-Hunt et al., 2017.

⁴³ Griffin et al., 2020; Hom et al., 2020.

⁴⁴ Yang 2019, p. 10.

⁴⁵ Zhou et al., 2020.

⁴⁶ Zhang & Yan, 2016.

⁴⁷ Zhao et al., 2016.

 $^{^{\}rm 48}$ Zhang et al., 2020.

⁴⁹ Lin, 2010.

their neighbourhood in terms of kindness and willingness to help. ⁵⁰ The stronger the experience of loneliness, the lower the expectation that in certain situations help will be offered by strangers. This group is less likely to ask for help in such situations too. This results in a negative spiral which makes it difficult for the individual to break out of. ⁵¹ The importance of social cohesion and healthy social relationships are discussed later in this thesis.

In sum, it has been stated that high levels of loneliness are associated with poor mental and physical health. However, some factors have a rather probabilistic relationship with loneliness instead of a deterministic one. This proves once again that loneliness is not easy to grasp nor measure, and that the current literature is insufficient to establish a solid epidemiology. One factor of loneliness that should definitely be included and which is currently often overlooked, is culture. As noted by Yang, loneliness is a social problem, and for this reason it is necessary to include cultural values when studying loneliness.

1.3 Loneliness in China

Former cross-cultural studies on loneliness among different cultures mainly included Europeans and Northern Americans.⁵² When comparing a Western sample to a Chinese one, those from China scored higher on the loneliness scale, due to its more interdependent culture, as shown by Craig Anderson.⁵³ In a more recent study of Maes et al. no significant differences were found for peer-related loneliness between Chinese and Belgian adolescents; yet, the latter were more negative toward aloneness.⁵⁴ Inconsistencies in results can be clarified partly by culture. While studying a universal phenomenon in another culture, it is necessary to take culture-specific concepts into account. In this section, two cultural elements relevant for this study are described, followed by a description of the rural-urban difference in loneliness within China.

First, China has been categorized as a relatively collectivist culture.⁵⁵ This is a complex concept that involves embeddedness with the in-group, conformity to social norms and a priority to the public interest. There has been a considerable debate around its relationship with loneliness. On the one hand, most researchers have found evidence for a lower level of loneliness regarding more collectivistic cultures,⁵⁶ as these people are more group-oriented and socially connected. Researchers have also confirmed the

⁵⁰ Rotenberg et al., 2010.

⁵¹ Matthews et al., 2019.

⁵² Heine, 2016, p. 22.

⁵³ Anderson, 1999.

⁵⁴ Maes et al., 2016.

⁵⁵ Techo, 2017.

⁵⁶ Rokach & Neto, 2005.

stronger relationship between loneliness and life-satisfaction.⁵⁷ Luzia Heu et al. added that internalized collectivism was significantly related to lower loneliness. Their theoretical contribution is that loneliness can be caused by the feeling of discrepancy between how the individual wishes to be socially embedded and the actual social embeddedness. As higher collectivism implies that individuals have a higher desire to feel socially embedded, individuals with internalized collectivism have a higher risk of feeling lonely only when these needs are not met.⁵⁸ On the other hand, there is also evidence of the opposite, such as Johannes Beller & Adina Wagner's study: loneliness levels are lower in individualistic cultures, as expectations for social connections are lower and psychological autonomy higher.⁵⁹ If one wishes to be socially less embedded and more independent, this desire would not clash with the reality in an individualistic culture, and would therefore lead to less discrepancy. Psychological processes such as emotions, identities and relationships are thus influenced by cultural standards, which highlights the importance of culture in psychological study.

Second, the concept of 'face' (mianzi 面子) is worth mentioning: the so-called mianzi represents "what a person feels about his or her image as it is seen through the eyes of others, of the person's social group, community or the wider public."60 Consequently, 'saving face' means the ability to avoid humiliation or embarrassment and preserve one's dignity for the sake of their (family's) reputation within society. As culture shapes the expression and attitude towards problems, the average Chinese might not be willing to share psychological maladies because of fear of social stigma and shame. 61 According to traditional Confucian teaching, open displays of emotions disturb social and familial harmony. So, although the concept of face is not exclusively a part of the Chinese culture, it is more strongly embedded in it than in Western cultures. 62 Moreover, the fact that showing emotions and talking about mental health are generally discouraged, could influence the answers during a self-reported survey as well: Chinese respondents may hold a stronger social desirability bias. Nevertheless, it is important not to generalize these concepts to the whole of China and attribute results exclusively to culture. Because cultural psychology is a complex topic and something this thesis is not going to challenge, it sticks to these two elements (collectivism and social stigma).

Apart from traditional cultural values, the major changes that modern China has undergone in the last forty years should also be taken into consideration. In 1979, former leader of the People's Republic of

⁵⁷ Goodwin et al., 2001.

⁵⁸ Heu et al., 2019.

⁵⁹ Beller, 2020.

⁶⁰ Qi, 2011, p. 288.

⁶¹ Kramer et al., 2002.

⁶² Bond, 1993.

China Deng Xiaoping (邓小平 1904-1997) put forward the idea of a 'moderately prosperous society' (xiaokang shehui 小康社会) as a goal for mainland China. This is a very important development stage in China's modernization process; a transitional period from poverty and backwardness to a higher quality of life for Chinese people. The aim is to live in a society that not simply solves the problem of food and clothing, but also satisfies the needs of urban and rural development in terms of politics, economy, culture, society and ecology. 63 At the 19th CPC National Congress in 2017, the Chinese leaders have set the year of 2020 to reach a moderately prosperous society in all respects.⁶⁴ Current president Xi Jinping stated that year that China not only has achieved the goal of building a moderately prosperous society in all respects, but even obtained better results than expected. Yet, more efforts to support the vulnerable people and to solve environmental pollution have to be taken in order to improve people's well-being.⁶⁵ In addition to these modernization plans, urbanization, digitalization and individualization are inevitably occurring social phenomena.⁶⁶ National statistics show that urban areas have increased from 17,9% of all land in China in 1978 to 59,6% in 2018.⁶⁷ Furthermore, the number of Internet users has been growing exponentially since the beginning of this century due to developments of online messaging tools (e.g., QQ, WeChat),⁶⁸ as well as new media (e.g., *Douyin* 抖音, similar to TikTok) and e-commerce (e.g., Taobao 淘宝, Jingdong 京东). Another change in lifestyle is the shift to more individualistic activities and social engagement. In contrast to the strictly collectivistic era when Chinese people lived under work units, they began to pursue careers in the private sector, and gradually had more time and freedom to invest in their own life aspirations and develop a sense of self.⁶⁹

Nevertheless, what has been neglected, is what the consequences of modernization and urbanization are for people's mental health.⁷⁰ This is of great importance because China is one of the developing countries with over a billion people, of which 85 million people suffer from depression and anxiety alone, according to the statistics of the World Health Organization.⁷¹ While this being the case, there is growing media attention for social cohesion and public health as well.⁷² Social cohesion, connectedness and trust revolve around social networks that arise through the relationships people maintain with family, friends,

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⁶³ Pu & Huang, 2020.

⁶⁴ Li & Huang, 2020.

⁶⁵ Sun, 2020.

⁶⁶ Chen & Lunt, 2021.

⁶⁷ National Bureau of Statistics of the People's Republic of China, 2019b.

⁶⁸ Kleinman et al., 2011, p. 187.

⁶⁹ Kleinman et al., 2011, p. 17.

⁷⁰ Tian, 2011, p. 9.

⁷¹ World Health Organization, 2017.

⁷² Cai, 2018.

colleagues, et cetera. A lack of social cohesion between people can result in loneliness. When people feel they do not fit into a certain community, these networks do not function properly and hence create a society poor in social capital.⁷³ Considering the major changes in modern China, does loneliness occur more often in metropolitan areas?

The existing literature provides two answers to this question. The first position states that people are indeed lonelier in urban areas. In a cross-national literature review by Keming Yang and Christina R. Victor from 1992 to 2000⁷⁴ and in a longitudinal study of Zhimin Yan et al. from 1995 to 2011, a correlation was found between increased levels of loneliness among Chinese older adults and the growing level of urbanization. Loneliness is also more likely to occur in people who are living in cities that are going through a rapid development to endorse materialistic values. Cross-cultural research including China, a country that is accelerating its urbanization, has already found that Chinese citizens score higher in terms of materialism than Canadians and Americans. Truthermore, there is a widely held belief that in the countryside there are more places where people can have contact with each other in an easy, informal way: a grocery store in the street, a small privately-owned pharmacy for Chinese medicine, the breakfast stall at the corner and so on. Stephen Houghton et al., discovered lower levels of isolation among rural adolescents. Despite the fact that there are often fewer opportunities to meet new people in rural areas, the quality of existing kin- and friendships may be stronger, which plays a big role in social support and loneliness too. Therefore it is both about the quantity and the quality of the social interactions.

The second position, in contrast, states that people are lonelier in rural areas. In a study among children across different historical times and contexts in China, those from 2002 and 2005 urban groups scored lower on loneliness than not only their rural counterparts, but also compared to the urban children in 1992 and 1998. This suggests that urban China has become more modernized and self-oriented and that this has not caused an increase in the number of people who feel lonely. This evidence for a negative relation between loneliness and individualistic values such as independence and pursuing individual goals is in line with the second hypothesis mentioned earlier. Researchers Chistina Victor and Jitka Pikhartova conducted research in the United Kingdom, indicating that loneliness in older adults is higher in the most deprived areas. In doing so, they prove that the quality of the area in which people live has an effect on

⁷³ Putnam, 2002.

⁷⁴ Yang & Victor, 2008.

⁷⁵ Yan et al., 2014.

⁷⁶ Liao & Wang, 2017.

⁷⁷ Podoshen et al., 2011; Ogden & Cheng, 2011.

⁷⁸ Houghton et al., 2016.

⁷⁹ Chen & Li et al., 2014.

loneliness.⁸⁰ However, though loneliness in rural areas appears to be higher than in urban areas, this does not mean that loneliness in urban areas is not significant. Several (non-comparative) research studies in urban areas shed light that loneliness is an existing problem: high levels were reported in Shenzhen,⁸¹ Beijing,⁸² and Shanghai.⁸³ Accordingly, this thesis attempts, among other things, to provide a clearer picture of the extent and the nature of loneliness in the city, against the backdrop of urbanization in China. To keep this research feasible, the geographic area is limited to China's biggest populated city, namely Shanghai.⁸⁴

To sum up, higher quality of life and better job opportunities in cities attract people from the countryside to move to the city. Rural-to-urban migrants may thus have a different cultural background than the local urbanites, whose culture is more modernized and self-oriented, instead of collectivistic. A side note should be added to the existing literature: Chinese researchers have often surveyed left-behind children in rural areas, who reported high loneliness levels. This is mostly due to the fact that their parents have migrated to urban areas for job opportunities and hence their relationship is weakened. The so-called 'empty-nest youth' (kongchao qingnian 空巢青年) are in the same situation, as they have left their hometown, live alone in rented apartments and work in big cities. The same goes for graduate students, who are very likely from elsewhere than the city where they study. To conclude, the geographic area cannot completely explain loneliness levels and possible risk factors. There is more to be investigated. Thus, the next section takes a look at the socio-demographics of lonely people, of which there is insufficient data.

1.4 Socio-demographics

Due to increased mobility and development of prosperity, people are less bound to where they were born or where they live. This means that loneliness is not limited to place; additionally, there is considerable evidence for higher loneliness among specific social groups. This section briefly outlines the interplay between socio-demographics and loneliness: age, gender, relationship status and socio-economic status.

To begin, there are different models illustrating the relationship between loneliness and age, as shown in chapter three of Yang's book on loneliness. The linear model describes a relationship between two

⁸⁰ Victor & Pikhartova, 2020.

⁸¹ Zhong et al., 2016.

⁸² Zhu et al., 2020.

⁸³ Li et al., 2017.

⁸⁴ There were over 24 million residents by the end of 2019, according to the Shanghai Bureau of Statistics.

⁸⁵ Jia & Tian, 2010.

⁸⁶ Chen. 2018.

⁸⁷ Li, 2015.

quantities that show a constant rate of change. In this case, it appears that loneliness increases with age, but the fact that most research has been conducted among older people, does not confirm this lay belief. Another way to present the age distribution of loneliness is an U-shaped graph, with higher levels in adolescence and at an older age. The same results appeared in a study of Magnhild Nicolaisen and Kirsten Thorsen when using a single-item for loneliness, yet when they applied a more sophisticated rating scale that consists of several items, the older adults reported significantly higher loneliness scores. An analysis by Maike Luhmann and Louise Hawkley using data of a German population shows that there is a peak both at the age of 30 and 60. In fact, none of the models represents the relationship between loneliness and age veritable, because different studies have different samples; nonetheless, they contain relevant information and are helpful for future studies. As people attribute the causes of loneliness to different sources at different stages in our lives, and since most loneliness research has been conducted among adolescents and elderly and elderly, a study among younger adults could help fill the gap. At this stage, people have to be more independent and live on their own. They undergo a process of individualization and have to make decisions autonomously while facing an uncertain future, financial problems and social strain.

Moving on to gender, there have been more inconsistent results on its relationship with loneliness. In general, some studies reveal that men are lonelier than women, due to weaker family bonds, while other studies suggest the opposite, because women have higher average life expectancies and are thus more likely to be affected by widowhood. A recent meta-analysis by Maes et al. even shows a close-to-zero overall effect, meaning that the loneliness levels are more or less similar for males and females. Yet, differences in loneliness levels between men and women within a country can be different from another country, because of different social and national contexts. Men and women experience different types of loneliness to various degrees. In traditional China, women stay at home so that their social network consists mainly of family members, neighbours and friends. Contrary, men spend more time outside the

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⁸⁸ Yang, 2019, p. 46; Qualter et al., 2015.

⁸⁹ Nicolaisen, 2014.

⁹⁰ Luhmann & Hawkley, 2016.

⁹¹ Yang, 2019, p. 48.

⁹² Mahon et al., 2006.

⁹³ Pinquart & Sorensen, 2001.

⁹⁴ Diehl et al., 2018.

⁹⁵ Lee et al., 2018.

⁹⁶ Barretoa et al., 2020.

⁹⁷ Maes et al., 2019.

