
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202006.00091

Psychological and Behavioral Changes Among Chinese People Over the Past Half-Century: An Empirical Study from a Psychological Perspective

Authors: Cai Huajian, Huang Zihang, Lin Li, Zhang Mingyang, Wang Xiaou, Zhu Huijun, Xie Yiping, Yang Ying, Yang Ziyang, Jing Yiming, Huajian Cai

Date: 2020-07-14T00:00:00+00:00

Abstract

Over the past half-century, unprecedented rapid social transformation has exerted extensive and profound influences on Chinese culture and the psychology and behavior of Chinese people. Existing research has examined psychological and behavioral changes among Chinese people across more than ten dimensions, including cultural values, personality traits, self-construal, interpersonal trust, well-being, emotion, motivation, relationships, mental health, and other social attitudes and behaviors. Collectively, these studies have delineated the general trends of psychological change among Chinese people over the past half-century: (1) Individualistic values and psychological behaviors compatible with modern society are becoming increasingly prevalent; (2) Collectivistic values emphasized by traditional society, though gradually declining, still maintain a position within contemporary mainstream values; (3) Multicultural coexistence will constitute an important characteristic of present and future Chinese society. Specific changes also include: Chinese people's general trust is declining, well-being initially decreased but has shown signs of increase in recent years, the overall level of mental health has risen but with inconsistent trajectories across different social groups, overall negative emotions are increasing, and attitudes toward sexuality have become more open and tolerant. Future research should expand existing studies in both breadth (content, domains) and depth (causes, mechanisms, and processes), striving to construct theories that can simultaneously explain the general patterns of psychological impacts of social change and the uniqueness of sociocultural psychological changes in China.

Full Text

Preamble

The world is undergoing profound changes unseen in a century. How will this rapidly changing society impact human culture, psychology, and behavior? This is not only a question of widespread concern across society but also a major research frontier in contemporary humanities and social sciences, particularly cultural psychology. At the invitation of the journal's editor-in-chief, Researcher Cai Huajian has conducted a comprehensive review and synthesis of relevant psychological research on social change in Chinese society. These studies not only reveal the fundamental trends in the psychological and behavioral patterns of Chinese people over the past half-century but also demonstrate the complexity of these changes. To some extent, these findings can help us understand China and the Chinese people—past, present, and future—and provide insights for cultivating a social mentality of “self-respect and confidence, rationality and peace, and positivity and optimism,” building a social psychological service system, and modernizing national governance. At the end of the article, Researcher Cai Huajian points out that research on psychological and behavioral changes among Chinese people is still in its infancy and urgently needs to be expanded in both depth and breadth. He warmly calls on more researchers to participate in this field of study with significant academic and practical value, to “write their articles on the vast land of the motherland.” (Responsible Editor: Li Shu)

The Change of Chinese Psychology over the Past Half Century: Empirical Research from a Psychological Perspective

CAI Huajian^{1,2}; HUANG Zihang^{1,2}; LIN Li³; ZHANG Mingyang^{1,2}; WANG Xiaoou^{1,2}; ZHU Huijun^{1,2}; XIE Yiping^{1,2}; YANG Ying^{1,2}; YANG Ziyang^{1,2}; JING Yiming^{1,2}

(1 Center for Personality and Social Psychology, Institute of Psychology, Chinese Academy of Sciences, Beijing 100101, China)

(2 Department of Psychology, University of Chinese Academy of Sciences, Beijing 100049, China)

(3 Zhejiang Institute of Educational Sciences, Hangzhou, Zhejiang 310012, China)

Received: 2020-04-07

This research was supported by the Major Project of the National Social Science Fund of China (17ZDA324).

Corresponding Author: CAI Huajian. Email: caihj@psych.ac.cn

Abstract

Over the past half-century, unprecedented rapid social transformation has exerted broad and profound influences on Chinese culture and the psychology and

behavior of Chinese people. Existing research has examined changes in Chinese psychology and behavior across more than ten dimensions, including cultural values, personality traits, self-construal, interpersonal trust, well-being, emotion, motivation, relationships, mental health, and other social attitudes and behaviors. Overall, these studies have outlined the general trajectory of psychological changes among Chinese people over the past fifty years: (1) Individualistic values and psychological behaviors compatible with modern society are becoming increasingly prevalent; (2) Collectivistic values emphasized in traditional society, though declining, still occupy a place in contemporary mainstream values; and (3) The coexistence of multiple cultures will be an important feature of present and future Chinese society. Specific changes include: general trust has declined; well-being first decreased but has shown signs of rising in recent years; overall mental health levels have improved but with inconsistent trajectories across different social groups; negative emotions have generally increased; and sexual attitudes have become more open and tolerant. Future research should expand existing studies in both breadth (content and domains) and depth (causes, mechanisms, and processes), and strive to construct theories that can simultaneously explain both the general laws of psychological impacts of social change and the unique characteristics of Chinese sociocultural psychological changes.

Keywords: cultural change; cultural psychology; individualism; collectivism; modernity; traditionality

More than a century ago, facing Western military aggression and the impending crisis of late Qing China, statesman Li Hongzhang deeply realized that China was experiencing “great changes unseen in three thousand years.” Indeed, over the past hundred-plus years, from the end of a feudal society that had lasted for millennia to the emergence of the first modern state in the Republic of China, to the establishment of socialist New China, and the rapid development brought by reform and opening-up over forty years ago, China has leaped from poverty and weakness to become the world’s second-largest economy by GDP, undergoing comprehensive and accelerated transformation from a traditional, backward agricultural country to a modern nation. What impacts have these dramatic changes over more than a century, especially the magnificent development over the past four decades of reform and opening-up, had on Chinese culture and the psychology and behavior of Chinese people? Where will the future lead? For over a century, numerous scholars have examined and explored the impacts of social change on Chinese people from various professional fields and perspectives, including philosophy (e.g., Liang Shuming, Yin Haiguang), history (e.g., Du Weiming, Yu Yingshi), anthropology (e.g., Fei Xiaotong, Yan Yunxiang), sociology (e.g., Zhou Xiaohong, Bian Yanjie), literature (e.g., Lu Xun, Lin Yutang), and psychology (e.g., Yang Guoshu, Huang Guangguo). Particularly in the past decade or so, amazed by China’s miraculous development over nearly forty years, an increasing number of domestic and overseas psychologists have begun to focus on and study the impacts of Chinese social change on Chinese culture and psychology, generating a substantial body of research. This article aims to systematically and comprehensively review and synthesize relevant stud-

ies. Below, we will first introduce the main historical background, theoretical frameworks, historical evolution, and methodological paradigms of these studies; then systematically review findings on cultural and psychological changes across more than ten dimensions to clarify the specific trajectory of psychological and behavioral changes among Chinese people; finally, based on the most commonly used framework of individualism and collectivism in contemporary cultural psychology, we will summarize the overall trends in Chinese psychological changes and point out future research directions.

1.1 Historical Background

In recent years, psychologists' attention to the cultural and psychological consequences of Chinese social change has been continuously growing. In a sense, this is an inevitable result of specific domestic and international developmental contexts. Domestically, China's earth-shaking changes and promising high-speed development over the past four decades have provided strong objective demand, social momentum, and research materials for studying the psychological effects of social change; meanwhile, the vigorous development of Chinese psychology in the past two decades, especially the high level of national and societal attention to psychology, particularly social psychology and mental health, has provided a solid human resource foundation and social resources for research. Internationally, the prosperity of cultural psychology over the past four decades and its numerous findings have provided rich theoretical foundations and professional support for studying social change; simultaneously, the rise of social change and cultural-psychological dynamic construction as a new direction in international cultural psychology has provided an excellent academic opportunity for studying Chinese social change. Thus, the objective needs of China's social development and the continuous progress of domestic and international psychological research have jointly promoted the rapid development of research on Chinese social change.

1.2 Theoretical Frameworks

Social change is a research hotspot across many disciplines, with numerous theories originating from different fields. In psychology, two major frameworks have had the greatest influence: modernization theory, which originated in sociology (Inkeles, 1977; Inglehart & Baker, 2000), and the individualism-collectivism cultural theory widely applied in contemporary cultural psychology (Hofstede, 1983; Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1995).

Modernization theory distinguishes between traditional and modern society at the macro level, with corresponding manifestations at the individual level as traditionality and modernity (Yang Guoshu, 2008). According to modernization theory, the basic trend of social change worldwide is from traditional to modern; correspondingly, human change involves the continuous decline of traditionality and the continuous enhancement of modernity. However, understandings and operationalizations of traditionality and modernity vary by person, region, and

era. Initially, Inkeles believed that modernity could be measured across twelve dimensions involving life attitudes, values, and behavioral patterns. In studying Chinese social change, researchers have repeatedly offered new interpretations of modernity's content to better explain changes among Chinese people (see below), and this exploration continues.

In cultural psychology, individualism and collectivism have both broad and narrow definitions. Narrowly defined, individualism and collectivism primarily refer to cultural values and beliefs at the value level, which can be measured through specific scales (e.g., Triandis & Gelfand, 1998) and manifested through many specific behaviors. Broadly defined, individualism and collectivism refer to a cultural syndrome that, in addition to values, includes many aspects that can mark cultural differences, such as corresponding self-construals, cognition, emotion, and motivation (Oyserman et al., 2002). They correspond respectively to autonomy vs. conformity, independent vs. interdependent self, analytic vs. holistic thinking, individual vs. social emotion, and intrinsic vs. extrinsic motivation, and prevail respectively in the West and the East. From the perspective of change, collectivism mainly prevails in traditional society, while individualism mainly prevails in modern society. Therefore, the basic trend of cultural and psychological-behavioral change worldwide is: individualism continues to strengthen while collectivism continues to decline.

It should be noted that individualism is not equivalent to modernity, nor is collectivism equivalent to traditionality. Comparatively speaking, individualism and collectivism encompass broader content, have more stable connotations, and are more concretely operationalized, whereas traditionality and modernity remain more at the value and personality levels with higher uncertainty in connotation. In this article, when reviewing previous literature, we respect the theoretical interpretations of original studies; however, when summarizing, we adopt the broad individualism-collectivism framework more frequently, while also considering the traditionality-modernity framework. It should be pointed out that not all psychological and behavioral changes reviewed in this article can be explained by these two theoretical frameworks (e.g., changes in mental health). Therefore, while grasping the basic trends, we should also pay attention to the special trajectories of certain psychological and behavioral changes.

1.3 Methodological Paradigms

Social change research typically involves three effects: period or time effect, cohort effect, and age effect. The period effect refers to effects caused primarily by cultural and economic changes in a specific period (e.g., changes caused by urbanization). The cohort effect refers to psychological impacts or imprints left by special birth cohorts (e.g., the special imprint left by the Cultural Revolution on a generation). The age effect refers to effects caused by age differences or individual development (e.g., changes caused by physiological maturation). Among the three effects, those related to society or social change are the period effect and cohort effect, while the age effect is an interfering factor that most studies aim

to control or eliminate. Ideally, social change research designs should be able to distinguish and examine these three effects separately. However, since these three effects are often confounded in reality, no current method can completely separate them; the more ideal design would be a cohort-sequential longitudinal design spanning sufficiently long periods, but such designs are difficult to implement in reality due to the need to span long time periods and require large samples.

In actual research, researchers employ various imperfect or indirect methods. The three most commonly used types are: cross-temporal comparisons (e.g., cross-temporal meta-analysis, cross-temporal survey comparisons, analysis of cultural products or historical archives), cross-generational comparisons (e.g., actual intergenerational difference comparisons, perceived intergenerational difference comparisons), and historical reconstruction (e.g., historical reconstruction based on cross-sectional comparisons). Cross-temporal comparisons reveal possible changes and their directions along the time axis by comparing data produced at different time points. For example, many studies infer the impact of social change by comparing college students from different eras (e.g., Twenge, 2000; Xin & Xin, 2017). Results obtained through this method are typically a mixture of period and cohort effects, and some may also include age effects. Cross-generational comparisons reveal possible cohort change effects by comparing the psychology of people born in different eras at a single time point. For example, many studies reveal the impact of social change by comparing people born in different eras (e.g., Cai, Zou, Feng, Liu, & Jing, 2018; Zhou, Yiu, Wu, & Greenfield, 2018). Results obtained through this method are typically a mixture of cohort and age effects. Historical reconstruction is based on an indirect logic, using non-temporal, non-generational differences to reconstruct temporal differences. For example, differences between developed and underdeveloped areas can to some extent reflect trends in social change, because social development overall proceeds from underdeveloped to developed. Some studies have adopted this method (e.g., Cai, Kwan, & Sedikides, 2012). Results obtained through this method may be influenced by the three aforementioned effects as well as other non-equivalent factors.

All three types of methods are used in existing research on Chinese social change. Given that each method has its own strengths and weaknesses and may be contaminated by irrelevant interferences, when interpreting each research finding, it is necessary to consider possible interferences and alternative explanations, and particularly to consider corroboration with studies employing other methods. Additionally, it should be noted that social change research typically involves both group and individual levels, and findings based on group studies may not necessarily apply to individuals, and vice versa.

