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The Perceived Mental Health Effects of China's One-Child Policy

Avery Rasmussen
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The Perceived Mental Health Effects of China's One-Child Policy

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Abstract

This study looked at the perceived impacts of China's 30 year One-Child Policy (OCP). Previous studies suggested the OCP affected Chinese culture and society in a number of ways, however no studies (to the knowledge of the principal investigator) had looked at perceptions of the effects of the OCP on anxiety levels and other mental health issues of students in China. This study sought to fill the aforementioned knowledge gap and aimed to determine perceptions about the mental health effects of the OCP on students. Specifically, this study endeavored to gain a better understanding of perceptions of the effects of the OCP on Chinese culture, the aging population, and students' mental health along with adults who are only children. This mixed-methods study used two forms of data collection; in-person interviews and WeChat surveys. The quantitative results of this study were analyzed using SPSS Statistical Analysis Software and qualitative data was thematically analyzed to compliment the quantitative results. The results of this study indicated that the primary effects of the OCP on Chinese culture were changes in the values placed on different family roles and a decrease in the value placed on and prevalence of traditional Chinese culture. The results also suggested egocentrism, selfishness and independent awareness were perceived to be higher among OC, which could have been the result of changes in the way OC were treated by their parents and therefore how they developed. Results also indicate the perception that spoiling of OC by parents and grandparents resulted in the lowering of OC's tolerance to adversity and increased frustration when presented with challenges. Another perceived implication of being an OC was less developed social skills, which could be due to the lack of siblings. Based on the results of this study, it can be suggested that there are significant perceived impacts of the OCP on the mental health of OC.

Key Words: Mental health, public health, health sciences

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Introduction

Mental health in China

The ethics behind and efficacy of cross-cultural studies should be discussed whenever such a study is considered. This is an especially important consideration when conducting research on human subjects involving mental health. The World Health Organization defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014). There are numerous examples of cross-cultural mental health assumptions that turned out to be incorrect and negatively affected the wellbeing of the international communities being served (Watters, 2010). Because the sociocultural environments are different around the world, the same etiological models for mental health problems (MHP) cannot be used internationally without prior community-based research. Even though someone might have clinical depression according to Western diagnostics, the community and/or individual might not view it as such (Fadiman, 1997). Moreover, in every culture, there are specific MHP only present in that community (or group of communities) called culture-bound syndromes (Fadiman, 1997; Nichter, 2008). Multiple studies have been published (both Chinese and Western) “supporting the cross-cultural generalizability of etiological methods” of diagnosing depression and other MHP in adolescents in China (Chen J., Li, Natsuaki, Leve, & Harold, 2014). According to studies conducted by international organizations and the World Health Organization, “the entire range” of Western-diagnosed MHP and their symptoms “have been observed in the Chinese” (Lin T., 1983). Every type of mental disorder has been treated in Chinese communities using Western methods (Lin T.,

1983). The results of these studies suggest that conducting an ethical cross-cultural study related to mental health in China is possible and can be done effectively.

As mental illness continues to become less stigmatized in China and more citizens are treated for MHP, the prevalence of diagnosis and treatment will continue to rise (Zhong et al., 2013). The current prevalence of MHP in China is comparable to the lower end of Western MHP prevalence (when diagnosed using Western criteria), but clinical diagnosis and treatment have not kept up with this rise (Bartlett, W., & Raikhel, 2014; Lin T., 1983). Chinese culture often considers what Western criteria would diagnose as an MHP to be the manifestation of social pressures and not a health problem. This view of mental health contributes to the lower treatment levels of MHP in China. Moreover, family plays a much larger “role in coping and help-seeking” for people with MHP in Chinese communities than in Western cultures (Lin T., 1983; Zhong et al., 2013). This is because, in accordance with Chinese cultural norms, it makes more sense to talk to a trusted family member than a complete stranger (mental health professional). Furthermore, it is important to recognize the role of indigenous knowledge and health systems when analyzing culture-specific mental health. According to an experienced Traditional Chinese Medicine (TCM) doctor based in Kunming, TCM has not yet developed a comprehensive or effective approach for treating MHP. As half of the medical care provided is in TCM settings, the development of psychiatric infrastructure to treat MHP has been inhibited by TCM (Lin T., 1983). All of these sociocultural factors contribute to the lower levels of diagnosis and treatment of MHP in China.

China's One-Child Policy

China's One-Child Policy (OCP) has been widely recognized as the largest population control measure of all time (Jiang, Li, & Feldman, 2013). The OCP was introduced as a short-

term, emergency population control measure (Hesketh, Lu, & Xing, 2005). When the People's Republic of China (PRC) was established in 1949, Mao Zedong proclaimed having a large population was a point of national pride as it provided the country with labor and soldiers (Clarke, 2015; Jiang et al., 2013; Tong, 2010). The Chinese government encouraged citizens to reproduce and condemned the use of contraceptives (Jiang et al., 2013; White, 2006). As a result, over the next few years, the Chinese population doubled (Clarke, 2015). From 1958 to 1961, "30 million starved to death from famine," because there were not enough resources to support to rapidly booming population (Clarke, 2015; Tong, 2010). In 1962, Chairman Mao "changed his stance" and ensuing propaganda in an attempt to control the population size and introduced a voluntary version of the OCP (Jiang et al., 2013; Tong, 2010; Yang, 2003). After the Cultural Revolution, baby boomers were reaching reproductive age and the market had stagnated (Zhu, 2003). The OCP was needed for population growth (2%) to be slowed "to cooperate with economic development and resources" and to improve living standards (Hesketh et al., 2005; Tao, 1999; Tong, 2010; White, 2006; Zhu, 2003).

Despite its name, the OCP was not as simple as one child per family. The OCP set restrictions on family size, late marriage and childbearing and the spacing of children (case depending; only if a second child was allowed) (Hesketh et al., 2005). These restrictions were enforced locally but regulated by the State Family Planning Bureau, which determined the overall "targets and policy direction" of the OCP (Hesketh et al., 2005). Enforcement of the OCP was very strict, especially for urban residents and government employees (Hesketh et al., 2005). Exceptions were granted to families whose firstborn was disabled (Hesketh et al., 2005). Furthermore, urban families in which both parents were from one-child families or in which both parents worked in high-risk occupations were allowed to have more than one child (Hesketh et

al., 2005). Rural citizens (often whose firstborn was a girl) were also allowed to have a second child after five years (Hesketh et al., 2005) and some ethnic minorities (and people in underpopulated remote regions) were allowed to have three children (Hesketh et al., 2005). The OCP was enforced by local officials using a combination of economic incentives for compliance and penalties in the form of fines, confiscation and dismissal from work (Hesketh et al., 2005). In addition to widespread family planning propaganda, access to contraceptives and abortions was also improved to meet the goals of the OCP (Hatton, 2013; Hesketh et al., 2005).

The OCP was introduced as a short-term measure to limit population growth and as population growth decreased, it became less and less necessary (Greenhalgh & Bongaarts, 1987; Nardelli & Swann, 2015). Moreover, as living standards improved (especially in urban areas where people were most affected by the OCP), an increasing number of citizen attained the level of wealth necessary to pay the fines and support multiple children (Hesketh et al., 2005). Furthermore, indicators showed that China had made the shift towards a small family culture (Lin B., 2003). As illustrated by these figures, China outgrew the OCP. The Chinese government updated its family planning regulations in 2013, at which time the OCP was enforced only for “urban Han parents who were both the product of two-child homes” (Pasick, 2013). After roughly 30 years of the OCP, it was replaced by a “universal two-child policy” (TCP) in the fall of 2015 (Zeng & Hesketh, 2016). According to the literature, concerns over the wellbeing of the aging population was cited as one of the primary reasons that the OCP was phased out (Barrows, 2016). It was estimated that this change will result in the additional birth of 10 million people annually, a relatively small increase (Pasick, 2013; Zeng & Hesketh, 2016). Although the change was small, it is expected to have a variety of impacts. More people means higher demand for resources, and the government estimates that “demand for water might outstrip supply by 2030”

(Pasick, 2013). Other effects of the new policy will not be realized for two or more decades, but have already been predicted to be mostly beneficial (Zeng & Hesketh, 2016). It has been predicted that the OCP ending will (over time) create a healthier housing market, because there will be more demand (Pasick, 2013). Health outcomes, such as a reduction in the number of abortions for unapproved pregnancies, a decrease in the number of unregistered children and a normalization of the sex ratio have all been predicted outcomes of the transition to the TCP (Zeng & Hesketh, 2016). The potential impacts of the TCP are relatively tame compared to the effects of the OCP.