⁹⁸ Yang, 2019, p. 53.

house mainly for work.⁹⁹ Their social interactions often involve colleagues while women are more attached to trusted friends and family at home. It can thus be easier for women to feel social loneliness, whereas men rather experience familial loneliness. One must add that with time, gender roles and social tendencies have changed, especially in Shanghai: due to better education, women's social position has risen. Young adults often put their career first and women learn to live economically independent.¹⁰⁰ Women's disagreement with the patriarchal tradition leads to an interesting turn of events. Not only do men outnumber women due to the one-child-policy, many men cannot match the high education and standards of women. At the same time, they feel like they are not filial towards their parents who wish their sons to start a family by the age of thirty.¹⁰¹ In a patriarchal and culturally unequal society such as China's, ¹⁰² this study predicts firstly that men feel lonelier than women.

Relationship status can also be a significant risk factor for loneliness. ¹⁰³ Single people often reported higher loneliness than those married or in a relationship. ¹⁰⁴ Nicolaisen and Thorsen noticed that although young adults see their friends often, they may still feel lonely when their expectations of intimate friendship qualities are not met. ¹⁰⁵ This kind of loneliness is being labelled as emotional loneliness, which is explained in section 5. Even though the results are consistent, the importance of this factor must be emphasized. As statistics show in Figure 2, over the past ten years, marriage rates have been declining in Shanghai, as well as in the whole of China. ¹⁰⁶ Despite the fact that unmarried couples are not included in this table, living alone leads to a higher probability of feeling lonely too. ¹⁰⁷ It is mainly about people who do not want to or are being forced to live alone: due to certain social restrictions in the country, married migrant workers, for example, are not able to live with their spouses and/or children in the host country. Related to this example, Katharina Diehl et al. surveyed university students and found that emotional loneliness as well as social loneliness were positively associated with a migrant background. ¹⁰⁸ The following paragraphs focus on the urban migrant workers and why those in China in particular should be more researched in the academic world.

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⁹⁹ Nan zhu wai, nü zhu nei 男主外 女主内.

¹⁰⁰ Ji, 2015.

¹⁰¹ Qi, 2019.

¹⁰² Sangren, 2015.

¹⁰³ Weiss, 1973, p. 71.

¹⁰⁴ Adamczyk & Segrin, 2015; Chan & Qiu, 2011; Zhong et al, 2016.

¹⁰⁵ Nicolaisen, 2014.

¹⁰⁶ National Bureau of Statistics of the People's Republic of China, 2019a.

¹⁰⁷ Yang, 2019, p. 76.

¹⁰⁸ Diehl et al., 2018.

2.9 MARRIAGE STATISTICS IN MAIN YEARS

	Marriage					of which	
Veen	Registrations	First Marriages	Remarriages	of which	Divorce	Approved	Mediated
Year	Permitted					by the Civil	by the
	(10 000 couples)	(10 000 persons)	(10 000 persons)	Female	(10 000 cases)	Administration	Court
1990	10.77	19.49	2.04	1.06	1.64	0.73	0.91
1995	8.40	14.61	2.19	1.09	2.27	0.98	1.29
2000	9.31	15.08	2.89	1.45	3.18	1.76	1.42
2001	9.30	15.23	2.68	1.40	3.15	1.68	1.47
2002	9.10	14.60	3.05	1.40	2.96	1.54	1.42
2003	10.82	17.20	3.97	2.31	3.30	1.98	1.32
2004	12.49	20.27	4.18	2.05	3.63	2.67	0.96
2005	10.27	16.44	4.09	2.05	3.93	3.10	0.83
2006	16.56	27.29	5.83	2.93	4.72	3.78	0.94
2007	12.01	18.10	5.93	2.95	4.69	3.75	0.94
2008	14.16	22.04	6.28	3.17	4.68	3.72	0.96
2009	14.99	23.33	6.65	3.31	4.83	3.92	0.91
2010	13.03	20.10	5.96	2.98	4.67	3.81	0.86
2011	14.89	23.94	5.84	2.90	4.78	3.92	0.86
2012	14.42	22.96	5.88	2.86	5.29	4.42	0.87
2013	14.95	22.17	7.74	3.77	6.96	6.09	0.87
2014	14.19	20.14	8.25	4.06	6.15	5.30	0.85
2015	14.18	19.89	8.47	4.19	6.66	5.83	0.83
2016	12.52	13.79	11.25	4.53	8.26	7.44	0.82
2017	10.87	13.84	7.90	3.92	5.72	5.08	0.64
2018	10.37	14.23	6.51	3.81	5.41	5.18	0.22

Note: This table is provided by Shanghai Civil Affairs Bureau and Shanghai Municipal Senior People's Court.

Figure 2. Marriage statistics in main years (Shanghai). 109

First of all, the 'migrant population' in general refers to those who leave their hometown to seek employment elsewhere. In Chinese databases, they are often labelled as nongmingong 农民工, which means literally 'farmer worker' (migrant workers from rural areas) and has a discriminating connotation. Alternatives are the 'floating population' liudong renkou 流动人口 and 'workers from outside (the city)' wailai wugongzhe 外来务工者,whose hometown is not necessarily in rural areas. In A more suitable term for the current study would be 'workers entering the urban city' (urban migrant workers) jincheng wugong renyuan 进城务工人员. In Specifically, this term refers to workers, holding a rural household registration (hukou 户口, see next paragraph), who entered the urban area to work in non-agricultural industries for 6 months or more. In Sport the sake of simplicity, they are referred to as migrant workers in this thesis.

¹⁰⁹ Shanghai Bureau of Statistics, 2020b.

¹¹⁰ Chi, 2019

¹¹¹ This is a term that is used in most recent studies, such as Xiao & Gao (2013), and I would like to apply this as well.

¹¹² Chen, 2016, pp. 3-4.

¹¹³ National Bureau of Statistics of China, 2017.

One of the three reasons why it is needed to pay attention to the Chinese migrant workers is their increasing number. According to the 2019 Shanghai Municipal Statistics, the number of migrant workers¹¹⁴ has grown by 400.000 in a year, from 9,72 million to 9,76 million, which is more than one third of the local population.¹¹⁵ Second, their identity as 'others' in the urban areas is mainly due to China's unique household registration system (hukou zhidu 户口制度).116 The household registration system identifies the one and only place of residence of each individual, which means you can either have a rural hukou or an urban hukou. Before the economic reform in 1978, internal migration was strictly controlled. As the *hukou* is closely tied to civil services, such as housing, health care, pension benefits and schools, it was almost impossible for rural people to live in urban areas. The economic reforms increased the country's GDP and led to higher income levels in the cities, and relaxed restrictions on rural-urban migration. Nevertheless, the urban social welfare benefits were still exclusively for urban citizens. 117 Researchers have concluded that this makes the migrant workers a vulnerable part of the Chinese population that is economically and socially inferior to urban residents. 118 One of the greatest barriers concerns access to mental health care. 119 Whereas students can rely on services provided by universities and student associations, young adults who have nothing but their job cannot rely on such care. The third reason for researchers focussing on migrant workers in China is the insufficient evidence in current literature to form a conclusive statement about the prevalence of loneliness among them. In China, much loneliness research has been conducted on the left-behind children, ¹²⁰ adolescents, ¹²¹ university students¹²² and (empty-nest) elderly; ¹²³ however, the fact that migrant workers are a vulnerable group too has been overlooked so far, not only in academic research, but also in Chinese news media. 124 Their distinctive characteristics and significance to the Chinese economy mark the importance of including them in research. 125

As mentioned above, the main reason why they are vulnerable is because of their lower social status compared to their urban counterparts. This vulnerability has also been proven in research on loneliness: compared to other urban residents, migrants generally feel lonelier. The two main reasons for this

¹¹⁴ In the table it is written *liudong renkou* 流动人口, which is actually the floating population.

¹¹⁵ Shanghai Bureau of Statistics, 2020a.

¹¹⁶ Zhong et al., 2016.

¹¹⁷ Zhao et al., 2018.

¹¹⁸ Zhong et al., 2016.

¹¹⁹ Kramer et al., 2002.

¹²⁰ Jia & Tian, 2010; Ren et al, 2020.

¹²¹ Wu et al., 2015.

¹²² Li, 2018; Zhang & Yan, 2016.

¹²³ Xu & Hu, 2018; Yan et al., 2014; Chen & Hicks et al., 2014.

¹²⁴ Qiu & Liu, 2019, p. 140.

¹²⁵ Chen & Wang, 2015.

loneliness are that they often have to cope with homesickness on the one hand, and difficulties with integrating themselves into the new society, making new friends and finding a job on the other. On the basis of existing data, Yang concluded that the length of unemployment as well as perceived lower income are risk factors strongly associated with subjective well-being. It is migrants in particular who often face such problems, alongside discrimination, exclusion and mistrust. Alang Ying et al. for example, found that Chinese migrant workers' loneliness levels were significantly higher than other social groups, such as police men, students and even the elderly. In contrast, Sow Hup Chan and Hua Han Qiu's comprehensive research argued that the degree of loneliness among Chinese migrant workers was not significantly high, gender difference did not have an influence, nor did age. However, their study focused on a very specific group (blue-collar workers) in one sector (clothing factories). Furthermore, they lived and worked in a relatively small city where they received support from friends, family and/or associates from the same hometown. The results of this specific group cannot be generalized to all migrant workers. In other words, different results in literature can be due to different measures, subgroups, cities and/or the unexplored role of other factors.

Another example is the cross-sectional survey on the prevalence and five associated factors of loneliness among migrant workers in the service industry in Shenzhen, conducted by Zhong Baoliang et al. Their research show a high prevalence of loneliness indicating that they have psychological needs that are not being met. Moreover, the authors indicate that this prevalence is much higher than other studies using a similar single-item question about loneliness in other regions worldwide. At the same time, this level of loneliness is consistent with findings from transnational immigrant studies, according to Zhong et al. The adaptation to a new environment is furthermore accompanied by limited religious activities, language barriers and confrontation with market-oriented values. Therefore, uncertainty in identity, alienation, lack of belonging, and loneliness all inevitably occur. Given that China is a multi-ethnic country with diverse regional dialects and cultures, the researchers state that Chinese migrant workers are similarly affected by these factors. Second, by regression analysis, Zhong et al. demonstrated that among other factors, having a marital status other than married or never married, migrating alone and low perceived social support were all significantly associated with increased risk of loneliness among those migrant workers. Although

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¹²⁶ Yang, 2019, pp. 117-119; Wang et al., 2009.

¹²⁷ Yang, 2019, p. 149.

¹²⁸ Ming & Wang, 2009.

¹²⁹ Zhang et al., 2009.

¹³⁰ Chan & Qiu, 2011.

¹³¹ Li et al., 2014.

¹³² Zhong et al., 2016.

the researchers focus on different sub-categories of migrant workers, they are significant in the results they produce; but to form a more coherent view, these differentiations do not matter in the current study.

In migrant research, there is little empirical data on the new generation of migrant workers as a subcategory. This is the generation born in the 80's and 90's, who are better educated and are more likely to work in manufacturing and service industries than in the construction industry. ¹³³ Two studies investigated the overall quality of life among them compared to their urban counterparts in Eastern China. ¹³⁴ Not only was the quality of life lower, but the new generation of migrant workers also perceived poorer social support. ¹³⁵ Although the new generation lives under better material conditions than the older, both Li Jie et al. ¹³⁶ and Zhong et al. assume that the younger generation of migrant workers has a poorer mental health compared to the older one. This is not merely due to the fact that they are in a pivotal stage of life, but also because the new generation have higher demands for material and spiritual enjoyment ¹³⁷ and may therefore experience more stressors. ¹³⁸ The conclusions about the prevalence of loneliness among migrant workers must be stated cautiously, given the limited information on this social group in China in general. The current study attempts to fill this gap by adding data on the new generation of migrant workers in Shanghai, without restricting to one employment sector.

As loneliness among adults is mostly linked to experiential or situational aspects rather than individual characteristics, ¹³⁹ the current thesis focuses on the defects of inadequate social environments instead of individual motivation and skills and suggesting therapy or education to gain new skills. ¹⁴⁰ Migrants find themselves in a completely new environment, which is why their social network is reduced. Accordingly, social support can play an important role in the feeling of loneliness. For instance, Liang Dekuo et al. showed that migrants with inadequate perceived social support tended to have higher levels of loneliness; ¹⁴¹ so in the last section, literature on social support is reviewed.

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¹³³ Zhao et al., 2018.

¹³⁴ Xing et al., 2019.

¹³⁵ Xing et al., 2013.

¹³⁶ Li et al., 2014.

¹³⁷ Zhong et al, 2017.

¹³⁸ Yu et al, 2019.

¹³⁹ Rokach & Neto, 2005.

¹⁴⁰ Weiss, 1973, p. 73.

¹⁴¹ Liang et al., 2019.

1.5 Social support

Lijun Song et al. proposed a synthetic definition of social support: it refers to the aid (i.e., the supply of tangible or intangible resources) individuals gain from people in their social network. 142 It is considered to be an important factor in mental health and well-being, 143 as lower support can predict higher loneliness. 144 Because loneliness is a subjective feeling, it is rather the perceived support and not the actual support that has an influence. Robert Weiss is one of the first researchers to make a distinction between emotional and social loneliness. Emotional loneliness is usually due to the absence of a close emotional or intimate attachment, and social loneliness is the feeling when there are deficits in one's social network. Different types of relationships are important at different stages in life. Children attach themselves to parents and siblings, and when they enter adolescence, their relations with peers become increasingly important. In the transition to adulthood, romantic relations are being established. The question remains how bonds with family, friends and romantic partners differ in importance and loneliness prevention. 146

Enrico DiTommaso and Barry Spinner noted that emotional loneliness appeared to be composed of two domains, that is family emotional loneliness and romantic emotional loneliness. Amountic relations (or lack thereof) seem to be a higher predictor of loneliness. China abandoned the one-child policy from 1978 in 2014, yet has already created 'the loneliest' generation, according to Javier Hernandez and Amy Qin. The one-child policy did not only size down the population, but also lead to a declining fertility rate, and left widowers, empty-nest families and families who lost their only child in deep loneliness. The people who are an only child in this generation have insufficient interaction with their counterparts during their developmental period and may, as a result, lack social skills. As their parents were busy with work, they have been often brought up by their grandparents, with whom they experience generational gaps. Accordingly, stress, frustrations and not being able to communicate all contribute to loneliness. Another by-product of the one-child policy is the imbalance in gender ratios: in traditional patriarchal China, boys were preferred over girls and abortion was often committed after an ultrasound revealed it would be a girl. As a result, males outnumber females and a large number of males stay single.