1.4 Historical Evolution

Historically, empirical psychological research on Chinese social change can be divided into two stages based on research approaches. The first stage originated in

Taiwan, China. Over half a century ago, Chinese psychologists began studying cultural and psychological changes during modernization in Taiwan (Gao Xufan & Yang Guoshu, 2011; Qu Haiyuan, 1971), with traditionality and modernity of people being the core themes of this stage. This was because when social change research began in Taiwan, cultural psychology as a branch of social psychology had not yet emerged, while modernization and modernity research in sociology was at its peak (Inkeles, 1977; Kahl, 1968). Consequently, modernization theory from sociology “naturally” became the main theoretical framework for psychological research on social change at that time.

Research on this theme has gone through three periods following researchers’ deepening understanding of traditionality and modernity: From 1969 to 1985, researchers continued Western scholars’ understanding of modernization, believing that modernization included both social modernization and human modernization, with the latter mainly manifested as the enhancement of human modernity and the decline of traditionality, understanding human traditionality and modernity as two poles of the same dimension where the growth of one meant the decline of the other, and developing indigenous scales based on this understanding; from 1985 to 2005, researchers no longer viewed modernity and traditionality as two poles of one dimension, but instead understood them as two independent dimensions, each containing multiple sub-dimensions in different domains, and developed new scales based on this new understanding; since 2005, researchers have found that previous understandings of traditionality and modernity could no longer reflect the rapidly changing international and domestic economic and social realities, and based on reflections on past research, have begun to re-understand modernization and develop new scales, with these studies currently ongoing (Gao Xufan & Yang Guoshu, 2011).

In the 1980s, traditionality and modernity research originating in Taiwan, China began to sample from mainland China, and subsequently an increasing number of mainland Chinese psychologists joined the research on modernity (Cai Xiaoyue & Wu Ping, 1999; Guo Hengjie & Xia Yun, 1997; Xu Yan & Cao Xue, 2000). In the past decade or so, an increasing amount of research on change beyond the theme of modernity has emerged in mainland China, marking the entry of Chinese social change research into the second stage. Compared with the first stage, the second stage differs significantly in many aspects: First, the academic foundation and orientation are different. The first stage was mainly based on modernization theory from sociology, while the second stage is based not only on modernization theory but more on theories of modern social psychology, especially cultural psychology. In a sense, the two stages correspond respectively to the sociological and psychological orientations of social psychology. Second, in terms of content, the first stage mainly focused on cultural values and personality outcome variables covered under the categories of traditionality and modernity, while the second stage includes all psychology and behaviors sensitive to social change, involving cultural values, self, cognition, emotion, motivation, mental health, etc. Third, methodologically, the first stage was mainly limited to cross-generational and cross-temporal comparisons in addition to qualitative methods,

while the second stage has adopted various new methods including cultural product analysis, cross-temporal meta-analysis, cross-temporal reconstruction, and laboratory experiments. Finally, the geographical focus differs between the two stages. The first stage mainly focused on social change in Taiwan, China, with researchers primarily from Taiwan; the second stage mainly focuses on social change in mainland China, especially changes over the past forty years, while the researcher team shows a more international tendency, including not only domestic scholars but also many from the West. Compared with the first stage, the second stage obviously has more diverse theoretical foundations, richer content, more varied methods, and a more international research team.

2 Major Research and Findings

To date, psychological research on Chinese social change has been considerable in quantity and has covered a very wide range of psychological and behavioral phenomena. Since these cannot be covered by one or a few social change-related theories (e.g., modernization theory), this article will review and synthesize research across eleven aspects, roughly following the order from macro to micro and from core to peripheral within the domain of psychology (especially social and cultural psychology).

2.1 Changes in Cultural Values

As one of the most frequently studied topics in social change research, numerous studies have examined changes in Chinese values from various perspectives and using different methods.

Research on traditionality and modernity under the modernization theory framework constitutes one major line of research. This area has been reviewed in a dedicated article (Gao Xufan & Yang Guoshu, 2011). Main findings include: 1) Chinese society has experienced and is still undergoing a massive transformation from traditional to modern over the past half-century (Yang, 1996); correspondingly, Chinese cultural values and personality and other psychological changes have manifested as a shift from traditionality (complying with authority, filial piety and ancestor worship, contentment with one's lot, fatalistic self-preservation, male superiority) to modernity (egalitarianism and openness, independence and self-reliance, optimism and enterprise, respect for emotions, gender equality); 2) Although Chinese traditionality continues to decline and modernity continues to strengthen, the two are not necessarily opposed, and many aspects of traditionality still widely exist in modern society (Gao Xufan & Yang Guoshu, 2011; Yang, 1996); 3) Economic development, urbanization, and education are the main drivers of the decline of traditionality and the enhancement of modernity (Guo Hengjie & Xia Yun, 1997; Xu Yan & Cao Xue, 2000; Zhang Xinggui & Zheng Xue, 2002); 4) The connotations of traditionality and modernity continue to change with the development of the times (Gao Xufan & Yang Guoshu, 2011; Wu Chao, Qin Qiwen, & Li Yajuan, 2008).

Another line of research is based on Schwartz' s value theory (Schwartz, 1994, 1997). Schwartz divides human values into four higher-order values: open-to-change, conservation, self-enhancement, and self-transcendence. Openness values emphasize individual autonomy, independence, diversity, and challenge; conservation values emphasize self-control, security, stability, relationships, and tradition; self-enhancement values emphasize personal achievement, status, and fame; self-transcendence values emphasize promoting the welfare of others or even all humanity. Based on this, Egri et al. (2004) examined value differences across three generations of Chinese people (born during the early period of the PRC from 1950-1965, the Cultural Revolution period from 1966-1976, and the reform and opening-up period after 1978), finding that compared with pre-reform generations, post-reform generations showed gradually increasing acceptance of openness, no change in conservation and self-transcendence, and a decline in self-enhancement values compared with pre-reform generations. Tang et al. examined differences across three generations—pre-reform (1961-1977), during reform (1978-1989), and post-reform (1990-1998)—and found that acceptance of openness gradually increased, but there was no change in self-transcendence, self-enhancement, or conservation between pre-reform and post-reform generations; additionally, the relationships between self-enhancement and work performance and between self-transcendence and organizational performance varied by generation (Tang, Wang, & Zhang, 2017).

Other psychological perspectives on value change have involved very diverse content and domains, most of which are related to individualism and collectivism. Ma et al. (2016) surveyed company employees of different ages and found that younger people (especially the post-1990 generation) particularly advocate individualism and reject collectivism. Zhang (2013) found that for older people, advertisements emphasizing collectivistic rather than personal values were more attractive; but for younger generations, individualistic and collectivistic advertisements were equally attractive. Sun et al. (2010) examined two generations of different ages in Shanghai and found that younger generations' values were more secular and individualistic, focusing more on self-enhancement (e.g., pursuing career success), while older generations placed more emphasis on collective interests (e.g., contributing to the nation). Zhao (2018) found that compared with their predecessors, post-1980s company employees paid more attention to work-life balance and valued the more individualistic sense of achievement, self-expression, and meaning derived from work itself. Moore (2005) found that post-1980s youth advocated the individualistic “cool” culture. Zhou et al. (2018) asked grandmother participants to evaluate themselves, their children, and their grandchildren, finding that grandchildren exhibited more behaviors with individualistic values, such as autonomy, self-expression, and curiosity.

Wu Cuiping (2008) found that with economic development, contemporary youth increasingly value spiritual consumption (e.g., traveling) and personalized consumption (e.g., buying brand-name goods), in sharp contrast to their parents' generation, which advocated frugality and valued practicality (also see Hung, Gu, & Yim, 2007). Wang and Nehring et al. (2014) found that contemporary

Chinese people pursue freedom, autonomy, and self-realization more in romantic relationships. Zeng and Greenfield (2015), through a study of Chinese Google e-books, found that words reflecting individualistic values (choice, competition, acquisition, private, autonomy, innovation, fairness, etc.) were increasing, while words reflecting collectivistic values (contribution, public, help, sacrifice, hard-working, obedience, etc.) were decreasing. Xu and Hamamura et al. (2014) found through surveys that in Chinese people's eyes, the importance of values such as materialism, individualism, freedom, equality, and openness was increasing, while the importance of values such as collectivity, loyalty, restraint, and the golden mean was decreasing.

The above studies from various aspects reveal a basic trend in the change of Chinese sociocultural values: individualism is rising while many aspects of collectivism are continuously declining, which is generally consistent with the trend of sociocultural change worldwide over the past half-century (Santos, Varnum, & Grossmann, 2017; Cai, Huang, & Jing, 2019). However, research also shows that not all collectivistic values are declining; some remain popular, and some are even strengthening. For example, Zeng and Greenfield (2015) found that traditional values such as "responsibility" and "obligation" remained stable or increased over the past decades; Xu and Hamamura (2014) found that the importance of traditional values such as family, friends, kinship, and patriotism did not decrease with the development of the times; Yang found that many traditional values (e.g., filial piety, fatalism, ancestor worship) and modern values (autonomy, self-reliance, independence) can not only coexist but even mutually reinforce each other (Yang, 1996). Yang et al. found that the golden mean still has adaptive value in contemporary China (Yang et al., 2016).

Some studies have also examined the impact of major natural or social events on values. Based on Spranger's six value types (theoretical, economic, social, political, religious, aesthetic), Xu Yan et al. explored the impact of major natural and social disasters on college students' values (Xu Yan et al., 2004; Xu Yan, Wang Fang, & Jia Huiyue, 2008). They found that although reform and opening-up made contemporary college students increasingly pragmatic in orientation, major social disasters weakened pragmatic values and strengthened values emphasizing society and health. This suggests that the increasingly strong individualistic values may be curbed under certain conditions, while collectivistic values in decline may be strengthened again.

2.2 Changes in the Self

Existing research on changes in Chinese "self" has involved both cognitive (e.g., self-concept) and affective (e.g., self-esteem) aspects.

As one of the influential foundational theories in cultural psychology, the independent-interdependent self-construal theory generally holds that individuals in Western, particularly North American, individualistic societies mostly possess independent self-construals, while individuals in non-Western,

particularly East Asian, collectivistic societies mostly possess interdependent self-construals (Markus & Kitayama, 1991). The former emphasizes individual autonomy and its expression, while the latter focuses on individuals' relationships with others and harmony. Xu Jiang et al. (2015) surveyed participants of different age groups from six provinces and cities, finding that people born later scored higher on independent self-construal, indicating that with the development of the times, Chinese people's independent self-construal has an increasingly strengthening trend, while the intergenerational difference in Chinese people's interdependent self-construal was not significant (Xu Jiang, Ren Xiaopeng, & Su Hong, 2015). Hamamura and Xu (2015) found that Chinese people increasingly use the first-person singular "I" and decreasingly use the plural "we" in language expression. Yu et al. (2016) also found similar trends. These findings indicate that Chinese people's independent self-construal is becoming more prevalent, while interdependent self-construal is gradually weakening. It is worth noting that research has found that independent self-construal is increasingly important for the well-being of contemporary Chinese people (Cheng, Cheung, & Montasem, 2016), indicating that the adaptability of independent self-construal in contemporary China is growing.

Some studies have also examined other aspects of changes in Chinese self-concept. Wang et al. studied the content of Chinese people's autobiographical memory and found that compared with older generations, younger Chinese generations' autobiographical memory focuses more on individual content and less on others or collective content (Wang, Leichtman, & White, 1998). Liu Dianzhi et al. (2011) found that among contemporary college students, absolutely single-sex-typed individuals in gender self-concept are decreasing, while individuals with androgynous characteristics are increasing.

Other studies have examined changes in the affective aspect of the self, including various self-evaluations such as self-esteem and narcissism. Regarding self-esteem, one meta-analytic study found that Chinese adolescents' (middle school students) scores on the Rosenberg Self-Esteem Scale significantly declined from 1996 to 2009 (Liu & Xin, 2015; but see Zhao Dongyan, 2019); another meta-analysis analyzed Chinese college students' self-esteem levels from 1993 to 2013 and found a significant decline in college students' self-esteem, a trend that did not vary by region or gender (Sha Jingying & Zhang Xiangkui, 2016). The latest meta-analysis on Chinese self-esteem summarized all existing studies involving Chinese self-esteem and found: 1) From 1993 to 2017, Chinese people's self-esteem overall showed an upward trend, but with a process of first declining then rising, with the inflection point appearing around 2008; 2) Modernization is closely related to the rise of Chinese self-esteem; 3) Regarding different groups, middle school students showed no significant change, while both college students and non-student groups showed an upward trend (Li, Li, Mei, & Wang, 2020). Regarding narcissism, Cai et al. (2012) found that Chinese people's narcissism levels showed a gradually rising trend, because younger people, urban residents, people with higher socioeconomic status, only children, and

people with higher individualism levels have higher narcissism levels. However, a recent meta-analysis found that from 2008 to 2017, Chinese youth's narcissism showed a declining trend (Gao, Thomaes, Noortgate, Xie, Zhang, & Wang, 2019).

2.3 Changes in Personality

Based on the distinction between Western and Chinese personality theories and their measurements, research on personality changes among Chinese people can be divided into two categories.