Effects of the One-Child Policy

Chinese Culture

The success of the OCP is still being measured and cannot yet be ascertained. Certain outcomes, however, have already been determined. The OCP aimed at shifting China to a “voluntary small family culture” (Hesketh et al., 2005). This was an ambitious goal given that prior to the OCP, families in China had an average of four children and large families were more valued (Hatton, 2013). The goal of the OCP was to keep the population size under 1.2 billion by 2000, however, the population in 2000 was estimated to be over 1.27 billion (Hesketh et al., 2005). It is difficult to measure the extent to which the OCP influenced population growth. Other factors, such as economic development, could have been responsible for a percentage of the population decline following the start of the OCP (Tien, 1984).

The OCP was successful in reaching its fertility rate goal (Hesketh et al., 2005; Hesketh & Xing, 2006; Wang J., 2003). The rate was decreased by almost half in urban areas, creating a demographic divide between rural families (mostly two children) and urban families (mostly one child) (Hesketh et al., 2005; Hesketh & Xing, 2006; Wang J., 2003). Currently, China has one of

the lowest fertility rates in the world, which can (at least in part) be attributed to the OCP (Li, 2004; Tong, 2017). These findings illustrate that the OCP was an obvious family planning success (Tao, 1999). Furthermore, the population growth rate decreased from 2.5% to 1.5% in just 10 years (Tao, 1999). The Chinese government proudly announced that through the OCP they were able to prevent 400 million births, “relieving pressures” on the environment and resources (medical care, education, social services) (Jiang et al., 2013; Kane & Choi, 1999; Tong, 2017). Maternal mortality decreased (50 fold from 1950 to 2005) and having fewer children allowed women more independence, and enabled them to elevate their status in society and the workplace (Harris et al., 2007; Hesketh & Zhu, 1997; Merli M.G. & Morgan, 2011). The successes of the OCP, including improvements in women’s rights are only one side of the story. The OCP has undeniably benefited China, however, “it has also had many side effects” (Wu, Viisainen, & Hemminki, 2006).

Women’s Rights

The OCP was a double-edged sword; vast societal benefits and equally immense consequences. For example, virtually universal access to contraception and abortions was accompanied by minimal to no choice in the type of contraception (IUD, sterilization, etc.)(Hesketh et al., 2005). Forced abortions, use of IUDs and sterilizations were among the human-rights abuses that mostly ended with the transition to the TCP (Hesketh et al., 2005; Pasick, 2013; Short, Linmao, & Wentao, 2000), however, the “vast social difficulties and human suffering” caused by these forced family planning measures are still present (Greenhalgh & Bongaarts, 1987). In line with the collectivist culture and government, the OCP put national interests above those of families (Jiang et al., 2013). There was no consideration for the effects the OCP could have on traditional Chinese culture and family and even when these effects were

finally realized, the OCP was kept in place to maintain economic growth (Tong, 2010). The lack of forethought on the possible effects of the OCP contributed to the immensity of these consequences.

China's Population

The OCP directly affected one-third of the Chinese population; Urban, Han Chinese families in which at most one parent was an only child. However, the effects of the OCP have permeated every corner of Chinese society and affected “nearly a quarter of the world’s population for a quarter of a century” (Hesketh et al., 2005; Pasick, 2013). The OCP is considered by many to have been “a 30-year-old social engineering experiment that changed the face of China’s society” (Pasick, A. 2013). One of the primary objectives of the OCP was to shift China to a small family culture (Lin B., 2003). During the 2013 policy relaxation, only twelve percent of the twelve million couples who were eligible to “apply to have a second child” expressed interest in doing so, exhibiting China’s successful cultural shift (Clarke, 2015). This trend is projected to continue under the TCP. The fertility rate will remain below replacement level but will now be the result of a desire for small families and not due to the government’s family planning policy (Baochang, Feng, Zhigang, & Erli, 2007; Cai Y., 2010; Clarke, 2015). The most likely cause of permanent change was the shift from a quantity-based to a quality-based societal view of offspring and the rising costs of education and child-rearing (Li, 2004; Merli M.G. & Morgan, 2011). Women in remote or more rural areas, however were less likely to move as quickly to the small family culture, which could cause demographic disparities between urban and rural areas (Merli M.G. & Morgan, 2011). Although these disparities exist, the populations of 48 out of 55 minority ethnic groups declined due to the distorting of the sex ratio (and urbanization) as a result of the OCP and economic development. The possible extinction of

certain minority ethnic groups would reduce diversity in China's gene pool and be disastrous for Chinese cultural preservation, further illustrating the effects of the OCP on culture (Cao & Wang, 2010; Harris et al., 2007).

Economy

China's "emergence as an economic powerhouse" was fast-tracked by the OCP (Pasick, 2013). Having only one child allowed families to have disposable income to invest in education or consumer expenses, one of the government's primary economic objectives (Hatton, 2013; Pasick, 2013). During the early stages, the low fertility rates resulting from the OCP played a "positive role in economic growth" by improving the "quality of human capital" (Jiang et al., 2013). The early economic effects of the OCP were positive, however, over time these benefits will decrease as the detrimental economic effects are realized (Jiang et al., 2013). Many scholars believe that the OCP deprived China of the young generation needed for China to flourish (Tong, 2010). Without enough young people "to work and pay taxes, care for the elderly and invent things," China's new economic prosperity could fizzle out (McDonald, 2006; Tong, 2010). One of the most detrimental effects of the OCP on China's economy will be "serious future labor shortages" as the working population shrinks at a rate of 10 million per year (McDonald, 2006; Nardelli & Swann, 2015; Pasick, 2013). Ending the OCP was too little too late to replace the workforce and even if all women in China gave birth to two children under the TCP (an impossible scenario), the working population would not be replenished until the 2030s or 2040s (Clarke, 2015; Pasick, 2013). Moreover, the smaller population sizes of the OCP generations caused the Chinese housing market to stagnate (Pasick, 2013). The economic advancements allowed by the introduction of the OCP were immense, however, the aforementioned long-term economic consequences of the OCP could be irreversible.

Aging Population

One of the principal reasons for ending the OCP was the impending effects on China's aging population. Aging populations are not a distinctly Chinese issue. As life expectancy and healthcare quality increase, countries are experiencing the aging of their (mean) populations (Clarke, 2015). The aging of a population results in an increase of the age dependency ratio, meaning the number of elders who rely on social services compared to the number of young people who are able to support those elders (Nardelli & Swann, 2015; Peng, 1998). The greatly reduced birthrate coupled with improved living standards and life expectancy have exacerbated the aging population issue in China, making it the fastest and largest aging population in the world (Cai F., 2007; Peng, 1998). One of the foundational elements of Chinese culture, dictated by Confucian doctrine, is filial piety or devotion to one's family (especially to parents). It is assumed (and required by law) that children show their devotion to their parents by taking care of them as they age. This cultural norm is illustrated by the fact that at the start of the 21st century, 70% of elderly people in China financially depended on their offspring (Sun, 1998). The family structure resulting from the OCP has been labeled the "4-2-1 phenomenon" and consists of two parents who must take care of four grandparents and one child (Winker, 2002). This structure puts "tremendous pressure" on the family. Urbanization (moving away from parents), increasingly stressful working environments and attention to the child's education were all factors that exacerbated this familial pressure (Jiang et al., 2013; Rajan, 1994). China's changing social structures drastically impacted the population's ability to care for their elderly family members (Jiang et al., 2013). Because elders were historically cared for by younger family members, public infrastructure for eldercare is virtually nonexistent in China (Jiang et al., 2013; Rajan, 1994). This issue is of even greater concern when the fragility of one-child families is

considered. Families with only one child are more susceptible to becoming childless (Jiang et al., 2013; Pui Yan Flora, 2014). It is estimated that “one million families have lost their only child in China” due to accidents and natural disasters such as the Sichuan earthquake of 2008 (Pui Yan Flora, 2014; Song, 2014). Accompanying the immense psychological stress of losing an only child came substantial economic burden (Jiang et al., 2013; Song, 2014). Without any governmental eldercare infrastructure and no children to take care of them, these citizens’ most prominent worry was how they would be able to survive old age (Song, 2014).

Sex Ratio

Potentially the only notion of traditional Chinese society that expanded as a result of the OCP was gender preference (Li, 2004; Lipatov, Li, & Feldman, 2008). China has a “2,500-year-old culture of son preference” (Lipatov et al., 2008). Historically, the sex ratio was slightly skewed due to infanticide of females at birth, however, because of technological advancements and the OCP, this disparity steadily intensified (Baochang et al., 2007; Davis, Gottlieb, & Stampnitzky, 1998; Gu B. R., K., 1995; Kang, 2003; Li, 2004; Nardelli & Swann, 2015; Wu et al., 2006). Although illegal in China, sex selection abortions (SSA) were still common practice in the private sector and were almost always performed on female fetuses (Hesketh et al., 2005). SSA and non-registration of female births contributed to China’s dangerously skewed sex ratio (Merli M. G. & Raftery, 2000; Short & Fengying, 1998). The OCP has been referred to as the “at-least-one-son” policy (Wu et al., 2006). This, along with the fact that the government allowed rural citizens to have another child if their first was a girl (known as the “1.5-child policy”) exacerbated the sex ratio by reinforcing the values of the son preference and access to methods of achieving it (SSA, etc.) (Yi, 2007). According to a study conducted in China, this engrained gender bias carried on to postnatal discrimination against females (Li, 2004).