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¹⁴² Song, 2011, p. 6.

¹⁴³ Zimet et al., 1988.

¹⁴⁴ Li et al., 2011; Liu et al., 2020.

¹⁴⁵ Weiss, 1973, pp. 18-19.

¹⁴⁶ Peplau & Perlman, 1982, p. 297.

¹⁴⁷ DiTommaso & Spinner, 1993.

¹⁴⁸ Adamczyk & Segrin, 2015.

¹⁴⁹ Hernandez & Qin, 2015.

¹⁵⁰ Qiu & Liu, 2019, pp. 143-144.

It is often the case that family support has a more important place among Chinese older adults. ¹⁵¹ From existing findings, it can be concluded that a good relationship with the family also contributes positively to the mental well-being of the child, as well as in their adult years. In Chinese culture, a good relationship is often accompanied by 'filial piety' (*xiaoshun* 孝顺), which refers to the duty of respect, obedience and care for one's parents and elder family members, including authoritative obligations and reciprocal behaviours. ¹⁵² Even if younger adults might not need family support as much as the elderly do, when the actual relationship differs from the ideal one, a discrepancy occurs. Furthermore, China's traditional values and practices are re-evaluated and reshaped while being confronted with modern Western ideas. The problem of paying frequent visits to and taking care of the elderly while migrating to the city for employment can be solved by nursing homes; an institution that has been popping up mainly after the opening-up reforms. This way, pressure can be elevated without harming the relationship with parents, if they approve of this decision.

In a meta-analysis measuring the influence of friendship quality on loneliness in various countries, a significant negative correlation was confirmed. However, no comparison was made with emotional relations and most of the studies were conducted among children and adolescents. Another Chinese study reveals that, in contrast to the elderly and children in whom family support has a stronger effect on loneliness, young adults are more attached to friendships. It is often the case that these young adults go to big cities for education or employment and therefore have to leave their families. In their new environment, they cannot do anything but rely more on friends. Hese results are consistent with those from Zhang Ying et al. Is and Xiao Suowei and Gao Ying. Regardless of the results, limitations of past studies should be taken into account for future research: different research subjects, cultural background within China and measurement instruments focussing on different sources of social support all lead to different results.

Concerning the latter, Chih-Yuan Lee is among the few to focus on three different sources of social support: family, friends, and romantic partners. In his literature review, he refers to a study where a negative relationship between family support and loneliness was reported. A strong support system at home may make adolescents vulnerable to feeling isolated and lonely when separated from family in early adulthood. He cooperated with Sara Goldstein and they found no associations between family

¹⁵¹ Li et al., 2017.

¹⁵² Fu & Ji, 2020.

¹⁵³ Wu et al., 2015.

¹⁵⁴ Liu, 2018.

¹⁵⁵ Zhang et al., 2009.

¹⁵⁶ Xiao & Gao, 2013.

support and loneliness; instead, there were stronger negative relations with support from friends and romantic partners. This can be explained from the life course perspective, suggesting that at different life stages, people have different psychological needs and thus support from varying relationships may influence our well-being differently. The biggest observation here is that the author has explored the relationship between different sources of social support and loneliness as one dimensional. However, there is also a scale that measures the different types of loneliness: social loneliness and emotional loneliness. The next chapter about methodology elaborates more on this scale.

The insignificant relation between family support and loneliness does not indicate that family support is not necessary. In fact, researchers examined the mediating roles of three different sources of social support in relation to perceived stress and well-being among young adults. Lee et al. suggest in the first place that family support ameliorated physical health. To be more specific, friend support elevated loneliness, and romantic partner support mediated the relationships of stress with both loneliness and depressive symptoms. 158 However, one important limitation of this study is the fact that both research samples were conducted on American students. As noted before, there are specific factors that play a role in social relations in China, and therefore these findings with American students cannot be generalized to the migrant workers of Shanghai. Nonetheless, research among migrant workers in China on this particular topic is very scarce, which also means that one needs to rely on sources focussing on other countries. The study by Xiao Suowei and Gao Ying is in line with previous findings and shows that male migrant workers lack emotional support compared to their female counterpart. There is a high barrier to seeking support from colleagues and urbanites for the migrant workers in general. Relaxations in the hukou system would allow close relatives to move to the city and alleviate emotional loneliness in both parties. Furthermore, the authors suggest that more could be invested in formal institutions and social services to promote the urban integration of migrant workers at the economic, social, cultural and psychological levels.¹⁵⁹

In short, there are multiple contextual factors that need to be taken into account; but first, descriptive research should be conducted on the prevalence of loneliness among young Chinese migrant workers nowadays, and how they perceive different sources of social support. It is important to examine both types of loneliness independently as Diehl et al. reasoned: "because the satisfaction for the need of emotional loneliness cannot act as a counterbalance for social loneliness, and vice versa." ¹⁶⁰ As this thesis

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¹⁵⁷ Lee & Goldstein, 2016.

¹⁵⁸ Lee et al., 2018.

¹⁵⁹ Xiao & Gao, 2013.

¹⁶⁰ Diehl et al., 2018, p. 2.

aims to prove that the source of support matters among Chinese people too, the contribution of the current study is to enhance the understanding of the impact of both situational and cultural factors on one's psychological well-being in general, and feelings of loneliness in particular. The lack of information and a sense of ignorance should not mean that a problem can be forgotten. In addition, policy makers and social workers can benefit from this study too: a comprehensive understanding of a certain social group can help them to adjust their policies, services and projects.

Against this background, the present study aims to find an answer to the main research question: How prevalent is loneliness among different groups by socio-demographics of young migrant workers in Shanghai and how does this relate to different sources of social support? It is expected to achieve the answer in the following three steps, namely by (1) investigating how certain socio-demographic factors are related to loneliness, (2) investigating to what extent social relations have a more positive influence on loneliness than familial relations and (3) investigating how the length of stay in an urban environment influences their experience of loneliness. The findings of previous studies have been used to shape the three hypotheses of this study. First, it is expected that relationship status, employment status and gender are significantly correlated to loneliness, resulting in higher levels of loneliness in people who are male, single and unemployed compared to their counterparts. The second hypothesis states that social support from friends and significant others have a stronger negative influence on loneliness than support from family. Third, the longer one has been staying in Shanghai, the higher the loneliness level will be.

2. Theory and methodology

The second part of this master thesis starts with an evaluation of the different ways to conceptualize loneliness and social support. This leads to the determination of how to measure both constructs, as assessed in the second section. The third section describes the methodology for the current study with regard to the participants, measures, procedure and data analysis strategy. The empirical research tries to describe the relationship between loneliness and social support among migrants in Shanghai by conducting an online survey with closed questions and a rating scale.

2.1 Conceptualization

Loneliness can be conceptualized in two different ways: unidimensional or multidimensional. As Daniel Russell reviews, the unidimensional approach regards "loneliness as a single or unitary phenomenon that varies primarily in its experiences intensity."¹⁶¹ Even so, when estimating the prevalence of loneliness, researchers face the problem that loneliness is not a condition like a fever, which one does or does not have. In fact, it varies from the slightest perception to a full immersion. ¹⁶² For this reason, a multidimensional approach can conceptualize "loneliness as a multifaceted phenomenon that cannot be captured by a single global loneliness measure." ¹⁶³ Multidimensional scales can thus identify the variations in the experience of loneliness in order to facilitate interventions for the lonely.

As described in the literature, Weiss was among the first researchers to distinguish emotional loneliness from social loneliness. ¹⁶⁴ According to Stephanie Cacioppo et al. however, the overarching framework includes three types of loneliness: intimate/emotional loneliness, relational/social loneliness and collective loneliness, which refers to perceived discrepancies in one's social identity and connection with 'similar others'. ¹⁶⁵ As pointed out by Maes et al., there is insufficient research on collective loneliness to understand it sufficiently. ¹⁶⁶ It is also unclear if those 'similar others' are limited to peers at school or the whole village. According to the self-determination theory of Edward Deci and Richard Ryan, relatedness is one of the three basic psychological needs that are essential for one's psychological health and well-being. Relatedness is to a great extent synonymous to belongingness, a driving force in human development. ¹⁶⁷ Roy Baumeister and Mark Leary emphasize the distinction between 'needs' and 'wants'.

¹⁶¹ Peplau & Perlman, 1982, pp. 81-82.

¹⁶² Weiss, 1973, p. 23.

¹⁶³ Peplau & Perlman, 1982, p. 82.

¹⁶⁴ Weiss, 1973.

¹⁶⁵ Cacioppo et al., 2015.

¹⁶⁶ Maes et al., 2020.

¹⁶⁷ Ryan & Deci, 2000.

'Wants' refer to desires and unsatisfied wants lead to temporary distress (e.g., negative affect). 'Needs' on the other hand, derive from necessities, of which a dissatisfaction results in pathological consequences (e.g., anxiety, depression, poor health). ¹⁶⁸ When the need for belongingness in a society is not met, collective loneliness arises. It could therefore be seen as a general term for loneliness, so this study focuses on emotional and social loneliness only.

For each type of loneliness there can be multiple subtypes, depending on the kind of social relationship. Emotional loneliness, for example, can be due to a discrepancy in connections with family members or romantic partners. Weiss has argued that different kinds of relationships are constructed by six types of social support. 169 The first one is attachment, derived from relationships that provide a sense of security and commitment; second, social integration is obtained from those providing a sense of companionship, similar concerns and activities; third is opportunity for nurturance, gained from those providing a sense of being needed and responsible for another's well-being; fourth is the reassurance of worth, stemming from relationships that provide a sense of competence and being valued; the fifth type of provision is reliable alliance, drawing from relationships providing a sense of continuing assistance; and the sixth one is guidance, arising from relationships in which individuals can obtain trustworthy advice. ¹⁷⁰ Even though one single relationship may offer more than one social support, Weiss has stated that it is unlikely that one can satisfy all types of relational provisions.¹⁷¹ Moreover, at different stages in life, people value particular provisions more than others. For example, children need guidance, usually from teachers, young adults value attachment more, while a parent needs the opportunity for nurturance and so on. For this reason, this study takes a look at the different sources of social support and its relation to different types of loneliness.

Social support is about the amount of assistance one receives from other people in general. This can be in various forms, such as emotional (e.g., empathy), material (e.g., practical help) or informational (e.g., advice). Regardless of the actual available social support such as government agencies, each individual experiences the social support differently. Not everyone finds it easy to seek help from a particular friend or even family member, even if they are present. So from a psychological perspective, social support is clearly subjective, which is why researchers talk about perceived social support. Many researchers have shown that social support has a positive influence on a multitude of variables such as depression,

¹⁶⁸ Baumeister & Leary, 1995.

¹⁶⁹ Weiss, 1974.

¹⁷⁰ Cutrona & Russel, 1983.

¹⁷¹ Peplau & Perlman, 1982, p. 299.

¹⁷² Dambi et al., 2018.

loneliness and well-being in general.¹⁷³ Although the beneficial effect of support is widely cited, researchers have found varying degrees of impact with different sources of social support.¹⁷⁴ In the light of previous findings, this study attempts to reflect how the different sources of social support relate to each other and their influence on loneliness among the migrants in Shanghai.

2.2 Instruments

To measure these invisible abstract psychological constructs more accurately, various instruments have been developed. Since loneliness is a subjective experience, self-report measurements are the most common method of data collection. They execute a matching process: respondents assess their own attitude in conceptual terms (e.g., 'I feel as if nobody really understands me') and indicate the point on the rating scale that matches their attitude most closely. The Given the complex character of loneliness and the complex structure of social networks, a single question such as 'Do you often feel lonely?' or 'Do you think you have many friends?' cannot capture the various dimensions of personal milieux. Therefore, measurement scales consisting of multiple items are more adequate to grasp different aspects of one's feeling of loneliness and social support. In this section measuring scales for both loneliness and social support are presented.

The conceptualization of loneliness as either unidimensional or multidimensional determines its measurement, as noted before. At present, most empirical research on loneliness as a unidimensional construct uses the Revised UCLA (University of California, Los Angeles) Loneliness Scale. The main problem with this scale is that it has been developed and tested on students, for whom friends play a big role when it comes to loneliness. It was designed mainly to assess satisfaction with social relationships, with focus on the affective state. This unidimensional approach is said to be inadequate because it does not elaborate on the complex and differential relationships between the different forms of loneliness and other related constructs.

When it comes to multidimensional scales for loneliness, one of the two widely used scales is the Social and Emotional Loneliness Scale for Adults (SELSA), which is also used in this study. As noted earlier, Weiss suggests that emotional loneliness "is initiated by the absence of a close emotional attachment",

¹⁷³ Lee & Goldstein, 2016.

¹⁷⁴ Vangelisti, 2009.

¹⁷⁵ Krosnick & Presser, 2010.

¹⁷⁶ Peplau & Perlman, 1982, p. 37.

¹⁷⁷ Russell et al., 1978.

¹⁷⁸ de Jong-Gierveld, 1984, p. 86.

¹⁷⁹ Penning et al., 2014.

¹⁸⁰ Heinrich & Gullone, 2006.

whereas social loneliness "is initiated by the absence of socially integrative relationships." ¹⁸¹ Accordingly, DiTommaso and Spinner divided loneliness into social and emotional loneliness. After subjecting the results to Principal Components Analyses (PCA), they further divided the emotional loneliness component into romantic and family subtypes. ¹⁸² Cramer and Barry think that, because of the comprehensive evaluation of the three loneliness dimensions, high reliability estimates and factor loadings, the SELSA represents the better instrument to assess both social and emotional loneliness dimensions. ¹⁸³ The original SELSA contains in total 37 items rated on a 7-point scale, whereas the abbreviated version of 15 items (SELSA-S) is designed to minimize response fatigue and has been validated as well. ¹⁸⁴ Yet, rating scales cannot be fully validated since every sample is different and is usually not repeatedly surveyed across time. Hence, this study contributes to loneliness research by using existing questionnaires in a study with different participants.

