

**Proceedings of
The Second Summit Forum
of China's Cultural Psychology**

Nov. 5-6, 2016 Wuhan, China

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Preface

On November 5-6th, 2016, the second Summit Forum of China Cultural Psychology, and the annual conference of Social Psychology committee of Chinese Psychological Society, as well as the annual meeting of Cultural Psychology Subcommittee of the Chinese Association of Social Psychology (CASP) were held in Wuhan University. This is the second great academic event organized by the Department of Psychology of Wuhan University following the first Cultural Psychology Summit Forum held in 2013. We are proudly say that this is the ONLY academic forum in China that includes almost all the themes of cultural psychology.

At the opening ceremony, the designated president of the Chinese Society of Social Psychology, and Social Psychology committee of Chinese Psychological Society, Professor Wang Xinjian delivered a celebration speech. He reviewed the *First Cultural Psychology Summit Forum* and expressed his expectations. He stated this academic communication and research forum would further engage scholars and students in their academic criticism, to stimulate their research inspiration, to improve education quality, and to encourage further development of social psychology and cultural psychology of China.

The theme of this forum was “Sociocultural Psychology and Cultural Development”. In the morning of Nov. 5th and 6th, Huang Guangguo, Zhang Jianxin, Zheng Quanquan, Peng Kaiping, Yu Guoliang, Sun Qianru and other domestic cultural psychologists presented outstanding speeches, which were of energizing and refreshing in-depth topics catching peoples’ attention. They developed not only frontier research theory and elaborated on the applied research of different groups of social psychology, but also explored the content of academic research on indigenous cultural psychology of China. Moreover, participants warmly pondered over the future development of the discipline of Cultural Psychology.

In addition to the themes of the scholar’s presentation, the forum also set up parallel sessions. In the afternoon of Nov. 5th, 14 discussion groups and 10 roundtables were held. Participants shared and studied more than 200 academic papers in the field of cultural psychology. The topics included theory of cultural psychology and methodology, folk psychology, geropsychology under Chinese culture, social conflict and social cognition, indigenous psychology, cross-cultural psychology, culture and mental health, and psychology for special populations, as well as the application of psychology. Scholars and students also conducted extensive exchanges and heated discussions on a series of central psychological issues.

At the closing ceremony and on behalf of this forum, I had the opportunity to convey my sincere thanks to all participants, teachers, students and volunteers of Department of Psychology of Wuhan University. I am very happy with the job done within a limited time preparation for a comprehensive and complex forum that had many subthemes and missions to complete. In the end, the executive committee of the International Union of Psychological Science (IUPsyS), and the Vice Director of the Institute of Psychology, Zhang Jianxin made a closing speech. He expressed his gratitude to the committee of the *Second Cultural Psychology Summit Forum* for the connection and new academic channel to allow scholars from different psychological disciplines to communicate together under one roof. By doing so, it helps to strengthen the academic cohesion of Chinese psychology and promote Chinese psychologists to work together to further develop theoretical innovation and practical applications to better serve China, the Chinese people, and contribute to the international psychology.

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Keynote Speech I

Relational Hospitalization: A Cognitive Shortcut for Chinese Doctor-Patient Initial Trust Judgments

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[Abstract] Relational hospitalization is a cognitive shortcut based on which Chinese doctors and patients make their initial trust judgments, it's a manifestation of the Chinese "relationship-oriented" social theories about survival in the medical interaction field. Since the foundation for initial trust in the traditional doctor-patient relationship has gradually been shaken, and the institution-based trust has not been established in the course of social transformation, it's necessary to introduce perspectives of cultural psychology, and to reflect on the importance of building doctor-patient trust under concrete socio-cultural contexts.

[Keywords] relational hospitalization; relational trust; doctor-patient initial trust; cultural psychology

Introduction

These years, violent events have frequently occurred where doctors were attacked and killed in China. Hot events about the lack of doctor-patient trust have tended to happen frequently. In 2011, a survey covering 10 provinces in China found that over half of the physicians had been verbally abused, one-third had been threatened and 3.4% had been physically assaulted by patients in the past 12 months (Zhang & Sleeboom-Faulkner, 2011). How to restore and rebuild the broken doctor-patient trust has aroused the widespread concern of scholars home and abroad (e.g. Lancet, 2014; Lyu, Wu, Cai, & Guan, 2016; Tucker, et al., 2015). This study intends to analyze the cognitive shortcuts based on which Chinese doctors and patients make their initial trust judgments and discuss cultural characteristics of China behind medical behaviors by starting with Chinese-style relational hospitalization and diagnostic behaviors, in order to reflect on the importance of constructing doctor-patient under concrete socio-cultural contexts.

Relational Hospitalization: Instrumental Methods for Building Initial Trust between Chinese Doctors and Patients

In light of the time of trust development in the course of mutual intercourse, the doctor-patient trust relationship covers a stage of initial trust, namely the doctor-patient initial trust, which refers to the anticipated judgment and psychological state of one party in the early stage of an interpersonal relationship who more or less believes that the other party won't do anything detrimental or even harmful to themselves. "Initial" refers to the first meeting or the first contact between the specific doctor and patient without interacting with each other ever before (Hillen, et al., 2014). Although doctor-patient relationships are generally temporary without any prior interaction, it's not that no trust exists at all between doctors and patients who haven't dealt with each other for the first time. In fact, their mutual trust is essentially developed upon and even before their first meeting, and plays a role in their first meeting. Factors such as institutional trust, intergroup trust and traits of individuals have underpinned the formation of initial trust between strange doctors and patients on and even before their first meeting. Pursuant to the duration of medical activities, the doctor-patient initial trust may be developed under two medical contexts as follows: One is the state of trust between patients and medical personnel that exists in a medical process when they

begin to interact with each other, and this kind of initial trust generally develops in short-term medical activities. For instance, in the process of treating a cold, perhaps there is only one medical activity carried out between the patient and medical personnel concerned, so they don't intend to have long-term interactions with each other. Another context is the state of doctor-patient trust during patients' preliminary diagnosis or the early stage of treatment in a range of medical interactions between the patients and specific medical personnel. This type of trust generally exists in medium and long-term medical activities. This kind of initial trust would further develop into continuous trust between patients and designated medical personnel for treating certain chronic disease or difficult and complicated diseases such as diabetes and leukemia. In the short-term medical activities of treating ailments and common diseases, the doctor-patient relationships are apparently temporary. Although the results of trust would not be reciprocal, a relatively high level of initial trust would be presented between doctors and patients who have never interacted with each other. A high-level initial trust really exists and contributes to a great willingness to cooperate between doctors and patients. In medium and long-term medical activities, the continuity of medical interactions between doctors and patients, and the longer duration of their cooperative relationships may impact the perceptions of the credibility of both parties. Thus, the doctor-patient trust may be gradually enhanced with the accumulation of their positive interactions and active attributions (Hillen, de Haes & Smets, 2011). In different phases of the doctor-patient relationships, trust is judged based on different information and clues. Therefore, the state of doctor-patient trust and psychological mechanisms of trust formation differ in different phases (Ozawa & Sripad, 2013).

The doctor-patient relationship is a type of temporary role relationship developed for the purpose that doctors can help patients deal with health problems effectively. On the premise of no intercourse between each other, both doctors and patients shall build initial trust within a short time, making use of cognitive schemas such as stereotypes and classification in brains, and taking advantage of their existing medical experiences or diagnosis and treatment experiences for the convenience of controlling uncertainties, vulnerability, risks and expectations in temporary relationships. The experiential sources based on which trust-related judgments are made may be roles, categories, institutions or third-party recommendations (Robert, Dennis & Hung, 2009). In the phase of initial doctor-patient relationships, trustors lack the first-hand materials of trustees or information about these individuals' characteristics. In addition, it is extremely difficult to judge trust based on fuzzy or incomplete information, so the "third-party relationship" becomes important media helpful for doctors and patients to judge the initial trust between them. Under this circumstance, trustors usually supplement and complete their judgments about credibility of related trustees. For instance, a patient may quickly build his or her belief in trusting a doctor when he or she hears from a third party that "the doctor is highly skilled with good service attitudes". In other words, trust can be transmitted, and trust transitivity is more important for initial relationships. Provided that the third party is trusted by the trustor, the information he or she offered will be endowed with greater weights in making trust judgments (Ferrin, Dirks, & Shah, 2006). In view of this, relational hospitalization has become a type of instrumental methods for developing initial trust between doctors and patients in China. Trust is judged according to clues about credibility transferred through the "third-party relationship", so as to develop cognitive shortcuts for judging initial trust between doctors and patients.

At present, relational hospitalization is not just the logic of the individual patient's health seeking behavior anymore, a deeply-seated concept that "it is more reliable to choose a doctor with the recommendation of an acquaintance, seek medical consultation from chief physicians with high titles and consult doctors through relationships" has been dispersed to the whole society and become a popular doctor-

patient social mentality in China. In the course of seeking medical services, patients attempt to reduce risks of information asymmetry and the weak sense of vulnerability by relying on relationships. According to a survey, up to 70.6% patients expect to seek medical services through relationships and 86.6% doctors accept the behaviors of relational hospitalization. More importantly, 40.7% patients consider that the doctors introduced through relationships are more credible. Some patients even consider that the treatment options determined via relational hospitalization are more trustworthy, 21.1% patients think relationships have evident impacts on treatment options; 55.3% patients think relationships have some impacts on treatment options; only 23.6% patients think relationships have no impacts on treatment options (Qu & Zhong, 2012). According to a survey on medical personnel, the initial trust of medical personnel also displays a high orientation of relational trust: 86.6% of medical personnel accept behaviors of relational hospitalization, 24.7% of medical personnel think it is easier to develop good relationships with familiar patients, and 18.1% of medical personnel feel it is easier to deal with patients recommended by their acquaintances (Huang, Huang, & Hu, 2011).

Furthermore, doctors' personal differences in medical skills and medical ethics are also one of reasons why patients have behaviors of relational hospitalization. The surveys about behavioral motives of relational hospitalization have shown that, 52.8% patients seek medical services by relying on relationships for the purpose of consulting better experts (Qu & Zhong, 2012). Patients expect to find doctors with superb medical skills, high titles and rich experiences through third-party relationships, in an attempt to strive for advantageous medical resources. Researchers of the early school of behaviorism observe behaviors of individuals from simulations, interactions and trust games like Prisoner's Dilemma. They think that cooperation of individuals or cooperative choice is essential for measuring trust, while cooperative trust is regarded as an observable and explicit trustworthy behavior (Flores & Solomon, 1998). Trustors have to make rational decisions on the extent to which they will cooperate with trustees. They may infer trustees' intents, motives and credibility in line with the extent and frequency of their cooperative behaviors. Hence, patients' cooperative choices of chief physicians in their first hospital visit are also one of explicit behaviors of initial doctor-patient trust. In the initial phase of doctor-patient relationships, doctors and patients generally can obtain trust-related clues from information about types and roles, because they have never interacted with each other before. Apart from techniques of hospitals such as their expert systems and online inquiries, third-party relationships are usually more trustworthy for patients to get information about types and roles of doctors, including their titles, educational attainment, medical experiences, areas of expertise and word-of-mouth. Such information is helpful for doctors and patients to form a kind of cognitive shortcuts. Initial trust is often judged by rapidly perceiving clues about others' social roles, identities of group members or stereotypes.