The first category is research based on personality scales originating from the West. Cattell's personality scale has been widely used in China. One study examined 21 applications of Cattell's personality scale from 2000-2009 and found that male college students' stability and boldness showed an upward trend, gradually approaching the level of female college students (Zhou Zhenhua, Zhou Xiufang, & Li Yan, 2011). In recent years, the Big Five personality scale has been increasingly applied in China. A meta-analysis of 65 studies using the Big Five personality scale from 2004-2013 showed that overall, college students' scores on neuroticism, extraversion, openness, agreeableness, and conscientiousness all significantly increased; however, the trends differed between men and women, with men showing upward trends on all dimensions, but women showing no change in openness and a decline in agreeableness (Tian Yuan, Ming Hua, Huang Silin, & Sun Ling, 2017). Another study found that only children scored higher on neuroticism and lower on conscientiousness in the Big Five personality dimensions, leading the authors to speculate that Chinese people's neuroticism may increase while conscientiousness may decrease (Cameron, Erkal, Gangadharan, & Meng, 2013).

The other category consists of studies based on the uniqueness of Chinese culture and doubts about the applicability of Western personality scales in China. Researchers have proposed many indigenous personality theories and developed corresponding personality scales, such as Wang Dengfeng et al.'s Big Seven personality (Wang Dengfeng & Cui Hong, 2003, 2007) and Zhou Xinyue et al.'s seven-factor personality structure (Zhou, Saucier, Gao, & Liu, 2009). The most influential is the Big Four personality theory and the Chinese Personality Assessment Scale (CPAS) developed through collaborative research between Professor Song Weizhen from the Institute of Psychology, Chinese Academy of Sciences and Professor Zhang Miaoqing from the University of Hong Kong (Song Weizhen, Zhang Jianxin, Zhang Jianping, Zhang Miaoqing, & Liang Jue, 1993). These researchers combined cross-cultural and indigenous research paradigms in cultural psychology to propose four aspects of Chinese personality: dependability, individuality, leadership, and interpersonal relatedness. Compared with Western Big Five personality theory, openness is unique to Westerners, while relatedness is unique to Chinese (Cheung et al., 2001); if Chinese Big Four personality and Western Big Five personality are combined, a more culturally universal Big Six personality can be formed (Zhang Jianxin & Zhou Mingjie,

2006). Zhou Mingjie and Zhang Jianxin (2007) compared two Chinese norms of the Chinese Personality Assessment Inventory formed in different periods and found that Chinese people' s "modern personality" is gradually forming, specifically manifested as being more tolerant of others and having enhanced diversity orientation; while the interpersonal relationship dimension reflecting traditional cultural influence is weakening, specifically manifested as declining levels of traits related to traditional cultural core elements such as guanxi, renqing (human sentiment), and mianzi (face).

2.4 Changes in Emotion

Research on emotional changes has mainly focused on various negative emotions, such as anxiety, depression, loneliness, and other negative affects. A series of meta-analyses have found that Chinese adolescents' anxiety has been continuously rising from 1992 to 2017 (Xin Ziqiang et al., 2011; Xin Ziqiang, 2009; Zhang Di, 2015; Xin, Wang, & Sheng, 2020; Xin, Zhang, & Liu, 2010); Chinese people' s depressive emotions have shown an upward trend among both adolescents and the elderly (Li Xiaomin & Han Buxin, 2012; Nie Xiaolu et al., 2013; Xin Ziqiang & Zhang Mei, 2009; Yan Zhimin et al., 2014). Xin and Xin (2015) analyzed Chinese college students' scores on the UCLA Loneliness Scale from 2002-2011 and found that college students' loneliness was increasing. Yan Zhimin et al. found that Chinese elderly people' s loneliness became stronger from 1995-2011 (Yan Zhimin et al., 2014). Feng Yi, through an analysis of positive and negative emotional words in popular song lyrics from 1970-2010, found that the proportion of negative emotional words in lyrics significantly increased during this period, while positive emotional words also increased but not significantly (Feng Yi, 2013). Overall, with economic and social development, Chinese people' s negative emotional experiences have significantly increased, while positive emotions have changed little.

Some studies have also examined the ability to understand others' emotions and regulate one' s own emotions. Yan Zhiqiang, Su Jinlong, and Su Yanjie (2017) found that college students' empathy ability improved from 2009-2015. Liu Dan and Jiao Runkai (2017) found that male college students' emotional intelligence declined from 2000-2014, while female college students remained relatively stable; moreover, the difference in emotional intelligence changes between male and female college students showed a widening trend.

2.5 Changes in Motivation

Social change research has currently mainly involved two types of motivation: achievement motivation and need for uniqueness.

Achievement motivation refers to the internal drive to strive for success in the process of completing tasks, usually including the motivation to approach success and the motivation to avoid failure. Individuals with high achievement motivation are more willing in life to choose things they consider important,

valuable, and likely to succeed at, and are happy to work hard to achieve success. Two early studies consistently found that Chinese college students' achievement motivation levels decreased with grade and age (Xie Cuiling, 2007; Zhang Shuhua & Tang Xueping, 1996), to some extent suggesting that college students' achievement motivation may have a possibility of declining with the development of the times. Recently, Xin Sufei and Wang Yixin (2019) used cross-temporal research to examine the changing trend of Chinese college students' achievement motivation from 1999-2014 and found that Chinese college students' achievement motivation overall showed a downward trend over the 16 years; specifically regarding the two different sides of approaching success and avoiding failure, the results showed that the motivation to approach success did not change significantly, while the motivation to avoid failure increased.

Regarding changes in the need for uniqueness, Su Hong et al. conducted a study on Chinese people's names across multiple large samples and found that from the 1950s to the present, the use of common names has continuously declined, while the use of unique names has continuously increased (Su Hong, Ren Xiaopeng, Lu Kewen, & Zhang Hui, 2016). In another study, Cai et al. used different methods and found through comparisons of the frequency of characters in Chinese names that over the past decades, low-frequency characters have become increasingly common in Chinese names, indicating that more and more Chinese people have unique names (Cai et al., 2018). Cai et al. also studied intergenerational differences in self-reported need for uniqueness and found that Chinese people's need for uniqueness has been increasingly strengthening with the development of the times (Cai et al., 2018). These studies reflect from one side that with the development of the times, Chinese people's need for uniqueness shows an increasingly rising trend.

2.6 Changes in Child Development and Education

Cultural transmission and inheritance are largely realized through education and child development. Cultural psychology research shows that compared with Western societies where individualism prevails, people in collectivistic societies have more avoidance or self-inhibition behaviors (Elliot & Covington, 2001), with shyness being a typical manifestation in childhood. Research has found that with China's rapid development, contemporary Chinese children show less and less shyness, and the social adaptive value of shyness is also decreasing.

In one study, Chen et al. (2005) examined elementary school children's shyness behavior in 1990, 1998, and 2002, and found that Chinese children's shyness levels showed a downward trend across the three time points; moreover, parents' and children's attitudes toward shyness changed from positive to negative, and the relationship between shyness and academic achievement, peer relationships, and mental health changed from positive to negative (Chen, Cen, Li, & He, 2005).

An important reason for changes in children's psychology and behavior may be

that adult parenting styles toward children have changed. Chen (2012) surveyed children in a Chinese school and found that children from urban household registration families had stronger initiative-taking than those from rural household registration families, and this initiative was positively related to parental encouragement; moreover, compared with girls from rural household registration families, girls from urban household registration families had stronger social skills and better school adaptation. The researchers believe this is because in the more competitive urban environment, initiative has greater adaptive value, and parents tend to encourage children's initiative more in the process of raising them. In another study, Zhou et al. surveyed 19 elderly female participants who had children and grandchildren. They examined the characteristics of three generations as perceived by these grandmothers and the characteristics of child-rearing across generations (Zhou et al., 2018). The study found that the elderly believed the younger generation had higher levels of autonomy, curiosity, and self-expression—traits that meet the requirements of modern society—indicating a higher individualistic tendency; while they had lower levels of obedience and shyness—traits that meet the requirements of traditional society—indicating a lower collectivistic tendency; when raising children, the younger generation used more promotion-oriented parenting (praise and support) and less prevention-oriented parenting (control and criticism).

2.7 Changes in Well-Being

Well-being is one of the core indicators for measuring an individual's life and adaptive state, and it is also an internationally recognized important indicator for measuring people's quality of life and social development level. Many scholars have examined the impact of China's rapid development on people's well-being.

Brockmann, Delhey, Welzel, and Yuan (2009) analyzed data from the World Values Survey in 1990 and 2000 and found that Chinese people's life satisfaction declined between 1990 and 2000. Steele and Lynch (2013) added more recent World Values Survey data and found that Chinese people's life satisfaction showed a U-shaped change from 1990-2007, first declining and then rising after 2000. Easterlin et al. (2012) reviewed surveys on Chinese people's well-being by different survey institutions over the past two decades and also found that Chinese people's life satisfaction showed a U-shaped trajectory, declining between 1990-2000 and stabilizing or slightly rising between 2000-2010 (Easterlin, Morgan, Switek, & Wang, 2012; also see Knight & Gunatilaka, 2011). Liu Junqiang, Xiong Moulin, and Su Yang (2012) analyzed data from the Chinese General Social Survey (CGSS) and also found that Chinese residents' life satisfaction rose significantly from 2003-2010. A recent large-sample study based on the Chinese Household Finance Survey found that Chinese people's well-being showed a significant upward trend from 2013-2017 (Clark, Yi, & Huang, 2019). It is evident that Chinese people's well-being declined in the 1990s and began to rise after 2000, a trend that has continued to the present.

More studies have examined changes in life satisfaction among different groups

of Chinese people at different stages of social development. Li Shuangshuang and Li Xueping (2015) found that Chinese college students' life satisfaction significantly increased from 2000-2011. Dong Jie (2016) reviewed literature from 2003-2014 that used indigenous scales to examine urban residents' subjective well-being and found an upward trend in urban residents' subjective well-being. Morgan et al. found that urban residents' life satisfaction showed an upward trend from 2002-2012 (Morgan & Wang, 2019). Hong Yanbi (2017) compared CGSS data from 2005 and 2013 and found that the increase in subjective well-being was particularly pronounced among groups with lower social class. However, Li Chao, Wu Yuheng, and Qin Biao (2016) found that migrant workers' job satisfaction significantly declined from 2003-2013, a phenomenon particularly evident among new-generation migrant workers in inland provinces. A recent study by Zhang et al. found that overall, Chinese people's well-being showed a declining trend across generations; however, when examining Party members and non-Party members separately, they found that Party members' well-being was significantly higher than non-Party members' during the planned economy era, but this advantage gradually disappeared after reform and opening-up (Zhang, Hu, & Zhang, 2020).

Some studies have also examined differences in life satisfaction changes among different social groups. One study found that the well-being gap between urban and rural residents narrowed from 2001-2010 (Zhang Junhua, 2012). Another recent study found that from 2003-2015, the well-being gap among different groups of Chinese people has been widening (Yang, Liu, & Zhang, 2019).

Some researchers have also attempted to explore the reasons for changes in Chinese people's well-being. Theoretically, it is generally believed that in a country like China with a low starting point for development, people's life satisfaction should have a long-term continuous upward trend with economic and social development, only beginning to decline after economic development reaches a certain level. However, during China's rapid economic development in the 1990s, people's life satisfaction first declined and then rose. One explanation is that reform and opening-up in the 1990s brought massive unemployment and layoffs, eliminating the "iron rice bowl" and its associated income security. After 2000, with the recovery of employment rates and the continuous development of the market economy, people's well-being levels improved again (Wang Hongliang & Tu Yafu, 2016; Easterlin et al., 2012). Other studies have shown that from 1990-2007, individualism's predictive power for Chinese people's well-being became increasingly strong (Steele & Lynch, 2013).

2.8 Changes in Mental Health

In recent years, mental health has received unprecedented attention. Over the past decades, research on Chinese people's mental health has been quite substantial. Among these, studies based on the Symptom Checklist-90 (SCL-90) are the most numerous. This scale includes ten factors: somatization, obsessive-compulsive symptoms, interpersonal sensitivity, etc. Since 2005, a large number

of researchers have begun conducting various integrative meta-analyses on published literature, with dozens of articles involving temporal changes, covering multiple special groups including students, teachers, soldiers, doctors, and migrant workers.