As for perceived social support, one of the most extensively used measurement scales is the Multidimensional Scale for Perceived Social Support (MSPSS). This scale is not only used among participants in Western countries, but has been translated in numerous foreign languages. Whether or not the simplified Chinese version is proven to be valid remains unclear. Jermaine Dambi et al. reviewed Chong Guan Ng and his colleagues' methodology as poorly, whereas Kaina Zhou et al. evaluated the Chinese version as strongly satisfactory in terms of its reliability and convergent/discriminant validity. However, one must note that the participants of both studies were completely different, i.e., university students in Malaysia and opioid dependent patients in China respectively. Research to date has not used this scale yet among migrant workers in Shanghai, which makes the current study to be the very first to do so.

2.3 Current research

As noted before, the current study attempts to find an answer to the main question in three steps. First, how are certain socio-demographic factors are related to loneliness? Second, to what extent social relations have a more positive influence on loneliness than familial relations? Third, to what extent does an urban environment influences the loneliness experience among young adults in Shanghai over time? A sub-question can be added as well, which is 'what effect does the length of their stay in Shanghai have on

¹⁸¹ Weiss, 1973, p. 33.

¹⁸² DiTommaso & Spinner, 1992.

¹⁸³ Cramer & Barry, 1999.

¹⁸⁴ Cramer et al., 2000.

¹⁸⁵ Zimet et al., 1988.

¹⁸⁶ Dambi et al., 2018.

¹⁸⁷ Zhou et al., 2015.

loneliness?' After a concise but substantive literature study and overview of measuring scales, this knowledge can be applied to current research. Data is obtained by means of a quantitative correlational research is conducted using the survey method. This section is divided in three subsections: the participants, measures and procedure of the current research.

2.3.1. Participants

Since many psychological theories and measurement instruments have been developed in Western countries, most research is often conducted with the so-called WEIRD samples: people living in Western, Educated, Industrialised, Rich and Democratic societies (e.g., Cramer et al. 188). These samples often contain university students, who are not representative of Westerners in general and definitely not of non-Western societies. 189 This makes it even more interesting to test theories developed in the West with other cultures such as China. Matching results could contribute to its universality. This study would like to focus on young adults living and working in Shanghai, or - simply put - 'migrant workers'. To avoid sampling bias, a minimal number of criteria is set for the selection of the research subjects. Inclusion criteria contain Chinese citizens, Mandarin speakers as the questionnaires are in Mandarin, between 18 and 30 year old. Because age is calculated differently in China, the questionnaire asks for their birth year instead of age. To be concrete, in traditional China, people automatically turn one at their birth. Additionally, another year is added on Chinese New Year's Day as well. Consequently, a Chinese person can differ one to two years from someone in a Western culture with the same birth year. On the other hand, residents with a Shanghainese hukou and students are not eligible for this study, because they have a different lifestyle and social relations. The variance in the sample would be too big to notice significant patterns. The sampling method is non-probability sampling, convenience sampling to be more specific. Since there was no access to the electronic database containing information about the total Chinese migrant workers in Shanghai, it was impossible to list all individuals. Despite the fact that this sample method makes it hard to control, it is yet quick, cheap and less time intensive, which seems the most suitable given the limited time to conduct this study.

Given the fact that the research subjects are human beings, it is essential to follow the ethical codes of research. Ethical issues at stake may include, but are not narrowed to the following principles: social value, scientific validity, fair subject selection, favourable risk-benefit ratio and respect for subjects. Prior to the survey, participants were informed about the goal of this study and the structure of the survey.

¹⁸⁸ Cramer et al, 2000.

¹⁸⁹ Heine, 2016, p. 22.

¹⁹⁰ Emanuel et al., 2016.

Participants' names will not be registered nor published, and anonymity and confidentiality of the data are guaranteed at every stage of the investigation. Moreover, they are allowed to terminate their participation at any time without penalty. After completion, contact information of mental health organizations in Shanghai were disclosed as well as the email address of the current researcher. The mental health organizations include the Shanghai Mental Health Center and the Tulip Sunshine Group (yujinxiang yanggyanghui 郁金香阳光会). While the former is a hospital focusing on treating mental disorders, the latter is a less formal organization with a lower threshold for requesting help. They focus on collaborative depression rehabilitation, devote themselves to building a mutual assistance platform, through online listening, companionship, and warmth through volunteers and depressed partners. Furthermore, they actively conduct offline rehabilitation activities for mental skills healing, family support groups through a team of expert psychologists and they introduce work and employment and other ways to recover. ¹⁹¹ An ethical justification of this research is approved by KU Leuven University's Social and Societal Ethics Committee (SMEC), see reference number G-2020-2877-R2(MAR).

Prior to the larger research study, a small pilot study was conducted. The aim of this pilot phase was to critically trace any flaws in the questionnaire and thereafter conduct higher-quality research. Accordingly, a total of 7 participants were recruited and two questions were revised and adjusted according to their feedback. Because representativeness for the official sample is not the focus in this phase, these participants were allowed to deviate slightly from the criteria of the official study. One of them noticed that there was no answer option for those living with family in Shanghai. Another adjustment is the option 'student' under the question about employment status. After these two adjustments were made, the research could be conducted officially. The data from the pilot participants were not included in the data analysis described in Chapter 3.

Based on the power analysis in the statistical program G*Power, 192 it showed that 67 participants were needed to obtain a medium size effect (one-tailed, $\alpha = .05$, with effect size 0.3 and power 0.8). Taking possible non-eligible participants into account, the study aimed at 100 participants by forwarding the survey to approximately 50 acquaintances and potential participants through WeChat. Distributing questionnaires via the internet or an online platform does not require high costs and it is a fast method. A large audience can be reached, which makes it possible for this research to study a Chinese sample. They

¹⁹¹ Tulip Sunshine Group, 2021.

¹⁹² Faul et al., 2009.

were politely asked to post this link on their moments (pengyouquan 朋友圈) 193 on WeChat to obtain a snowball effect. To reach as many people as possible, this link has been posted on other Chinese social media platforms such as Weibo 微博 194 and Zhihu 知乎 195 . In the three weeks starting from April 13, 93 participants filled in the questionnaire. Wenjuanwang has an inherent function that displays the province where the participant was at the moment of completing the survey. To conform to the inclusion criteria, questionnaires completed outside Shanghai had to be excluded. The final sample consisted of 70 eligible participants. Other measured sample characteristics related to socio-demographics are discussed below as separate constructs because they are relevant for the research questions.

2.3.2. Measures

The questionnaire consists of three parts, conforming to the variables that are included in this study: socio-demographics, loneliness and social support. The socio-demographics consist of age, gender, relationship status, family composition, residential situation, employment status, education and self-rated health. Loneliness and social support are measured by the SELSA-S and MSPSS respectively. All questions are translated in simplified Chinese, reviewed and corrected through back-translation by native Chinese speakers.

Socio-demographics

The first hypothesis suggests that relationship status, employment status and gender are related to loneliness, resulting in higher levels of loneliness in people who are male, single and unemployed compared to their counterparts. To keep this questionnaire as short as possible, irrelevant variables for this study have been left out, such as indication of wealth, religion and physical activity.

In a previous literature study, it was described that men in Chinese patriarchal society face more social pressure than women. ¹⁹⁶ This leads to the first part of hypothesis H1, namely that men score higher on loneliness than women (H1a). Instead of marital status, this study has opted for relationship status. The reason behind this change of label is the fact that marriage may secure attachments in terms of law, even so, it does not guarantee genuine emotional attachment. In other words, it is not marriage that could lower

¹⁹³ Moments (朋友圈) is a fundamental feature for WeChat where you can post text-based updates, images videos and articles, similar to Facebook Timeline or Twitter News Feed.

¹⁹⁴ Sina Weibo is a Chinese microblogging platform based on fostering user relationships to share information.

¹⁹⁵ Zhihu is a Chinese question-and-answer website where questions are created, answered, edited and organized by the community of its users.

¹⁹⁶ Li et al., 2011.

one's risk of feeling lonely but rather the availability of emotional attachment. ¹⁹⁷ Non-married couples can mutually provide sufficient emotional support as well. This way, LGBTQ-couples have the opportunity to clarify their relationship status too as same-sex marriages are still a major social taboo in China. Based on previous literature study, single people are expected to feel more lonely (H1b). As for employment, Yang concludes that being employed gives more security and a stable income. Being employed also means to have the opportunity to interact with people. ¹⁹⁸ Therefore, it is expected that unemployed people feel more lonely than employed people (H1c). Because migrant workers often leave their family in the countryside, the second hypothesis is based on the assumption that they cannot but rely on friends in the urban city. Therefore, it states that a deficit in social support from friends and significant others has a stronger negative influence on loneliness than support from family (H2). Finally, two more items were added to grasp the situation better: how long the participants have been staying in Shanghai and when the last time was they went back to their hometown. The third hypothesis assumes that the length of one's stay in Shanghai also relates to loneliness: the longer one has been staying in Shanghai, the higher the loneliness level will be (H3).

Table 1 shows the socio-demographic information of the 70 eligible respondents, who successfully completed the survey for this study. The subject pool consisted of 53% male, 46% female participants and 1% was not comfortable sharing gender. Their average age was 24.2 years (SD = 2.4), ranging from 19 to 28 years. More than half were single (66%) and the majority of the respondents was childless (85.7%). Regarding education, 74.3% hold an academic bachelor degree and 90% work full-time. Over a third of the respondents live with family (35.7%), 31.4% cohouse with strangers, 15.7% live with a partner and only 7.1% live alone. This can be partly due to the high housing prices in Shanghai for single households. ¹⁹⁹ Most of the participants rated their health as 'good' (58.6%) or 'very good' (22.9%), while none indicated 'very bad'. Lastly, 70% have been living in Shanghai for more than 2 years and 77.1% have visited their hometown in the past 6 months.

¹⁹⁷ Weiss, 1973, p. 90.

¹⁹⁸ Yang, 2019, p. 143.

¹⁹⁹ CBRE, 2019.

 ${\bf Table\ 1.}\ Socio-demographic\ information.$

Socio-demographic		Frequency $(N = 70)$	Percentage (%)
Gender	Male Female	37 32	52.9 45.7
Age	Not specified 18 - 24	1 38	1.4 54.3
	25 - 30	32	45.7
Relationship status	Single	46	65.7
	Seeing partner daily	9	12.9
	Seeing partner often	10	14.3
	Long-distance relationship	5	7.1
Children	Yes	10	14.3
	None	60	85.7
Employment	Unemployed	3	4.3
	Part-time	4	5.7
	Full-time	63	90.0
Residence	Partner	11	15.7
	Family	25	35.7
	Friend	7	10.0
	Stranger	22	31.4
	Alone	5	7.1
Education	High school	1	1.4
	Professional bachelor	17	24.3
	Academic bachelor	52	74.3
Health	Very bad	0	0
	Average	13	18.6
	Good	41	58.6
	Very good	16	22.9
Length of stay in Shanghai	< 1 year	11	15.7
	< 2 years	10	14.3
Hometown visit	> 2 years	49	70.0
	<1 year	24	34.3
	< 6 months	30	42.9
	> 6 months	16	22.9

Loneliness and social support

Loneliness is measured by the abbreviated version of the Social and Emotional Loneliness Scale for Adults (SELSA-S), consisting of 15 items, divided in three subscales: family loneliness (e.g., 'I feel part of my family'), romantic loneliness (e.g., 'I have someone who fulfils my needs for intimacy') and social loneliness (e.g., 'I can depend upon my friends for help'). All items were scored reversely except for item 15 'I have an unmet need for a close romantic relationship'. Cronbach's alphas for the 5 items on familial loneliness, 4 items on social loneliness items and 6 items on romantic loneliness were .86, .78 and .85 respectively, which means acceptable to good internal consistency. ²⁰⁰ This is followed by the Multidimensional Scale for Perceived Social Support (MSPSS) in simplified Chinese, consisting of 12 items (e.g., 'I can count on my friends when things go wrong'). Each subscale consisted of 4 items, which are support from family ($\alpha = .71$), friends ($\alpha = .80$) and significant others ($\alpha = .72$). Both scales make use of a 7-point Likert response scale, containing the following labels: 1 'strongly disagree', 2 'disagree', 3 'somewhat disagree', 4 'neutral', 5 'somewhat agree', 6 'agree', and 7 'strongly agree'. Higher scores suggest more loneliness and more perceived social support respectively. The length of scales can impact the quality of the research, namely, the more questions there are, the greater the burden for the participant and the less accurate the answers. Therefore, shortened versions are preferred.

It is important to choose scales that have once been used in research among Chinese people and are also cross-culturally validated. For example, this study used the same version of the MSPSS as in the study by Ng et al. 201 and the SELSA-S of Li et al.'s research 202. However, Li included only 14 items of the SELSA-S in her study while the English version contains 15 items. The item 'I have an unmet need for a close romantic relationship' has been left out because it did not have a significant correlation to the results of social support in her study. The questionnaire revision process requires a reliability and validity test among domestic college students. Items whose total correlation is less than 0.3 or factor loading is less than 0.3 were deleted. Therefore, this item has been removed from her study. Since the current study has a different sample, it was decided to add this item anyway. The translation was adjusted and approved by native Chinese speakers, Dr. Xiaoli Wu and Iris Cheng. For example, item 18 'I have friends that I can turn to for information' has been translated as '我有可以向其寻求帮助的朋友'. This seems quite similar to '当我需要整忙时我可以依靠我的朋友', which should refer to item 24 'I can depend upon my friends for help'. In order to include the fact that it is about informative help, the Chinese translation has been

²⁰⁰ Roose & Meuleman, 2014, p. 151-152.

²⁰¹ Ng et al., 2015.

²⁰² Li et al., 2012.

changed to '我有可以向其寻求帮助的朋友提供我实用信息'. Another change in translation is about item 22 'I am in love with someone who is in love with me'. In the Chinese version, the object is in plural ('我爱上那些爱上我的人') and has been changed into singular for this study ('我爱上一个也爱我的人'). It is crucial to keep these linguistic and cultural concepts in mind when conducting research among people from another culture than one's own. This way, the methodology can be adjusted if necessary in order to avoid measurement errors.