The Model of Doctor-Patient Initial Trust is Constructed by Socio-Cultural Contexts

Relational hospitalization and diagnostic behavior implies that Chinese doctors and patients usually have strong relational trust orientation during the initial phase of interpersonal intercourse. Furthermore, relational hospitalization and diagnostic behavior actually is a manifestation of the Chinese "relationship-oriented" social theories about survival in the field of medical interactions. Having been influential since the traditional agricultural society, the family system dominated by Confucian thoughts and concepts of hierarchy has underpinned social relationships in China based on derived family-centered blood relations, family relations and acquaintance relations. Thus, "relational identification" has contributed to deep structures of social psychology among Chinese people. It is of substantial universal significance for

interpersonal intercourses among Chinese people. For interpersonal intercourses and interactions with strangers, Chinese people often relieve their predicaments in building initial trust through their “common friends” or “friends’ friends”. Such cultural foundation emphasizes particularistic trust to family members and various relatives based on blood relations (Fukuyama, 1995) and still affect people’s behavioral orientations. To be sure, it also impacts the psychology and behaviors of the concerned doctors and patients. After all, the models and characteristics of doctor-patient initial trust are developed under certain socio-cultural contexts. In building and developing doctor-patient trust, it is unnecessary and impossible to completely replace relational trust with institutional trust, because Chinese people tend to build trust through relationships even if they are surrounded by institutions. However complete the expert systems of hospitals are or however elaborate experts’ descriptions of themselves are in their resumes, patients still hope to consult doctors with advanced medical skills and good medical ethics through relationships. In this way, doctors and patients who have never interacted with each other before may be incorporated into mutual relationship networks via the extended, or rebuilt, social networks, so that their relationships may develop from strangers into acquaintances for the purpose of offsetting the perceived uncertainties and the risks of initial trust.

In the traditional society of China, self-evident trust foundations are implied by the initial doctor-patient relationships. In other words, Chinese people have had relatively high role expectations for doctors and have been inherently in awe of them since the ancient times. The occupational values of traditional Chinese medical ethics advocating that “medicine is the art of benevolence” have just contributed to people’s relatively high role expectations for doctors. Mengzi mentioned in the *Mencius, King Hui of Liang*, “Curing people with benevolence”. Thereafter, the occupational values upholding that “medicine is the art of humanity” have been penetrating into histories of Chinese medicine. For example, Yuanzhong Li, as a medical scientist of the Northern Qi Dynasty, proposed that “doctors should be sympathetic, benevolent and tolerant; they should save and treat all patients no matter they were rich or poor” (Radice, 2011). As a well-known medical scientist of Tang Dynasty, Simiao Sun warned doctors in his work titled *Thousand Golden Prescriptions* that “they must be calm, determined and compassionate without any desire in treating patients. They should swear rescuing those in pain and in trouble. If people asked them for help because of diseases or sufferings, they should treat them equally as if they were their close relatives no matter they were noble or humble, poor or rich, old or young, ugly or beautiful, wise or stupid, a member of minority groups or Han people”. As an eminent doctor of Ming Dynasty, Shigong Chen put forward the “five don’ts and ten dos for doctors” in his *Surgical Authentic*, thereby specifying a particular behavioral criteria for doctors’ roles. The “five don’ts” include: “don’t curry favor with the rich and despise the poor, don’t behave in a disorderly manner, don’t have evil intentions for benefits, don’t neglect duties, and don’t be frivolous/hypocritical”. After a review of the origin of the title “daifu (doctor)”, people’s inherent awe of doctors may also be reflected in it. The semantic origin of this appellation may be traced back to the senior official titles of the pre-Qin states. In other words, *qing* (ministers), *daifu* (gentlemanly bureaucrats) and *shi* (academicians) were set as titles under the monarch. In the Song Dynasty, certain development was achieved in the medical system and medical management. *Daifu* was the highest title among medical officials, followed by *lang*, under which *yixiao* and *zhihou* and so on were set. In view that it was the highest position among medical officials, people have used “*daifu*” as an honorific title until today (Hao & Jiang, 2015).

High role expectations and implicit awe have underpinned the initial trust in traditional doctor-patient relationships. Such implicit attitude is an unconscious sign that has formed with the accumulation of

patients' previous medical experiences and existing attitudes towards doctors. It unconsciously influences patients' cognitive, affective and behavioral responses to doctors. However, the accumulation of institutional deficiencies, including realizing high value added of drugs through doctors' work, associating doctors' income with patients and assigning full responsibilities to specific departments, has resulted in intergroup conflicts and contradictions between doctors and patients with the promotion of market-oriented reforms of medical systems since 1980s. Concerning patients' role perceptions about doctors, sharp conflicts between "life-saving doctors" and "profit-seeking businessmen" have been caused. Patients' high role expectations for doctors can't be met. Thus, the foundation for initial trust in traditional doctor-patient relationship has been gradually shaken, disintegrated and even lost its effectiveness. The institution-based trust has not been developed in the course of social transformation (Wu, Mao, & Ma, 2012). Therefore, doctors and patients attempt to create cognitive shortcuts for judging initial trust based on social relations. In fact, such health-seeking and medical behaviors reflect the "pre-constructive distrust" between doctors and patients in the modern society.

Some scholars consider that relational hospitalization is a violation of social norms, codes of conduct and medical orders which are generally accepted by doctors and patients in the medical field (Tucker et al., 2015). In fact, it is inadvisable to judge if relational hospitalization and diagnostic behaviors are proper or not simply with ethical frameworks, because compared with immoral health-seeking and medical behaviors such as vicious medical violence, medical disturbance, deliberate postponed payment of medical fees and excessive medical treatment for the purpose of profit, relational hospitalization and relational trust more or less reflect the social psychological mechanism for building initial trust between Chinese doctors and patients, it's a type of sensible strategy for individuals to cope with current crisis of doctor-patient trust. However, it doesn't mean that seeking and offering medical services by relying on relationships and acquaintances should be advocated, it's just a fact that the socio-cultural context has not only contributed to the minds and behaviors of doctors and patients, but also determines the models and the characteristics of doctor-patient initial trust in a certain society.

Implications and Conclusion

As a miniature of social trust crisis, mutual suspicion and precaution reflect a universal social mentality for doctor-patient relationship in modern China. The doctor-patient trust relationship in China has some homogeneous aspects with western doctor-patient trust relationships, but it shows more Chinese characteristics. On one hand, the crisis of doctor-patient trust is one type of "Chinese experience" in the transitional phase. Thus, relational hospitalization and relational trust are just one of the doctors' and patients' attempts to overcome their difficulties in building initial trust. There are unnecessarily completely unified models for the establishment and the evolution of doctor-patient initial trust, which are dependent upon diverse cultural contexts. The minds and behaviors of doctors and patients are influenced by Chinese "relationship identification"-centered theories of social survival, traditional medical ethics and indigenous views about body, diseases and death. In view of this, it is necessary to review the mental and emotional world of Chinese doctors and patients from the perspectives of cultural psychology. The social psychological mechanisms for the establishment and the dynamic evolutions of doctor-patient trust may be intensively explored using techniques of medical anthropology, such as participant observation and case study in combination with other conventional research techniques, including questionnaire survey, experimental simulation and big data analysis. While general rules about trust are discussed, the unique

features of Chinese cultural contexts should be taken into account, so that the theories and the intervention models of doctor-patient trust can be much closer to the practical operations of the society.

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Keynote Speech II

From Comparison to Criticism – The Culturological Basis of Cultural Psychology

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[Abstract] Culturology is a discipline with a long history and vast content of study. It is derived from anthropology, and ethnology. As one of the fast-growing fields in psychology, cultural psychology also has a strong culturological basis. This paper explores the culturological enlightenments which help promote today's flourishing development of cultural psychology, including these five aspects: comparison, localization, application, synthesis and criticism.

[Keywords] culturology; cultural psychology; comparison; localization; application; synthesis; criticism

Introduction

Cultural psychology is one of the fastest growing fields in psychology in the last twenty or thirty years. About ten years ago, we discussed the term “cultural psychology” from the perspective of Chinese language, and proposed the possible meaning in the framework of Chinese linguistic (vol. 6, 2005). According to the way of thinking and features of language, “Cultural Psychology” can be comprehended in Chinese from at least from three aspects: First of all, it is the study of “cultural mentality”. The scholars have already proposed the terminology as individual psychology, group psychology, ethnic psychology and social psychology, and therefore, the concept of “cultural psychology” can also be put forward. In fact, many other relevant social disciplines like sociology, anthropology, literature, history and philosophy, and so on have already conducted research at this level accordingly. Secondly, it is about the psychological study of “culture”. As a keyword of anthropology, could “culture” also be the subject of study in the field of psychology? In fact, “What is culture?” has become the first concern of cultural psychologists in contemporary study in the era of “open social sciences”, and any terminology is possibly re-examined by other disciplines. Finally, it is the study of the relationship between “culture” and “psychology”. This dimension focuses on how culture influences the human mind and how the human mind works on culture, and so on. At present, many cultural psychologists work on this pattern, especially the impact of culture on humans. The above three levels of understanding may not be able to cover all aspects of cultural psychology's research field, but we believe that cultural psychologists should always take these tasks into account. It is to say that cultural psychology ought to be a discipline with broad mind, wide acceptability and remarkable tolerance; in this field, a variety of research orientation, different kind of methodology and scholars from all sorts of disciplines should not be excluded.

Literally, cultural psychology is a cross-discipline – a relative common comprehension is “culturology” + “psychology”. However, what is culturology? In the general anthropological lexicon, culturology is interpreted as “a terminology proposed by White, which refers to a scientific study of culture, but it has not been widely accepted yet” (Seymour-Smith, 1987, p. 69). The study of culturology includes the origin, the evolution, the diffusion, the structure, the function, the generality and the particularity of culture, as well as the general law and special law of culture, etc. In the construction process of culturology,

Chinese people have made great contributions and have also showed special preference to it, such as Huang Wenshan, Chen Xujing, Qian Mu, and others. They all have strong interests in culturology and have written outstanding works on this field. American famous anthropologist L. A. White is well-known for his book *The Science of Culture*; he actively advocated the study of culturology and also constructed the academic pedigree accordingly. In this work, he mentioned the contribution of Huang Wenshan and other Chinese scholars on the development of culturology, and he also believed that for a new term such as culturology, that the Chinese language would adapt to it much easier than English. “‘Culturology’ means ‘Wen Hua Xue’ (science of culture) in Chinese; they almost mean the same, so the combination of ‘culturology’ and ‘science of culture’ will not make Chinese scholars feel harsh or hurt their emotions” (White, Cao, et al., Trans, 1988, p. 390).

From the perspective of culturology, it is in fact anthropology/ethnology (anthropology and ethnology are actually the same. People refer to “anthropology” in Anglo-America regions, but “ethnology” in Europe, while the usage of the two are often mixed internationally and in academic conferences). It is basically anthropologists/ethnologists who are the only scholars to advocate culturology as well as to engage in the study of culturology. Anthropological/ethnological research has always been closely associated with psychology, including the academic career of B. Malinowski, the thought of origin of Freud, the outstanding study of national character of R. Benedict, et al., the classic works on adolescent conflict of M. Mead, the long and arduous field work to study animal wisdom of J. Goodall, and others. In the field of cultural psychology, people often bring psychological origin into play, but mention little about the origin of culturology (anthropology, ethnology). In fact, as a discipline with a longer history than psychology, culturology has its unique characteristics to when Wundt created scientific psychology – he had learned a great deal from culturology. Therefore, we try to find out the culturological enlightenments which help to promote today’s flourishing development of cultural psychology.