Many researchers have indicated that the so called “bare branches” (unmarried Chinese men) could be susceptible to “socially disruptive” or even violent behavior as a result of being socially outcast (Hudson & denBoer, 2004; Tuljapurkar, 2009). Coupled with the increase in the trafficking of women for marriage and commercial sex work, this could pose an increased threat to women’s safety (Tucker et al., 2005). The increase in commercial sex work (CSW) has also increased the risk of commercial sex workers contracting and spreading HIV/AIDS (Tucker et al., 2005). Furthermore, the prevalence of “severe depression and suicide ideation” among these “bare branches” was a growing public health concern (Tuljapurkar, 2009; Zhou, Yan, & Hesketh, 2013). The aforementioned results of the sex ratio gap not only affect the health and wellbeing of Chinese men and women today, but could threaten the stability of China in the future (Hudson & denBoer, 2004).

Misconceptions

More than 90% of urban and 60% of rural children do not have siblings (according to 2003 statistics)(Chen X. S., 2003). The effects of the OCP on the Chinese population and culture have been evidenced, however the impacts on the only children (OC) themselves have not. Early research suggested OC were at a disadvantage, but most current research illustrated no major disadvantages of being an only child (Tao, 1999). There are many misconceptions and negative perceptions about OC (Wang Y. & Fong). In the early 20th century, being an OC was so looked down upon that it was believed to be a disease and parents would have a second child just to avoid an OC (Thompson, 1974). The majority of recent studies, however, indicate no major differences in the personalities of OC and children with siblings (CWS) (Falbo T., 1984; Falbo T. & Poston, 1993; Hatton, 2013; Tao, 1999; Tseng et al., 1988). Perceptions of OC were forced to change due to the OCP and have improved ever since its inception.

Obesity and Diabetes

The 4-2-1 family structure caused by the OCP not only impacted Chinese culture and society, but children's physical and psychological health. Childhood obesity and diabetes rates rose dramatically since the introduction of the OCP (and acceleration of the westernization of Chinese culture), especially in only children in urban areas (He, James, Merli, & Zheng, 2013; Hesketh, Qu, & Tomkins, 2003). More than 83% of recent studies conducted on this topic suggested higher rates of obesity and type II diabetes in only children than in children with siblings (Cheng T.O., 2005; Cheng T. O., 2013; Falbo T. & Poston, 1993; Fu et al., 2013; Hesketh et al., 2003; Min, Xue, Wang, Li, & Wang, 2017; Wang D. et al., 2016). Studies contributed this rise to an increase in availability of and "purchasing power for obesogenic goods" in urban areas and to the OCP (He et al., 2013). The OCP was directly linked to this rise in two ways (Cheng T. O., 2013). In OC families with great grandparents, this link was so apparent that Chinese idiom was created for it; "'er'(2 parents), 'si'(4 grandparents), 'ba'(8 great-grandparents), you get fat" (Cheng T.O., 2005). With only one child and (typically) six parents and grandparents per family, the OCP resulted in substantial and widespread overfeeding of only children by parents and grandparents in China (Cheng T.O., 2005). The second direct impact was the lack of siblings to share food with (French & Crabbe, 2010). This "six-pocket syndrome" occurred when one person ate all of the food that would have been distributed among siblings (French & Crabbe, 2010). Given the effects on obesity and diabetes, it can be concluded that the OCP had detrimental effects on the physical health of only children.

Little Emperors

The underlying cultural phenomenon responsible for the rise in childhood obesity and diabetes in China was also contributed to the presence of "little emperors" (Cheng T. O., 2013).

Research on the OC generations yielded much debate over this topic. Books were published about the so-called “littler emperors,” while other research found little indication of increased prevalence of egocentrism in OC (Cameron, Erkal, Gangadharan, & Meng, 2013; Cheng T. O., 2013; Falbo T., 1982; Falbo T. & Poston, 1993; Falbo T. F. & Poston, 1995; Hatton, 2013; Wang M., Chen, & Fu, 2007; Wang Y. & Fong). Although it is unclear if China truly had two generations of “little emperors,” it is undeniable that the OC generations were given more attention, comforts and opportunities than any preceding generation in China (Wang Y. & Fong). Because of this, egocentrism and individualism were more prevalent in the OC generation than any prior (Wang Y. & Fong). Studies indicated that OC more often required instant gratification, showed “disrespect to elders,” and refused to eat food they did not enjoy than CWS. Moreover, OC were determined to be “less conscientious individuals” who threw significantly more temper tantrums as children (Cameron et al., 2013; Hesketh et al., 2003; Tao, 1999). These studies suggested that there were certain marked differences in personalities of OC and CWS, most of which were negative.

Benefits

The consequences of the OCP on health and wellbeing did not provide a comprehensive look at the effects of the OCP. The health benefits of the policy also needed to be addressed. For example, obesity and diabetes rates were higher in OC, but so were nutritional intake and height for age (Li, 2004). Multiple Chinese studies indicated that OC typically had higher academic performance and achieved higher levels of education than CWS (Beal-Hodges, Loh, & Stranahan, 2011; Falbo T. & Poston, 1993; Falbo T. P., D. , 1986; Hatton, 2013). Moreover, research suggested that OC had better leadership skills and showed “imagination to a greater degree” (Falbo T. P., D. , 1986; Tao, 1999). CWS exhibited more aggression than OC and male

CWS were more hyperactive, according to a 10 year Chinese study (Tao, 1999). These figures illustrated that being an OC was not, as it was described in the early 20th century, a disease. A comprehensive look at the effects of the OCP determined that although benefits to being an OC existed, there were also health consequences.

Behavior

There were few widespread personality differences between OC and CWS, however, research suggested the presence of a significant divergence in behavioral patterns (Hatton, 2013; Tao, 1999). It was difficult to judge the cause of behavioral differences in OC, because behavioral development had so many influencing factors, including stage of development, living environment and parenting methods (Cameron et al., 2013; Falbo T., 1982; Falbo T. & Poston, 1993; Falbo T. F. & Poston, 1995; Tao, 1999; Tseng et al., 1988; Wang M. et al., 2007). Differences in behavioral patterns were identified primarily in male OC who were raised by grandparents, exhibiting increased “anxious aggression” (Tao, 1999; Tseng et al., 1988). This illustrated, as pointed out by the Deputy Director of the Chinese Children’s Center in Beijing, that family greatly influenced child development and behavioral patterns (Chen X. S., 2003; Tao, 1999). According to the research, including a study of 21,013 urban primary school students in 22 provinces, there was no significant difference in prevalence of behavioral problems between OC and CWS (Tao, 1999; Wang Y. E., Shen, & Guo, 1988). However, CWS exhibited more “externalizing behavior problems” and OC had more “internalizing behavior problems” (Tao, 1999). Internalizing behavior problems were less noticeable than externalizing issues and include withdrawal from social activities and a negative internalizing of criticism (Tao, 1999). Furthermore, this internalizing of issues by OC made them less likely to admit to having mental health issues than CWS (Hesketh et al., 2003; Wang W., Du, Liu, Liu, & Wang, 2002).

Psychological

In addition to internalizing behavior, female OC were significantly more insecure and emotionally driven than their counterparts with siblings (Tao, 1999). Another difference in the mindset of OC and CWS was perception of social support. Mental health strongly correlated to the feeling of social support and OC perceived less social support than CWS, even when receiving the same amount (Gu Y., Hu, Hu, & Wang, 2016). This could have indicated higher levels of mental health issues in OC and explained certain social patterns of OC. According to the research, lacking siblings influenced social development and made it hard for OC to build close and long-term relationships (Falbo T. P., D. , 1986). This lack of social development resulted in OC being “significantly less trusting” and more reliant on parents for social support (Cameron et al., 2013; Feiring, 1984; Hesketh et al., 2003; Mercy, 1982). Without siblings to learn from, OC also had inferior teamwork skills, which could have led to social isolation (Falbo T. P., D. , 1986). Moreover, because they lacked siblings, OC were less competitive and more risk-averse than CWS (Cameron et al., 2013; Tao, 1999). Because there was only one child per family, studies suggested that only children had “less opportunity to experience rejection or abandonment from their parents” (Chen Y., 2007). This, in turn, lowered their ability to handle challenges because they rarely experienced adverse situations as children (Chen Y., 2007). OC's low tolerance to difficulties was exhibited by their self-reported significantly higher levels of suffering, heightened level of pessimism, and increased likelihood of complaining (Cameron et al., 2013; Tao, 1999; Wang D. et al., 2016). Only children's less developed ability to handle challenges coupled with their less developed social skills could have put these OC at serious risk of developing mental health issues. The burgeoning of mental health problems in China could have been partially due to the family pressures caused by the OCP. Parents of OC, often referred

to as “tiger parents,” “focus[ed] excessively” on their OC and had higher expectations for the child’s academic and career success (Chen X. S., 2003; Chen Y., 2007; Hatton, 2013). Parents often planned the lives of their OC and provided extended attachment, reducing the ability for OC to become autonomous and independent (Chen Y., 2007; Hatton, 2013). The lack of independence to pursue their dreams could have caused long-term mental health issues for OC (Hatton, 2013).