2.3.3. Procedure

For this study, the socio-demographics, SELSA-S and MSPSS have been programmed together into one questionnaire on Wenjuanwang 问卷网: a Chinese platform that provides a series of free services of online questionnaire design, data collection, customized forms and survey results analysis. Compared to other survey systems, Wenjuanwang outperforms on convenience and facilitation. The main advantages are the fact that no identity verification is needed to sign up as a non-Chinese and the option to allow one submission per device or WeChat account to avoid multiple submissions per person. The study took place between 13 April and 6 May 2021, and could be filled in on any mobile device or computer. The questionnaire can be opened through an URL-link or QR-code, which leads them to the survey starting with information on this study and then the informed consent.²⁰³ After agreement, they could continue with next part, which are the socio-demographics, followed by the SELSA-S and MSPSS without mentioning the term 'loneliness' (gudugan 孤独感). In the debriefing at the end of the study, participants receive further information to mental health organisations for psychological counselling, as well as the email address of the researcher for more information about this study. Participants did not receive any reimbursement, but Wenjuanwang inherently offers a chance to win one of the prizes in partnerships with several companies. The current study did not take part in this service. It takes approximately five minutes to complete the questionnaire, it is something the participants can do individually without the presence of a researcher, so researcher bias and demand characteristics are not an issue here. All questions were required to be filled in and the registered answers of the respondents were processed completely anonymously.

2.3.4. Data analysis strategy

The data was pre-processed and analysed using the statistical software SPSS version 27.0²⁰⁴ to conduct a correlational research strategy. This way, it attempts to describe the current state of individual variables

²⁰³ See Appendix.

²⁰⁴ IBM Corp., 2020.

(i.e., socio-demographics, loneliness and social support levels) and then check if there is a consistent relationship pattern between the variables, without making any statements about causality between the two. First the variables that had to be reversed scored (SELSA) and recoded to prepare the dataset. Afterwards, the mean values and standard deviations of each variable of this study were determined. In the next chapter, descriptive statistics of loneliness and social support are first reported. Pearson correlation was used to examine the relationship between the social support and loneliness, as well as between length of stay in Shanghai and loneliness. In addition, 95% confidence intervals, two-tailed tests and a significance level of p < .05 were employed in all tests.

To test the first hypothesis H1a, a t-test with two independent samples was computed to determine if there is a significant difference between the loneliness means of the two gender groups. For hypotheses H1b, c and H3, one way ANOVA was applied to analyse the differences among loneliness means for different groups regarding relationship status, employment status and length of stay in Shanghai respectively. Only the difference in loneliness means for different groups by relationship status was significant enough to use the Bonferroni correction, which counteracts the error when multiple groups were compared. With regards to the second hypothesis H2, regression analyses were used to test if social support from each source of social support separately was a significant predictor for participants' overall loneliness. In a final step, multiple regression analysis was carried out to see if all sources uniquely predicted loneliness after controlling for their shared variance.

3. Results

The dataset showed some remarkable patterns that were very interesting for this study. The data is first described and analysed from the view of three aspects in their relation to loneliness: socio-demographics, social support and its subscales, and the length of stay in Shanghai. The following sections explore these analyses without further interpretation and illustrate them by means of tables and figures. In the appendix the original documents related to the survey can be found.

Concerning the SELSA-S, the mean of the total scores was 46.19 (SD = 14.05) and the potential range went from 15 (low) to 105 (high). 71,4% scored higher than 38, which has been labelled as 'high' by Li Huanhuan.²⁰⁵ The mean of the total scores on the MSPSS for all participants was 59.54 (SD = 13.26), within a potential range from 12 (low) to 84 (high). No missing values were found as all questions were required to be filled in before submission. Figures 3 and 4 show these data visually in histograms. For further analyses, this study used mean scores ranging from 1 to 7 according to the Likert scale.

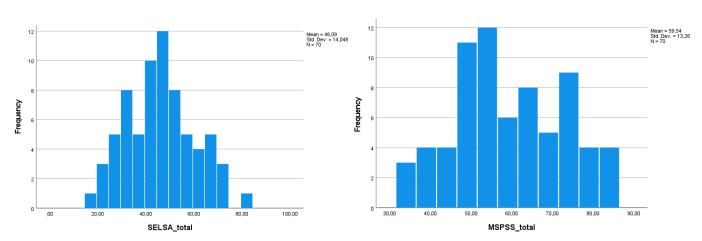


Figure 3. Histogram of total scores on SELSA-S.

Figure 4. Histogram of total scores on MSPSS.

H1: Relationship status, employment status and gender are strongly related to loneliness.

a. Men are more likely to feel lonely compared to women.

A t-test was used to determine if there is a significant difference between the means of the two gender groups. As the group who did not specify any gender is a very small one (N = 1), it was omitted from the analysis. There was no significant evidence found for loneliness in general, $M_{\text{men}} = 3.06$, SD = .88; $M_{\text{women}} = 3.14$, SD = 1.00; t(67) = -.427, p = .671. Similarly, there were no significant differences in terms of family loneliness ($M_{\text{men}} = 2.40$, SD = .93; $M_{\text{women}} = 2.54$, SD = 1.22; t(67) = -.531, p = .597), social

20

²⁰⁵ Li et al., 2012.

loneliness ($M_{\text{men}} = 2.53$, SD = .99; $M_{\text{women}} = 2.65$, SD = 1.01; t(67) = -.476, p = .635), or romantic loneliness ($M_{\text{men}} = 3.93$, SD = 1.42; $M_{\text{women}} = 3.97$, SD = 1.41; t(67) = -.148, p = .883). In short, there are overall slightly higher loneliness levels among women and concerning romantic loneliness in particular (see Figure 5), but no significant difference has been found between male and female gender groups, resulting in a rejection of hypothesis H1a.

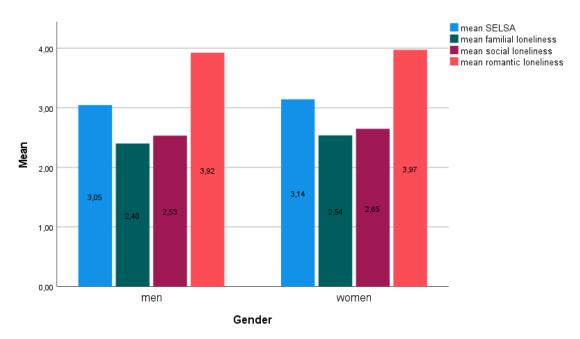


Figure 5. Bar graph of loneliness means and gender.

In a next step, gender differences in social support have been analysed as well: again, no significant evidence was found in general ($M_{\text{men}} = 3.06$, SD = 1.07; $M_{\text{women}} = 4.95$, SD = 1.12; t(67) = -.110, p = .913), neither in terms of support from family ($M_{\text{men}} = 5.11$, SD = 1.08; $M_{\text{women}} = 5.29$, SD = 1.06; t(67) = -.673, p = .503), friends ($M_{\text{men}} = 4.82$, SD = 1.30; $M_{\text{women}} = 4.74$, SD = 1.34; t(67) = .237, p = .813), or significant others ($M_{\text{men}} = 4.82$, SD = 1.16; $M_{\text{women}} = 4.81$, SD = 1.19; t(67) = .042, p = .967). In other words, women seemed to perceive higher support from family, but lower from friends and significant others; yet the differences were insignificant. All data are visible in Table 2.

b. People who are single are more likely to feel lonely compared to those in a relationship.

Accordingly, there are overall higher loneliness levels among single people (M = 3.25, SD = .88) than those who see their partner daily (M = 2.90, SD = 1.06), whether that is seeing them often (M = 2.55, SD = .75) or being in a long-distance relationship (M = 2.80, SD = 1.32). Regarding the subtypes of loneliness, romantic loneliness was the highest among single people (M = 4.37, SD = 1.34), familial loneliness was the highest among those in a long distance relationship (M = 2.80, SD = 1.25), and social loneliness was the highest among those seeing their partner daily (M = 2.67, SD = .91). These mean values are shown in

Figure 6. A one way ANOVA showed that in contrast to social loneliness (F(3, 66) = .23, p = .875) and familial loneliness (F(3, 66) = .22, p = .880), only romantic loneliness was significantly influenced by relationship status. Specifically, post hoc analyses using the Bonferroni post hoc criterion for significance indicated that the average scores on romantic loneliness was significantly higher among the singles (M = 4.37, SD = 1.47) compared to those seeing their partner often (M = 2.90, SD = .93), F(3, 66) = 5.30, p = .002. Taken together, hypothesis H1b is partially confirmed. Table 3 shows the ANOVA results.

Tabel 2. Descriptive statistics of gender differences in loneliness and social support.

		Men (<i>N</i> = 37)		Women $(N = 32)$				
Variable	_	M	SD	M	SD	t	df	p
mean SELSA		3.05	.88	3.14	1.00	427	67	.671
	Familial	2.40	.93	2.54	.93	531	67	.597
	Social	2.53	.99	2.65	1.01	476	67	.635
	Romantic	3.92	1.42	3.97	1.41	148	67	.883
mean MSPSS		4.92	1.07	4.95	1.12	110	67	.913
	Family	5.11	1.08	5.29	1.06	673	67	.503
	Friends	4.82	1.30	4.74	1.34	.237	67	.813
	Significant others	4.82	1.16	4.81	1.19	.042	67	.967

Tabel 3. *One-way ANOVA of relationship status and loneliness*.

Variable		Sum of	df	Mean	F	p
		Squares		Square		
a== a .	Between groups	4.78	3	1.60	1.89	.140
mean SELSA	Within groups	55.74	66	.85		
Familial	Between groups	.80	3	.27	.22	.880
loneliness	Within groups	78.72	66	1.19		
Social	Between groups	.72	3	.24	.23	.875
loneliness	Within groups	68.62	66	1.04		
Romantic	Between groups	26.78	3	8.76	5.30	.002
loneliness	Within groups	109.02	66	1.65		

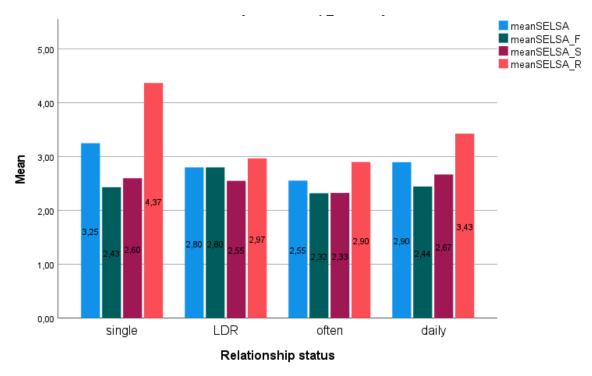


Figure 6. Bar graph of loneliness means and relationship status.

c. Unemployed people are more likely to feel lonely compared to employed ones.

Regarding the third part of the first hypothesis, the groups of different employment statuses were not large enough, so it is not possible to meaningfully compare the groups and verify if unemployed people scored higher on loneliness compared to their counterparts. However, when comparing them, the results showed no empirical evidence for this claim. A one way ANOVA showed that part-time workers have higher overall loneliness scores (M = 3.78, SD = 1.19) than unemployed ones (M = 2.84, SD = .57) and full-time workers (M = 3.04, SD = .93), as displayed in Figure 7. The mean scores of these groups were not significantly different from each other (F(2, 67) = 1.30, p = .281). Considering this non-significant finding, hypothesis H1c can only be assumed to be untrue. As noted before, the samples of unemployed people and part-time workers were too small to compare with full-time workers, due to lack of control over the groups.

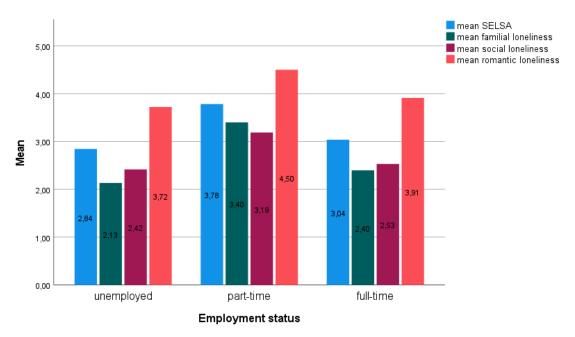


Figure 7. Bar graph of loneliness means and employment status.

H2: Social support from friends and significant others have a stronger influence on loneliness than support from family.

Table 3 displays Pearson's correlations between different types of loneliness and different sources of social support. In line with previous research and the expectations for current research, social support in general was negatively related to loneliness (r = -.766, p < .01), of which the strongest correlation was with support from significant others (r = -.775, p < .01) compared to support from family (r = -.653, p < .01) and friends (r = -.691, p < .01). Contrary to the expectations, familial loneliness did not necessarily have the strongest correlation with support from family (r = -.590, p < .01) but rather with support from friends (r = -.604, p < .01). Conversely, social loneliness had stronger correlations with support from family (r = -.710, p < .01) compared to support from friends (r = -.642, p < .01). There were no significant correlations between romantic loneliness and each source of social support. In fact, the correlations seemed to be slightly positive, but they were weak in magnitude. In a next step, regression analyses were computed to detect any significant predictions of different sources of social support and loneliness.

Tabel 4. Correlations between social support and loneliness.

Variable	M	SD		1	2	3	4	5	6	7	8
1. mean SELSA	3.07	.94	Pearson's r p-value	1							
2. Familial loneliness	1.49	.53	Pearson's r p-value	.757* .000	1						
3. Social loneliness	1.74	1.13	Pearson's r p-value	.728* .000	.570* .000	1					
4. Romantic loneliness	2.86	.46	Pearson's r p-value	.841* .000	.355* .003	.376* .001	1				
5. mean MSPSS	2.54	.76	Pearson's r p-value	766* .000	623* .000	732* .000	.227 .059	1			
6. Family	2.54	.76	Pearson's r p-value	653* .000	590* .000	710* .000	.227 .059	.901* .000	1		
7. Friends	2.54	.76	Pearson's r p-value	691* .000	604* .000	642* .000	.227 .059	.946* .000	.789* .000	1	
8. Significant others	2.54	.76	Pearson's r p-value	775* .000	528* .000	683* .000	.227 .059	.917* .000	.725* .000	.807* .000	1

^{*} p < .01

A first regression analysis was used to test if social support from significant others significantly predicted participants' overall loneliness. The results indicated social support from significant others explained 77.5% of the variance ($R^2 = .60$, F(1, 68) = 102.13, p < .001) and that it was a significant predictor ($\beta = .61$, t(20) = -10.11, p < .001). A second regression analysis showed that social support from family also significantly predicted loneliness scores, $\beta = -.57$, t(14.21) = -7.11, p < .001. This source of social support also explained 65.3% of variance in loneliness scores, $R^2 = .43$, F(1, 68) = 50.50, p < .001. Similarly, the third regression analysis confirmed that support from friends significantly predicted loneliness scores ($\beta = -.49$, t(17.53) = -7.88, p < .001) and explaining 69.1% of the variance ($R^2 = .47$, F(1, 68) = 62.14, p < .001).