Comparison

We can first talk about the characteristics of a comparison of culturology. Anthropology/ethnology is considered a comparative discipline; it is about the comparison of different cultures within the human world in a more extensive sense. For example, a supreme talent of classical evolutionary theory, J. G. Frazer studied the evolution of human thinking for his lifetime; he studied research materials from different parts of the world at the Library of Trinity College of the University of Cambridge for about fifty years, trying to find out the regular laws through comparisons. His masterpiece *The Golden Bough* contains 12 volumes, and attempts to lead the reader on a visiting tour to discover human culture of different regions. Another world-renowned female anthropologist, M. Mead, whose reputation was achieved by her book *Coming of Age in Samoa*, which studied young women in Samoa, called her a study a comparative sociology. In order to facilitate the comparison of cultures of different regions, Murdoch, an anthropologist at Yale University built the “Human Relations Area Files” (HRAF), in which he collected cultural materials and scientific surveys from anthropology and other disciplines, and classified the data by subject at the paragraph-level which enables quick access for scholars from all over the world. Culturology has also a tradition to study the human mind from a comparative perspective, such as the comparison of thinking. For example, the famous American anthropologist F. Boas’ book, *The Mind of Primitive Man*, and the French ethnologist Lucien Lévy-Bruhl’s book, *La Mentalité Primitive*, are both products with multi-ethnic perspectives and multi-cultural viewpoints of cross-cultural study. To date, these books still have great value as references to academic researches. As a Chinese proverb says, “People are not afraid to well know the goods, but to

compare the goods.” (Comparisons help to identify high quality goods much better than the knowledge). This saying emphasizes precisely the value of comparison.

Localization

Secondly, we prefer indicating the characteristic of localization of culturology. A large number of studies in western anthropology/ethnology focus on exotic culture. This kind of research is fundamentally the concern about one’s own culture; the ultimate purpose is to better understand the self through mirroring others. On the other hand, China’s anthropology/ethnology has developed its own characteristics, as one of the representative of Chinese scholars, Mr. Fei Xiaotong opened up a culturological way to study our indigenous culture. The famous American anthropologist Geertz’s masterpiece *Local Knowledge* expounded the nature of culturology – to care about indigenous cultures. We can also see the influence on indigenous cultures in psychological study. A group of Chinese psychologists in Taiwan have proposed the movement of indigenous psychology. It is noteworthy to mention that the base camp is the Institute of Ethnology of Taiwan Academia Sinica and the founder of Indigenous Psychology in Taiwan, Mr. Yang Guoshu has worked for a long time in the Institute of Ethnology. In addition, his good friend, Mr. Li Yiyuan, plays a leading role on the development of anthropology in Taiwan. Li Yiyuan and Yang Guoshu and their other like-minded scholars make great contributions to promote the localization of psychology and other social sciences. Take language as an example; it is widely known that many dialects are difficult to translate accurately due to their unique meanings in a particular linguistic context. If such dialects disappear, the diversity of human culture will also suffer a heavy loss. In psychology, there is similar indigenous knowledge like dialect, such as the book *Totem and Taboo* written by Freud. Totem and taboo are not common but region-specific and group-specific vocabularies, which means they are considered as indigenous concepts in Western culture. Likewise, the Chinese indigenous psychology also possesses many culture-specific concepts, like *Guanxi* (relationship), *Yuanfen* (fate), *Mianzi* (face & honor), *Lian* (face), etc., have already become psychological terminology. In addition, the Chinese language include a large number of the character “Xin” (mind); it can also be the bottom and the side component of Chinese characters, all these words are relevant to Chinese people’s view on mind. To further study these characters is a significant and meaningful work.

Application

Another feature of culturology is its application. It is an unavoidable fact that the origin of anthropology/ethnology has a certain relation with the need to manage the colonies, moreover, it also relates to its application. Culturology is accepted by the academy, and in a certain sense, it is considered as an intellectual game of scholars, but meanwhile, the feature of its application has never changed. At present, the application of anthropology/ethnology is engaged by many branch disciplines, such as developmental anthropology, urban anthropology, economic anthropology, immigration study, and tourist anthropology, with the gradual implementation of globalization, and the domain-like action anthropology has also begun booming. In fact, anthropology/ethnology has always been playing the applied role since entering China. For instance, frontier politics, which studies the border districts, has been an essential contribution of anthropology/ethnology to the affairs of Sino-Indian boundary settlement and the participation in World Bank project and other similar events, not to mention the irreplaceable role of anthropology/ethnology in China’s national identification, and policy formulation of ethnic groups, etc. In 1980, when Mr. Fei Xiaotong accepted The Bronislaw Malinowski Award of anthropology in the United States, he made a

speech titled, “Toward a People’s Anthropology” (1980). In this speech, in addition to anthropology/ethnology, he mentioned in particular the keywords *applied anthropology*, *Chinese people*, *Chinese society*, as well as people whom he investigated and social life. Mr. Fei said that China’s social sciences are not just an intellectual game of a few people in college; instead, as representatives, they must stand on the side of the people and be the spokesmen for the people. Therefore, the application is said to be one of a crucial basis in culturology’s emergence.

Synthesis

It may be difficult to find another discipline that is more comprehensive than culturology. To anthropology, the broader definition contains four branches: physical anthropology, cultural (social) anthropology, archaeological anthropology, and linguistic anthropology. Furthermore, from physical to social culture, it constitutes the elements “biology + society”; however, all the branches of anthropology contain two dimensions: the research of history and the study of the status quo. The latter focuses on all kinds of cultural differences, while the former looks at the endless cultural changes – this, thus, refers to the elements of “space + time”. Even scholars are shocked by the colossal content of anthropology. In fact, culturology is much broader than psychology; psychology contains “biology + society”, but lacks much of “space + time”. Until recently, the rise of cultural psychology reflects the efforts to expand to space; the rise of evolutionary psychology reflects the efforts to expand to time. However, the broad mind and vision of psychology, as a whole, still seems to lag behind culturology. In the history of psychology, the predecessors who were influenced by culturology show fertile imaginations, which greatly impressed the successors. For example, from March 1900 to September 1919, the founder of scientific psychology, W. Wundt, had written 10 volumes work, entitled *Folk-Psychology – Exploring the Developmental Laws of Language, Mythology and Morality*. In this book, Volumes 1 and 2 expound upon the language, Volume 3 is about the arts, Volumes 4, 5 and 6 are about myths and religions, Volumes 7 and 8 discuss society, Volume 9 covers law, and Volume 10 describes the general view of culture and history of Wundt (Gao, 1991, p. 16). In a broader sense, the book reflects that Wundt’s national psychology is quite similar to anthropology.

Criticism

Culturology perseveres in a critical standpoint, including to criticize common sense. For example, the relativity of culture in anthropology emphasizes equal attitudes and views to all sorts of cultures all over the world. It also encourages people to abandon cultural (or national) egocentricity and to respect the values of different cultures and different nations. This viewpoint is distinctly manifested in racial issues, which pass on from generation to generation. Among culturologists like F. Boas and other famous scholars, they all have criticized racism. Anthropologists always raise questions through their own research. From the perspectives of time and space, they ask questions like, “Are we civilized?” This kind of thinking and criticism can be seen from the anthropological masterpiece, *Are we civilized? Human Culture in Perspective* (Lowie, 2005). Culturologists also advocate thinking from the edge to the center, which enables people to reconsider the question of what is the center and what is the edge. It can be seen that the culturological criticism extends more to the self, that is to say, to one’s own culture, society, behavior and mind, which is probably the cultural consciousness proposed by Mr. Fei Xiaotong in his old age.

Psychology also has a perspective of critical thinking. It also covers the issues of common sense and science. What kind of critical thinking should cultural psychology learn from culturology? At least, people should mention diversification (not to think that one’s own culture or behavior is the only one in human

society), connection (although there are different human cultures and behaviors, we are in fact inextricably linked), tolerance (to look at other cultures and other people's behavior through a mild and peaceful attitude), positive way of thinking (to believe that there is always a better world and a better future), and transcendence (to look for more possibilities other than the dichotomy), etc.. By these means, psychologists should have an open mind to learn all the merits mentioned above from culturology.

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Keynote Speech III

Materialism as an Action Strategy in Chinese Contemporary Society

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[Abstract] *Previous theories have construed materialism as a personality, a value, a goal, or a self-identity. However, these constructs are not appropriate for describing materialistic phenomena in Chinese contemporary society. The current article tries to propose a new way of understanding materialism by considering the cultural value system, the social structure and the individual's action together. It was argued that when the normal strategy cannot be used easily and properly to solve the social problems faced by individuals in a given society, the pursuing, or occupying, money and possessions may be used as an action strategy. The action strategic materialism was defined as the extent to which people engage in such an action. This article also discusses the predictors and consequences of this new conceptualization of materialism and compares them with previous conceptualizations.*

[Keywords] *materialism, action strategic materialism, Chinese contemporary society*

Introduction

1. *Ten years ago, a man resolutely sold his house, lying in Shenzhen, at six hundred thousand yuan. Then he started a business with the money. After ten years of hard work, his company has brought back him four million net profits in total. With this money and some bank loans, he finally brought back the house that he had sold ten years ago, since his child needs this house for school registration. Netizen commented that he should have earned more money by investing on real estate, but he chose to show himself by starting a business. (form report of Tencent 's finance (from <http://finance.qq.com/a/20160311/014598.htm>).*

2. *'Shijijiayuan', an Online dating site, conducted a survey about standards of choosing a spouse to 16525 singles. The survey shows that 77% of male participants can't stand that their spouse is a money-oriented woman and 59% of female participants can't stand that their spouse is a mean man, a skinflint. (from Ifeng: http://news.ifeng.com/a/20170110/50553086_0.shtml)*

The above news depicts two hotly debated topics in recent China. The story in Topic One probably is imagined by netizen, but it factually reflects a Chinese contemporary social fact. Compared to effortlessly speculating on real estate, starting a serious business most likely will bring people less profits in many super cities of China. The survey data of the story in Topic Two is true. It informs us that regardless of sex in modern China, the most important standard of choosing a spouse is that the other spouse shouldn't have too high of a money request.

Money is a hot topic in contemporary China. The cause behind this situation most likely is that there is a paradox or tension in people's pursuit of money. On the one hand, Chinese morally criticize those who excessively value money, such as in Topic Two in which people despise money-oriented women and mean

men. On the other hand, how to rapidly and effectively earn more money is one of the most fascinating questions to every Chinese, such as in Topic One in which people are only concerned with how to earn more money, but aren't concern at all whether starting a business can bring them some other welfare, despite money. Although some people have proposed this kind of question, their voices were always swallowed by others who argued that such questions are unrealistic.

There are many discussions about materialism in previous literature. Researchers have proposed different perspectives to understand this topic, such as materialism as personality (Belk, 1985), materialism as a value (Richins & Dawson, 1992; Inglehart, 1990), materialism as a goal (Kasser & Ryan, 1993; 1996), and materialism as an identity (Shrum, et al., 2013). These conceptualizations have provided many insights for us to understand materialism, but seem unable to properly describe some materialistic phenomena in Chinese contemporary society. The current article first reviews different materialism conceptualizations proposed by researchers in previous literatures, then attempts to propose a new perspective which conceives materialism as an action strategy, and finally compares this perspective to other previous perspectives through which researchers defined materialism.