These studies have found: 1) The mental health of primary and secondary school students overall remained stable with a slight decline (Fan Huiyong & Zhang Jinfu, 2005; Hao Ping, Zhang Dajun, Su Zhiqiang, & Hu Tianqiang, 2016; Sheng Hongyong, 2008; Wang Qing & Yu Guoliang, 2017; Xin Ziqiang & Zhang Mei, 2009; Yu Guoliang, Li Tianran, & Wang Qing, 2016; Xin, Niu, & Chi, 2012); 2) College students' mental health remained stable with a slight improvement (Chen Shunsen & Chen Chunyu, 2011; Ding Wu & Guo Zhixi, 2017; Hu Qingpo, 2011; Jiang Songmei & Huang Qian, 2016; Luo Mingchun, Huang Xiting, Yan Jinhong, Fu Yanfen, & Yin Kelli, 2010; Xin Sufei & Liu Lijun, Xin Ziqiang, & Lin Chongde, 2018; Xin Sufei, Jiang Wenyuan, & Xin Ziqiang, 2019; Xin Sufei & Liu Lijun, 2019; Xin Ziqiang, Zhang Mei, & He Lin, 2012; Yang Haibo, 2010; Zhang Mei, Sun Dongqing, Xin Ziqiang, & Huang Silin, 2018; Zhang Liying, 2013); 3) Teachers' mental health remained stable with a slight decline (Fan Huiyong & Li Mochuan, 2014; Li Mochuan & Fan Huiyong, 2014; Wang Haibin, Chen Ning, & Chen Feng, 2013; Xiao Tong & Wu Zhihui, 2018; Yang Ruijuan, 2013; Yi Xinfu, Zhao Qian, Hu Weiping, & Li Jun, 2014; Zhao Yunlong, 2015; Zhao Yunlong, 2014); 4) Soldiers' mental health remained stable with a slight improvement (Deng Lifang, 2013; Feng Zhengzhi & Dai Qin, 2008; Li Jingqiang, Wang Bei, Li Kang, & Zhao Ning, 2018; Yi Xinfu, Zhao Qian, & Cai Shushan, 2012; Zhao Mengxue et al., 2017); 5) Migrant workers, miners, and railway workers' mental health remained stable with a slight improvement (Huang Silin et al., 2015; Liu Yujiao, Liu Jian, & Zhu Baoyan, 2018; Yi Xinfu, Liu Yu, Liao Jiangqun, Dou Donghui, & Peng Kaiping, 2010); 6) Women's mental health remained stable with a slight decline (Dong Zhenyin, Li Guizhen, & Yuan Fengwei, 2010; Kong Lingming et al., 2014; Zhao Chunjuan & Xue Hongtao, 2015). A meta-analysis integrating 5,465 studies involving more than four million people showed that Chinese people's mental health overall remained stable with a slight improvement (Liao Youguo & Lian Rong, 2019).

Mental health is closely related to coping styles. Coping styles refer to the cognitive and behavioral ways individuals adopt when facing setbacks or stress, including six factors: problem-solving, self-blame, help-seeking, fantasy, avoidance, and rationalization. Among them, the "problem-solving" and "help-seeking" factors belong to positive coping styles, the "self-blame," "fantasy," and "avoidance" factors belong to negative coping styles, and the "rationalization" factor belongs to mixed coping styles. Xin Ziqiang et al. (2008) studied changes in college students' coping styles from 2001-2006 and found no significant changes in scores on any dimension over the five years (Xin Ziqiang, Liu Chunhui, & Zhang Li, 2008). In contrast, Xin Sufei et al. (2018) studied changes in college students' coping styles from 2001-2015 and found that college students overall increasingly tended to adopt positive coping styles to solve problems (e.g., "problem-solving" and "help-seeking" significantly increased); specifically by gender, male college

students showed significant increases in all aspects except “problem-solving,” while female college students showed significant increases in all aspects except “help-seeking” (Xin Sufei, Liu Lijun, Xin Ziqiang, & Lin Chongde, 2018). These findings by Xin Sufei et al. seem to indicate that when facing difficulties and setbacks, Chinese college students’ positive and negative coping styles both show increasing trends.

2.9 Changes in Trust

Generalized trust toward most people (including strangers) is an important psychological resource for maintaining interpersonal relationships and healthy functioning in modern society (Welzel & Delhey, 2015). Historical data show that Chinese people’ s generalized trust level was once internationally high, comparable to Nordic countries such as the Netherlands and Denmark (Ma Deyong, 2008; Medrano, 2015; Niu, Xin, & Martins, 2010).

However, recent studies have found that lack of trust has become a crisis facing contemporary China. The Chinese Academy of Social Sciences’ 2013 “Report on Chinese Social Mentality (2012-2013)” found through surveys of trust status among residents in Beijing, Shanghai, and other cities that “Chinese urban residents’ trust fails to pass” (Wang Junxiu & Yang Yiyin, 2013). A series of studies based on longitudinal data have also confirmed this trend. For example, a cross-temporal meta-analysis conducted by Xin Ziqiang et al. found that college students’ interpersonal trust levels significantly declined from 1998-2009 (Xin Ziqiang & Zhou Zheng, 2012). In subsequent series of meta-analyses, Xin Ziqiang et al. repeated this trend (Xin & Xin, 2017; Zhang & Xin, 2019). A series of studies using existing open databases have also found similar trends. For example, one study based on World Values Survey data found that Chinese residents’ scores on generalized trust-related items (“most people can be trusted,” “one needs to be careful in dealing with people”) continuously declined in 1990, 1995, 2001, and 2003; a study based on the Asian Barometer Survey also showed that Chinese residents’ trust levels significantly declined compared with 1990 (Ma Deyong, 2008); another analysis based on CGSS (2010-2013) data showed that Chinese residents’ generalized trust level in 2013 was significantly lower than in 2010. These studies indicate that Chinese people’ s trust overall shows a declining trend. However, some individual studies have shown that Chinese people’ s trust levels have gradually improved in recent years (Yang Ming, Meng Tianguang, & Fang Ran, 2011).

Some researchers believe that marketization may be an important reason for the decline in Chinese people’ s trust. Trust levels are lower in economically developed areas than in underdeveloped areas in China, and differences in the degree of marketization across regions can explain these differences in trust levels among residents; moreover, the marketization process can longitudinally predict the decline of Chinese people’ s trust, but trust decline cannot predict the marketization process (Xin & Xin, 2017). Further, Xin Ziqiang et al. believe that marketization leads to the growth of economic man beliefs and reduces ex-

pectations of others' kindness, ultimately leading to a decline in generalized trust. This speculation has been supported by some empirical studies. One comparative study found that college students majoring in economics and non-economics had no difference in generalized trust levels when they first entered college, but after three years, economics students' trust levels were significantly lower than non-economics students' (Xin Ziqiang, Dou Donghui, & Chen Chao, 2013). Another experimental study found that priming economic man concepts directly led to reduced trust levels (Xin & Liu, 2013). However, subsequent research also shows that the impact of economic man beliefs on trust varies by domain, with the consumption domain being a severely affected area (Liu Guofang, Xin Ziqiang, & Lin Chongde, 2016). Some studies have also found that other factors accompanying marketization can lead to trust decline, such as the lack of reputation mechanisms (Liu Guofang & Xin Ziqiang, 2011), increasing income gaps (Yang & Xin, 2019; Zhang & Xin, 2019), intensifying social inequality, lack of institutions/rules (Zhang & Xin, 2019), and prevalence of unspoken rules (Xin Sufei, 2016).

Xin Ziqiang's team has also conducted a series of studies on the micro-mechanisms of trust change. They found in one study that if participants observed others' distrustful behavior, the observers themselves would also become more distrustful, resulting in the so-called "bad apple effect" (one bad apple spoils the barrel; Gino, Ayal, & Ariely, 2009), even though this effect lasts for a limited time (Liu Guofang, Xin Ziqiang, & Lin Chongde, 2017). Another study found that parents' trust levels could predict their children's trust levels, showing a trend of intergenerational transmission (Chi Liping & Xin Ziqiang, 2013). However, subsequent research found that intergenerational transmission mainly occurs between parents and boys (Chi Liping, 2013). These findings indicate that trust decline can occur through both horizontal and vertical transmission pathways.

2.10 Changes in Guanxi and Its Functions

China is a guanxi (relationship) society. Guanxi can satisfy both emotional needs and serve practical purposes. Regarding whether guanxi is becoming more or less important in China's modernization process, there is currently a so-called "Yang-Guthrie" debate in academia (Bian, 2018).

Based on the "market-as-rational-institution" hypothesis, Guthrie believes that with the development of the market economy, individuals and society will both become increasingly rational, rules will play an increasingly important role in daily life, and the importance of guanxi will decline (Guthrie, 1998). This view has been supported by some studies. In a survey study of managers in Shanghai state-owned enterprises (Guthrie, 1998), Guthrie et al. found that these managers rarely considered guanxi in recruitment, supplier and sales selection, and welfare distribution. Guthrie believes this is because state-owned enterprises, like private enterprises, have limited finances and must be profit-oriented, calculate precisely, and act rationally. Hanser also found in a study that in the 1990s,

guanxi played almost no role in first-time job seeking in private enterprises and reformed state-owned enterprises (Hanser, 2002). Huang (2008) interviewed a group of college students (including undergraduates and graduate students) looking for jobs in Shenzhen and found that ability was the key factor in job seeking, with guanxi playing a very small role.

Yang, however, believes that guanxi is a fundamental element and important resource deeply rooted in Chinese history and culture (guanxi-as-cultural-repertoire), with unique adaptive value in Chinese society, and its importance will not weaken with economic and social development, though it may manifest in different forms (Yang, 2002). Consistent with this, some large-sample studies have indeed shown that the role of guanxi has not weakened with economic and social development, and may even be strengthening. Bian et al.'s survey of five cities across the country found that compared with respondents who entered employment through formal channels, those who found jobs through personal guanxi had higher wages and better job matches (Bian & Huang, 2009; also see Zhao, 2013). This phenomenon is consistent with many findings from the 1980s and 1990s, indicating the continued importance of guanxi (Bian & Huang, 2009, 2015; Bian, Huang, & Zhang, 2014). A study based on CGSS data from 2003-2008 also found that the proportion of respondents relying on guanxi to find jobs increased by 20% during the first thirty years of reform and opening-up (Bian, 2008; Tian & Lin, 2016). A longitudinal study spanning 1978-2009 found that the ratio of Chinese people relying on guanxi when looking for jobs showed an overall upward trend; this trend was particularly obvious in non-state-owned enterprises, rising from less than 1% in 1978 to 65% in 2009, while the ratio of finding jobs based on personal merit only rose from 4% to 14% during the same period, a much slower increase (Bian, 2018). Additionally, research has shown that guanxi can help people obtain more promotion opportunities (Zhao, 2013); diverse personal relationships can provide more opportunities to achieve higher status than single relationships (Lin, Ao, & Song, 2008; Son & Lin, 2012).

2.11 Changes in Other Social Attitudes and Behaviors

Psychology and behaviors related to sex are a hot topic in many disciplines including sociology and psychology. A large body of research shows that since reform and opening-up, Chinese people's psychology and behaviors related to sex have undergone tremendous changes. These changes are mainly manifested in the following aspects: First, Chinese people's concepts of marriage and love have changed dramatically. Since the promulgation of the Marriage Law of the People's Republic of China in 1950, people's awareness of marital rights and autonomy has greatly strengthened (Zhang Chengfen & Chen Yingmin, 2000; Xu Anqi, 2000; Xu Anqi & Li Yu, 2004); people can not only independently decide whether to enter marriage but also whether to leave marriage, with divorce rates rising year by year (Li Ping, 2011; Liu Yiping, 2012; Xu Anqi, 1994). Second, Chinese people's sexual consciousness, concepts, or attitudes have undergone

profound changes. Traditional chastity concepts are increasingly fading (Huang Yingying & Pan Suiming, 2012; Xu Anqi, 2003; Ye Lihong, Gao Yabing, & Luo Bowei, 2001), while concepts of sexual freedom, gender equality, and even that women should be more autonomous in sex are strengthening (Farrer, Suo, Tsuchiya, & Sun, 2012; Xiao, Mehrotra, & Zimmerman, 2011). Various sexual behaviors that do not conform to tradition and norms are increasing and becoming more accepted and tolerated by people, such as premarital sex, extramarital sex, homosexuality, and virtual sex (Liu Yuping, Guo Junjun, & Yu Hailong, 2019; Yu Jia & Xie Yu, 2017; Hu, 2016; Tian, Merli, & Qian, 2013; Zhang, 2017; Ruan, 2013; Zhang, Gao, Dong, Tan, & Wu, 2002; Zheng & Zheng, 2014). In daily life, sex is no longer a taboo topic, and attention to and discussion of sex are increasing. In *People's Daily*, the frequency of many keywords related to “sex,” such as premarital sex, homosexuality, extramarital sex, extramarital love, and “mistress,” has become increasingly high (He Ying & Hu Yiqing, 2014).

Many studies have also examined changes in other social attitudes/behaviors beyond sexual behavior. Xin Sufei et al. used cross-temporal meta-analysis and found that Chinese college students' aggression levels decreased from 2005-2015 (Xin Sufei & Zheng Yang, 2019); Chinese elderly people's social support overall declined, but specific trends varied by domain and region: objective support declined in all regions, but subjective support for elderly people in eastern regions increased (Xin Sufei, Yue Yangming, Xin Ziqiang, & Lin Chongde, 2018); Chinese college students' social support also declined (Xin & Xin, 2015). Lin Rongmao et al. (Lin Rongmao, Yan Youwei, & Tang Xiangdong, 2010) found that Chinese high school and college students' sleep quality declined from 1994-2009; but Ling Xihuan and Xin Ziqiang (2014) found no significant change in college students' sleep quality from 1998-2011. Harmel et al. found that the new generation of Chinese people, especially only children, have higher interest in politics, hope to communicate with the government more, and personally participate in politics (Harmel & Yeh, 2014).