Tabel 5. Regression coefficient of support from significant others^a.

Predictors	В	SE	β	t	p	R^2	F	95% <i>CI</i>
(Constant)	6.036	.302		20.000	.000	.620	102.131	[5.43, 6.64]
Significant others	611	.060	775	-10.106	.000			[73,49]

a. Dependent Variable: meanSELSA

Tabel 6. Regression coefficients of support from family^a.

Predictors	В	SE	β	t	p	R^2	F	95% <i>CI</i>
(Constant)	6.024	.424		14.2060	.000	.653	50.505	[5.18, 6.87]
Family	565	.080	653	-7.107	.000			[72,41]

b. Dependent Variable: meanSELSA

Tabel 7. Regression coefficients of support from friends^a.

Predictors	В	SE	β	t	p	R^2	F	95% <i>CI</i>
(Constant)	5.427	.310		17.529	.000	.477	62.138	[4.81, 6.04]
Friends	489	.062	691	-7.883	.000			[61,37]

c. Dependent Variable: meanSELSA

As visible in Table 7, multiple regression analysis was computed to predict loneliness based on multiple sources of social support. A significant regression equation was found (F(3, 66) = 35.97, p < .001), with an R^2 of .62. This full model explains 78,8% of the variance, which is similar to social support from significant others but a lot more than family and friends in the single analyses. The 69 participants' predicted loneliness is equal to 6.327 - .461 (Significant Others) - .128 (Family) - .072 (Friends), where all independent variables (predictors) are coded according to the 7-point Likert scale. Participant's loneliness levels decreased with .461 for each point of social support from significant others; .128 for

each point of social support from family; and .072 for each point of social support from friends. In this analysis, only support from significant others emerged as a significant negative predictor ($\beta = -.46$, t(17.53) = -4.42, p < .001) compared to friends ($\beta = -.07$, t(17.53) = -.69, p = .493) and family ($\beta = -.13$, t(17.53) = -1.16, p = .259). In concrete terms, this means that when someone has the feeling that they can rely on someone special, they feel less lonely. Support from friends and family, on the other hand, are a less significant negative predictor, although friends (r(68) = -.691, p < .001) are somewhat more influential than family members (r(68) = -.653, p < .001). This results in partial support for the second hypothesis. The final predictive model was:

SELSA score = 6.327 + (-.461*Significant Others) + (-.128*Family) + (-.072*Friends)

Tabel 8. Regression coefficients of all sources of social support^a.

Predictors	В	SE	β	t	p	R^2	F	95% <i>CI</i>
(Constant)	6.327	.361		17.530	.000	.620	35.967	[5.61, 7.05]
Significant others	461	.104	585	-4.421	.000			[67,25]
Family	128	.110	148	-1.160	.250			[35,09]
Friends	072	.105	102	689	.493			[28,.14]

d. Dependent Variable: meanSELSA

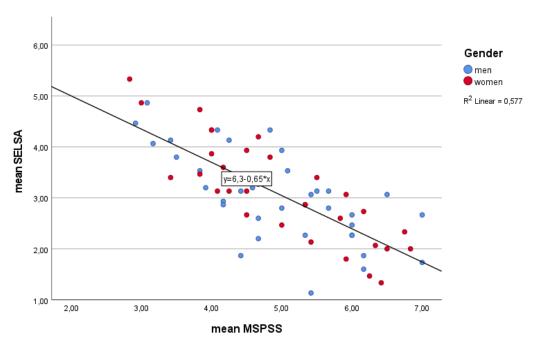


Figure 8. Scatter plot of loneliness mean and social support mean by gender.

H3: The longer one has been staying in Shanghai, the higher the loneliness levels are.

Lastly, this study took a closer look at the correlation between loneliness and one's length of stay in Shanghai. As displayed in Table 8 and Figure 9, the results seem to support the third hypothesis: there is a positive correlation between the two, yet it is not significant, r(68) = .131, p = .281. Among the groups, those staying in Shanghai for more than 2 years show the highest loneliness levels (M = 3.14, SD = .97), followed by those staying between 1 and 2 years (M = 3.02, SD = .90), and those staying less than 1 year score the lowest (M = 2.81, SD = .85). Unfortunately, this relationship is not significant, (F(2, 67) = 5.92, P = .556). A possible explanation could be the fact that the groups are not equally sampled. Another remarkable find are the higher familial loneliness levels among those staying between 1 and 2 years in Shanghai compared to those staying there for less than 1 year and those staying there for more than 2 years. Regarding social and romantic loneliness, the third group scores the highest, as shown in Table 9. In spite, the third hypothesis is fully supported.

Tabel 9. Correlation between length of stay in Shanghai and loneliness.

Variable	M	SD		1	2
1. mean SELSA	3.07	.94	Pearson's r p-value	1	
2. Length of stay in Shanghai	2.54	.76	Pearson's r p-value	.131 .281	1

Tabel 10. Descriptive statistics of loneliness levels by length of stay in Shanghai.

	Less than 1 ye	ear (N = 11)	1-2 years (N	V = 10	More than 2 years $(N = 49)$		
Variable	M	SD	M	SD	М	SD	
Latent mean SELSA	2.81	.85	3.02	.90	3.14	.97	
Familial loneliness	2.29	1.18	2.54	.98	2.46	1.08	
Social loneliness	2.04	.80	2.40	1.01	2.71	1.02	
Romantic loneliness	3.74	1.06	3.83	1.46	4.00	1.47	

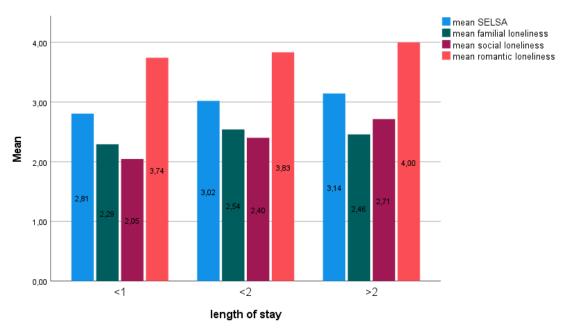


Figure 9. Bar graph of loneliness means and length of stay in Shanghai.

4. Discussion

The main findings indicate that higher perceived social support predict lower levels of loneliness. There is some evidence for a link between relationship status, length of stay in Shanghai and loneliness. Notably, single people and those staying longer than two years in Shanghai feel more lonely than their counterparts. No significant evidence has been found for gender differences in regard to loneliness, nor for a relation between employment status and loneliness. This section takes a closer look at the main findings of this study and links these findings back to the current literature on loneliness and social support. Special attention is given to integrating and interpreting the different research results and to applications to Chinese realities. In addition, it reflects on the shortcomings of this research and the related suggestions for further research.

4.1 Main findings

Since there has not been much research on loneliness that also uses the SELSA-S, it is not easy to make meaningful statements about the different levels of loneliness and social support. The proportions between the different types of loneliness in both men and women are in line with the results of the research by Aryn Benoit and Enrico DiTommaso among Canadian university students current research.²⁰⁶ When comparing with a Chinese sample, the findings differ from those of Li Huanhuan et al., who found that 27% of them scored higher than 38 on the SELSA-S, which they labelled as high, and another 27% scored lower than 25, which they labelled as low levels of loneliness. 207 In contrast to them, 71.4% of the participants in the current study score high on loneliness, according to that standard. Three possible explanations can be given for this major discrepancy. First, there is a difference in samples in both studies: university students versus migrant workers. As briefly mentioned in the literature study, students can often rely on services of and communities within the university, whereas migrant workers have more difficulties to integrate themselves in an estranged environment with low social cohesion. Next, the booming growth in science and technology development in metropolises over time may be another explanation. The fact that technology replaces humans can be positive in terms of productivity, but has devastating consequences for interpersonal relationships.²⁰⁸ For instance, a self-checkout machines in stores simply replace cashiers with whom someone has their weekly conversations. As there is a substantial amount of research on the influence of social media and loneliness, the majority of them found that online social relationships do not necessarily have more benefits for one's mental well-being than

²⁰⁶ Benoit & DiTommaso, 2020.

²⁰⁷ Li et al., 2012.

²⁰⁸ Tian, 2011, p. 9.

offline relationships.²⁰⁹ Compared to students living on the university campus, migrant workers may lack close friendships and therefore attempt to socially integrate by means of social media.²¹⁰ A final explanation involves multiple factors unexplored in this research, but confirmed in the loneliness literature, such as individual personality traits, subjective financial well-being, materialism and consumer behaviour. However, including these variables is beyond the scope of this study.

H1: Relationship status, employment status, education and gender are strongly related to loneliness.

To meet the first objective of this study, namely the investigation of different groups with high scores for loneliness, a one way ANOVA was used. First, the study expected slightly higher loneliness scores in men. The results are not in accordance with the predetermined hypothesis, but are partly in line with earlier research that found that there are no significant gender differences in loneliness. ²¹¹ The one way ANOVA found a tendency that women scored slightly higher on loneliness than men. A gender difference in loneliness could be affected by existing social stigmas. It is usually men who are less likely to admit that they are emotionally lonely. ²¹² Moreover, since women are more likely to express and share their emotions, research on the expansion of loneliness showed that it spreads much more easily among women than among men. ²¹³ Yet, this tendency was weak in magnitude in current research. Because the surveys were filled in anonymously and independently, there should be fewer issues to do with saving face (*mianzi* 面子) and stigmas. This nonfinding also implies that there are no biological dispositions making either men or women more vulnerable to loneliness, as neurological scholarship has shown to date. ²¹⁴ In general, more attention is also paid to the situational factors.

It is intriguing that even though women score higher on loneliness, they report higher levels of social support too. This was also the case in previous studies among Chinese participants using MSPSS. To contextualize these results, the social expectations for women in contemporary China need to be considered. Yingchun Ji conducted qualitative research analysing the so-called 'leftover' women's ($shengn\ddot{u}$ $\not{\!\! =}$) narratives, referring to Chinese women who are unmarried by their late 20s. Many struggle with finding a balance between their economic independence and support for family and men.

²⁰⁹ Benoit & DiTommaso, 2020; Fox, pp. 280, 316-322.

²¹⁰ Zhu, 2020.

²¹¹ Maes et al., 2019; Wang, 2020; Wang & Zhong, 2011.

²¹² Nicolaisen, 2014.

²¹³ Cacioppo et al., 2009.

²¹⁴ Yang, 2019, p. 53.

²¹⁵ Liu & Cai, 2015; Zhang et al., 2015.

²¹⁶ Ji, 2015.

On the one hand, the traditional gender roles advocate for men working outside and women staying at home.²¹⁷ This is in conflict with the modern values of egalitarianism and independence that encourage women to pursue a career in cities, where they, despite having left their familiar social network, are likely to engage in local communities as well.²¹⁸ Through these activities, new social networks can be established, resulting in higher perceived social support. On the other hand, some refuse to step into an (arranged) marriage, due to other priorities, but at the same time they long for romantic love. A higher loneliness level can be inferred from the narratives in Ji's study.

Second, the study expected and found a significant correlation between relationship status and loneliness, namely that those who are single would feel most lonely compared to those in a relationship. This result adds to the evidence that having a romantic relationship helps to relieve loneliness. ²¹⁹ It is also worth noting that those who saw their partner every day scored highest on social loneliness. Katarzyna Adamczyk and Chris Segrin found higher social loneliness among individuals in non-marital romantic relationships compared to single people as well. ²²⁰ There is a chance that this group is already married as the amount is similar to those having a child. Moreover, Gonçalo Santos and Stevan Harrell described how patrilineal thinking and filial values remain dominant in contemporary Chinese society. ²²¹ Accordingly, being committed in a relationship may reduce romantic loneliness, but having less time to spend with friends can indicate higher social loneliness. This statement should be stated with care as only about ten of the seventy respondents actually saw their partner every day.

For the relationship between employment status and loneliness, this study had previously stated that loneliness is more common among the unemployed. There was not enough data to support claims of a significant relationship between these variables. Yet, in contrast to the expectations, there was a tendency of higher loneliness levels in those who worked part-time. If this finding were replicated with a larger sample size, it would suggest that employment status cannot be viewed as an independent variable in itself.²²² The duration of unemployment or in combination with physical limitations as variables may rather show different results.²²³ Another factor to take in consideration is the competitive character of the Chinese society, ²²⁴ and thus hinders one to establish meaningful social relationships.²²⁵ Consequently,

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²¹⁷ Nan zhu wai, nü zhu nei 男主外,女主内.

²¹⁸ Kleinman et al., 2011, p. 21.

²¹⁹ Adamczyk & Segrin, 2015.

²²⁰ Adamczyk & Segrin, 2015.

²²¹ Sangren, 2015.

²²² Yang, 2019, p. 147.

²²³ Mugoya et al., 2018.

²²⁴ Yang, 2019, p. 63.

²²⁵ According to the cultural dimensions of Hofstede, China scores high on masculinity rather than femininity (MAS).

having a job does not appear to inherently benefit from social contact that comes along. Nevertheless, the hypotheses about employment and relationship status cannot be confirmed or rejected with certainty, because these groups under-perform in numbers and thus show no significant correlation with loneliness.

H2: Social support from friends and significant others have a stronger negative influence on loneliness than support from family.

To assess the second hypothesis, multiple linear regression was used to examine the relationship between different sources of social support and loneliness. Results indicated a significant negative relationship, which is in line with previous findings, ²²⁶ particularly between social support of 'significant others' and loneliness. Support from family and friends was not significantly correlated to loneliness. Findings may change when applying a two-factor structure (inside family support and outside family support), as Zhong et al. did in their study. They reported that this was a more appropriate fit among Chinese adults. ²²⁷ The term 'significant other' is indeed somewhat ambiguous (e.g., "There is a special person who is around when I am in need."): it can refer to a romantic partner, but also a best friend or soulmate. Its meaning is thus very subjective and may be different for every individual.

Lower familial loneliness can be explained by Yunxiang Yan based on his research on the changing moral landscape in China in the last decades. He noted that the meaning of filial piety has changed from an obligation to financially support one's parents to pursue individual happiness in order to make one's parents happy.²²⁸ This change in meaning of filial piety has its consequences for familial relationships: while the contemporary young adults may not have a strong need for close relationships with family members, the older generation often endorse the more traditional meaning of filial piety, which is the obligation for children to take care of their parents.²²⁹ This conflict can cause different levels of loneliness among different age groups. As Tian also suggested, the way people in traditional China perceived the family as the fundamental source of meaning no longer dominates in today's urban society.²³⁰ The urban communities must be established by social relationships rather than kinship.