Studies about Materialism in Previous Literature

Previous theories construed materialism as a personality, a value, a goal, or a self-identity. More specifically: (1) Belk (1985) viewed materialism as a personality. According to this definition, the more that people emphasize the importance given to possessions, the more they are considered as owning this materialism trait. He categorized materialism as a collection of three personality traits: envy, ungenerosity, and possessiveness. As such, the trait of materialism itself means negative judgment. (2) Richins & Dawson (1992) saw materialism as a system of personal values, which emphasizes the importance of possessions to achieve major life goals. Materialism values can be divided into three parts: acquisition as the centrality of one's life, acquisition as the pursuit of happiness, and possession-defined success. (3) Inglehart (1990) believed materialism also as a value orientation, although his research was from the political perspective. He viewed materialism as a chronic focus on lower order needs for material comfort and physical safety over higher order needs such as self-expression, belonging, aesthetic satisfaction, and quality of life. This definition is consistent with the traditional notion that materialists emphasize worldly ambitions over spiritual matters, and it corresponds to findings by Grouzet, et al. (2005). (4) Kasser & Ryan (1993, 1996) viewed materialism in the context of tradeoffs between intrinsic and extrinsic goals. According to this definition, people are considered as having a higher level of materialism if they emphasize financial success, social recognition, and an appealing appearance more. In addition, materialism is in conflict with self-transcendence, whether in the dimension of physical self vs. self-transcendence (Grouzet, et al. 2005) or self-enhancement vs. self-transcendence (Burroughs & Rindfleisch, 2002). Various research findings have repeatedly verified the conflict of materialism and spirituality (Inglehart, 1990; Grouzet, et al., 2005). (5) Shrum, et al. (2013) defined materialism from the perspective of self-identity. They view materialistic behavior as a motivated goal pursuit intended to construct and maintain self-identity, and they define materialism as the extent to which people engage in identity maintenance and construction through symbolic consumption.

In terms of the consequences of materialism, previous literature has consistently shown that most of what materialism brings are negative (e.g. Dittmar, et al., 2014). More specifically, a large number of studies show that materialism is negatively associated with life quality, life satisfaction, self-actualization, happiness, positive affection, and physical health; however, it is positively associated with negative

affection, social anxiety, and substance abuse. In addition, materialism also impairs people's concerns about others, family, society, and natural environment (e.g. Kasser, 2002).

In terms of the predictors of materialism, previous literature has found that senses of economic insecurity that one has experienced in childhood (Inglehart, 2008), impertinent parental styles (Cohen & Cohen, 1996), family disruptions (e.g. parental divorce – Rindfleisch, Burroughs, & Denton, 1997), and thoughts of death (Kasser & Sheldon 2000) will lead individuals to use materialism as a substitutive compensation strategy.

However, there still is a question that exists that literature is unable to work out. If the consequences that materialism will lead to are all negative, why do people still continually pursue it? In other words, why don't people recognize the negative consequences of materialism in their social learning process and then stop? The level of materialism is becoming higher and higher in many regions around the world. Does this suggest that materialism can also bring positive effects in some respects? Other study fields, relevant to materialism, seem to suggest that possessing money, not pursuing money, indeed can bring positive outcomes. For example, a recent research shows that the average lifetime of the rich is nine and a half longer than the average lifetime of the poor in America (Evans, 2016). Further, money priming studies also found that when a primed money concept is apparent, people will become more self-sufficient, a state at which people believe not only are they able to take care of themselves, but also others are able to do the same thing too (Vohs, Mead, & Goode, 2006). Thus, money has been regarded as substitution of social resources (Zhou & Gao, 2008). Researches about mortality and materialism argue that money and material wealth can serve as personal function, because materialism can help individuals acquire a sense of security when facing problems about oneself. In consideration of the realistic conditions of China, we posit that materialism may also serve as a social function, a proposition which means that materialism can help individuals solve social problems when facing it.

Reflections on Materialism in Chinese Contemporary Society

We propose that the investigation of materialism can't ignore the social structure and proximal situation to which individuals belong (McLeod & Lively, 2006). In other words, people do not voluntarily let money occupy their minds and become the center or goal of their lives. However, it is in modern society, not native soil society, that many realistic questions can only be dealt with by money, but not the support of relatives as in the past closed society. For example, people can deal with education and medical treatment problems only with money in our modern society. This fact suggests that the solution to problems is becoming monetized. Indeed, Simmel (1900/1978), a philosopher, Merton (1948/1968), a sociologist, and Kasser, et al. (2007), all psychologists, have discussed the effects of the capitalist system and capitalist social cultural values on shaping people's materialism.

However, we argue that the effect of the Chinese society on materialism has some specific aspects. More specifically, China is not a capitalist society and more importantly, it has never, like America, publicly alleged that having money is having success. There is no doubt that the notion that money equals success has been criticized in the context of the Chinese ancient Confucian culture, a culture valuing agriculture while despising trade. In addition, even during four decade years of reform and opening-up when the market-oriented economy system was implemented, the Chinese government and folks never agreed to the cultural value that money equals success. Recently, indigenous psychology research also has enlightened us that the Chinese culture values human relationships (Hwang, 1987), not money. Thus, if we want to understand the newly-arisen materialism in China from the perspective of the effect of society on

individuals, this phenomenon can't be completely attributed to the consequences of the internalization of a materialism cultural value.

Thus, we posit that, in Chinese society, social problems that individuals face are the pressure to survive and to acquire status and face, and materialism is a means that individuals can use to deal with these problems. In both traditional society and periods before reform and opening-up, people can solve these two big problems by other ways, such as imperial examination, education, and jobs. But in modern Chinese society, it is getting harder and harder for people to use education and common jobs to solve these two large problems. At the same time, society encourages people to pursue money and material wealth. Thus, when facing social problems and having no better strategy to deal with, individuals will tend to select pursuing or possessing money and material wealth as a temporary action strategy.

For example, in Topic One above, starting a business is an ordinary way that people use to solve a survival problem and achieve goals that our cultural values agree upon, such as winning face and enhancing social status. Also, this method ordinarily receives approval and encouragement from our society. But, it is a real fact that this approved way is becoming more and more difficult and useless for common people to achieve those goals. Therefore, people have no choice but to adopt materialistic action strategies, such as speculating on real estate, to solve their problems. Moreover, there are some people who choose marrying into the purple for enhancing their social status. In Topic Two above, marriage-seeking people, both males and females, think that excessively valuing money is the most unacceptable character in a mate. This fact seems to suggest that a materialistic action strategy is common in real life. However, solving social problems by a materialistic action strategy will likely lead to some negative outcomes. For example, speculating on real estate can only earn money, under normal conditions, but starting a business is not only funny but also praised by society, such as being called entrepreneur. Similarly, regarding economic conditions as a standard for choosing a spouse will likely lead us to miss our Mr. Right or Miss. Right, under normal conditions. Nevertheless, there still are many people adopting materialistic action strategies, a fact which suggests that the materialistic action strategy might not be an active choice; on the contrary, it more likes a forced choice.

The Uniqueness of Viewing Materialism as a Behavioral Strategy

First, an action strategy, different than previous definitions of materialism, is neutral. In other words, it is not moral or immoral, but non-moral. Thus, under given social conditions, the valence of consequences of action strategic materialism is uncertain, but to some extent, it can be used to solve problems.

Second, this kind of materialism will be influenced by the tension between cultural values, goals advocated by society and the social permitted means of achieving these goals. For example, Chinese and many other eastern countries' cultural values all encourage higher social status and upward mobility of social stratification. When previous normal means, such as education and starting a business, are considered as becoming more and more difficult and useless in achieving those social goals, materialism may become a strategy, such as marrying into the purple, which people use to realize those goals. In other cases, social problems that people face may become more universal, such as normal survival and a stable social order. When people can't obtain survival resources and security assurance by normal working strategies, they will attach more importance to material things and possessing them to maintain their life and psychological sense of security.

Third, this kind of materialism has different predictors. If materialism is defined as an action strategy, this kind of action strategy is temporarily formative according to goals and is immune to the influence of

individuals' past growth history. This nature is different to Inglehart's (1990) theory prediction. Besides, it is also different to the theory prediction of goals materialism (e.g. Grouzet, et al., 2005), because action strategic materialism is flexible and not conflict with spirituality. Accordingly, in any given society in which people live, whether possessing material can becomes a mean that people can use to acquire what the social culture encourages is an important predictor of whether people adopt materialistic action strategy or not.

Finally, the consequences of this kind of materialism will be influenced by cultural values. In addition, when people recognize that most social members don't agree that 'Success equals Financial Success', an equation which means that materialism is a cultural value, previous research conclusions about the predicted negative consequences of value materialism will no longer exist.

Summary

The current article proposes that materialism is an action strategy by which people pursue money and possessions to solve social problems that they face. Different from previous perspectives that construe materialism as a personality, a value, a goal, or self-identity, materialism as an action strategic considers the tension between requirements that a society places on individuals and means that people can use to realize these requirements. Thus, this kind of action strategy is value-free and temporary. The article also discusses the predictors and consequences of this new conceptualization of materialism and compared with previous conceptualizations.

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Keynote Speech IV

Some Viewpoints on the Development of Multicultural Psychology in China

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Introduction

Cultural psychology is a booming field now in China. However, multicultural psychology should be paid attention to and studied also. I agree with the definition of multicultural psychology set by Mio, Barker, & Tumamabing (2009) that multicultural psychology concerns the systematic study of behavior, cognition, and affect in settings where people of different backgrounds interact. I also agree that cultural psychology is a branch of multicultural psychology. Why is it important to study multicultural psychology in China? The reasons are obvious. From a domestic perspective, as the reform of economy, education and politics develop deeper and deeper, such as urbanization, citizen fluidity across the areas of China rapidly increases unprecedentedly. For example, in 2015, there were 277 million farmers from rural areas moving to cities, especially large cities. Among them, some stayed temporarily for some months like migratory birds and went back to the countryside afterwards where busy farm work was waiting for them. Some maybe stayed for a long time with their families, such as several years, and were going to be urban citizens. No matter whatever the duration they stayed in cities, it is no doubt that they were confronted with culture shock, cultural identity, cultural adaptation, culture-bound values, even culture-bound syndromes, and so on. From an international perspective, the open-door policy of China has been kept continuously. Exchange and communication among the Chinese and overseas has increased more rapidly than ever today. For example, huge populations of Chinese have gone abroad to take trips over the past few years. There are many people from other countries that come to China to look for opportunities to work and develop, and majority of them are from Africa. The tides of returned oversea Chinese has been booming again. International trade grows at a high level in China, which makes businessmen from various countries interact more rapidly and closely, and so on. It can be seen that different cultures are merging and clashing, which seems usual, so that people from different cultures should face the same issues as described above. We need multicultural psychology indeed.

The importance of research on multicultural psychology can be shown in the idea of Paul Pederson (1990, 1991). He proposed that multicultural psychology was the “fourth force” in psychology, which means it has a huge influence on the field and precipitates a paradigm shift, or major change, in the way people think about human behavior. He said that labeling multiculturalism as the fourth force, which follows the first three forces (psychoanalysis, behaviorism, and humanism) explores “the possibility that we are moving toward a generic theory of multiculturalism that recognizes the psychological consequences of each cultural context, where each behavior has been learned and is displayed...and calls attention to the way in which a culture-centered perspective has changed the way we look at psychology across fields and theories” (Pederson, 1999, p. xxii; also see Mio, Barker, & Tumamabing, 2009, pp. 13-14).