3.1 Main Findings and Analysis

The past half-century has witnessed unprecedented rapid development and earth-shaking changes in China, as well as extensive changes in Chinese culture and Chinese people's psychology and behavior. In response, researchers in psychology and related disciplines have conducted a large amount of empirical research covering more than ten aspects including cultural values, self, personality, emotion, motivation, mental health, interpersonal relationships, interpersonal trust, social attitudes, and behaviors, preliminarily revealing the overall picture of the basic trends and multiple complexities of psychological and behavioral changes among Chinese people.

3.1.1 Main Findings on Chinese Psychological and Behavioral Changes and Their Implications

Based on the above review, we can see that the main changes in Chinese people's psychology and behavior include: modernity is gradually strengthening while traditionality is declining; many values related to individualism that are widely popular in modern society (autonomy, uniqueness, etc.) are becoming increasingly prevalent, while many values related to collectivism that were popular in traditional society (obedience, restraint, etc.) are declining; independently constructed self is increasingly strengthening while interdependently constructed self is continuously weakening; personality factors closely related to traditional Chinese culture (involving renqing, mianzi, guanxi, harmony, etc.) are declining, while personality factors that meet the requirements of modern society (involving diversity, openness, tolerance, etc.) are rising; achievement motivation overall is declining, but the motivation to approach success has not declined—rather, the motivation to avoid failure has strengthened; the need for uniqueness is strengthening; negative emotions such as anxiety, depression, and loneliness are generally increasing, while positive emotions change slowly; life satisfaction overall first declined and then stabilized and rose, but different groups show different patterns; mental health overall remained stable with slight improvement, but specific changes vary across different groups—some groups declined, some remained unchanged or improved; coping with setbacks and difficulties shows both positive and negative changes; in terms of interpersonal trust, generalized trust among people overall declined; guanxi continues to play an important role in social life and is even continuously rising; people's subjectively perceived social support is declining; Chinese people are becoming more open and tolerant in sexual behavior and psychology, etc. These findings indicate that over the past half-century, Chinese people's psychology and behavior have undergone extensive and significant changes, suggesting that Chinese people's psychology and behavior continuously change with the times, and that the practice of national governance modernization and social psychological service system construction must keep pace with the times to adapt to the constantly changing psychology and behavior of Chinese people.

3.1.2 Complexity of Chinese Psychological and Behavioral Changes and Its Implications

Existing research has covered quite extensive groups, including different social groups such as students, teachers, farmers, workers, soldiers, and company employees in terms of identity; various age groups from children, youth to the elderly in terms of age; and coastal, inland, and remote areas in terms of region. Since different groups have different demographic, sociological, and psychological characteristics and are in different social ecological environments, the trends of psychological and behavioral changes vary in many aspects. For example, regarding recent changes in Chinese people's mental health, although the overall trend is stable with slight improvement, research based on different groups

has also found that the impact of social change on mental health differs across groups. Some groups' mental health levels are increasing, such as soldiers; some are declining, such as primary and secondary school students. The characteristic that the impact of social change varies by group means that in the current process of building a social psychological service system, we must not only grasp the overall trend but also understand the unique impacts of social change on specific groups. No policies or measures can be one-size-fits-all; they must be adjusted according to the different situations of different groups, being relatively robust at the macro level and more flexible at the micro level.

Existing research shows that psychological and behavioral changes are not monotonically linear. First, some cultural change-related psychological and behavioral indicators have different trends in different time periods. For example, some studies have found that Chinese people's well-being declined in the 1990s but has shown a rising trend in recent years; generalized trust has mostly been declining but has shown signs of recovery recently. Second, some cultural-psychological indicators may change their speed or even direction due to some major social events. For example, some studies have shown that Chinese college students' values changed significantly before and after the Wenchuan earthquake and SARS. This means we need to recognize that some social-psychological problems that emerge in development may only be temporary and are twists and turns in progress, thereby maintaining a positive attitude that neither avoids problems nor loses optimism about the future.

Existing research also shows that the cultural changes formed by social change and their psychological consequences have both positive and negative aspects. On the one hand, the enhancement of values and qualities such as diversity, openness, tolerance, independence, autonomy, and responsibility helps Chinese people adapt to modern society in the context of globalization and contributes to China's strategic advocacy and efforts to build a community with a shared future for mankind. On the other hand, social change has also brought many negative impacts, notably the decline of interpersonal trust, the rise of large amounts of negative emotions, and the decline of mental health in some groups. These negative consequences should be avoided, reduced, or eliminated as much as possible. In a sense, the national advocacy in recent years for building a social psychological service system is a strategic response to the large number of psychological problems and their changes that have emerged in the process of social development. The simultaneous existence of positive and negative impacts also suggests that we need to comprehensively, scientifically, and dialectically evaluate the process and impacts of reform and opening-up and social development, and actively respond to possible negative impacts.

Finally, how should we understand the various inconsistent findings in existing research? On the one hand, it may reflect an objective reality. A study usually examines changes in a specific group during a specific time period, and it is entirely possible that psychological and behavioral changes in different groups during different time periods show different trends; some studies are

conducted at the individual level (cross-sectional individual data cross-temporal comparisons), while others are conducted at the group level (e.g., cross-temporal meta-analysis), and the laws at the individual level and group level may not be consistent (Na et al., 2010; Robinson, 1950). On the other hand, many inconsistencies may also be related to the methods used. The vast majority of studies only use one method, and the results obtained by almost every method are a mixture of multiple effects, with social change being only one of them. In addition, when these methods compare data from different times, spaces, and samples, issues such as sample representativeness and measurement equivalence of research content may also make results inconsistent. In view of this, we need to be particularly cautious when interpreting specific research findings.

3.1.3 Basic Trends in Chinese Psychological and Behavioral Changes and Their Implications

Although Chinese cultural and psychological-behavioral changes present a complex picture, based on the main theoretical framework of cultural psychology—individualism and collectivism—we can still identify some basic trends: individualism and various cultural-psychological behaviors compatible with it that are widely popular in modern society are rising, while collectivism and various cultural-psychological behaviors compatible with it that were widely popular in traditional society are declining (Cai et al., 2019). For example, many modern cultural values and individual qualities such as equality, autonomy, independence, openness, diversity, and tolerance are strengthening, while many traditional values such as rigid conformity and male superiority are declining. However, we also find that some modern concepts and psychologies expected to rise in the world change system, such as self-transcendence, have not risen; while some values and psychologies expected to decline, such as self-enhancement, have not declined. At the same time, some elements of traditional Chinese culture such as filial piety and ancestor worship, emphasis on family, emphasis on kinship and friendship, and emphasis on guanxi continue, and some are even continuously strengthening. Previous research based on Taiwan, China also found similar results (Lu & Yang, 2006). This suggests that contemporary China is a society where multiple cultures coexist, with widespread collisions and integrations of tradition and modernity, East and West, individualism and collectivism. It can be expected that in today's increasingly irreversible globalization, multicultural interaction and coexistence will be the basic feature of the future world. In this regard, we must fully understand and actively respond, especially by leveraging the characteristics of traditional Chinese culture that emphasize holistic and dialectical thinking, striving to utilize the advantages of multiculturalism (e.g., beneficial for creativity) while guarding against the negative elements of various cultures, and paying attention to coordinating the conflicts that may arise in the interaction process of various cultures or their elements, maintaining social harmony and stability.

3.2 Future Research Directions

Undoubtedly, the large body of research on cultural change and psychological changes in China during its modernization process has important theoretical and practical value. However, we should also recognize that, similar to social change research internationally (Cai et al., 2019), Chinese social change research is also in its infancy, with many areas not yet covered and broad development space for the future. In addition to replicating existing studies using different methods, future research can be expanded in the following directions.

3.2.1 Expand Existing Research Domains and Content

Contemporary psychology, especially cultural psychology, has revealed a large number of psychologies and behaviors sensitive to micro or macro social ecological environments. Theoretically, all psychologies sensitive to social ecological environments need to be re-examined from a dynamic, changing perspective. In this sense, from modern psychological topics such as attention, intelligence, and thinking styles, to relatively indigenous topics such as changes in the “differential mode of association” closely related to guanxi (where “insiders” change from blood relatives to pseudo-kin), changes in family structure (the disintegration of extended families, vertical becoming flat), and changes in interpersonal interaction patterns (increased mobility, rising importance of mixed relationships), etc., all need to be explored in future research on areas not yet covered by social change.

3.2.2 Strengthen Research on Changes in the Connotation of Psychological Constructs Itself

When existing research examines changes in certain cultural psychologies, it usually assumes that the cultural psychology has the same connotation across different eras, and based on this, compares its average levels. However, research from both the West and China shows that this assumption is not always reasonable. For example, a Western study found that people in different eras have different understandings of happiness; in the past, people understood happiness more as a result of good luck, but now they understand it more as a result of personal success (Oishi et al., 2013). China also has many similar findings. For example, some research has found that grandparents’ generation understood obedience more as whether children help with household chores, while grandchildren’ s generation understood obedience more as a common behavior in intergenerational conflict (Zhou et al., 2018). These findings suggest that when studying a certain cultural value or psychological behavior, what changes may be not only the level but also the connotation. Therefore, changes in construct connotation should also be a direction for future research.

3.2.3 Strengthen Research on Changes in Relationships Between Different Psychologies and Behaviors

Most research has focused on changes in the levels of psychologies and behaviors themselves, with only a few studies examining changes in relationships between variables, especially the relationships between psychology, behavior, and adaptation. For example, one study found (Chen et al., 2005) that shyness was a positive personality trait in China in 1992, associated with good social adaptation and better academic performance. But by 2002, not only had the average level of children's shyness declined, but its relationship with psychological adaptation had also changed, transforming from a factor beneficial to adaptation to a detrimental factor. Similarly, will the relationships between various cultural values and psychological adaptation also change with social change? In a more general sense, will the relationships between various psychologies and behaviors also undergo some changes? Future research needs to examine these questions against the background of social change.

3.2.4 Strengthen Research on the Causes Behind Cultural and Psychological-Behavioral Changes

Most existing research only reveals phenomena (e.g., whether and how changes occur), with few studies examining the specific factors causing changes. Although modernization theory from the West (Inglehart & Baker, 2000), social change and human development theory (Greenfield, 2009), and others have macroscopically pointed out some possible factors, they are often not refined. For example, research shows that the mental health of Chinese primary and secondary school students is declining, but what social changes have caused this decline? Changes in academic pressure, parent-child relationships, and social environment may all be possible reasons. Similarly, research shows that Chinese people's negative emotions are increasing—is this behind it due to increased uncertainty brought by social mobility? Changes in the quantity and mode of interpersonal interaction brought by technological development? Or increased feelings of social injustice? Clarifying the specific causes or mechanisms of change not only has important theoretical value but can also provide scientific guidance for intervention.

3.2.5 Strengthen Research on the Processes and Mechanisms of Social Change's Impact on Cultural Psychology

It is generally believed that there are four possible sources of cultural change or transformation: input of foreign cultures, inheritance and elimination of traditional culture, creation of new cultural elements, and random variation during the transformation process. So, how do these four different sources play a role independently or jointly in the process of Chinese cultural change? What are the specific pathways? What are the boundary conditions for various effects? What is the relationship between horizontal transmission and vertical inheritance? How to promote or conduct cultural innovation? Answering these ques-

tions can not only help us understand Chinese cultural change but also help us understand cultural change processes in a general sense.

Contemporary cultural psychology research also shows that culture's influence on specific psychologies and behaviors may function through either subjective culture or inter-subjective culture (Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010). In addition, human genes, brain, and cultural behavior mutually influence and construct each other (Chiao, 2009; Kim & Sasaki, 2014). These findings provide new paths and perspectives for future research to reveal the behavioral and neural mechanisms of cultural-psychological changes.

3.2.6 Strive to Build More Explanatory Theories Suitable for China

The most influential theories explaining social change are modernization theory (Inglehart & Baker, 2000; Welzel, 2013) and social change and human development theory (Greenfield, 2009). Both had an implicit early expectation that with economic development, cultural values and psychological behaviors related to individualism would become increasingly prevalent, while cultural values and psychological behaviors related to collectivism would decline (Inglehart & Baker, 2000; Welzel, 2010). However, a large body of existing research has found more complex trends of change (Cai et al., 2019). For example, East Asian countries such as Japan, South Korea, and Singapore have all achieved modernization, but many traditions of Confucian culture have been well preserved, and some have even been strengthened. To explain these inconsistent phenomena, scholars such as Inglehart have revised early modernization theory, acknowledging that traditional cultural heritage can continue to some extent (e.g., Inglehart & Baker, 2000). However, there is a lack of in-depth research on why it continues, which cultural components will continue, and how continued traditional culture and modern culture interact and coexist. Future research on Chinese social change should strive to build more inclusive and explanatory theories to answer these questions.