Study Aims

This review of previous literature regarding the OCP and its effects was comprehensive if not exhaustive. Due to restrictions on language capabilities, literature searches were only conducted in international databases and only relevant English (or translatable) literature was read and included. No uniquely Chinese databases were searched; however, Chinese sources were used whenever possible. Previous research suggested the presence of differences between OC and CWS, however, no studies (to the knowledge of the principal investigator) looked at the perceived effects of the OCP. This study aimed to determine the mental health effects of the OCP on OC. Moreover, it sought to gain a better understanding of perceptions of the effects of the OCP on Chinese culture, the aging population, students’ mental health and OC as adults.

Methodology

Study Location and Rationale

This study was conducted in Wuhua District, Kunming, Yunnan Province, China. All interview participants (but not all WeChat survey respondents) lived in Kunming at the time of the interviews. Because interviews were arranged to accommodate the interviewees, interviews were conducted at multiple sites. One interview was conducted at OnePizzi Restaurant. One interview was conducted at a Psychology Conference at Yunnan University's Yunda Hotel. Three interviews were conducted at the Experimental Middle School Attached to Yunnan Normal University. Two informal interviews were conducted at Green Lake Park (English Corner). Seven interviews were conducted at a sporting event for the Experimental Middle School Attached to Yunnan Normal University Kunming Stadium. Three interviews were conducted at the SIT language teacher's workshop. Two interviews were conducted at a restaurant near the Kunming Number 16 Middle School.

Kunming was chosen as the primary study site, because it was the most practical option. Conducting this experiment in Kunming allowed access to more participant groups than would have been accessible in a different location in Yunnan. Furthermore, it allowed for close proximity to the study's advisors, which was of undeniable benefit to the success of the study. Because this study did not require respondents from specific ethnic populations in Yunnan, conducting the study anywhere but Kunming would have reduced participant recruitment opportunities. By returning to Kunming for this study, it was possible to recruit participants from specific groups that are geographically restricted. For example, only a few schools in Yunnan are privileged enough to have their own psychological counselors and those schools are mostly concentrated in and around Kunming. Moreover, there was a significantly higher population of

the core focus of this study, only children, in Kunming than in rural areas of Yunnan (See Introduction). For the aforementioned reasons, Kunming was chosen as the most practical study location.

Participant Recruitment and Rationale

The following groups of people were recruited for participation in this study: mental health professionals and other medical professionals, school counselors and administrators, teachers, college students. Mental health professionals were interviewed in order to gain their perspective on the mental health status of only children. Medical professionals were included for their perspective on physical and behavioral differences between only children and children with siblings. School counselors and teachers could offer unique perspectives on only children's mental health and behavior in an educational setting. College students were included to hear about their experiences as a part of the One-Child Policy generation first-hand. Originally, the study also aimed to recruit middle/high school student participants, however, after consideration it was determined that this topic could be too triggering for those populations. So, in the interest of protection of human subjects, this group was not recruited for this study. The selected participant groups were recruited to help determine perceptions of the effects of the OCP.

Participants were recruited using a variety of methods through SIT affiliates and connections in Kunming. Dr. Zhao connected the principal investigator with his daughter, who is a college student in Beijing. Dr. Zhao's daughter assisted in the recruitment of 20 college students for this study. Other participants were recruited with the assistance of SIT Kunming staff. The Academic Director, Lu Yuan, assisted in the recruitment of a Traditional Chinese Medicine pediatrician who helped recruit an additional participant. Other connections were made through the Assistant Academic Director and the Director of Student Affairs, Zhao Jie and Zhou Yan, respectively.

The following SIT Kunming language teachers aided in the recruitment of parents: Zhou Yan, Luo Xiao Lei, Huang Su Ying and Zhang Xian. Because all of the participant recruitment was initiated through SIT Kunming staff or affiliates, this study does not represent random sampling within participant groups. Moreover, although random sampling techniques were employed in certain settings, those settings negate the randomness of the sampling. For example, random parents were asked to participate in this study at the Experimental Middle School Attached to Yunnan Normal University's sporting event at the Kunming Stadium. All of these parents had children who attend this privileged school and thus could not be classified as a random sample of parents.

Participant Information

To protect the privacy of participants, no names were used in the data analysis or discussion of the results of this study. The participants' identities were coded based on date and time of interview. The full list of interviewees with their codes was solely recorded in a password-protected Excel Spreadsheet that only the principal investigator could access. The following information was recorded in this spreadsheet: Participant name, date interviewed, interview format, response status (for WeChat surveys), length of interview, participant group, location of interview and coded participant ID. 18 in-person interviews were conducted with 26 different interviewees for this study. These interviews ranged from 30 minutes to 1.5 hours in length. Zhao Jie was present as a translator at over half of the interviews conducted. The majority of interviews were conducted one-on-one (not including Zhao Jie). In addition to the in-person interviews, surveys were sent to 29 participants. 28 surveys were completed by 28 different interviewees for this study, making the survey response rate 96.6% (28/29). These surveys contained the same questions as the in-person interviews along with additional demographic

information. The total number of unique participants was 47; nine teachers and school administrations, 27 students, seven parents, one TCM pediatrician, three psychological

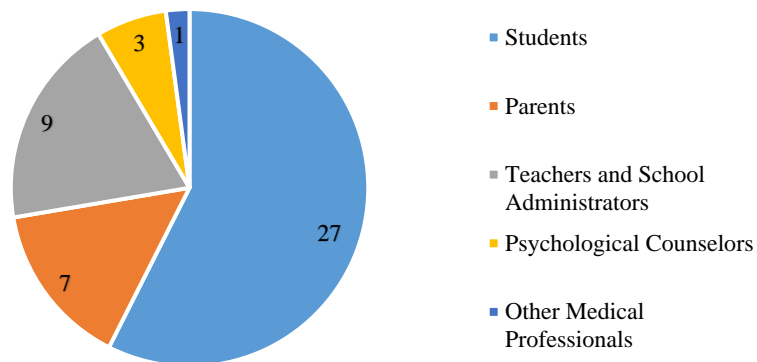


Figure 1: Participant Distribution by Group

counselors (two school-based, one private practice-based) (See *Figure 1*). The gender distribution of participants was 82.9% female (39 participants) and 17.1% male (8 participants).

Data Collection

Data was collected for this study between November 7th, 2017 and December 6th, 2017. Data was collected using two methods; in-person interviews and WeChat surveys (See Appendices II and III). Most in-person interviews were formal; however, interviews were more conversational when appropriate. For the sake of uniformity, each participant was asked every question for their respective participant group and except for certain demographic information, the questions were the same for in-person interviews and WeChat surveys. In-person interviews were recorded in two ways; iPhone audio recording and notetaking. Notes were taken at all interviews, but only interviews in which permission was explicitly received were recorded. Surveys were sent to participants via WeChat messaging. Surveys were in Microsoft Word .docx format (See Appendix III). Once completed and returned to the investigator, the data from the surveys was compiled in a Microsoft Excel spreadsheet using the coded participant IDs.

Data Processing and Analysis

Because this was a mixed-methods study, both quantitative and qualitative data were collected. The qualitative data came from in-person interviews and specific survey questions. Quantitative data also came from in-person interviews, but was primarily collected via the WeChat surveys. All data was compiled in a Microsoft Excel spreadsheet after being collected. Any data in Mandarin was translated into English in a separate spreadsheet before the translations were edited and verified by a classmate with more advanced language skills (Rachel Bernstein). After the translations were verified, the data was cleaned in Excel and the variables were coded in the quantitative data. The quantitative data was then analyzed by running it through SPSS Statistical Analysis Software. The analytics for the quantitative study data were then exported into a new Microsoft Excel spreadsheet and organized to complement the thematic analysis of the qualitative data. The qualitative data was organized by corresponding question and then analyzed thematically in English to complement the themes identified by the quantitative data analysis.

Shortcomings and Limitations

The most obvious shortcoming of this study was the identity of the principal investigator. The principal investigator of this study was a foreigner who was not fluent in the local language nor an expert on Chinese culture. The inherent biases that accompanied cross-cultural inquiry coupled with the short amount of time the principal investigator spent in China inevitably skewed the focus and results of this study. Furthermore, the fact that the principal investigator was a foreigner could have influenced participant responses and further reduced the validity of the results. The acknowledgement of these biases cannot make up for this shortcoming, an unavoidable limitation of performing cross-cultural studies.