Key Issues

When conducting research on multicultural psychology in China, some key issues should be focused on. The similarity and difference between multicultural psychology and cross-cultural psychology should be recognized. As we use the definition of multicultural psychology, it means that the broad concept of culture is adopted, in which most multicultural psychologists subscribe to a broad definition of culture that includes statuses and affiliations such as gender, physical ability, religion, and sexual orientation, and certainly includes a wide range of diversity that encompasses differences beyond race, ethnicity, and nationality. In other words, any of the important or meaningful ways in which we identify ourselves can be viewed as a culture. So, multicultural psychology is the systematic study of all aspects of human behavior as it occurs in settings where people of different backgrounds encounter one another. Here, cultural encounters or contacts signifies “critical incidents where people from different cultural, ethnic, or linguistic backgrounds come into social contact with each other” (Bochner, 1999, p. 22). Some psychologists use the term cross-cultural psychology or cultural psychology to refer to multicultural psychology and think they are the same thing. But the clear distinctions between multicultural psychology and cross-cultural psychology or other terms must be seen. Cross-cultural psychology is often concerned with comparisons across cultures, while multicultural psychology usually makes comparisons within one society. So, as the broad definition of multicultural psychology, it is better to be seen as the broad field which includes the subfield like cross-cultural psychology, ethnic minority psychology, and so on.

Theoretical Model

When we learn about multicultural psychology as well as conduct research on this field, we need a theoretical model. The Biopsychosocial Model put forward by Engel, et al. (1977) is appropriate by my own view. As we know, the tenet of multicultural psychology is that all behavior is learned and exhibited in a cultural context. In order to understand human behavior, we must understand its cultural context. Culture influences everything. The Biopsychosocial Model, as Mio, Barker, & Tumamabing (2009) say, explain the effect of culture on behavior. This model grows out of behavioral medicine and health psychology and focuses on an understanding of the psychological, social, and biological factors that contribute to illness and that can be utilized in the treatment and prevention of illness and the promotion of wellness.

The Biopsychosocial Model says that behavior can be understood on many levels. The first is the biological level. Our behavior is influenced by our physiological and genetic makeup. This level is surely important. Some of domestic neuro-psychologists tend to ignore other out-levels as they do research. The second level is the cognitive-affective level. Cognitions include all of our basic mental processes and affect refers to feelings or emotions. Cognitions and affects influence our behavior, and many psychologists are doing research at this level, and at which most people understand and think about mental disorder, because most of what we know and study in the field of psychology occurs at this level.

There are still some psychologists that are not concerned about the influence coming from other levels outside, such as third to fifth ones. The third level is the social-interpersonal level, which focuses on the impact of social relationships. The majority of social psychologists are working on this level. The fourth level of the model is the social institutional level. Social institutions are large, complex, relatively stable clusters of social relationships that involve people working together to address some basic human or societal

need. The military, government, schools, hospitals, and large corporations are examples of social institutions. Behavioral scientists, including social psychologists, are involved in this level. The final level of the Biopsychosocial Model is the cultural level, last, but not least. Culture reflects the values, beliefs, and practices of a group of people and all behavior occurs in a cultural context. So, a complete analysis of, for example, a student's suicide, must consider all the levels, from a biological predisposition to cultural beliefs about gender roles. We should keep in our minds that according to Biopsychosocial Model, all behavior is learned and occurs in a cultural context.

As in dealing with the application of psychology, we should also have an eye to conduct it in terms of multicultural psychology. A typical example is counseling and therapy. Sue, Ivey, and Pedersen (1996) outline the basic tenets of a theory of multicultural counseling and therapy (MCT), which includes general principles that are the foundation of multicultural psychology. One example is the second proposition which says that both client and counselor have multiple identities, at the individual, family, group and cultural levels. The identities are dynamic, and the salience of one over the others varies across situations and across time. Another example is the fourth proposition which says that therapy is most effective when the therapist takes into account the culture of the client when defining issues, setting goals, and developing treatment strategies. One of the main goals of multicultural training is to help therapists expand their repertoire of helping skills so they can find the best match between the client's culture, the client's presenting problems, and the interventions, (see Mio, Barker, & Tumamabing, 2009, pp.19-20). These and other principles give us enlightenment when we conduct counseling and psychotherapy. We should remember that (1) culture provides that context for all behavior; and (2) each person has a cultural identity that is made up of many dimensions and layers which influence an individual's attitudes, feelings and behaviors.

We look forward to the vigorous development and fruitful findings of multicultural psychology in China.

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Keynote Speech V

Reflection on Cultural Psychology from the Perspective of Comparative Philosophy

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[Abstract] Through a comparison between Plato's Cave Metaphor and Laozi's Water Metaphor, this research explores how these two philosophers explain cognition and thoughts of human beings. Then it explores their influence on psychology study from these three aspects: disembodied and embodied cognition, balance and harmony, and Plato's objectivity and Laozi's objectivity. This study emphatically analyzes the guiding significance of Laozi's philosophy on cultural psychology. This research might have some theoretical and practical implications for current psychology study.

[Keywords] cave metaphor; water metaphor; psychology research; cultural traditions

Introduction

Linguistics professor Lakoff from UCB regarded metaphor as the basis of human cognition, the basic way for the thinking and language of human beings to function. He and the philosopher Johnson pointed out in the book named, *Metaphors We Live By*, "The conceptual system of human thinking is based on Metaphor." Lakoff thought the essence of metaphor was to understand and experience a kind of thing with another kind of thing. Laozi and Plato both noticed the ineffability of basic psychological phenomenon, and the best way was metaphor. Therefore, this study tries to grasp the relevant ideas by analyzing the famous metaphors of Plato and Laozi and the related models.

Two Great Root Metaphors

As the deep core concept in human concept system, root metaphor plays an important role in the daily thinking mode and discourse expression of human beings. The root metaphor of Plato's philosophy is the cave metaphor, and the root metaphor of Laozi's philosophy is the water metaphor. Plato's cave metaphor contains a vision model, and Laozi's water metaphor contains a multi-sensory model.

Light Metaphor – Vision Model

In the seventh volume of *The Republic*, Plato made the famous cave metaphor: Several prisoners, who were imprisoned for life in a cave and were bound, were only able to see the scene in front of them, and they were passed by a path on which people carried a variety of things. Behind the road was a burning flame, and the pedestrians and the things they carried with them were projected on the wall in front of the prisoners. These shadows constituted the prisoner's real world. One of the prisoners broke free from the yoke, escaped from the cave, and when he turned to the flame, his eyes tingled, and after he gradually accustomed to it, his eyesight was restored. First, he saw the shadows, next, he saw the reflections of people or the things in the water, and then he saw the things themselves, along with the pedestrians and objects which were just shadows before for him. The flames brightened up those things like the sun. Then, let's guess, when the prisoner left the cave and went on until he made it into the "upper world", confronting real reality, the prisoner would feel dazzled. Only after a certain period of adjustment, would he able to see the things in

the “upper world” and realize that they were more real than the shadows he had seen in the cave. Then he understood that it was the sun that had dominated the seasons and the cycles of ages, and it was also the source of all the things they had seen through a certain twist. Plato applied the “cave metaphor” to illustrate the situation of human beings: We were prisoners with chains, collectively imprisoned, could only see the deformed shadows on the wall, what we had felt was not the real thing, but the things in our consciousness. The real world was the perfect and changeless world of ideas, only existing in the cave, and only by reason could we feel this world (Kuang & Deng, 2009).

From Plato’s Cave Metaphor, the following seven corresponding relationships can be sorted out: The world inside the cave corresponds to the visible world and phenomenon; the world outside the cave corresponds to the known, real world; the prisoners in the cave correspond to our human beings (to be educated); the shadows on the wall correspond to the shadows of real things in the real world; the sun corresponds to the idea of good; observations of shadows correspond to suggestions. The sun’s intuition corresponds to the knowledge and truth of good.

The basic model proposed by Plato’s philosophy can be seen as a light model, and light is directly related to vision. Without light, things will not be seen; without the idea of good, truth and beauty are also out of the question. The model is a vision model.

Plato’s vision model had a major influence on both western philosophy and science, Gadamer’s Philosophical Hermeneutics suggested that understanding was the factually existing’s way of being. To explore the basic conditions of all human understanding activities, the problem of “Horizont” must be solved at first. The original meaning of “Horizont” is “Horizon”, which means the place where the world intersects by looking horizontally. “The Horizont is the area of vision, which encompasses and accommodates everything that can be seen from a single point of departure”. The area that our horizon can reach is finite, but the horizon itself is infinite and extends indefinitely beyond our reach. This constitutes a contradiction between the limited and infinite “Horizont”. As for the individual, its “Horizont” is limited, and only the things within the scope of personal vision can enter its “Horizont”, but relative to the infinite vast world, “Horizont” must be infinite, with infinity, understanding is carried out on this basis, in order to obtain this limited and infinite fusion. And this is the basis of understanding, to achieve the integration of limited and unlimited (Hong, 1999).

Water Metaphor-Multisensory Model

The root metaphor of Laozi’s philosophy is water. Laozi used water as a model to make a profound explanation of natural law and humanity. It not only provides us a very illustrative and explanatory model to understand the psychology and behaviors of human beings, but also provides inspiration for us on the use of metaphor and models in the psychological study. Laozi described the characteristics and functions of water and its relationship with human beings in *Tao Te Ching* from a various of perspectives. He pointed out that, “Highest good is like water benefits all things without striving for fame” (Chapter VIII).

Water is visual, audible, sniffing, touchable, and movable. Therefore, it is a basic phenomenon that involves a variety of senses to understand and recognize from a variety of approaches. Taoism values soft, female, life and quiet. All of these are the properties of water. *Lu’s Spring and Autumn* only uses one word to describe the difference among Laozi’s philosophy, Confucius philosophy and Mozi’s philosophy: “Laodan values soft, Confucius values benevolence, Mozi values universal”. Professor Wang Bo from Peking University suggested that all the *Tao Te Ching* five words can also be seen as the explanation of “soft”, soft is both “Tactics” and Taoism. Laozi suggested that things in the world were not only being

opposite and yet complementary, being and non-being, but also were developing and changing. The process of changing was not often of a straight line, but a curve. It is not difficult to understand these ideas from the water model. From Laozi's water metaphor can be seen that "as good as water" is the highest value standard of Taoistic philosophy. "Tao obeys ziran" is not only the highest cognitive law of Taoistic philosophy, but also the highest law of scientific thinking and practice.

Main Differences Between These Two Models

In epistemology, the two models have a different focus on the category of discrete and continuous: The main characteristic of light is discrete, and the main characteristic of water is continuous. As for certainty and variability, Plato's model focuses on correct certainty, and Laozi's model pays more attention to variability. As for structure and function, Plato's model pays more attention to structure; this also has an impact on the prevalence of structuralism in Western philosophy and science. Laozi's model pays more attention to function, and this may be related to the fact that Chinese traditional culture attaches more importance to the analysis of the function than structure.

The differences between the methodology is that the Plato's model focuses on the reduction and reconstruction, and Laozi's model mainly focuses on intuitive and abstract. As for the attitude towards logic and intuition, Plato's model emphasizes the construction of experience by the methods of formal logic, Laozi's model pays more attention to the intuitive method to interpret unknowns. Only when the "intuition" is finally raised to the "ontology" status, will not it be confused with the passive sensory feeling. Laozi achieved this major change.