The world pattern is undergoing changes unseen in a century, and psychologists and researchers in related disciplines have conducted a large amount of research on China's unprecedented social change. In this article, we have systematically organized and introduced relevant research from a psychological perspective for the first time in recent decades, and attempted to point out some directions that urgently need research in the future. These completed and future studies can help us deeply and comprehensively understand the impact of Chinese social change on Chinese culture and Chinese people's psychology and behavior, and help us understand China and Chinese people, including the past, present, and future. At the same time, the relationship between social change and cultural-psychological change is becoming a frontier hotspot in cultural psychology (Grossmann & Na, 2014). Research on this academic frontier based on the rapid changes that have occurred and are occurring in China will also help understand the general and specific laws of how social change influences cultural psychology and behavior, and answer many fundamental questions in psychol-

ogy. Practically, the laws of Chinese people' s psychological and behavioral changes revealed by these studies will also have significant guiding significance for China' s current and future national construction and the improvement of national physical and mental health and well-being (Fu Xiaolan & Cai Hua-jian, 2016). It is precisely based on this recognition of the importance of social change issues that at the “First World Science and Technology Development Forum” held in Beijing at the end of 2019, “the impact of social change on human physical and mental health” was listed as one of the top ten scientific issues for future humanity (Xinhua Net, 2019). Riding this east wind, we also hope and call on more and more psychologists to join the research on this major historical issue, both to promote understanding of China and Chinese people in this great transformation, and to make unique contributions to the development of psychology worldwide.

References

- Cai Xiaoyue, & Wu Ping. (1999). Research on the modernity of concepts among Chinese adolescent students. *Psychological Science*, (02), 148-151.
- Chen Shunsen, & Chen Chunyu. (2011). Changes in college students' mental health over the past 20 years. *Journal of Zhangzhou Normal University (Natural Science Edition)*, 24(2), 96-101.
- Chi Liping. (2013). Trust: Intragenerational similarity in parents and inter-generational transmission from parents to children. *Acta Psychologica Sinica*, 45(3), 336-344.
- Chi Liping, & Xin Ziqiang. (2013). The mediating mechanism of trust inter-generational transmission: A conceptual model. *Journal of Capital Normal University (Social Sciences Edition)*, (1),
- Ding Wu, & Guo Zhixi. (2017). The change of mental health of rural college students in China (2000~2015): A cross-temporal study. *Ideological and Political Education Research*, (2),
- Deng Lifang. (2013). A meta-analysis of Chinese pilots' mental health in the past 10 years. *Psychological Science*, 36(1), 228-233.
- Dong Jie. (2016). The ten-year change of residents' subjective well-being in China' s urbanization process. *Journal of Southwest Minzu University (Humanities and Social Sciences Edition)*, 37(11),
- Dong Zhenyin, Li Guizhen, & Yuan Fengwei. (2010). Analysis of Chinese women' s mental health status—A cross-temporal study. *Health Vocational Education*, 28(19),
- Xinhua Net. Top ten scientific issues for human social development in 2019 released. Retrieved 2019-10-17 from http://www.xinhuanet.com/tech/2019-10/17/c_1125113994.htm
- Fan Huiyong, & Li Mochuan. (2014). The impact of economic and social factors

on primary and secondary school teachers' mental health: Analysis based on historical data. *Shanghai Educational Research*, (2),

Fan Huiyong, & Zhang Jinfu. (2005). A meta-analysis of middle school students' SCL-90 survey results in the past decade. *Psychological Science*, 28(6), 1424-1326.

Feng Yi. (2013). *Individualism in contemporary China: An examination from the perspective of cultural change* (Master's thesis). Institute of Psychology, Chinese Academy of Sciences, Beijing.

Fu Xiaolan, & Cai Huaqian. (2016). Peace of mind leads to national stability, peace of mind leads to national governance—Grasping the pulse of the times' psychology and enhancing national cohesion. *Bulletin of Chinese Academy of Sciences*, 31(11),

Feng Zhengzhi, & Dai Qin. (2008). A meta-analysis of Chinese soldiers' mental health status. *Acta Psychologica Sinica*, 40(03), 358-367.

Gao Xufan, & Yang Guoshu. (2011). Review and prospect of research on Chinese psychological traditionality and modernity. *Journal of National Changhua University of Education*, 100(19), 1-11.

Hao Ping, Zhang Dajun, Su Zhiqiang, & Hu Tianqiang. (2016). Analysis of mental health status changes among Chinese 4th-6th grade primary school students from 1995-2011. *Chinese School Health*, 37(4), 597-601.

Guo Hengjie, & Xia Yun. (1997). The relationship between college students' personal modernity, traditionality and mental health. *Abstracts of the 8th National Psychology Academic Conference*

He Ying, & Hu Yiqing. (2014). An examination of the discourse changes of "sexual concepts" since reform and opening-up—Taking *People's Daily* as an example. *Press Circles* (21), 24-29.

Hong Yanbi. (2017). The change of happiness class differences by redistribution (2005-2013). *Society*, 37(2), 106-132.

Hu Qingpo. (2011). A meta-analysis of Chinese college students' psychological surveys from 2001-2005. *Shanghai Preventive Medicine*, 23(10), 490-493.

Huang Silin, Hou Jiawei, Zhang Mei, Xin Ziqiang, Zhang Hongchuan, Sun Ling, & Dou Donghui. (2015). A cross-temporal study of mental health changes among Chinese migrant workers: 1995-2011. *Acta Psychologica Sinica*, 47(4), 466-477.

Huang Yingying, & Pan Suiming. (2012). Love and sex among Chinese boys and girls—Based on a 2010 national random sample survey of 14-17 year olds. *China Youth Study*, 7, 57-63.

Jiang Songmei, & Huang Qian. (2016). A cross-temporal study of Chinese graduate students' mental health status. *Journal of Nanjing Medical University*

(*Social Sciences Edition*), (4), 281-287.

Xie Cuiling. (2007). Research on the developmental characteristics of college students' achievement motivation. *Journal of Inner Mongolia Normal University (Philosophy and Social Sciences Edition)*, 10(4), 23.

Kong Lingming, Zhang Liyi, Mei Guisen, Ren Zhongwen, Zhang Zhibin, Zou Huagen, Liu Xiaohui, & Chen Jijun. (2014). Maladjustment status of Chinese female soldiers and its relationship with temporal changes. *China Journal of Health Psychology*, 22(5), 727-729.

Li Chao, Wu Yuheng, & Qin Biao. (2016). The change of Chinese migrant workers' job satisfaction: 2003-2013. *Economic System Reform*, (1), 77-84.

Li Jingqiang, Wang Bei, Li Kang, & Zhao Ning. (2018). A cross-temporal study of Chinese military pilots' mental health status. *Chinese Journal of Health Statistics*, 35(2),

Li Mochuan, & Fan Huiyong. (2013). A meta-analysis of Chinese primary school teachers' mental health from 1995-2012. *Psychology Progress*, 4, 123-128.

Li Ping. (2011). A sociological analysis of the rising divorce rate in rural China. *China Youth Study*, 2011(5), 17-20.

Li Shuangshuang, & Li Xueping. (2015). A meta-analysis of the change of college students' subjective well-being. *Psychology: Techniques and Applications*, (10), 12-17.

Li Xiaomin, & Han Buxin. (2012). The changing trend of depression detection rate among urban elderly over the years. *Chinese Journal of Gerontology*, 32(8), 3496-3499.

Liao Youguo, & Lian Rong. (2019). A cross-temporal study of national mental health changes in the past 30 years. *Journal of Southwest University (Social Sciences Edition)*, 45(2),

Lin Rongmao, Yan Youwei, & Tang Xiangdong. (2010). A meta-analysis of Chinese adolescents' Pittsburgh Sleep Quality Index survey results in the past 15 years. *Chinese Mental Health Journal*, 24(11), 839-844.

Ling Xihuan, & Xin Ziqiang. (2014). A cross-temporal study of college students' sleep quality changes. *Chinese Mental Health Journal*, 28(10), 786-790.

Liu Dan, & Jiao Runkai. (2017). A cross-temporal study of Chinese college students' emotional intelligence changes: 2000-2014. *Heilongjiang Researches on Higher Education*, (9), 113-116.

Liu Dianzhi, Huang Huixin, Jia Fengqin, Gong Qian, Huang Qi, & Li Xia. (2011). The new college student gender role scale reveals gender role changes. *Acta Psychologica Sinica*, 43(06), 639-649.

- Liu Guofang, & Xin Ziqiang. (2011). Reputation mechanisms in indirect reciprocity: Impression, reputation, labels and their transmission. *Advances in Psychological Science*, 19(2), 233-242.
- Liu Guofang, Xin Ziqiang, & Lin Chongde. (2016). The impact of economic man beliefs on trust: The moderating role of trust themes. *Psychological Science*, 39(1), 166-171.
- Liu Guofang, Xin Ziqiang, & Lin Chongde. (2017). The bad apple effect and its transmission in interpersonal trust. *Studies of Psychology and Behavior*, 15(5), 691-696.
- Liu Yiping. (2012). A sociological analysis of high divorce rates in the context of contemporary Chinese social change. *Journal of Sichuan University of Science & Engineering (Social Sciences Edition)*, (2), 13-17.
- Liu Yujiao, Liu Jian, & Zhu Baoyan. (2018). Research on mental health status of Chinese coal mine underground workers from 2007-2014. *Journal of Safety and Environment*, 18(1),
- Liu Yuping, Guo Junjun, & Yu Hailong. (2019). Premarital cohabitation, cohabitation spread and marital stability of Chinese residents: Self-selection and its changes. *Northwest Population*, 40(01), 87-96.
- Liu Junqiang, Xiong Moulin, & Su Yang. (2012). National happiness during economic growth—A tracking study based on CGSS data. *Social Sciences in China*, 12, 82-102.
- Luo Mingchun, Huang Xiting, Yan Jinhong, Fu Yanfen, & Yin Kelli. (2010). A meta-analysis of mental health status of Chinese ethnic minority college students. *Psychological Science*, (4),
- Ma Deyong. (2008). Trust, the origin of trust and changes in trust. *Open Times*, 4, 72-86.
- Nie Xiaolu, Wang Hongying, Sun Feng, Yang Zhirong, Tang Shaowen, Tao Qingmei, Wang Huali, Lü Xiaozhen, Yu Xin, & Zhan Siyan. (2013). Detection rate of depressive mood in Chinese community elderly from 2000-2012—Systematic review and updated meta-analysis. *Chinese Mental Health Journal*, 27(11), 805-814.
- Qu Haiyuan. (1971). *The relationship between personal modernization level and personality* (Master's thesis). Institute of Psychology, National Taiwan University, Taipei.
- Sha Jingying, & Zhang Xiangkui. (2016). A cross-temporal study of Chinese college students' self-esteem changes: 1993-2013. *Advances in Psychological Science*, 24(11), 1712-1722.
- Sheng Hongyong. (2008). A meta-analysis of university freshmen SCL-90 survey results from 1996-2005. *Journal of Preventive Medicine of Chinese People's Liberation Army*, 26(1), 45-46.

- Song Weizhen, Zhang Jianxin, Zhang Jianping, Zhang Miaoqing, & Liang Jue. (1993). The significance and procedure of developing the Chinese Personality Assessment Scale (CPAI). *Acta Psychologica Sinica*, 25(04), 66-73.
- Su Hong, Ren Xiaopeng, Lu Kewen, & Zhang Hui. (2016). Name evolution and temporal changes. *Youth Studies*, (3), 31-38.
- Tian Yuan, Ming Hua, Huang Silin, & Sun Ling. (2017). A cross-temporal study of Chinese college students' personality changes from 2004 to 2013. *Psychological Development and Education*, 33(1), 30-36.
- Wang Haibin, Chen Ning, & Chen Feng. (2013). A cross-temporal study of primary and secondary school teachers' mental health status. *Shanghai Educational Research*, (2), 41-45.
- Wang Dengfeng, & Cui Hong. (2003). The development process and preliminary results of the Chinese Personality Scale (QZPS). *Acta Psychologica Sinica*, 35(1), 127-136.
- Wang Dengfeng, & Cui Hong. (2007). Chinese-Western differences in personality structure and characteristics of Chinese personality. *Advances in Psychological Science*, 15(02), 196-202.
- Wang Hongliang, & Tu Yafu. (2016). Research on China's "happiness-income paradox" phenomenon. *Journal of Nanjing Audit University*, (2016 02), 31-39.
- Wang Junxiu, & Yang Yiyin. (2013). *Report on Chinese Social Mentality (2012-2013)*. Beijing: Social Sciences Academic Press.
- Wang Qing, & Yu Guoliang. (2017). A cross-temporal study of junior high school students' mental health. *Chinese Journal of Special Education*, 11, 74-80.
- Wu Chao, Qin Qiwen, & Li Yajuan. (2008). A survey of contemporary college students' filial piety concepts—A study on the changes of youth values in Chinese society since reform and opening-up. *Youth Exploration*, 2008(1), 40-43.
- Wu Cuiping. (2008). 30 years of reform and opening-up and youth concept changes—30 years of reform and opening-up and youth consumption concept changes. *China Youth Study*, 2008(1), 17-20.
- Xiao Jihua, & Xu Xiufeng. (1996). A study on the validity and reliability of the "Coping Styles Questionnaire". *Chinese Mental Health Journal*, 10(4), 164-168.
- Xiao Tong, & Wu Zhihui. (2018). The change of rural teachers' mental health status in China (1991-2014): A cross-temporal study. *Educational Science Research*, 69
- Xin Sufei. (2016). *Unspoken rules identification and its impact on trust* (Doctoral dissertation). Beijing Normal University.
- Xin Sufei, & Wang Yixin. (2019). A cross-temporal study of Chinese college students' achievement motivation changes: 1999-2014. *Psychological Development*

and *Education*, 35(3),

Xin Sufei, & Zheng Yang. (2019). A cross-temporal study of Chinese college students' aggression level changes. *Chinese Mental Health Journal*, 7, 550-555.