The reliance on personal connections to recruit participants was necessary to comply with Chinese cultural norms, however, this could have greatly reduced the validity of this study. Not being able to employ a valid sampling technique, such as random sampling, could have skewed the data collected. This was because personal connections tended to be more similar (socioeconomic status, demographic, values and beliefs) than a random sample. Moreover, the reliance on the connections of others made it difficult to recruit large enough sample sizes for each participant group. Part of the intrigue of researching the OCP was a lack of expertise on the subject. This also proved to be a shortcoming of the study. Furthermore, the gender distribution of participants (82.9% female) was significant enough to note as a possible source of erroneous data. Another skewed demographic of this study was socioeconomic status. All participants were of middle to high socioeconomic status and most had a high level of education, which could have affected the data collected.

Issues related to the language barrier discussed in the proposal for this study were realized during data collection and processing. Multiple interviews were conducted in English so no language barrier was present. About half of the interviews (and all but one WeChat survey) were conducted in Mandarin. Translations were verified by a proficient classmate; however, it is still probable that a number of concepts were lost in translation. Another possible limitation of this study was the use of Zhao Jie as a translator. Not having Zhao Jie present to translate in-person interviews would have made them exponentially more difficult to conduct and ultimately would have led to a reduction in the quantity and quality of data collected. However, having a translator diluted the information from its original source more so than if the data would have been collected in its original language. As the data had to be analyzed in English, however, this translation dilution would have been unavoidable.

Results

According to the results of this study, the OCP was believed to have affected the mental health of OC. Moreover, the majority of participants believed that the OCP had an effect on Chinese culture, the aging population, and the wellbeing of OC. Of the 28 students who participated, 24 identified as OC. As illustrated in *Figure 2*, 30 participants were living in Kunming, 13 living in Beijing and four living in other regions of China at the time the study was conducted. Also at the time the study was conducted, teachers and medical

Kunming (30), Beijing (13), Other regions (4)

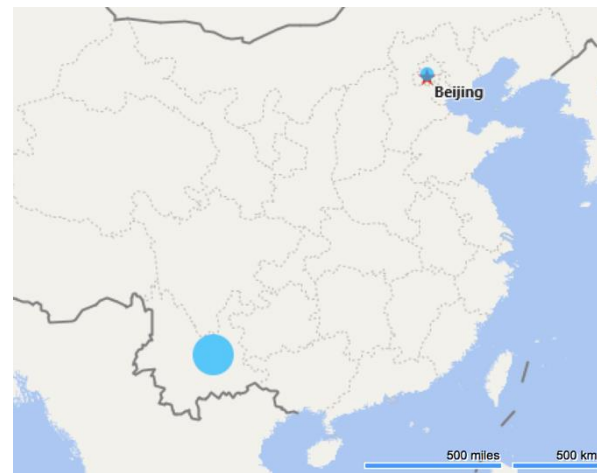


Figure 2: Geographical Distribution of Participants Across China

professionals had (on average) been practicing their professions for over 10 years (min: 2; max: 20). On average, each teacher who responded to the question reported being responsible for around 400 students (mean of 900; min of 57; max of 4000). The average number of schoolchildren that psychological counselors saw weekly was five and most were returning clients. On average, 70% of students seen by the three counselors were OC. 91% (10/11) of respondents stated that there were differences in the mental state and mental health issues of OC and CWS and that the OCP had affected their work. 89% of teachers, administrators and health care professionals responded that they thought the OCP had affected their students or patients. Of the 12 participants asked about if they believed the OCP had affected anxiety levels and behavior of schoolchildren, 91.6% said there was an effect. Moreover, this same set of participants (100%) responded that they believed the OCP would have long-term effects on

Chinese culture. 11/12 of participants asked believed that the OCP would have long-term effects on the aging population. Furthermore, 100% of participants asked (11) believed the OCP would have long-term effects on adults who were OC. When asked if they would tell the parents of a student if they believed that student had a mental health problem, all teachers, administrators and counselors said they would do so. However, not all participants thought this was the best first option for helping a student with an MHP. Most of the teachers (5/6) interviewed said they taught mostly only children. One teacher responded that her students were half OC and half CWS, but this was the first year she had so many CWS in her class. 19 out of 27 students (70%) believed anxiety to be prevalent at their schools; 89% believed anxiety to be prevalent among schoolchildren in China. 67% of students reported that most, 22% reported that some, and 11% reported that a little of their anxiety was school-related. In order to minimize egocentric data analysis, students were asked what their anxiety felt like. Feeling anxious, nervous and experiencing insomnia were the most commonly described symptoms of anxiety. See Appendix I for the complete list of symptoms described by participants. 70% of students reported that they or someone they knew had sought help for a mental health issue and 81.5% responded that they felt they could talk about anxiety or other mental health issues they were having. 85.2% of students felt that the OCP had affected the mental health of students and 64% of students felt the OCP had affected students' anxiety. 55.3% of students who identified as OC reported that being an OC had an effect on their mental health. 75% of parents who were old enough to have gone through school before the OCP felt that anxiety was more prevalent among students now than before the policy. 100% of parents who responded to the question said their children felt comfortable talking about mental health problems they were experiencing. Moreover, 100% of

parents who identified as OC responded that they believed being an OC had affected their parenting and how they taught their children.

Discussion

Chinese Culture and Society

This study attempted to gauge perceptions regarding the effect of the OCP on Chinese culture. Medical professionals (psychological counselors and doctors), teachers and school administrators were asked about this and 100% responded that they believed the OCP would have long-term effects on Chinese culture. These participants identified three primary areas of Chinese culture and society that would be most affected; families, traditional culture and societal structure. Five participants emphasized that the OCP had a huge impact on families. One of the primary effects cited by participants was the impact on family structure. As evidenced in the introduction, China transitioned to a small family culture (Hesketh et al., 2005). This notion was supported by the results of this study. Four participants talked about the social burden and big commitment of having two kids in modern China. According to one participant, urbanization led to a decrease in the amount of childcare available to families from grandparents, which in turn led to a decrease in plausibly having a second child for families. Based on the results of this study, another way in which the OCP impacted Chinese families is that it changed the value of specific family roles. As dictated by the foundational core of Confucianism, Chinese families historically valued and respected elder members more than children (Hatton, 2013). This fundamental pillar of Chinese society was challenged by the OCP, according to participants. The results suggest that family culture shifted along with family structure. According to four participants, children were valued over (and had less respect for) elders in Chinese families, because of the 4-2-1 phenomenon and ensuing loss of filial piety. This notion was supported by

previous studies and some participants believed these changes in family structure and culture to be irreversible (He et al., 2013; Hesketh et al., 2003). The results of this study indicated that these changes to family structure and culture reduced the level of family education to a detrimental degree. One participant discussed that there used to be more than 40 titles for various family members to show respect, but most people were unfamiliar with these titles and traditional family values in modern China. As evidenced in the introduction, family education plays a crucial role in child development, so this reduction in traditional family education could have severe effects (Chen X. S., 2003; Tao, 1999).

According to the majority of participants, many of the traditional family values (e.g. filial piety) were lost in addition to other aspects of Chinese culture due to the OCP. Although the perceived nature of the effects varied between participants, this study suggested that the OCP “definitely had an obvious impact on traditional culture” (I6). According to multiple participants, the OC generations valued Western culture more than those before them, which reduced the prevalence of Chinese cultural traditions during these generations. The majority of participants believed that these effects would prevail in China for generations to come and could even be irreversible. According to multiple participants, reverting back to more traditional Chinese culture would be inhibited by the OC generation's lack of knowledge about these traditions. According to I6, this lack of knowledge occurs “because the older generation didn't teach history to the younger generation and the younger OC generations don't care” (direct quote from an interview conducted in English). The perceived effects of the OCP on Chinese culture varied between participants, however, the presence of effects was clearly evidenced by 100% of participants. The primary effects of the OCP on Chinese culture (according to the data analysis)

were changes in the values placed on different family roles and a decrease in the value placed on and prevalence of traditional Chinese culture.

Medical professionals (psychological counselors and doctors), teachers and school administrators who participated in this study were asked if they believed the OCP would have long-term effects on the aging population. Prior research on the subject suggested that there would be effects and the results of this study reinforce this idea (Cai F., 2007; Clarke, 2015; Nardelli & Swann, 2015; Peng, 1998). 91.6% (11/12) of participants felt the OCP would have long-term effects on the aging population and two participants felt these effects would worsen over the next few generations as the population growth continues to decrease. The one participant that felt these effects would not be present cited a rise in economic conditions as the reason there would be no impact. This participant believed that the aging population would have enough economic resources to support themselves without assistance from their children. Furthermore, one of the three primary reasons participants gave as to why they believed the OCP would have long-term effects on OC as adults was the burden of caring for aging parents (identified by nine participants). The presence of effects of the OCP on the aging population was supported by this study. These effects not only pertained to the aging population themselves but to the OC that would have to care for them. One participant's notion that the aging population would have enough economic resources to care for themselves said a lot about changing family culture and the egocentrism of the OC generation. This idea that if parents could provide financially for themselves, the OC did not need to support them was an entirely new and distinctively not traditional Chinese mindset. This apparent shift away from traditional Confucian family values could be a substantial impact of the OCP on Chinese culture.