As for the way of thinking, the two models have a different focus on analysis and synthesis, deduction and induction, pedigree tree thinking and tuber thinking. Plato's model focuses on analysis, and Laozi's model mainly focuses on synthesis. Plato is the master of logical reasoning, he participated in the creation and improvement of the way of thinking that has influenced the West for thousands of years. Laozi's understanding of comprehensive thinking has had a far-reaching impact on the way of thinking in the East.

Plato's model focuses more on deductive thinking. Deductive thinking requires tight deduction from the original concept → the defined concept → the empirical concept, and applies a postulation, axiom or theorem to describe experiences (phenomenon). Thus, this method has achieved a far-reaching impact on the western scientific thinking. Laozi's model attaches more attention to vertical induction and horizontal analogy, and this thinking conducts cross-domain transplantation with experience induction and similar analogy, and thus, has achieved greater impact on oriental literature and art.

Plato's model defines Western thinking as a pedigree tree, while Laozi's model shapes the Chinese mind into a tuber. Pedigree tree thinking is mainly diachronic thinking, and tuber thinking is mainly synchronic thinking. According to the view of Deleuze and Gattari, pedigree tree thinking is a blood system, Bunch thinking is federated. The former emphasized the verb "to be"; while the latter relied on the conjunction "and ... and ... and" Tuber thinking is a logic of AND (conjunction). They thought this was also the difference between the method of ideology and culture. They believed that the pedigree tree thinking dominated almost all of the ideas and reality of modern Western.

This led to an important difference between the East and West in the characteristics of thinking: Westerners' precision thinking, abstract thinking and mathematical thinking became more developed, and the Chinese people's ambiguous thinking, image thinking and empirical thinking became more developed.

The history of human thought shows that any single way of thinking and cognition is flawed. Complete and profound understanding needs the complement of a variety of cognitive methods and ways of thinking.

Popper suggested that: One-sided deep is better than the overall mediocre. Psychologist Jung saw the limitations of analysis and reduction, and he tried to transform psychoanalysis into “spiritual synthesis”. The final purpose of Jung’s analytical psychology should be regarded as “comprehensive” psychology rather than “analysis” psychology. Analysis is nothing but a method, synthesis is the purpose to achieve. If analysis is just a method of decomposition, then there should be a comprehensive method afterwards, which is not to reduce a dream, but to “produce”, “increase” and “enlarge” its significance.

The Guiding Significance and Inspiration of Laozi’s Philosophy to Psychology Research

The main tradition of Western psychology is based on Plato’s philosophy, and now Western psychology is wide-spread in Chinese study, but China hasn’t formed the psychological traditions as western science has suggested, so the psychological significance of Laozi’s philosophy has received little attention. The following is a brief discussion of the significance of Laozi’s philosophy on the study of psychology, including cultural psychology.

The concept of people in Laozi’s philosophy is different from that in Western philosophy – they are the natural people, the concrete people, the social people, and the people in the relations of the sexes and family. Laozi’s philosophy advocates getting close to nature, and not to be materialized. Using symbols, but not to be symbolized. Laozi’s philosophy is of great epistemological and methodological significance to the study of psychology, especially to the study of cultural psychology, such as embodied cognition, harmonious thoughts and the objectivity of Taoism.

Disembodied and Embodied Cognition

It is well known that Baslau proposed the concept of “Embodied Cognition”. It suggests that the way we recognize the world is not purely conceptual, it is not just to transform the outside world into a purely conceptual mental representation, but our bodies also bare the task of representing the world. If Plato’s philosophy of cognition is mainly disembodied and structural, then Laozi’s philosophy is mainly embodied and procedural. Influenced by Laozi’s philosophy, Chinese traditional culture believed that most of the diseases in our body result from the accumulation of our negative thoughts and emotions, and different parts of the body store different emotions. Ancient wisdom of Chinese medicine has long said that the kidney mainly stores fear, the liver stores anger, and the lungs hide grief and so on. Now people realize that our minds can deceive ourselves, but the body will not lie. It faithfully helps us store all of our emotions, reminds us to be true to our true needs, and to deal with it well. Our bodies are our loyal friends and are using various ways to remind us of the root of the problem.

Balance and Harmony

Another important difference between Plato’s philosophy and Laozi’s philosophy is that the former pays attention to balance, while the latter pays attention to harmony. Influenced by Plato’s philosophy, Western psychology emphasizes balance-conflict (imbalance)-balance. Taoism emphasizes the harmony of multi senses, the harmony of body and mind, and the harmony of human and nature, which has a profound influence on the cognition and behavior of Chinese people. The famous American physicist Capra expressed his concern about the ecological crisis, he very much appreciated Laozi’s thought of harmony with nature, and said, “Among all great traditions, in my opinion, Taoism provided the most profound and perfect ecological wisdom, it stressed that in the process of natural circulation, all individual and social phenomenon were basically consistent in potential” (Chen, 1992). Tong B. Tang, a researcher in Cambridge, compared Chinese and Western cultural traditions from the view of scientific thinking, and he

pointed out in the book *The Science and Technology of China*, “Chinese tradition is very different. It neither strives to conquer nature, nor tries to understand nature through analysis, it just tries to make agreements with nature to achieve and maintain harmony. The scholars focus on such a kind of wisdom that it combines subject and object, guiding people to be in harmony with nature” (Chen, 1992).

Kafka, the father of the modern western novels, revealed the four divisions of industrial civilization: the division of man and nature, man and man, man and society, and man and the self. Laozi’s philosophy helps to overcome these divisions.

Two Kinds of Objectivity

In *The Psychology of Science*, Maslow fully affirmed the “Taoist mentality” and “Taoist method”, but also made the following comparison of the cognitive styles between the East and the West: The West was “permissive (non-caring) cognition, and the East was “the cognition of caring and thorough (Taoist) non-intervention”. The former had “the spectator’s objectivity of detachment, neutrality and non-intervention”, while the latter had “the detachment and objectivity due to the non-intervention, the concern, the appreciation of the related people and the willingness to let it come naturally” (Ma, et al., 2010). The former objective recognition ruled out a person’s desire, fear and hope, and is more suitable for research on the phenomenon among non-human life, while the latter is more suitable for the study of the phenomenon among life, especially for the phenomenon of human beings in the social and cultural context.

The former objectivity comes from Plato, and the latter comes from Laozi, which was called “The Taoistic Objectivity” by Maslow. The objectivity of Taoism is a kind of transcendental objectivity, which goes beyond the pure self and the pure external object. It is a kind of embodied and comprehensive objectivity. Maslow suggested, “We can flexibly use these two epistemologies according to the changes in the situation”. “They are not contradictory, but complementary with each other” (Ma, 2010).

Laozi’s philosophy provides us with much wisdom and method. Therefore, it is instructive to vast areas of psychology, and helps to solve a series of important psychological problems, Laozi’s philosophy has been widely used in psychological counseling and therapy, medical psychology, personality psychology, cognitive psychology, aesthetic psychology, management psychology, political psychology, developmental, and educational psychology, etc.

In secular society, the basic motivation of most people’s behavior is self-centered; they chase sensory stimulation, enjoyment, and vanity selfishly, greedily, and tirelessly. Laozi’s philosophy suggests that desire is the root cause of restlessness. So, it advocates people to be less selfish and have little desire. Affected by Laozi’s philosophy, Taoist medicine suggested that all excessive mental activity would lead to pathogens, and they were the sources of diseases. It further discussed the relationship between emotion and disease, and suggested that the seven orifices are the portals of spirit, from which the outside information came in, and if they were not effectively treated, it would lead to a variety of physical and mental disorders. Some of these views and opinions coincide with modern psychosomatic medicine.

Taoism emphasizes the self-promotion of life, and is dedicated to the cultivation of people who can not only communicate with all lives, but can also maintain a complete and natural personality. The growing process of human beings is also consistent with Taoism, therefore, we should also follow Taoism in the process of raising children, and let nature take its course. The education style of Taoism is not so much like an intervention, but an accepting way. To educate children, you had better not to think the good things in your thoughts for them at first, but let them tell you what is good for them. Trust their own personal feelings,

let the children learn to grow up with self-realization. This means that we should pay more attention to the “natural” and “spontaneous”, and to minimize the external invasion and control.

Conclusion

Laozi’s philosophy suggested that if we want to know what is right and wrong, we must listen carefully to our inner voice with the attitude of Taoism. Only by listening can we shape ourselves, guide ourselves, and direct ourselves. Excellent psychotherapists must also counsel their patients in the same way, guide them to listen to their inner voices, and accept and love the inevitable reality. Laozi’s philosophy of “letting nature take its course” is the best guiding principle. Encourage people to develop balanced, comprehensive, flexible, optimistic attitudes and psychological ability at the basis of diligent, gregarious, and persistent exploration. It also encourages people to avoid negative masquerade attitudes towards life, and to prevent the excessive use of a “rationalization” psychological defense mechanism confronted with setbacks and conflicts.

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Analysis on Psychological Problems of College Students from 1248 Psychological Counseling Cases

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[Abstract] The purpose of this paper is to compile a coding handbook on the psychological problems of college students from a overall health perspective. The authors qualitatively analyzed the records from the mental health education center of a university for 1248 consulting cases from 2010 to 2015. The result showed that 1.3% college students had psychological problems, and among them, almost 85% consulted and sought help for developmental problems such as learning, emotion, interpersonal relationship, personal development and psychological crisis, and 15% of the help-seekers were diagnosed with a psychological disorder. It was discovered that when compared with the general population, college students constituted a healthier group and their psychological problems were mainly related to development, but not obstacle.

[Keywords] college students; developmental problems; psychological disorder

Introduction

Since China resumed the university entrance examination system in 1977, “college students” had almost always been the spokespersons for the “unusually lucky ones”; however, with the enrollment expansion of colleges and universities in 1999, the number of college students increased sharply, and the once-“unusually lucky ones” started to become perplexed by such problems as “college student employment difficulty” and “college student psychological worrying problems”. Such research themes as “college students’ psychological health” became hot topics for researchers, and some research revealed through psychological measurement of large samples that about 20% college students have varying degrees of a “psychological disorder” (Huang, & Zheng, 2009), giving rise to the popular belief that current college students have serious psychological problems. Is the psychological health of college students so worrying? And what are the features of a so-called “psychological disorder”?

At present, there are primarily two orientations of general studies related to college students’ psychological problems. One orientation is a measurement study adopting a relevant psychological health scale, and they mostly use the SCL-90 symptom check list to describe the behaviors of college students with various symptoms such as depression, anxiety, obsession and hostility. Xin, et al. (2012) found, upon meta-analysis of 25-year data sourced from researches adopting the SCL-90 symptom check list from 1986 to 2010 that the overall psychological health level of college students was improving. But due to measurement norm, the findings of the research that adopted this symptom check list can not exactly reflect the actual situation of college students’ psychological problems (Huang, & Li, 2009); as a result, other scholars tried to learn about the concrete manifestation of college students’ psychological problems via analyzing cases of psychological problems revealed by college students (Song, 2011; Zhu, & Yang, 2012). However, it’s hard to solicit data for research in this regard, and it involves the confidentiality of relevant case materials, so therefore, there is little literature, either at home and abroad. Overseas case studies mostly account for the special psychological problems concerning the studied college students (Whyte, & Guiffrida, 2008; Smart, 2010) or else, a single sample and smaller samples of certain psychological problems are used (Draper, & Faulkner, 2009; Aizenman, 2009), and there is little research

literature on large samples of the mass college students' psychological problems. In this research, the features and general picture of college students' psychological problems are discussed via analyzing counseling record files of a large sample.