Xin Sufei, Jiang Wenyuan, & Xin Ziqiang. (2019). A cross-temporal study of medical students' mental health changes from 1993 to 2016. *Advances in Psychological Science*, 27(7),

Xin Sufei, Liu Lijun, Xin Ziqiang, & Lin Chongde. (2018). A cross-temporal study of Chinese college students' coping style changes. *Studies of Psychology and Behavior*, 16(6),

Xin Sufei, Wang Yixin, & Lin Chongde. (2018). A cross-temporal study of higher vocational students' mental health level changes: 1999-2016. *Educational Research*, 18(11),

Xin Sufei, Yue Yangming, Xin Ziqiang, & Lin Chongde. (2018). Changes in Chinese elderly' s social support from 1996 to 2015: A cross-temporal study. *Psychological Development and Education*, 34(6), 672-681.

Xin Sufei, & Liu Lijun. (2019). The change of ethnic minority college students' mental health level—From the perspective of cross-temporal study. *Youth Studies*, 12(2),

Xin Ziqiang. (2019). Marketization and changes in interpersonal trust. *Advances in Psychological Science*, 27(12), 1951-1966.

Xin Ziqiang, Dou Donghui, & Chen Chao. (2013). Does studying economics reduce interpersonal trust? The impact of economics major study on college students' interpersonal trust. *Advances in Psychological Science*, 21(1), 31-36.

Xin Ziqiang, & Zhang Mei. (2009). The change of middle school students' mental health since 1992: A cross-temporal study. *Acta Psychologica Sinica*, 41(1), 69-78.

Xin Ziqiang, & Zhou Zheng. (2012). A cross-temporal study of college students' interpersonal trust changes. *Advances in Psychological Science*, 20(3), 344-353.

Xin Ziqiang, Liu Chunhui, & Zhang Li. (2008). A cross-temporal study of male and female college students' coping styles from 2001-2006. *Journal of China Women' s University*, 20(3),

Xin Ziqiang, Xin Sufei, & Zhang Mei. (2011). The change of college students' anxiety from 1993 to 2009: A cross-temporal study. *Psychological Development and Education*, 27(6),

Xin Ziqiang, Zhang Mei, & He Lin. (2012). A cross-temporal study of college students' mental health changes. *Acta Psychologica Sinica*, 44(5), 664-679.

Xin Ziqiang. (2009). The decline of adolescents' mental health level and its countermeasures. *Mental Health Education in Primary and Secondary Schools*, 24(4), 4-7.

- Xu Anqi. (2003). The latest report on unmarried youth' s sexual attitudes and behaviors. *Youth Studies*, (8), 12-22.
- Xu Anqi. (2000). Mate selection criteria: Fifty years of changes and their causes. *Sociological Studies*, (6), 18-30.
- Xu Anqi. (1994). The current situation, characteristics and trends of divorce in China. *Shanghai Social Sciences Academic Quarterly*, (2).
- Xu Anqi, & Li Yu. (2004). Youth mate selection process: Changes in the transformation period. *Youth Studies*, (1), 16-25.
- Xu Jiang, Ren Xiaopeng, & Su Hong. (2015). Intergenerational changes in Chinese people' s independent and interdependent self-construals. *Psychology Progress*, 5(02), 67-74.
- Xu Yan, & Cao Xue. (2000). Personality differences between Beijing and Hong Kong college students from the perspective of changes from traditionality to modernity. *Psychological Exploration*, 76(4), 44-58
- Xu Yan, Wang Fang, & Jia Huiyue. (2008). A comparison of value types between Sichuan and Beijing college students after the 5.12 earthquake. *Psychological Exploration*, 28(4), 46-50.
- Xu Yan, Liu Jia, Jiang Jiang, Wang Fang, Zheng Yuezhong, & Fu Tao (2004). The change process of college students' values during the SARS sudden disaster. *Psychological Exploration*, 91(3),
- Yan Zhimin, Li Dan, Zhao Yuhan, Yu Lin, Yang Xun, Zhu Shuirong, & Wang Ping. (2014). Increasingly lonely Chinese elderly: A cross-temporal study. *Advances in Psychological Science*, 22(7), 1084-1091.
- Yan Zhiqiang, Su Jinlong, & Su Yanjie. (2017). The temporal change of empathy: A cross-temporal meta-analysis. *Psychology: Techniques and Applications*, 5(10), 578-585.
- Yang Guoshu. (2008). Psychological traditionality and modernity. In *Indigenous Chinese Psychology (Vol. 2)* (pp. 688-720). Chongqing: Chongqing University Press.
- Yang Haibo. (2010). A meta-analysis of Chinese university freshmen SCL-90 survey results in the past 10 years and determination of their norms. *Chinese School Health*, 31(1), 88-90.
- Yang Ming, Meng Tianguang, & Fang Ran. (2011). Social trust in a changing society: Stock and change—1990-2010. *Peking University Journal (Philosophy and Social Sciences Edition)* (06), 100-109.
- Yang Ruijuan. (2013). A cross-temporal study of mental health levels of teachers in different occupational categories (1995-2011). *Teacher Education Research*, 25(4), 45-50.

- Yang Yiyin. (2010). Personality change and changing personality: Personality research from the perspective of social change. *Journal of Southwest University (Social Sciences Edition)*, 36(4), 1-8.
- Ye Lihong, Gao Yabing, & Luo Bowei. (2001). Research on contemporary college students' sexual concepts. *Chinese Mental Health Journal*, 15(3), 188-189.
- Yi Xinfu, Liu Yu, Liao Jiangqun, Dou Donghui, & Peng Kaiping. (2010). A cross-temporal study of railway employees' mental health status: 1988-2009. *Journal of Beijing Jiaotong University (Social Sciences Edition)*, 9(3), 47-53.
- Yi Xinfu, Zhao Qian, & Cai Shushan. (2012). A cross-temporal study of Chinese soldiers' mental health status: 1990-2007. *Acta Psychologica Sinica*, 44(2), 226-236.
- Yi Xinfu, Zhao Qian, Hu Weiping, & Li Jun. (2014). A cross-temporal study of Chinese teachers' mental health status: 1994-2011. *Journal of Beijing Normal University (Social Sciences Edition)*, (3), 12-22.
- Yu Guoliang, Li Tianran, & Wang Qing. (2016). A cross-temporal study of high school students' mental health. *Educational Research*, 37(10), 113-122.
- Yu Jia, & Xie Yu. (2017). Analysis of premarital cohabitation status and influencing factors among Chinese residents. *Population Research*, 41(02), 3-16.
- Zhang Di. (2015). The change of mental health status among college freshmen from different origins (2006-2013). *Psychological Exploration*, 35(6), 561-566.
- Zhang Chengfen, & Chen Yingmin. (2000). A survey of contemporary rural youth' s marriage and love concepts. *Journal of Shandong Normal University (Humanities and Social Sciences Edition)*, (5), 81-83.
- Zhang Jianxin, & Zhou Mingjie. (2006). Exploring Chinese personality structure—The six-factor hypothesis of personality traits. *Advances in Psychological Science*, 14(04), 574-585.
- Zhang Junhua. (2012). Urban-rural economic development differences and happiness index—Based on data analysis from 2001-2010. *Academic Forum*, 35(12),
- Zhang Liying. (2013). The change of university freshmen' s mental health from 1994 to 2012: A cross-temporal study. *Science and Technology Innovation Herald*, (17), 217-218.
- Zhang Mei, Sun Dongqing, Xin Ziqiang, & Huang Silin. (2018). A cross-temporal study of mental health changes among impoverished college students in China: 1998-2015. *Psychological Development and Education*, 34(5), 625-632.
- Zhang Shuhua, & Tang Xueping. (1996). A survey research on children' s achievement motivation status. *Journal of Shenyang Normal University (Social*

Science Edition), (2), 35-39.

Zhang Xingguo, & Zheng Xue. (2002). A comparison of urban-rural differences in adolescents' personality modernity. *Psychological Development and Education*, (3), 6-11.

Zhao Chunjuan, & Xue Hongtao. (2015). A cross-temporal study of ICU nurses' mental health status. *Nursing Research*, 29(3), 793-797.

Zhao Dongyan. (2019). A cross-temporal study of primary and secondary school students' self-esteem levels. Master' s thesis

Zhao Mengxue, Feng Zhengzhi, Wang Yichao, Lai Wei, Hu Feng, Liu Keyu, Xia Fan, Jiang Juan, Wang Jia, & Xia Lei. (2017). A cross-temporal study of mental health status of soldiers stationed at high altitude from 1993-2013. *Acta Psychologica Sinica*, 49(5), 653-662.

Zhao Yunlong. (2014). A cross-temporal study of Chinese university teachers' mental health changes: 2001-2010. *Modern Preventive Medicine*, 41(15), 2769-2772.

Zhao Yunlong. (2015). The change of Chinese primary and secondary school teachers' mental health in 20 years. *Social Psychology*, (6), 3-13.

Zhou Mingjie, & Zhang Jianxin. (2007). Chinese social modernization process and urban modernization level and the change pattern of Chinese group personality. *Advances in Psychological Science*, 15(02), 203-210.

Zhou Zhenhua, Zhou Xiufang, & Li Yan. (2011). A meta-analysis of Cattell 16 Personality Factor Inventory results comparison between male and female college students. *Chinese Mental Health Journal*, 25(8), 630-635.

Bian, Y. (2018). The prevalence and the increasing significance of guanxi. *The China Quarterly*, 234, 597-621

Bian, Y. (2008). "Urban occupational mobility and employment institutions: hierarchy, market, and networks in a mixed system." In D. Davis & F. Wang (eds.), *Creating Wealth and Poverty in China*. Stanford, CA: Stanford University Press, 165-183.

Bian, Y., & Huang, X. (2015). Beyond the strength of social ties: job search networks and entry-level wage in urban China. *American Behavioral Scientist*, 59, 961-976.

Bian, Y., & Huang, X. (2009). New work resources and job mobility in China' s transitional economy. *Research in the Sociology of Work*, 19, 255-282.

Bian, Y., Huang, X., & Zhang, L. (2014). Information and favoritism: the network effect on wage income in China. *Social Networks*, 40, 417-439.

Brockmann, H., Delhey, J., Welzel, C., & Yuan, H. (2009). The China puzzle: Falling happiness in a rising economy. *Journal of Happiness Studies*, 10(4), 387-405.

- Cai, H. J., Huang, Z. H., & Jing, Y. M. (2019). Living in a changing world: The change of culture and psychology. In D. Matsumoto & H. C. Hwang (Eds.), *Oxford handbook of culture and psychology* (2nd edition, pp.1070-1116). Oxford, England: Oxford University Press.
- Cai, H., Kwan, V. S., & Sedikides, C. (2012). A sociocultural approach to narcissism: The case of modern China. *European Journal of Personality*, 26(5), 529-535.
- Cai, H. J., Zou, X., Feng, Y., Liu, Y. Z. & Jing, Y. M. (2018). Increasing need for uniqueness in contemporary China: empirical evidence. *Frontiers in Psychology*, 9, 554.
- Cameron, L., Erkal, N., Gangadharan, L., & Meng, X. (2013). Little Emperors: Behavioral Impacts of China' s One-Child Policy. *Science*, 339, 953-957.
- Chen, X. (2012). Human development in the context of social change: Introduction. *Child Development Perspectives*, 6(4), 321-325.
- Chen, X., Cen, G., Li, D., & He, Y. (2005). Social functioning and adjustment in Chinese children: The imprint of historical time. *Child development*, 76(1), 182-195.
- Cheng, C., Cheung, M. W. L., Montasem, A., & International Network of Well-Being Studies. (2016). Explaining differences in subjective well-being across 33 nations using multilevel models: Universal personality, cultural relativity, and national income. *Journal of Personality*, 84(1), 46-58.
- Cheung, F. M., Leung, K., Zhang, J. X., Sun, H. F., Gan, Y. Q., Song, W. Z., & Xie, D. (2001). Indigenous Chinese personality constructs: Is the five-factor model complete?. *Journal of cross-cultural psychology*, 32(4), 407-433.
- Chiao, J.Y. (2009). Cultural neuroscience: A once and future discipline. *Progress in Brain Research*, 178, 287-304.
- Chiu, C. Y., Gelfand, M. J., Yamagishi, T., Shteynberg, G., & Wan, C. (2010). Intersubjective culture: The role of intersubjective perceptions in cross-cultural research. *Perspectives on Psychological Science*, 5, 482-493.
- Clark, W. A. V., Yi, D., Huang, Y. (2019). Subjective well-being in China' s changing society. *Proceedings of the National Academy of Sciences*, 116 (34), 16799-16804.
- Easterlin, R. A., Morgan, R., Switek, M., & Wang, F. (2012). China' s life satisfaction, 1990-2010. *Proceedings of the National Academy of Sciences*, 109(25), 9775-9780.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 13,
- Egri, C. P., & Ralston, D. A. (2004). Generation cohorts and personal values: A comparison of China and the United States. *Organization science*, 15(2), 210-

220.