The results on loneliness may differ greatly from previous studies²³¹, because the respondents are more likely to have visited family during Chinese New Year mid-February and the five-day holidays around

²²⁶ Chopik, 2017; Wu et al., 2015; Wang et al., 2009.

²²⁷ Zhong et al., 2016.

²²⁸ Kleinman et al., 2011, p. 37.

²²⁹ Kleinman et al., 2011, p. 221.

²³⁰ Tian, 2011, p. 12.

²³¹ Wang et al., 2009.

Labor Day and as current research lasted until May.²³² Therefore, more respondents reported to have visited family within the past 6 months than if the study would be conducted in Fall or Winter. On the other hand, some people may want to avoid the crowd during these holidays and just stay in Shanghai, which can inflate levels of loneliness. Social contact that they used to have at work decreases and seeing travel pictures and blog posts on social media can stir up social loneliness. Young adults in a qualitative study by Fox revealed that exposure to images on social media that show a perfect lifestyle can induce a sense of underachievement and loneliness, even though they know it is not the full picture.²³³ Another explanation for higher social loneliness levels can once again be found in a Chinese expression: "rely on parents at home; rely on friends when away from home".²³⁴ As young adults grow older, friendships play an increasingly important role in their mental well-being.²³⁵

H3: The longer one has been staying in Shanghai, the higher loneliness levels are.

With the question how long the participants have been staying in Shanghai, this study tried exploratively to find a relationship between the urban environment and loneliness. After all, among other researchers, Tian Xiaoming argued that loneliness has become a universal psychological phenomenon in modern urban societies. ²³⁶ The variable 'length of stay in Shanghai' seemed to be positively correlated to loneliness (i.e., the longer in Shanghai, the more lonely), but the relation appeared to be insignificant. There is a chance of habituation to the urban environment after a while, by integrating to the society in various ways such as obtaining membership at local communities. On the other hand, one cannot fully measure the influence of an urban environment on loneliness by simply asking how long one has lived in Shanghai. It either requires advanced research methods within urban studies, long-term records of land changes in Shanghai, ²³⁷ or a cross-sectional comparison with a rural group²³⁸ to provide a more accurate description of this relationship. Given the absence of a statistically significant association, the debate on the prevalence of loneliness in urban and rural areas requires more research.

To this point, it can be tentatively concluded that loneliness, as reported by the participants themselves via the SELSA-S, appears to be mainly associated with social support, measured with the MSPSS.

²³² The General Office of the State Council, 2020.

²³³ Fox, 2019, p. 320.

²³⁴ Li et al., 2018.

²³⁵ Liu, 2018.

²³⁶ Tian, 2011, p. 12.

²³⁷ Zhang & Guindon et al., 2015.

²³⁸ Karmakar & Raychaudhuri, 2015.

4.2 A different approach to loneliness?

Discussions of psychological phenomena related to cultural differences are often quite controversial. This controversy seems to find its origin in the contrasting views of the mind in general psychology (i.e., the mind operates independently of the context) and cultural psychology. As argued by many cultural psychology researchers, psychological phenomena that seem to be universal should be investigated within its context. Above and beyond the empirical or methodological differences within previous studies discussed so far, there is a more fundamental, theoretical reason for lower loneliness levels as well.

Tian analysed loneliness from a different perspective, namely the contemporary Chinese one. His main argument is that loneliness is an inevitable product of modernity and urbanization, so it is not derived from traditional Chinese culture. Accordingly, the experience of loneliness in China developed different patterns. ²⁴⁰ Over time, modernity even normalized this feeling, resulting in a more positive approach. Contrary to the negative impact of loneliness on the society, he argued that it is a necessity for both the urban society and the individual. A moderate degree of estrangement between individuals allows competition to be maintained, while independent consciousness allows an individual to grow. ²⁴¹ He has reasoned that, apart from our need for social relations and interpersonal communication, loneliness can meet our need for independence and autonomy. In this sense, loneliness could be seen as something positive. ²⁴² However, some researchers may not fully agree with the assignment of this term. According to the continuum in Figure 1 in section 1.1 Definition, this rather resembles solitude.

Not only because loneliness is a social problem, but also because medical and psychological services form a higher barrier in China, it would be better to look for solutions in the social field. Over the recent years, Chinese people have become increasingly interested in informal psychotherapy and counselling. Through the new social media, talking about emotional and relational problems is encouraged while focusing on pursuing happiness and reducing stress in contemporary fast-developing China. Traditional Chinese concepts of inner cultivation are revived in a modern way. Stated differently, Chinese people themselves seem to have the power to assign meaning to a unique urban loneliness and the way how they perceive it has its consequences regarding coping strategies.

²³⁹ Heine, p. 15.

²⁴⁰ Tian, 2011, p. 11.

²⁴¹ Tian, 2011, p. 10-11.

²⁴² Tian, 2011, p. 8.

²⁴³ Kleinman et al. 2011, pp. 29, 268.

4.3 Limitations

It is important to indicate the limitations of this study. First, no causal inferences can be made between all variables on the basis of this data. As indicated before, the present study used a non-representative sample of participants who volunteered to report their loneliness and social support experiences. Since individuals are variable in their nature, the findings of this research do not apply equally to all migrant workers in Shanghai. After all, the research results are a snapshot associated with this survey, while the loneliness levels are dynamic and constantly changing along with the changing social context.

Second, the original aim of this study was to gain a better understanding of the relationship between loneliness, socio-demographic characteristics and social support in young adults in Shanghai. Less attention was given to the socio-demographics not included in the first hypotheses, but they may play an important role as well. Moreover, regarding the features that were included in the hypotheses, they were not taken into account during sampling. A stratified sample based on gender, relationship status and employment could yield more meaningful results.

Third, given the self-report questionnaires, response biases are inevitable. Social desirability response bias, for example, refers to the tendency to choose responses participants believe are more socially acceptable rather than responses that reflect their true thoughts or feelings. ²⁴⁴ Prior research on how beliefs and expectations influence loneliness could provide comprehensive framework for loneliness research in China. Next, acquiescence bias or agreement bias refers to the tendency to select positive response options more frequently, especially if social norms encourage agreeable behaviour. ²⁴⁵ Lastly, the history effect can be found when COVID-19 caused changes in one's life with negative consequences for their mental health and especially social connections. Lockdowns and quarantine made people physically isolated and the virus took many lives of family members and friends of people.

Fourth, Ami Rokach has suggested that the experience of loneliness consists of six stages: (1) pain and awareness, (2) denial, (3) alarm and realization, (4) searching for causes and self-doubt, (5) acceptance, and (6) coping. The extent to which participants recognize and report loneliness depends on the particular stage they are in.²⁴⁶ Unfortunately, due to limited selection of the variables to make this study feasible within a limited time span, this study did not manage to fully grasp all mechanisms of the loneliness experiment. At the same time, addressing this question is beyond the scope of this thesis.

²⁴⁴ Grimm, 2010.

²⁴⁵ Krosnick & Presser, 2010.

²⁴⁶ Sha'ked & Rokach, 2015, p. 70.

4.4 Future directions

The present research contributes to the current literature in several ways. As a result of this study, more data has been obtained by using measuring instruments designed by Western scientists in a Chinese sample. Another distinctive feature of this study is the fact that, unlike the commonly used samples consisting of children, students or the elderly, this study focused on young adults who have migrated to a metropolis such as Shanghai. It is important to acknowledge that, although the mean differences between groups were very small or nonsignificant, the results went in the expected direction overall. Altogether, the results raise various topics for further endeavours of loneliness in contemporary China.

First, future research can definitely include coping strategies for loneliness and other items that focus more on the perceived quality instead of the availability of social support. As for young adults, Paola Iannello et al. has suggested developing individual programs to help the individual manage their finances, as well as to promote flexible and open thinking and the ability to psychologically adapt to uncertainties and stressful events in life.²⁴⁷ In addition to perceived social support, one can also ask questions about the satisfaction of that support: to what extent does their perceived social support meet psychological needs? As Vello Sermat says: "To understand loneliness it is useful to examine the quantity and quality of social support networks which are currently available to the individual."²⁴⁸

Second, future research can use alternate ways to grasp the mechanisms of loneliness, for example by conducting in-depth interviews on how people cope with loneliness. Although this research method has more implications for ethics and feasibility, it can provide interesting information on perspectives and casual beliefs on loneliness. For example, is the fact that people do more activities alone a form of loneliness or are they just breaking social taboos about enjoying activities alone?

Third, by including other scholarly paradigms and disciplines, such as cultural neuropsychology, specific gaps in the literature can be filled in. It will hopefully provide deeper insights into the interplay between biological dispositions and constructs similar to loneliness in their situated and global context. Crosscultural research with the same measuring instruments is needed to interpret reported levels of loneliness and social support as high or low to either verify or falsify the collectivistic character of Chinese culture. As Shinobu Kitayama suggested, inclusion of other scientists and diversity in sampling groups are necessary to keep the field intellectually vibrant.²⁴⁹

²⁴⁷ Cheng et al., 2014.

²⁴⁸ Sermat, Vello, "Satisfaction in Different Types of Interpersonal Relationships, Willingness to Take Social Risks, and Loneliness", UCLA-paper, 1979, p. 2 cited in de Jong-Gierveld, 1984, p. 189.

²⁴⁹ Kitayama, 2021.

Conclusion

Loneliness is a universal feeling, yet some people are more vulnerable to chronic experiences. There are multiple factors that have an impact on loneliness, and due to its subjective nature, these factors can vary from person to person as well. Throughout the discussion of the literature about loneliness, the role of socio-cultural context was highlighted, based on the available research. There has been solid research proving that age is significantly related to loneliness across cultures, resulting in a substantial amount of gerontological research and research involving children, in both Western and Chinese scholarship. As a counterbalance, the current study focused on young adults having moved to Shanghai for work in particular. Within this broad field, the current study attempted to find an answer to the main question: How prevalent is loneliness among different groups by socio-demographics of young migrant workers in Shanghai and how does this relate to different sources of social support? The current study investigated several related factors to loneliness, with an explanatory focus on different sources of perceived social support as independent variables.

Ideas imported from the insightful work of, among others, Yang and Kleinman are used to question data and to approach this topic from a more socio-cultural perspective. As a result of this interdisciplinary work, this research is the first to assess the abbreviated Social and Emotional Loneliness Scale (SELSA-S) and Multidimensional Scale for Perceived Social Support (MSPSS) in Chinese people in Shanghai. It contributes to the prevailing debate about the relationship between loneliness and influencing factors in general. In particular, the effect of the socio-demographic variables gender, relationship status and employment on loneliness was explored. Due to unequal groups, it was unfortunately not possible to make meaningful comparisons between the groups. Nevertheless, the absence of significant differences in loneliness between different genders and the tendency of higher loneliness levels among single people were both in line with previous research results. Regarding employment status, the hypothesis stating that unemployed people experience higher loneliness levels is not supported. Related to this, this study addressed a gap in the literature by examining the relationship between an urban environment and loneliness, and found a higher level of loneliness among those who have been staying in Shanghai for more than two years. However, the latter two findings were not significant. Finally, significant evidence was found for the claim that different sources of social support would have different strengths of influence. Specifically, support from significant others seemed to be the most effective, followed by friends and family.

This nuanced examination of the relationship between the source of social support and loneliness may help social workers to improve remedies for social and romantic loneliness. Yet, this research is not complete without reflecting on its limitations. The findings are definitely unique to the sample recruited and inconsistencies continue to prove the complex nature of loneliness and how related factors are not as straightforward as expected. Loneliness remains thus a complex phenomenon that is difficult to describe and study. Regardless of all factors such as employment, an urban environment, or technology and lay beliefs, the ability to communicate with someone else remains the most important. Both this research and the previous ones have proven that loneliness is not necessarily absent in crowded places, nor in non-Western societies. As Jenny de Jong-Gierveld describes, loneliness is a universal experience that many people will recognize in themselves. In many cases these feelings are only expressed in a very indirect way and sometimes not at all.²⁵⁰ Accordingly, mental health issues are still little discussed in China and it is important to step over this threshold and provide vital support to those in need. Even though I cannot influence healthcare providers and policymakers directly, at least I can raise awareness and care. To conclude this thesis, I quote essayist Chaohua Wang: "Such an understanding is not a mere concern for 'area studies'. In the past decade, debates among Chinese intellectuals have acquired an ever-stronger global colour; they can be seen as attempts to think not just about their own country's problems, but about issues that confront the world as a whole. Therefore, a record of their contributions is also a way to provide and participate in an intellectual engagement across frontiers."251

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²⁵⁰ de Jong-Gierveld, 1984, p. 23.

²⁵¹ Wang, 2005, p. 10.

Summary

In this networked society, we are living in the most connected time in human history and yet, an unprecedented number of people seem to feel lonely. This occasional feeling has become chronic in China among other countries, especially in metropolises. The main purpose of this thesis is to understand how loneliness is related to different situational factors and social support in particular among the young migrant workers in Shanghai. This specific group of people find themselves at a pivotal stage in their lives, leaving their hometown and having to adapt to a new environment. Accordingly, their social networks have decreased. Therefore, the main research question is: How prevalent is loneliness among different groups by socio-demographics and how does this relate to different sources of social support?

The first part of this thesis is a brief overview of the existing literature, divided into five sections. The first section outlines the most frequently adopted definitions of loneliness and discusses important related concepts. The second section discusses the causes and effects of loneliness to emphasize its impact. Given the fact that the focus of this study is on China, the third section therefore provides a background of the Chinese culture and changes in modern China that could affect the feeling of loneliness. The fourth section takes a closer look at the studies on Chinese migrant workers in metropoles (specifically Shanghai), whose loneliness has received too little attention in the academic world. The final section discusses the relation between perceived social support and feelings of loneliness.