Research Data Processing

The researcher selected 1248 consultation cases dated 2010 to 2015 from the mental health education center of a university in Zhejiang Province. There were a total of 3312 valid psychological counseling records after having deleted duplicate and invalid records, and numbered them (R1-R3312) hereunder. They were classified primarily according to the evaluation of counseling records in place, the problem description of each counseling record was reread, determining the features of problems, conceptualizing the features of problems into the same class, and then the concepts of the same attribute were divided into a category (see Table 1 for detail). To respect the personal privacy of the help seekers, psychological counseling record files were extracted in strict accordance with the principle of confidentiality concerning psychological consultation

Table 1. Open Coding Analysis Examples of Counseling Records

Counseling Records Example	Induction	Conception	Category
R3: It is no use to learn these courses which will be unused later in life.	Think that study is of no use	Learning burnout	<i>Problems of learning</i>
R23: I am not interested in any course, and I don't want to learn.	No interest in academic work		
R188: I don't know why I learn.	Without learning motivation		
R92: I am confused about current learning.	Without learning target		
R319: There are so many courses, they are so difficult, and I feel very tired.	Pressure of courses	Academic pressure	
R136: It's time to have the final exams, I am afraid of failure.	Pressure of examinations		
R542: My parents set their hopes on me, I am afraid I would feel sorry to them.	Pressure from parents		
R2278: These in our Excellence Class are all study overlords, I am afraid I will be eliminated.	Pressure of competition with classmates		
R358: I am distracted in tens of minutes while reading.	Inattention	Efficiency of learning	
R2267: I usually study very hard but my results are not satisfactory.	Improper method of learning		
R3190: I only read while exam time is coming but it's always too late.	Bad study habits		
R2119: I lack strong basis and study hard at ordinary times.	Poor learning ability		
R2301: Time flies when I fiddle with my phone and chat in WeChat.	Self-management absence	Academic procrastination	
R2208: I am fear of mathematics and feel afraid at the sight of the assignment.	Lack of control over study		
R926: I dislike AMaths and don't want to do my homework.	Rebel at learning tasks		
R1143: I am afraid I can't get scholarship because of exam failure.	Anxious about result evaluation		
R279: I need to take examinations for all kinds of certificates but the time is too limited, and I am afraid I can't go through.	Negative perfectionism		

The Category and Manifestation of College Students' Developmental Problems

Based on the open coding handbook, all counseling record texts were re-analyzed by the top-down method; and the first to third class concepts of college students' psychological problems were classified. The first-class codes consulted the primary theoretical framework; the second-class codes were specific problems covered by the two categories; the third-class codes generalized the features of each concrete problem. According to the theory of entire psychological health outlook, health and ill health are a continuum. When psychological unbalance reaches a certain level, general problems may turn into serious psychological diseases. Therefore, psychological problems are divided into two categories hereunder, namely, developing psychological problems and obstacle-related psychological problems. Table 2 shows systemized analysis results of 3312 counseling records and the generalized categories and features of college students' developing psychological problems in detail.

Table 2. Coding Handbook of College Students' Developing Psychological Problems

<ul style="list-style-type: none"> 1 Problems of learning <ul style="list-style-type: none"> 1-1 Learning burnout <ul style="list-style-type: none"> 1-1-1 Think that study is of no use 1-1-2 No interest in academic work 1-1-3 Without learning motivation 1-1-4 Without learning target 1-2 Academic pressure <ul style="list-style-type: none"> 1-2-1 Pressure of courses 1-2-2 Pressure of examinations 1-2-3 Pressure from parents 1-2-4 Pressure of competition with classmates 1-3 Low efficiency of learning <ul style="list-style-type: none"> 1-3-1 Inattention 1-3-2 Improper method of learning 1-3-3 Bad study habits 1-3-4 Poor learning ability 1-4 Academic procrastination <ul style="list-style-type: none"> 1-4-1 Self-management absence 1-4-2 Lack of control over study 1-4-3 Rebel at learning tasks 1-4-4 Anxious about result evaluation 1-4-5 Negative perfectionism 	<ul style="list-style-type: none"> 2 Problems of personal development <ul style="list-style-type: none"> 2-1 Personality problems <ul style="list-style-type: none"> 2-1-1 Self-centered 2-1-2 Self-unity crisis 2-1-3 Too low or too high self-evaluation 2-2 Family problems <ul style="list-style-type: none"> 2-2-1 Family accidents 2-2-2 Strained parent relation 2-2-3 Family financial difficulties 2-2-4 Family violence 2-3 Adaptability problems <ul style="list-style-type: none"> 2-3-1 Freshmen 2-3-2 After having changed majors 2-3-3 Environmental adaptation 2-4 Career planning problems <ul style="list-style-type: none"> 2-4-1 Unclear employment target 2-4-2 Inaccurate professional orientation 2-4-3 Lack of job-hunting skill 2-5 Sexual perplexities <ul style="list-style-type: none"> 2-5-1 Sexual behavior 2-5-2 Sexual orientation
<ul style="list-style-type: none"> 3 Interpersonal relationship problems <ul style="list-style-type: none"> 3-1 Interaction difficulties <ul style="list-style-type: none"> 3-1-1 Difficult to communicate with strangers 3-1-2 Afraid to speak in public 3-1-3 Difficult to make bosom friends 3-2 Interpersonal conflicts <ul style="list-style-type: none"> 3-2-1 Strained relationship with roommates 3-2-2 Strained relationship with classmates 3-2-3 Strained relationship with parents 3-2-4 Strained relationship with the tutor 	<ul style="list-style-type: none"> 4 Emotional problems <ul style="list-style-type: none"> 4-1 Have a love affair <ul style="list-style-type: none"> 4-1-1 Fear to love 4-1-2 Unrequited love 4-1-3 Emotional entanglement 4-1-4 Get along with lover 4-2 Disappointed in love <ul style="list-style-type: none"> 4-2-1 Emotionally too involved 4-2-2 Hurt oneself and others 4-2-3 Escape or avoidance
<ul style="list-style-type: none"> 5 Psychological crisis <ul style="list-style-type: none"> 5-1 Stress reaction to crisis events 5-2 Harm of personal hurt events 	

Features of College Students' Psychological Disorders

Obstacle-related psychological problems include psychological disorders and mental disorders, resulting from the long-term accumulation of uncured physiological and psychological disorders. These types of problems usually last for a long time and have complex forming reasons. The psychological counselor needs to realize whether visitors have such problems as a lack of insight, psychological activity or behavior disorders and the resulting severe defect in social function, then evaluate the severity of their psychological symptoms, including whether there is a suicidal risk or other factors, and refer them to special hospital of mental disease for clinical diagnosis and treatment if necessary. They need to pay attention to and follow up with students with obstacle-related psychological problems for good. A scholastic psychological counselor primarily evaluates according to student's social function impairment. Actually, a person's obstacle in cognition, emotion and behavior often disables him/her from maintaining a normal life, study and work; that is, it impairs his/her social functions. In the process of counseling, a judgment can be made whether the visitor has self-help ability via observing his/her appearance, clothing and apparel (for example, slovenly or raunchy), or learning from his/her roommates whether he/she has changed a lot in the state of life, for instance, become erratic, or not attending classes, not finishing their assignments, not sitting for exams, not communicating with others, not participating in any activity or staying in their room alone. As a result, obstacle-related psychological problems of college students are also reflected in three aspects such as losing their self-help ability, unable to carry out normal learning activities, or completely breaking away from normal social interactions.

Categorical Distribution of College Students' Psychological Problems

To describe population distribution features of college students' psychological problems, we compared the number of psychological counseling students with the total number of students and found that, from 2010 to 2015, the proportion of students who visited scholastic psychological consulting room didn't fluctuate greatly, only averaging 1.3% (see Table 3). In contrast with statistical data issued by the Centers for Disease Control of China which stated that in 2009 "the proportion of Chinese with psychological problems and mental diseases reaches up to 7%", and the proportion of college students with psychological problems fell far below the demographic proportion in China, showing that college students, as a whole, are a healthier group.

Table 3. Proportion of Counseling Students in the Headcount over the Years (2010-2015)

Year	2010	2011	2012	2013	2014	2015	Total
Counseling students	143	186	240	223	238	218	1248
Current students	16339	16116	16147	16491	16571	16533	98197
Percent	0.88	1.15	1.49	1.35	1.44	1.32	1.27

Seen from the proportion of each category of psychological counseling problems of the total counseling students (Table 4), those consult "developing psychological problems" were almost 6 times greater than those with "obstacle-related psychological problems". That is to say, most psychological problems were developing, but not obstacle-related ones, for college students. Among those students developing psychological problems, those with "personal development problems" accounted for 1/3 of the headcount, showing that college students were not only faced with self-identity crisis problems as the ordinary youth group, but they were exposed to such special problems as adaptation to college life at the university level and career planning; "problems of learning" made up almost 1/4, showing that with

learning as their main task, more than a few college students are perplexed by it; those with “interpersonal relationship problems” and “emotional problems” assumed a definite proportion, and those with “psychological crisis” were the least amount, showing that college students have favorable self-control.

Table 4. Categorical Distribution of College Students’ Counseling Problems

Problem categories	Developing psychological problems					Psychological disorder
	<i>Personal development</i>	<i>Learning</i>	<i>Interpersonal relationship</i>	<i>Emotion</i>	<i>Psychological crisis</i>	
Number of counseling students	958	777	531	467	77	502
Percent in the total number	28.9	23.5	16.0	14.1	2.3	15.2

Cause Analysis on College Students’ Psychological Problems

Factors that influenced psychological health and resulted in psychological disorders or psychological disease are complicated and various; some are common social factors such as the faster pace of life, fiercer competition, social inequality and large gaps between the rich and the poor. Some are personal problems such as family misfortune, problematic parenting styles and defects in personal character, wherein, personality and family were the main influencing factors for personal development (Sun, Wang, Wang & Man, 2014). Moreover, we also found the challenges against college students at the university level upon the analysis and systemization of counseling records.

Many college students believe that college life is carefree before entering a college, but in fact, numerous challenges lie dormant at the university level, such as:

1. Adapting to change is a stress each freshman must face. Living in a new dormitory, making new friends and becoming familiar with classroom organization forms different from those in senior high school may stress freshmen psychologically; someone can adapt well to the change, but some may feel anxious and confused on the turn.
2. Establishing new relationships: The process of discovering new friendships and blending into a new social network is important for the development of all college students. Friendship is an important indicator to evaluate whether the college life of a college student is successful and satisfactory, thus, conflict with classmate may turn out to be a source of unfavorable pressure for college students. Establishing close relationships and facing the issue of love and sex is another vital task for young students. For many college students, the establishment or sudden breakdown of an intimate relationship may be perplexing or will disturb their normal learning and life.
3. Academic competition: Course load and scores are the inevitable pressures in college life. universities/colleges overemphasize the scores, and as a result, some students regard getting good marks as their target, while other students just want to pass the examinations but not study hard. Furthermore, score-related pressure may also result in examination anxiety.
4. Processing daily annoys: Life events and daily routines may affect us greatly in a stressful life, and in some cases, may give rise to psychological imbalance and disease. Some researchers have found that the most common daily hassles for college students include wasting time, living alone, worrying about their scores, having too little money, being uncertain about the future and unsatisfied with their appearance.