Farrer, J., Suo, G., Tsuchiya, H., & Sun, Z. (2012). Re-embedding sexual meanings: A qualitative comparison of the premarital sexual scripts of Chinese and Japanese young adults. *Sexuality & Culture*, 16(3), 263-286.

Gao, S., Thomaes, S., Noortage, W. V. D., Xie, X., Zhang, X., Wang, S. (2019). Recent changes in narcissism of Chinese youth: A cross-temporal meta-analysis, 2008-2017. *Personality and Individual Differences*, 148(2019),

Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. *Psychological Science*, 20(3), 393-398.

Guthrie, D. (1998). "The declining significance of guanxi in China's economic transition." *The China Quarterly*, 154,

Guthrie, Doug. 1999. *Dragon in a Three-Piece Suit: The Emergence of Capitalism in China*. Princeton, NJ: Princeton University Press.

Greenfield, P. M. (2009). Linking social change and developmental change: Shifting pathways of human development. *Developmental Psychology*, 45(2), 401-418.

Grossmann, I., & Na, J. (2014). Research in culture and psychology: Past lessons and future challenges. *Wiley Interdisciplinary Reviews: Cognitive Science*, 5(1), 1-14.

Hamamura, T., & Xu, Y. (2015). Changes in Chinese culture as examined through changes in personal pronoun usage. *Journal of Cross-Cultural Psychology*, 46(7), 930-941.

Hanser, A. (2002). "Youth job searches in urban China: the use of social connections in a changing labor market." In Tom Gold, Doug Guthrie and David Wank (eds.), *Social Connections in China*. New York: Cambridge University Press, 137-161.

Harmel, R., & Yeh, Y. Y. (2014). China's age cohorts: differences in political attitudes and behavior. *Social Science Quarterly*, 96(1), 214-234.

Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management & Organization*, 13(1-2), 46-74.

Hu, Y. (2016). Sex Ideologies in China: Examining Interprovince Differences. *The Journal of Sex Research*, 53(9),

Huang, X. (2008). "Guanxi networks and job searches in China's emerging labour market: a qualitative investigation." *Work, Employment and Society*, 22, 467-484.

Hung, K. H., Gu, F. F., & Yim, C. K. B. (2007). A social institutional approach to identifying generation cohorts in China with a comparison with American

- consumers. *Journal of international business studies*, 38(5), 836-853.
- Inkeles, A. (1977). Understanding and misunderstanding individual modernity. *Journal of Cross-Cultural Psychology*, 8, 135-175.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), 19-51.
- Kahl, J.A. (1968). *The measurement of modernism: A study of values in Brazil and Mexico*. Austin, TX: University of Texas Press.
- Kim, H.S., & Sasaki, J. Y. (2014). Deviance of uniqueness harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, 77, 785-800.
- Knight, J., & Gunatilaka, R. (2011). Does economic growth raise happiness in China?. *Oxford Development Studies*, 39(01), 1-24.
- Li, L. M. W., Li, W. Q., Mei, D., & Wang, Y. (2020). Self-esteem Among Chinese Cohorts: Its Temporal Trend and Its Relationships with Socioecological Factors, 1993-2016. *European Journal of Personality*, 34(2), 203-214.
- Lin, N., Ao, D., & Song, L. (2008). "Production and returns of social capital." In R. Hsung, N. Lin & R. Breiger (eds.), *Contexts of Social Capital: Social Networks in Communities, Markets and Organizations*. London: Routledge,
- Liu, D., & Xin, Z. (2015). Birth cohort and age changes in the self-esteem of Chinese adolescents: a cross-temporal meta-analysis, 1996-2009. *Journal of Research on Adolescence*, 25(2), 366-376.
- Lu, Luo, & Yang, Kuo-shu (2006). Emergence and composition of the traditional-modern bicultural self people in contemporary Taiwanese societies. *Asian Journal of Social Psychology*, 9, 167-175.
- Ma, J., Hu, Z., & Gocłowska, M. A. (2016). Cultural orientation in China: Differences across five generations of employees. *Social Behavior and Personality: an international journal*, 44(4), 529-540.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224-253.
- Medrano, J. D. (2015). Interpersonal trust. Retrieved June 16, 2015, from <http://www.jdsurvey.net/jds/jdsurveyActualidad.jsp?Idioma=I&SeccionTexto=0404&NOID=104>.
- Morgan, R., Wang, F. (2019). Well-Being in Transition: Life Satisfaction in Urban China from 2002 to 2012. *Journal of Happiness Studies*. 20, 2609 -2629.
- Moore, R. L. (2005). Generation ku: Individualism and China' s millennial youth. *Ethnology*, 357-376.
- Na, J., Grossmann, I., Varnum, M. E., Kitayama, S., Gonzalez, R., & Nisbett, R. E. (2010). Cultural differences are not always reducible to individual differences.

Proceedings of the National Academy of Sciences of the United States of America, 107(14), 6192-6197.

Niu, J. H., Xin, Z. Q., & Martins, N. (2010). Trust discrimination tendency in average citizens at in-nation and out-nation levels in Canada, China and the United States. *International Journal of Psychological Studies*, 2(1),

Oishi, S., Graham, J., Kesebir, S., & Galinha, I. C. (2013). Concepts of happiness across time and cultures. *Personality and Social Psychology Bulletin*, 39(5), 559-577.

Oyserman, D. , Coon, H. M. , & Kemmelmeier, M. . (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72.

Ruan, F. F. (2013). *Sex in China: Studies in sexology in Chinese culture*. New York, NY: Springer Science & Business Media.

Robinson WS (1950) Ecological correlations and the behavior of individuals. *American Sociology Review*, 15,

Santos, H. C., Varnum, M. E., & Grossmann, I. (2017). Global increases in individualism. *Psychological Science*, 28(9),

Schwartz, S.H. (1994). Are there universals in the content and structure of values? *Journal of Social Issues*, 50 19-45.

Schwartz, S.H. (1997) . Values and culture. D. Munro, S. Carr, Schumaker, eds. *Motivation and Culture*. Routledge, New York, 69-84.

Singelis, T. M., Triandis, H. C., Bhawuk, D. P., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural research*, 29(3), 240-275.

Son, J., & Lin, N. (2012). "Network diversity, contact diversity, and status attainment." *Social Networks*, 34, 601-613.

Steele, L., & Lynch, S. (2013). The pursuit of happiness in China: Individualism, collectivism, and subjective well-being during China's economic and social transformation. *Social Indicators Research*, 114(2), 441-451.

Sun, J., & Wang, X. (2010). Value differences between generations in China: A study in Shanghai. *Journal of Youth Studies*, 13(1), 65-81.

Tang, N., Wang, Y., & Zhang, K. (2017). Values of Chinese generation cohorts: Do they matter in the workplace? *Organizational Behavior and Human Decision Processes*. 143, 8-22.

Tian, F. F. , & Lin, N. . (2016). Weak ties, strong ties, and job mobility in urban china: 1978-2008. *social networks*, 44,

Tian, F. F., Merli, M. G., & Qian, Z. (2013). Job mobility and extramarital sex in reform-era urban China: Evidence from Shanghai. *Chinese Sociological*

Review, 46(1), 60-82.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of personality and social psychology*, 74(1), 118.

Twenge, J. M. (2000). The Age of Anxiety? Birth Cohort Change in Anxiety and Neuroticism, 1952-1993. *Journal of Personality and Social Psychology*, 79(6), 1007-1021.

Wang, X., & Nehring, D. (2014). Individualization as an ambition: mapping the dating landscape in Beijing. *Modern China*, 40(6), 578-604.

Wang, Q., Leichtman, M. D., & White, S. H. (1998). Childhood memory and self-description in young Chinese adults: impact of growing up an only child. *Cognition*, 69, 73-103.

Welzel, C. (2010). How selfish are self-expression values? A civicness test. *Journal of Cross-Cultural Psychology*, 41,

Welzel, C. (2013). *Freedom rising*. Cambridge University Press.

Welzel, C., & Delhey, J. (2015). Generalizing trust: The benign force of emancipation. *Journal of Cross-Cultural Psychology*, 46, 875-896.

Xiao, Z., Mehrotra, P., & Zimmerman, R. (2011). Sexual revolution in China: implications for Chinese women and society. *AIDS Care*, 23(sup1), 105-112.

Xin, Z. Q., & Liu, G. F. (2013). Homo economicus belief inhibits trust. *PLoS ONE*, 8(10), e76671.

Xin, S. & Xin, Q. (2015). Birth cohort changes in Chinese college students' loneliness and social support: One up, as another down. *International Journal of Behavioral Development*, 40(5), 398-407.

Xin, Z. Q., & Xin, S. F. (2017). Marketization process predicts trust decline in China. *Journal of Economic Psychology*, 62, 120-129.

Xin, Z., Niu, J., & Chi, L. (2012). Birth cohort changes in Chinese adolescents' mental health. *International Journal of Psychology*, 47(4), 287-295.

Xin, S., Wang, Y., Sheng, L. (2020). Impact of social changes and birth cohort on anxiety in adolescent in mainland China (1992-2017). A cross-temporal meta-analysis. *Children and Youth Services Review*. 116, 105159

Xin, Z., Zhang, L., & Liu, D. (2010). Birth cohort changes of Chinese adolescents' anxiety: A cross-temporal meta-analysis, 1992-2005. *Personality and Individual Differences*, 48(2), 208-212.

Xu, Y., & Hamamura, T. (2014). Folk beliefs of cultural changes in China. *Frontiers in psychology*, 5, article 1066.

- Yang, J., Liu, K., & Zhang Y. (2019). Happiness Inequality in China. *Journal of Happiness Studies*, 20: 2747-2771.
- Yang, K. S. (1996). The psychological transformation of the Chinese people as a result of societal modernization. In Bond, M. H. (Ed.), *Handbook of Chinese Psychology* (pp. 479–498). Hong Kong: Oxford University Press.
- Yang, M. M. (2002). “The resilience of guanxi and its new deployments: a critique of some new guanxi scholarship.” *The China Quarterly*, 170, 459-476.
- Yang, X., Zhang, P., Zhao, J., Zhao, J., Wang, J., Chen, Y., Ding, S., Zhang, X. (2016). Confucian culture still matters: The benefits of Zhongyong thinking (Doctrine of the mean) for mental health. *Journal of Cross-Cultural Psychology*, 47(8), 1097-1113.
- Yang, Z., & Xin, Z. (2019). Income inequality and interpersonal trust in China. *Asian Journal of Social Psychology*. doi:10.1111/ajsp.12399
- Yu, F., Peng, T., Peng, K., Tang, S., Chen, C. S., Qian, X., Sun, P., Han, T., & Chai, F. (2016). Cultural value shifting in pronoun use. *Journal of Cross-Cultural Psychology*, 47(2), 310-316.
- Zeng, R., & Greenfield, P. M. (2015). Cultural evolution over the last 40 years in China: Using the Google Ngram Viewer to study implications of social and political change for cultural values. *International Journal of Psychology*, 50(1), 47-55.
- Zhang, L., Gao, X., Dong, Z., Tan, Y., & Wu, Z. (2002). Premarital sexual activities among students in a university in Beijing, China. *Sexually Transmitted Diseases*, 29(4), 212-215.
- Zhang, J. (2013). The Persuasiveness of Individualistic and Collectivistic Advertising Appeals Among Chinese Generation-X Consumers. *Journal of Advertising*, 39(3), 69-80.
- Zhang, Y. (2017). Premarital cohabitation and marital dissolution in postreform China. *Journal of Marriage and Family*, 79(5), 1435-1449.
- Zhang, T. H., Hu, J., & Zhang, X. (2020). Disparities in Subjective Wellbeing: Political Status, Urban-Rural Divide, and Cohort Dynamics in China. *Chinese Sociological Review*, 52(1), 56-83.
- Zhang, Y., & Xin, Z. Q. (2019). Rule comes first: The influences of market attributes on interpersonal trust in the marketization process. *Journal of Social Issues*, 75(1), 286-313.
- Zhao, Y. (2018). Managing Chinese millennial employees and their impact on human resource management transformation: an empirical study. *Asia Pacific Business Review*, 24(4), 472-489.
- Zhao, W. (2013). “Social networks, job search and income disparity in a transitional economy: an institutional embeddedness argument.” *Research in Sociology*

of Work, 24, 103–132.

Zheng, L., & Zheng, Y. (2014). Online sexual activity in Mainland China: Relationship to sexual sensation seeking and sociosexuality. *Computers in Human Behavior*, 36, 323–329.

Zhou, X., Saucier, G., Gao, D., & Liu, J. (2009). The factor structure of Chinese personality terms. *Journal of Personality*, 77(2), 363–400.

Zhou, C., Yiu, W. Y. V., Wu, M. S., & Greenfield, P. M. (2018). Perception of cross-generational differences in child behavior and parent socialization: a mixed-method interview study with grandmothers in China. *Journal of Cross-Cultural Psychology*, 49(1), 62–81.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv –Machine translation. Verify with original.