Child Behavior and Development

Previous studies came to different conclusions regarding the effects of being an OC on personality development, but most found no significant personality differences between OC and CWS (Hatton, 2013; Tao, 1999). Results from this study did not support this notion. 91% of the participants asked suggested that there were personality differences between OC and CWS. The major difference cited by participants was that OC tended to have more independent personalities. This could be because they had no siblings to help shape and challenge the development of their ideology. Additionally, while prior research suggested the presence of behavioral differences between OC and CWS, the results of this study did not indicate a significant difference (Hatton, 2013; Tao, 1999). The reasons for these discrepancies could be due to differences in sample population. This study asked adults who worked with or were the parents of OC about these differences, while previous studies measured discrepancies of OC and CWS directly. This study was unique because it looked at perceptions of the effects rather than the direct effects of the OCP on personality and behavior.

Another debated perception of OC was their classification as “little emperors” (Cameron et al., 2013; Cheng T. O., 2013; Falbo T., 1982; Falbo T. & Poston, 1993; Falbo T. F. & Poston, 1995; Hatton, 2013; Wang M. et al., 2007; Wang Y. & Fong). Participants were not asked about little emperors, but some broached the subject independently. Ten participants identified egocentrism as a primary consequence of the OCP on OC. Furthermore, participants felt that OC were more entitled than CWS. Participants had varied responses as to what type of entitlement, but multiple brought up OC feelings of entitlement to parents' resources. None of the participants that felt OC were entitled were themselves OC. This was important to note, because it illustrated the difference between previous studies conducted directly on OC and this study.

Although previous studies indicated that OC are entitled, this study exhibited how different groups who are close to OC perceive that they are entitled (Cameron et al., 2013; Cheng T. O., 2013; Falbo T., 1982; Falbo T. & Poston, 1993; Falbo T. F. & Poston, 1995; Hatton, 2013; Wang M. et al., 2007; Wang Y. & Fong). Moreover, ten participants noted selfishness as a key characteristic of OC. This was significant because strong selfishness goes against collectivism, the very foundation of Chinese culture.

The results of this study indicated the presence of the aforementioned personality differences between OC and CWS. 91% of respondents stated that there were differences in the mental state and mental health issues of OC and CWS. Increased egocentrism, selfishness and entitlement in OC could have been the result of differences in how OC are treated in their families. As previously mentioned, family education played a crucial role in child development, so it made sense that changing how OC were raised would also alter how they developed. The data analysis for this study suggested that both parents and grandparents paid more attention to OC than to CWS. Participants suggested that parents and grandparents were more overprotective of OC than of CWS, had a higher tolerance for mistakes made by OC, and tended to spoil their OC. The tendency for parents to overprotect and spoil their OC could have been the reason that the results of this study indicated a discrepancy in dependence on parents between OC and CWS. Theme analysis of the data collected determined that all participant groups (including OC students) felt that OC tended to stay in their comfort zones and were more dependent on their parents for longer than CWS.

The most frequently identified difference between OC and CWS in every participant group was tolerance to adversity. This exact sentiment was echoed in the majority of interviews and was also the most frequently mentioned distinction between OC and CWS in the survey

responses. Lower tolerance to adversity was also suggested by previous OC studies (Cameron et al., 2013; Chen Y., 2007; Tao, 1999; Wang D. et al., 2016). This study is significant, because as previously suggested it distinctly looked at perceived effects rather than direct effects. This lower tolerance to adversity could have been the result of how parents treated OC. By spoiling OC and overprotecting them from challenges, OC did not learn how to overcome difficulties to the extent that CWS were able to. Furthermore, a common theme identified by participants was that OC had a hard time accepting criticism. This could have been due to the fact that OC parents gave more positive affirmations, so the children had limited exposure to criticism. This was another facet of changes in family education due to the OCP that (according to the results of this study) negatively impacted OC. Another related theme identified by participants was that OC were more easily frustrated. This made sense because with the reduction (or elimination) of challenges, children would have fewer reasons to get frustrated and therefore not only have a lower threshold for frustration but have a less developed capacity for dealing with feelings of frustration. OC's lower tolerance to adversity and tendency to get easily frustrated could have impacted their mental health when coupled with an inability to communicate their frustrations.

The effect of being an OC on the development of social skills was another theme often discussed by participants. 91.6% of participants believed OC to lack the same level of social skills that CWS possess. Primarily, participants identified an inability to effectively communicate (eight participants), an overall lack of sociability (eleven participants), and difficulty handling conflict in relationships (four participants) as key characteristics of OC. One participant pointed out a possible reason for this perceived discrepancy between OC and CWS. OC "do not have the buffer of siblings" to learn how to interact socially and resolve conflict, so their development of these skills could be behind those of CWS (I3). A decreased ability to

effectively communicate among OC could have influenced OC mental health. Another effect of less developed social skills among OC as adults was the effect on long-term relationships.

Furthermore, 100% of participants asked (11) believed the OCP would have long-term effects on adults who are OC. One of the most commonly cited long-term issues facing OC as adults was a high divorce rate. According to twelve participants (and supported by the literature), because OC had less developed social skills and abilities to handle conflict resolution, they were more likely to get divorced than CWS (Falbo T. P., D. , 1986). This could have been why the divorce rate skyrocketed to 70% (the world's highest) during the OC generations, according to a medical professional interviewed.

Mental Health

According to the quantitative data analysis, 85.2% (23/27) of students felt that the OCP had affected the mental health of students, describing the impact as “direct” and “influential” (W22, I10). Furthermore, 55.3% (14/24) of students who identified as OC reported that being an OC had an effect on their mental health. Data regarding the prevalence of mental health problems (MHP) in general were not significant enough to be discussed as an outcome of this study, however, themes regarding perceptions of the most prevalent MHP in China were statistically significant (ten respondents). The main types of MHP discussed by participants were stress-related (eight participants) and depression-related (nine participants).

Depression was cited as the most common MHP among students by both school psychological counselors and eight additional participants. Two counselors and one medical professional described over anxiety and loneliness as the primary causes of depression among their patients. As the proportion of their patients who were OC was proportional to the general population, it could not be determined that these were distinctive to OC.

Seven participants (teachers, school administrators and psychological counselors) believed the most prominent MHP among schoolchildren was overstress from grades. Furthermore, 89% of students reported that some or most of their anxiety was school-related. Students most commonly expressed that their biggest challenges in school were maintaining good grades and handling relationships. One medical professional and two psychological counselors suggested that OC felt more stress and had more MHP related to school than CWS. Moreover, the private-practice psychological counselor stated that the primary reason parents brought children to see a counselor was worries about their academic performance. These results indicated that school was the primary cause of stress in schoolchildren. This could have been due to the amount of school-related pressure put on students by parents.

According to participants, the primary causes of the most prevalent MHP in schoolchildren (stress-related and depression-related) were school-related pressure and anxiety, and loneliness. Differences in prevalence of these MHP in OC and CWS was not determined by this study, however, thematic analysis regarding the OCP and anxiety levels proved statistically significant. As anxiety was described as a primary cause of the main MHP in schoolchildren, a difference in the prevalence of anxiety between OC and CWS could have also implicated differences in the prevalence of related MHP between these two groups. 72% (28/39) of participants who were asked if they believed the OCP had affected anxiety levels of schoolchildren said there was an effect. The degree of statistical significance varied between participant groups; 63% students (17/27) and 91.6% teachers, school administrators and psychological counselors (11/12) felt the OCP had increased students' anxiety levels. As aforementioned, the majority of the 27 student participants believed anxiety to be prevalent among their classmates (89%) and students in China (70%). This theme was also present among

parents who were old enough to have gone through school before the OCP (75%). These parents expressed a belief that anxiety was more prevalent now than before the OCP when they were students. However, student responses ranged in the degree to which they believed anxiety was prevalent among their classmates. Roughly half of students believed anxiety was extremely prevalent among their classmates. The other half generally felt that anxiety was present, but only prevalent in certain (unspecified) groups of students.