In the second part, the findings of previous studies have been used to shape the three hypotheses of this study. Based on data from 70 qualified questionnaires obtained through an online survey including general demographic information, the abbreviated Social and Emotional Loneliness Scale (SELSA-S), and the Perceived Social Support Multidimensional Scale (MSPSS), it was found that there were no significant differences in loneliness between men and women. In addition, single people have significantly higher romantic loneliness levels than those in a relationship, as expected. In terms of employment, part-timers surprisingly have the highest sense of loneliness, but due to the uneven distribution of the groups, this study cannot correctly explain the relationship between employment and loneliness. Furthermore, loneliness levels among people who stayed for more than two years in Shanghai seemed to be the highest. Finally, social relationships did have a greater impact on loneliness than kinships, and support from a significant other was higher than that from friends.

In short, this research confirms the importance of social relations in reducing loneliness, but no causal statements can be made. Future research should pay more attention to the balance of the samples, and include more variables and research methods.

论文摘要:探索 90 后进城务工员在上海的孤独感

在当代社会,人与人之间的生活更紧密,但感到孤独的人却越来越多,尤其是在中国的大都市。孤独是一种从外表看不见的主观感觉,因而难以判断一个人是否感到孤独,以及孤独感对此人是否产生负面影响。本研究以在上海的 90 后进城务工员为对象,因为他们正处于人生中关键阶段,离开家乡并且必须适应一个新的环境,于是他们的社交网络减少了。可是,文献尚未说明孤独感与不同类型的社会支持之间的关系,因此,本研究通过问卷调查试图从社会文化心理学的角度来回答这个问题,同时也填补了文献中的不足。从农名工研究的文献中可以得出三个假设:一、与女生、有对象、有工作的人相比,男生、单身的人以及待业人员的孤独感更强。二、社会关系比亲属关系对孤独感的影响更大。三、在上海住的时间越长,孤独感就会越高。由于中国的流动人口对经济发展有着重要影响,该族群的心理问题给个人和社会带来严重的后果,因此,该话题十分值得研究。

本文将分为两个部分。第一部分是对现有文献探讨的简要概述,从中可以得出五个结论。一、孤独并不是一个人的时候才会感受到的,而是指一个人实际的社会关系与他期望拥有的社会关系存在差距时所导致的不快。二、高度的孤独感与身心健康不佳有关,而且对中西人口的研究证实了孤独后果的普遍性及其重要性。三、由于孤独感是一种社会问题,因此,本研究应该考虑中国文化和社会特征,诸如集体主义、面子、户籍制度以及过去 40 年的城市化。在以往的研究中,孤独与集体主义、个人主义之间的关系以及孤独感与城市和农村地区的关系一直存在差异。四、社会人口统计学的研究显示,孤独感与性别没有明确的关系,但具有移民背景的单身和失业者更容易感到孤独。五、孤独感与社会支持有显著的负相关,而且孤独感可以分为情感和社交孤独感。因之,不同类型的社会支持可以满足不同年龄阶段的人个别的情感和社会需求。

第二部分是本人进行的研究,即通过网上调查收集了 70 份合格的问卷来进行定量研究。问卷包括一般的人口统计资料、社交和情感孤独感量表(SELSA)以及领悟社会支持多维量表(MSPSS)。数据分析结果如下: 首先,孤独感与社会支持呈显著负相关。进一步相关分析显示,浪漫孤独感相关度高于社会与家庭孤独感,而且来自亲戚的支持高于来自朋友或其他特殊人的支持。其次,男性和女性在孤独感上没有显著差异。此外,与有对象的人相比,单身者的浪漫孤独感显著更高,不过与亲戚和社会孤独感无显著关系。在就业方面,兼职者的孤独感最高,可是由于其群体分布不均,因此本研究无法正确地阐述就业与孤独感的关系。第二个假设反而得到充分的证实: 社会关系确实比亲属关系对孤独感的影响更大,其中来自特别的另一个人的支持高于来自朋友的。最后,因为在上海待了不到两年的样本不足,所以待在上海的时间与孤独感的关系不显著,但是待了两年以上的外地人的孤独感似乎最高。

简而言之,研究证实了大部分的在上海的外地人的孤独感与社会支持之间有显著的负相关,但在本研究中不能做任何因果关系的陈述。后续的研究应该更注意样本的平衡性,在变量的选择和研究方法上也应该有更多创新性的突破。

(1249 个字)

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Appendix

Informed consent

Informed consent for participation in a study

Title of the Research: Loneliness and social support among young adults in Shanghai
Name and Contact Details of the Researchers: Emilie Xu – emilie.xu@student.kuleuven.be Valeria Zanier – valeria.zanier@kuleuven.be Yasemin Erbas - yasemin.erbas@kuleuven.be
Methodology of the research: Questionnaire
Duration of the study: 5 minutes
\square I have had enough time to read the information regarding this study.
$\hfill \square$ I have had the opportunity to ask questions about this study – the answers to my questions were satisfactory.
\square I know that I will participate in the following tasks or tests: filling in a questionnaire about mental well-being and social relations.
$\hfill \square$ I understand what is expected of me during this study.
\square I know that there might be risks or inconveniences associated with my participation: a small chance of discomfort when thinking about my mental well-being.
$\hfill \square$ I understand that the anticipated benefits of this research are: awareness of my own mental well-being and the quality of my social relations.
\square I understand that my participation in this study is voluntary. I have the right to cancel my participation at any time. I do not have to give a reason for that and I know that no disadvantage can arise for me.
\square I understand that the data gathered through this survey will be stored on servers of the KU Leuven and treated according to the strict guidelines of the GDPR (European privacy legislation.
\square I understand that no sensitive personal data will be collected. I understand who will have access to my data, how my data will be stored and processed, and what will happen to the data after the research project.
\square I allow the researcher to process my data and store it in a safe way in order to use it for future research.
\square I understand that the results of this research can be used for scientific purposes and may be published. My name is not published, anonymity and the confidentiality of the data is guaranteed at every stage of the investigation.

 \square For any questions, complaints, further follow-up or other concerns about ethical aspects of this study, I know that after my participation I can contact:

- Social-Ethics Committee of KU Leuven (SMEC), smec@kuleuven.be KU Leuven data protection officer, toon.boon@kuleuven.be
- Emilie Xu, emilie.xu@student.kuleuven.be

I have read and understood the information above and have received answers to all my questions regarding this study. By ticking this box, I agree to participate.

Questionnaire

Thank you very much for your willingness to participate in our survey! This survey is part of my master thesis where I examine different factors related to the mental well-being of young adults in Shanghai.

This questionnaire is divided into three parts, namely socio-demographics, mental state measuring scale and social support measuring scale. There are 37 questions in total. Completing this survey will take approximately five minutes of your time, so please complete it at once. There is no right or wrong answer to the questions, it just reflects your personal real situation, so please answer according to your real situation, there is no need to consider it for too long.

This survey is anonymous, and the data will be stored on servers of the KU Leuven University and treated according to the strict guidelines of the GDPR (European privacy legislation). Results of this research can be used for scientific purposes and may be published. Please feel free to fill in. We are honored to be able to listen to your opinions. At the end of the survey, you will find more information on mental health organizations.

If you want to stay informed about the results of this survey or have further questions and remarks, you can send an email to emilie.xu@student.kuleuven.be. Thank you for your participation!

非常感谢您参加此次问卷调查。 这项调查是我硕士论文的一部分,调查的目的是为了更好地了解影响上海外地 人心理状况的各种因素。

本问卷分为三部分,即一般的人口统计、心理状况量表以及社会支持量表。总共有 37 题,大概需要五到十分钟完成,请独立一次性完成问卷。题目没有所谓对与错的答案,它只是反映您个人的真实情况,因此请依据您真实的状况来回答,无须考虑太久。本调查是匿名的,数据将会存储在鲁汶大学的服务器上,并按照 GDPR(欧洲隐私法规)的准则进行严格处理。这项研究的一般结果可用于科学目的而发表,请您放心填写。在调查结束时,您将找到有关心理健康机构的更多信息。

如果您想随时了解本次调查的结果或有其他疑问和评论 ,可以发送电子邮件至 emilie.xu@student.kuleuven.be。 能倾听您的意见,我们感到十分荣幸。谢谢您的合作!



邀请你来助力填写

心理状况与社会支持调查



动动您尊贵的手指扫一扫二维码填写

Socio-demographics

Gender:

- male
- female
- I prefer not to answer this question.

Birthyear:

Current relationship status:

- single
- in a relationship → how often do you see your partner?
 - o every day
 - o a few times a week
 - o long distance relationship

Household composition:

- I have a child/children
- I have no children

Residential situation:

- living with partner
- cohousing with friends
- cohousing with strangers
- alone

Employment status:

- unemployed
- employed, > 19 hours a week
- employed, < 20 hours a week

Education (highest level, whether or not completed):

- primary education
- secondary education
- higher vocational training
- university

Self-rated health: What is your general state of health?

• 1 poor, 2 not so good, 3 fair, 4 good, 5 very good

Length of stay in Shanghai:

- less than 1 year
- less than 2 years
- more than 2 years

When was the last time you went to your hometown?

- in less than a month
- in less than 6 months
- more than 6 months ago

性别:

- 男
- 女
- 不方便回答该问题。

出生年份

您是否单身?

- 是
- 有对象 → 交往模式:每天见面,经常见面,异地恋

家庭组成:

- 有孩子
- 没有孩子

居住情况:

- 与对象同居
- 与朋友合租
- 与陌生人合租
- 一个人住

就业状况:

- 没有工作经历
- 工作, 每周>19个小时
- 工作, 每周<20 小时

教育程度(最高水平,无论是否完成):

- 小学
- 中学
- 专科
- 大学

自我评估的健康状况:您的总体健康状况如何?

1差, 2不太好, 3一般, 4好, 5非常好

在上海生活的时间:

• 不到一年

- 不到 2 年
- 2年以上

您上次去家乡是什么时候?

- 不到一个月之内
- 不到 6 个月之内
- 6 个月前

Social and Emotional Loneliness Scale for Adults (shortened)

Family loneliness (own parents, spouse and children)

17. I really belong in my family (R)

我是真正属于我的家庭的

23. I feel part of my family (R)

我觉得我是家庭的一部分

26. My family really cares about me (R)

我的家人真的很在乎我

32. My family is important to me (R)

我的家庭对我而言很重要

35. I feel close to my family (R)

我感觉与我的家人非常亲近

Romantic Loneliness

4. I have a romantic partner with whom I share my most intimate thoughts and feelings (R)

我有一个可以与之分享最隐私的想法和感受的亲密伴侣

10. I have a romantic or marital partner who gives me the support and encouragement I need (R)

我有一个能够给我所需要的支持和鼓励的恋爱或者婚姻伴侣

13. I have an unmet need for a close romantic relationship

我对亲密浪漫关系的需求没有得到满足

22. I am in love with someone who is in love with me (R)

我爱上一个也爱我的人

28. I have someone who fulfills my needs for intimacy (R)

有人满足了我对亲密关系的需要

34. I have a romantic partner to whose happiness I contribute (R)

我有一个我愿意为他/她的幸福而努力的恋爱伴侣

Social Loneliness

18. I have friends that I can turn to for information (R)

我有可以向其寻求帮助的朋友提供我实用信息

24. I can depend upon my friends for help (R)

当我需要帮忙时我可以依靠我的朋友

27. I have friends to whom I can talk about the pressures in my life (R)

我有可以向其诉说生活中压力的朋友

36. I have a friend(s) with whom I can share my views (R)

我有可以向其分享我的想法的朋友

(R) signifies reversed scoring.

Multidimensional Scale of Perceived Social Support

1. There is a special person who is around when I am in need 在我有需要时,有一个特别的人在我身边

2. There is a special person with whom I can share my joys and sorrows 有一个特别的人是我可以分享喜乐与忧伤

3. I have a special person who is a real source of comfort to me

有一位真正安慰我的特别人物

4. My friends really try to help me

我的朋友真的很努力帮助我

5. I can count on my friends when things go wrong

有问题时, 我可以依靠朋友

6. I have friends with whom I can share my joys and sorrows

我有一些朋友是我可以分享我的喜乐与忧伤的

7. There is a special person in my life who cares about my feelings

在我生命中有一个关心我感受的特别人物

8. I can talk about my problems with my friends

我能够与我的朋友谈到我的问题

9. My family really tries to help me

我的家人真的很努力帮助我

10. I get the emotional help and support I need from my family

我得到家人在情感上给我帮助与支持

11. I can talk about my problems with my family

我可以与我家人谈论我的问题

12. My family is willing to help me make decisions

我的家人很愿意帮助我作出决定

You have completed this survey, thank you for your cooperation! If you want to know the results of this survey or have other questions and comments, you can send an email to emilie.xu@student.kuleuven.be. If you need psychological counselling, you can contact the following organizations:

-Shanghai Mental Health Center: 600 Wanping South Road, Xuhui District, Shanghai, Tel.: 64387250

-Tulip Sunshine Group: WeChat ID: yjxygh123, hotline: 4001811535

您已完成本调查,谢谢您的配合!如果您想随时了解本次调查的结果或有其他疑问和评论,可以发送电子邮件至 emilie.xu@student.kuleuven.be。如果您需要心理咨询,可以联系以下机构:

- 上海市精神卫生中心: 上海市徐汇区宛平南路 600, 电话: 64387250

- 郁金香阳光会: 微信 ID: yjxygh123, 热线: 4001811535

List of tables

Table 1. Socio-demographic information.	33
Tabel 2. Descriptive statistics of gender differences in loneliness and social support	39
Tabel 3. One-way ANOVA of relationship status and loneliness.	39
Tabel 4. Correlations between social support and loneliness.	42
Tabel 5. Regression coefficient of support from significant others	43
Tabel 6. Regression coefficients of support from family	43
Tabel 7. Regression coefficients of support from friends	43
Tabel 8. Regression coefficients of all sources of social support.	44
Tabel 9. Correlation between length of stay in Shanghai and loneliness.	45
Tabel 10. Descriptive statistics of loneliness levels by length of stay in Shanghai	45

List of figures

Figure 1. Alienation-connectedness continuum (including the importance of choice and society's	
perception of the concepts).	6
Figure 2. Marriage statistics in main years (Shanghai).	17
Figure 3. Histogram of total scores on SELSA-S.	37
Figure 4. Histogram of total scores on MSPSS.	37
Figure 5. Bar graph of loneliness means and gender.	38
Figure 6. Bar graph of loneliness means and relationship status.	40
Figure 7. Bar graph of loneliness means and employment status	41
Figure 8. Scatter plot of loneliness mean and social support mean by gender	44
Figure 9. Bar graph of loneliness means and length of stay in Shanghai.	46