When asked how the OCP had affected students' anxiety levels, students cited increased academic pressure (eight participants), decreased tolerance to anxiety (five participants) and a lack of buffers for social anxiety (four participants) as the primary influencing factors (See

Figure 3). As

aforementioned, the

results of this study

suggested that these

factors were more

prevalent in OC than

CWS. The lack of buffers

for social anxiety could

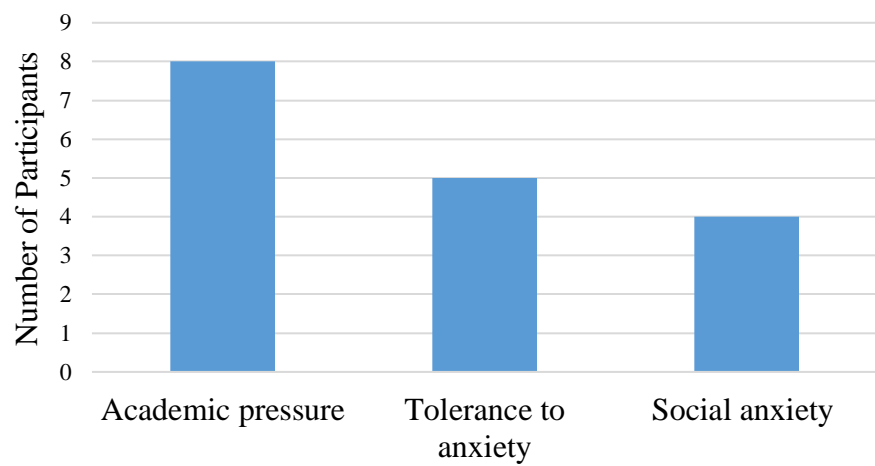


Figure 3: Student Perceptions of the Most Prominent Causes of Anxiety among Students

have been due to the above-evidenced less developed social skills attributed to a lack of siblings.

Furthermore, 30 participants felt that pressure was a leading cause of anxiety and that the OCP

increased pressure. 16 participants attributed this rise in pressure to the parents of OC. This result

was supported by previous research (Quach, Epstein, Riley, Falconier, & Fang, 2015). With all

of the attention and expectations of the family placed entirely on one child, it made sense that

OC would have felt greater pressure from parents than CWS. Most participants felt parental

pressure was the primary cause of anxiety in schoolchildren. Moreover, according to the results of this study, anxiety was a leading cause of mental health problems in schoolchildren. Based on this evidence it can be reasonably concluded that as OC received more parental pressure, they were also more susceptible to developing pressure-related MHP.

Conclusions

The goal of this study was to discover the perceived mental health effects of the OCP on OC. The primary objectives of this study were to understand perceptions of the effects of the OCP on Chinese culture, the aging population, students' mental health and adults who were only children. According to the data analysis, the primary effects of the OCP on Chinese culture were changes in the values placed on different family roles and a decrease in the value placed on and prevalence of traditional Chinese culture. Participants believed these cultural changes would be difficult (if not impossible) to reverse. Furthermore, the results of this study indicated that there would be long-term impacts on China's aging population. These effects would be felt not only by the elders within families, but also by the OC that would be responsible for their care. In contrast to previous studies, these results suggested that there were personality differences but no behavioral distinctions between OC and CWS. Although the notion that OC were little emperors was not supported by the majority of participants, the results of this study suggested egocentrism and selfishness were perceived to be higher among OC. Results also indicated the perception that spoiling of OC by parents and grandparents resulted in the lowering of OC's tolerance to adversity and increased frustration when presented with challenges. Another perceived implication of being an OC was less developed social skills, which could have been due to the lack of siblings. Although the behavioral differences between OC and CWS were null, perceptions of the presence of discrepancies between the mental health statuses of these two groups was significant. The main types of MHP discussed by participants were stress-related (eight participants) and depression-related (nine participants). Pressure and stress related to school and parents were believed by participants to influence MHP, especially in OC. Furthermore, participants often described loneliness resulting from being an OC, which could

impact MHP. It is important to note that this study did not attempt to discover MHP causation, but to discover perceptions towards the effects of the OCP as they relate to mental health. Based on the results of this study, it can be suggested that there were significant perceived impacts of the OCP on the mental health of OC.

Recommendations for Further Study

Because there are still knowledge gaps in the literature, this study encourages future SIT Kunming students to pursue an ISP topic related to mental health and the OCP. Students mentioned depression-related MHP as prevalent, but this could be further examined by looking at the effects of the OCP on depression. This study could be conducted with participants ranging from students to the elderly in order to gain a more comprehensive perspective on the topic. Similarly, students could look at the effects of the OCP on the mental health of the aging population. The age dependency ratio and childless elders (both exacerbated by the OCP) could have effects on the mental health of the aging population.

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Appendix I: Study Questions

Demographic Questions

- 年龄 (Age)
- 性别 (Gender)
- 民族 (Nationality)
- 出生地 (Birthplace)
- 居住城市 (Current city, province)
- 文化水平 (Education level)
- 职业 (Occupation)
- 你有几个兄弟姐妹? (Number of siblings)
- 你有几个孩子? (Number of children)

Psychological Counselor Interview Questions:

- 你做精神病医生多长时间? How long have you been practicing psychiatry?
- 你的病人里面有上学的孩子吗? Do you work with school children?
 - 每星期你看几个孩子? How many per week?
 - 你看的上学的孩子数量有变化吗? Have you noticed any changes in the number of school children you see?
 - 如果对, 什么变化, 为什么有这样的变化? If yes, what changes and why?
 - 他们怎么找到你的? Who recommends school children to see you? 学生的父母? Parents? 学校? Schools?
 - 你看的孩子是什么样的家庭, 有什么社会经济地位? What is the average socioeconomic status of the parents whose children you see?
- 你看的孩子主要有什么心理问题? What are the main mental health issues children have when they come for treatment?
- 你看的主要是独生子女吗 / Do you treat more only children or children who have siblings?
 - 独生子女 和非独生子女 心理健康状态 有什么不同? Are there any differences between the mental health status of these two groups?
 - 独生子女 和非独生子女 会有不同的心理问题吗? Are there any differences in the mental health issues you treat with only children versus children with siblings?
- 你觉得这些家庭为什么愿意带他们的孩子 来接受心理治疗? Why do you believe families seek out mental health treatment?
- 你觉得独生子女政策 对你的工作有影响吗? Do you believe the one-child policy has affected your work?
- 你觉得独生子女政策得对你的病人有影响吗? Do you believe the one-child policy has affected the children who you treat's mental health?
 - 你觉得 独生子女 对孩子的焦虑程度有什么影响? Effect on anxiety levels among schoolchildren?
 - 你觉得 OCP 对你的 独生子女成年病人 有什么长期的影响? Long-term effects on adults who are only-children?

- 你觉得 OCP 对中国文化 有什么长期的影响? Long-term effects on Chinese culture?

School Counselor Interview Questions

- 你多少时间做 学校心里咨询师? How long have you been a counselor?
- 你觉得跟别的昆明的学校比起来这所学校有什么不同? How would you compare this school to other middle schools/high schools in Kunming?
 - 每星期你看几个学生的孩子? How many per week?
 - 你看的上学的孩子数量有变化吗? Have you noticed any changes in the number of school children you see?
 - 如果对, 什么变化, 为什么有这样的变化? If yes, what changes and why?
- 是老师让他们咨询你的还是你自己决定来的? teachers refer children to see you or do the children see you of their own accord?
- 你看的孩子主要有什么心理问题? What are the main mental health issues children have when they come for treatment?
- 你看的主要是 独生子女吗 / Do you treat more only children or children who have siblings?
 - 独生子女 和非独生子女 心理健康状态 有什么不同? Are there any differences between the mental health status of these two groups?
 - 独生子女 和非独生子女 会有不同的心理问题吗? Are there any differences in the mental health issues you treat with only children versus children with siblings?
- 你觉得独生子女政策 对你的工作有影响吗? Do you believe the one-child policy has affected your work?
- 你觉独生子女政策得对你的病人有影响吗? Do you believe the one-child policy has affected the children who you treat's mental health?
 - 你觉得 独生子女 对孩子的焦虑程度有什么影响? Effect on anxiety levels among schoolchildren?
 - 你觉得 独生子女对你的 独生子女成年病人 有什么长期的影响? Long-term effects on adults who are only-children?
 - 你觉得独生子女对中国文化 有什么长期的影响? Long-term effects on Chinese culture?
 - 你觉得独生子女政策对老龄化有什么长期的影响? Long-term effects on aging population?

College Student Interview Questions

- 年龄 (Age)
- 性别 (Gender)
- 民族 (Nationality)
- 出生地 (Birthplace)
- 居住城市 (Current city, province)
- 文化水平 (Education level)
- 职业 (Occupation)

- 你有几个兄弟姐妹？（Number of siblings）
- 你怎么描述你的在大学的经历？你在高中的经历？你在初中的经历？How would you characterize your college experience? High school? Middle school?
- 到目前为止，你觉得在学校的最大的挑战是什么？What have been your biggest challenges in school up to this point?
- 你觉得 你的学校有很多焦虑的学生吗？Do you feel anxiety is prevalent among students in your school?
 - 如果有， 你觉得中国有很多焦虑的学生吗？
- 你觉得你的焦虑多少是来自学校的压力？How much anxiety do you feel because of school?
- 你的焦虑主要是因为什么导致的？What causes you the most anxiety?
 - 你焦虑的时候 具体是什么感觉？What does your anxiety feel like?
- 你或者你认识的人曾因为焦虑或者别的心理问题寻求过帮助吗？Have you or anyone you know ever sought help for anxiety or other mental health issues?
 - 如果有， 向谁寻求帮助？If so, from who?
- 你觉得你能跟别的人谈论 你的焦虑或者别的心理问题吗？Do you feel you can talk about anxiety and other mental health issues you are having?
 - 如果能， 你跟谁 谈论你的焦虑或者别的心理问题？If so, who do you talk to about these issues?
- 你觉得 独生子女 政策 对学生的心理健康 有影响吗？Do you feel the one-child policy has affected the mental health of students?
 - 你觉得独生子女 政策 对学生的焦虑程度 有影响吗？Do you feel the one-child policy has affected students' anxiety?
- 你觉得你的独生子女的身份对你的心理健康有影响吗？Do you feel being an only child has affected your mental health? 如果有， 有什么影响？If so, how?

Parent/Family Interview Questions

- 年龄（Age）
- 性别（Gender）
- 民族（Nationality）
- 出生地（Birthplace）
- 县居住（Current city, province）
- 文化水儿（Education level）
- 职业（Occupation）
- 你有几个兄弟姐妹？（Number of siblings）
- 你有几个孩子？（Number of children）
- 你怎么描述你的在学校的经历？How would you characterize your school experience?
- 你怎么描述你的孩子在学校的经历？How would you characterize your child/children's school experience?
- 你觉得在学校的最大的挑战是什么？What do you think were your biggest challenges in school?

- 你觉得你的孩子在学校的最大的挑战是什么？ What do you think are your child/children's biggest challenges in school?
- 你觉得 中间 你的孩子的学校的学生焦虑是于今为然吗？ Child school
 - 你觉得 中间中国的学生焦虑是于今为然吗？ Do you feel anxiety is prevalent among students in China?
 - 你觉得独生子女政策实施以后比实施以前有更多的学生有焦虑问题吗？ Do you feel anxiety is more prevalent among students now than before the one child policy when you were a student?
 - 如果是，为什么？ If so, why?
- 你是学生的时候，觉得你的焦虑多少是来自学校的压力？ How much anxiety did you feel because of school when you were a student?
 - 你焦虑的时候 具体是什么感觉？ What did your anxiety feel like?
- 你觉得你能跟别的人谈论 你的焦虑或者别的心理问题吗？ Do you feel you can talk about anxiety and other mental health issues you are having?
 - 如果对，你跟谁的人你谈论得了你的焦虑或者别的心理保健疾？ If so, who do you talk to about these issues?
- 你感觉你的孩子方便 跟别人谈论他的焦虑问题或者别的心理问题吗？ Do you think that your child/children feel comfortable talking about anxiety and other mental health issues they are having?
 - 如果方便，跟谁谈论他的焦虑问题或者别的心理问题？ If so, who do they feel comfortable talking to about these issues?

If they are an only child:

- 你觉得你的独生子女的身份对你的心理健康有什么影响？ Do you feel being an only child has affected your mental health?
- 你觉得你的独生子女的身份对你教育孩子的方法有什么影响？ Do you feel being an only child has affected your parenting?

If they have one child:

- 你觉得 独生子女政策对你的孩子 的心理健康有什么影响？ Do you feel the one-child policy has affected the mental health of your child?
 - 你觉得 独生子女政策对你的孩子 的焦虑程度有什么影响？ Do you feel the one-child policy has affected your child's anxiety?

If they have multiple children but are an only child:

- 你觉得你能给你的两个孩子足够的注意力吗？ Do you feel it is possible for you to give both of your children enough attention?
 - 如果不能，为什么？ If not, why not?

Teacher Interview Questions

- 你多少时间是老师？ How long have you been a teacher?
- 你觉得跟别的昆明的学校比起来这所学校是怎么样？ How would you compare this school to other middle schools/high schools in Kunming?
- 你教什么课？ What subject do you teach?

- 你有几个学生？
- 3 你对看学校辅导员举荐学生或者学生自己决定看学校辅导员？ Do you refer children to see school counselors or do the children seek help of their own accord?
 - 在你推荐去看心理咨询师的学生中，有更多的独生子女还是更多的非独生子女？ Do you refer more only children or children who have siblings to see a counselor for a mental health issue？
- 你的学生中有更多的独生子女还是非独生子女？ Do you teach more only children or children who have siblings？
 - 心理保健的这两个组有没有差异？ Do you think there are any differences between the mental health status of these two groups？
- 你教的孩子中，主要有什么心理问题？ What do you think the main mental health issues are that children in your class have？
- 你觉得 独生子女政策实施以前和以后 学生有什么明显的相同点和不同点吗？ What do you think are the noticeable similarities and differences between students before the one child policy and now？
- 你觉得独生子女政策对你的工作有什么影响？ Do you believe the one-child policy has affected your work？
- 你觉得独生子女政策对你的学生的心理健康有什么影响？ Do you feel the one-child policy has affected the mental health of your students？
 - 你觉得 独生子女 对孩子的焦虑程度有什么影响？ Effect on anxiety levels among students？
 - 你觉得独生子女政策对学生的课堂表现 有什么影响？ Effects on how students behave in class？
 - 你觉得 独生子女政策对你的 独生子女成年病人 有什么长期的影响？ Long-term effects on adults who are only-children？
 - 你觉得独生子女政策对老龄化有什么长期的影响？ Long-term effects on aging population？
 - 你觉得独生子女政策对中国文化 有什么长期的影响？ Long-term effects on Chinese culture？

Appendix II: Sample WeChat Survey (Students)

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感谢你对参与! 这是一个匿名的学习, 所以你不需要给我你的名字。你不需要回答你不愿意回答的问题。你可以请我如果你有问题!

年龄: _____ 性别: 女 / 男 (选一个)
民族: _____ 出生地: _____
居住城市: _____ 文化水平: _____
职业: _____ 你有几个兄弟姐妹? : _____

1. 你怎么描述你的在大学的经历? 你在高中的经历? 你在初中的经历?

2. 到目前为止, 你觉得在学校的最大的挑战是什么?

3. 你觉得 你的学校有很多焦虑的学生吗?

- a. 如果有, 你觉得中国有很多焦虑的学生吗?

4. 你觉得你的焦虑多少是来自学校的压力？

5. 你的焦虑主要是因为什么导致的？

6. 你焦虑的时候 具体是什么感觉？

7. 你或者你认识的人曾因为焦虑或者别的心理问题寻求过帮助吗？

a. 如果有， 向谁寻求帮助？

8. 你觉得你能跟别的人谈论 你的焦虑或者别的心理问题吗？

a. 如果能，你跟谁 谈论你的焦虑或者别的心理问题？

9. 你觉得 独生子女 政策 对学生的心理健康 有影响吗？

10. 你觉得独生子女 政策 对学生的焦虑程度 有影响吗？

11. 你觉得你的独生子女的身份对你的心理健康有影响吗？如果有，有什么影响？

Appendix III: Symptoms of Anxiety (Students)

- W23: Irritability, do not want to live, want to fight something, want to cry
- W24: Irritability, confusion, listlessness
- W25: Hungry, want to binge
- W26: terribly upset
- W22: Anxiety, insomnia, fear, frustration.
- W1: scatterbrained/superficial/shallow, do not want to study, do not know what I should do
- W10: stare blankly/ be in a daze
- W11: feel anxious
- W12: very panicked, at a loss/confused
- W13: comparatively exhausted and nervous/tense
- W16: Nervous, uncomfortable, worried, afraid
- W17: Insomnia, poor memory, in a bad state
- W18: Tense, there will be unstable emotions, and I'll even vent to friends around
- W2: Always let my imagination run away with me, there is no way to solve it
- W20: Need to calm down to work hard, irritability, mental rigidity, cannot turn up, feel all kinds of bad, uncomfortable. . .
- W3: miss close relatives, perplexed about future
- W4: nervous/ fast heartbeat, cannot sleep, hair loss
- W5: One kind of tearing feeling, do not know if it is appropriate. Although I know I have a lot of things to do, but I cannot put effort into work or study.
- W6: No matter what I do not want to play/ have fun
- W7: restless with anxiety mood, overactive/restless
- W8: feel very fidgety/agitated/irritable, moreover very easily reject myself. Compared with the now popular saying, it is more "dispirited"
- W9: do not know what I should do, cannot do anything, bad mood
- W21: Insomnia, loss of appetite
- W14: Upset, irritable, unable to focus attention, cannot focus on one thing for a long time, it is difficult to sleep.
- W15: Head pain, vomiting.

Appendix IV: Field Study Hours Breakdown

Activity	Total Hours
Participant recruitment	20
Review of literature	40
ISP proposal (writing and revising)	8
In-person interviews	16
Data collection activities	15
Participant communication	4
Translating responses	8
Creating datasheets	3
Creating syntax for SPSS data analysis	6
Qualitative theme analysis	5
Writing and editing ISP Paper	50
Creating ISP presentation	10
Creating graphics and figures for ISP results	5
Meals with participants/advisors	4
Total	194