5. Facing postgraduate challenges: Collegial experience includes not only the assessment of current needs, but is also a prediction of coming challenges such as vocational choice. The special challenge of making a vocational choice is making sure that it is totally your own thing and reflects your real interests and values. Under normal conditions, college students always go against their own will and ignore their own values, whether it fits their personality, their choice of lifestyle and other issues when choosing a vocation because of their parents' will, expediency, material interests or short-term opportunity, and this results in psychological obsession. College can be a place where "opportunity" and "crisis" coexist.

Conclusion

From the perspective of counseling, college students' psychological problems can be divided into two categories, namely, developmental problems and psychological disorders. The former mainly refers to various psychological adaptation problems, including problems of learning, emotional problems, interpersonal relationship problems, personal development problems and psychological crisis. These five aspects are time-phased and transient; the problems do not severely influence the logic of thought and often can be "adapted" and "corrected". The latter includes psychological and mental disorders resulting from the long-term accumulation of uncured physiological and psychological disorders. These types of problems usually last for a long time and have complex forming reasons. Those with such problems, as a lack of self-control, are featured with psychological activity and behavior disorders, severely damaged social functions, and shall be referred to a special hospital for mental disease to receive a clinical diagnosis and treatment if necessary. Compared with the general population, college students constitute a healthier group and their psychological problems are mainly related to development, but not obstacles.

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Anxiety and Attitude on Free Will: A Sample of Central China Male Prisoners

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[Abstract] *This paper investigates the anxiety level of male prisoners, their attitudes on free will, and the relation between the two factors. Three hundred seventy-six (376) male prisoners from central China completed the State-Trait Anxiety Inventory and Attitude on Free Will Questionnaire. The results showed: (a) the anxiety level of prisoners was higher than the general population and increased as their educational level decreased; (b) the scores of Attitude on Free Will Questionnaire were generally low; the scores of those prisoners between 21 and 30 years old, junior or senior middle school educated, and with shorter sentences, were significantly higher than those of prisoners between 31 and 50 years old, primary school educated, and with longer sentences, respectively; and (c) the attitude on free will and anxiety level were negatively correlated. The interactive mechanism of attitude on free will and anxiety level need further research.*

[Keywords] *male prisoners; anxiety; attitude on free will*

Introduction

As the management of prisons has been improving and psychological counseling has become popular in China, psychological issues of prisoners have aroused concerns, such as how to help prisoners achieve better psychological transformation in jail. Although there were some studies in China, most investigated the mental health status of prisoners (Chen & Ren, 2011; Ying, 2007; Zhang, Jiang, & Lin, 2009) or the relations between mental health status and personality, criminal types and term of imprisonment (Fan, et al., 2011; Lu, et al., 2005; Wang, Wang, & He, 2010). Few researches explored the relation between the prisoners' mental health status and their attitudes from the cognitive prospective.

The issue of free will is an ever-lasting topic of western philosophy, and in recent years, researchers have begun to explore the attitude on free will. Attitude on free will is the deep-seated cognition and understanding of the world, which represents an individual's belief in the extent to which human behaviors can be determined by ourselves. Chinese researchers have revised the questionnaire and investigated the relations between attitude on free will and the concept of creativity, psychological atmosphere in groups, and judgments on moral responsibility, etc. Research on the attitude on free will has indicated that to what extent individuals think his willpower can be does influence daily practices, physical health and mental health: as to the physical health and mental health, a controlled situation might have a negative influence on health, while a supportive situation might have a positive influence on health. In addition, individual differences in autonomy might also somehow predict health status. Thus, to investigate the relevance between attitude on free will and anxiety level might improve the understanding of the cognitive roots of prisoners' anxiety, and help to explore better ways to improve their mental status to achieve better transformation.

Method

Participants

There were 376 male prisoners who were randomly selected from 2 prisons in central China to be our subjects. Their ages varied from 21 to 66 ($M = 37.18$, $SD = 8.41$). The education level of the participants was generally low, and the education levels of 317 prisoners were lower than senior middle school, accounting for 84.3% of the total number. As for marital status, 127 prisoners were married (33.8% of the total), and 249 prisoners were unmarried, divorced, and/or widowed. As for the term of imprisonment, the sentence of 56 prisoners was less than 10 years (14.9% of the total), the sentence of 129 prisoners was between 11 to 20 years (34.3% of the total), and 191 prisoners were sentenced to suspended death or a life sentence (50.8% of the total).

Materials

- Free Will Attitude Questionnaire (FWAQ). The questionnaire was revised by Chinese researchers based on its English version. The Chinese version consisted of 27 items and 5 dimensions, including attitude on fatalism, self-control in one's life, action autonomy, personal influence on history and limitations of self-determination.
- State-Trait Anxiety Inventory (STAI). The revised Chinese version was used.
- Questionnaire of basic information, including age, marital status, education level, term of imprisonment and the length of sentence already served.

Procedure and Data Processing

A group test was carried out. Questionnaires were distributed in the direction of researchers and were taken back once the participants finished. 421 prisoners completed the test and 376 copies were valid (89.3%). SPSS17 was used to input, manage and process the data.

Results

Anxiety Level of the Male Prisoners

Results of one-way ANOVA indicated that there was no significant difference between the scores of male prisoners of different ages ($p > .05$), but there was a significant difference among male prisoners of different education levels ($p < .01$). The results of further multiple comparisons (Table 1) suggested that scores among male prisoners of different education levels, that is primary school, junior middle school and senior middle school, were significantly different, and the anxiety level increased as the education level decreased.

Table 1. Results of Multiple Comparisons among Educational Levels

(I) Education Level	(J) Education Level	MD (I-J)	SE	P-value
Primary School	Junior Middle School	2.0244*	.8174	.014
	Senior Middle School	4.4588**	1.1643	.000
Junior Middle School	Primary School	-2.0244*	.8174	.014
	Senior Middle School	2.4344*	1.1009	.028
Senior Middle School	Primary School	-4.4588**	1.1643	.000
	Junior Middle School	-2.4344*	1.1009	.028

Note: * $P < .05$; ** $P < .01$

The one-way ANOVA results suggested that there was no significant difference among male prisoners with different marriage status and prisoners with different terms of imprisonment.

Scores of FWAQ

Compared with the scores of college students, the scores of male prisoners on FWAQ were significantly lower. As illustrated in Table 2, the scores differed significantly among all conditions, and the scores of participants from 21 to 30 years old were significantly higher than that of the prisoners from 31 to 50 years old.

Table 2. Results of Multiple Comparisons among Ages

(I) Age	(J) Age	MD (I-J)	SE	P-value
21-30	31-40	5.8544*	1.8347	.002
	41-50	4.8287*	2.0871	.021
31-40	21-30	-5.8544*	1.8347	.002
	41-50	-1.0257	1.7611	.561
41-50	21-30	-4.8287*	2.0871	.021
	31-40	1.0257	1.7611	.561

Note: * $P < .05$; ** $P < .01$

As shown in Table 3, the analysis results indicated that the scores differed significantly among different education levels, and the scores of prisoners with an education level of primary school were significantly lower than that of the prisoners with an education level of junior or senior middle school.

Table 3. Results of Multiple Comparisons among Educational Levels

(I) Education Level	(J) Education Level	MD (I-J)	SE	P-value
Primary School	Junior Middle School	-4.6454*	1.6367	.005
	Senior Middle School	-7.0313*	2.3517	.003
Junior Middle School	Primary School	4.6454*	1.6367	.005
	Senior Middle School	-2.3859	2.2202	.283
Senior Middle School	Primary School	7.0313*	2.3517	.003
	Junior Middle School	2.3859	2.2202	.283

* $P < .05$, ** $P < .01$

Results of one-way ANOVA indicated that there was no significant difference among participants with different marital status. But the scores differed significantly among prisoners with different terms of imprisonment. Results of further multiple comparisons (Table 4) indicated that the scores differed significantly among participants with different terms of imprisonment. The scores of participants with the term of imprisonment shorter than 10 years were higher than those who were sentenced to suspended death. The scores of participants with the term of imprisonment between 11 to 20 years were higher than those who were sentenced to suspended death and life sentence respectively. The scores of participants with life imprisonment were higher than those who were sentenced to suspended death.

Table 4. Results of Multiple Comparisons among Different Sentences

(I) Sentence Types	(J) Sentence Types	MD (I-J)	SE	P-value
<10 years	11-20 years	-2.1109	2.2993	.359
	Suspended Death	5.5996*	2.4669	.024
	Life Imprisonment	1.6136	2.3628	.495
11-20 years	<10 years	2.1109	2.2993	.359
	Suspended Death	7.7104**	1.9003	.000
	Life Imprisonment	3.7245*	1.7630	.035
Suspended Death	<10 years	-5.5996*	2.4669	.024
	11-20 years	-7.7104**	1.9003	.000
	Life Imprisonment	-3.9859*	1.9766	.044
Life Imprisonment	<10 years	-1.6136	2.3628	.495
	11-20 years	-3.7245*	1.7630	.035
	Suspended Death	3.9859*	1.9766	.044

Note: * $P < .05$, ** $P < .01$

Relation between Prisoners’ Attitude on Free Will and the Anxiety Level

As represented in Table 5, male prisoners’ total scores in FWAQ were negatively related with their anxiety levels. Despite an attitude on fatalism (F), the other four dimensions, self-control of one’s life (S), action autonomy (A), personal influence on history (P) and limitations of self-determination (L), were all negatively related with anxiety levels.

Table 5. Correlations between the Scores of FWAQ and STAI

Factor	STAI Total	F	S	A	P	L	FWAQ Total
STAI Total	1	-	-	-	-	-	-
F	-0.345**	1	-	-	-	-	-
S	-0.229**	0.031	1	-	-	-	-
A	-0.136**	-0.137**	0.521**	1	-	-	-
P	0.063	-0.350**	0.335**	0.350**	1	-	-
L	-0.297**	0.331**	-0.078	-0.199**	-0.380**	1	-
FWAQ Total	-0.378**	0.387**	0.787**	0.594**	0.402**	0.203**	1

Note: * $P < .05$, ** $P < .01$

Discussion

The current study suggests that the anxiety level of prisoners is significantly higher than that of the general population and the anxiety level decreases as the education level of the prisoners increases. The results are consistent with previous findings (Wang & Zhang, 2008; Xu & Qiu, 2007; Zeng, Leng, & Lai, 2011). Obviously, lowering the anxiety level is necessary for stabilizing emotions during their prison terms and achieving better order in prison. Moreover, lowering prisoners’ anxiety levels may help to decrease the possibility of prisoners re-offending.

The current research also suggests that prisoners generally hold negative attitudes toward issues related to free will, while age is an important factor influencing their attitude on free will: prisoners younger than 30 are more likely to think they can control their lives. Meanwhile, the lower their education level is, the longer they’ve been in prison, and the more likely they would accept fatalism and deny the autonomy of their own behaviors. On one hand, compared with individuals in western culture, individuals influenced by

the traditional Chinese culture, which advocates collectivism and Buddhist ideas, were more likely to adopt fatalism and have a tendency to deny their autonomy of behaviors, and this became more obvious in old and poor educated people. On the other hand, previous studies demonstrated that bias existed in the prisoners' attribution processes of why they were put into prison. The prisoners attribute their imprisonment more to their parents, other people or situational factors; such that they attribute their behaviors more to external factors. Bias in attribution of imprisonment is absolutely one of the representations of attitude on free will which is a fundamental attitude of an individual to his/her own behavior. The longer their sentence is, and the more severe their crime is, then the more desperate they become to absolve themselves from guilt.

The research found that the attitude on free will was negatively related with anxiety level, so that the higher scores of FWAQ, then the lower the anxiety level, whereas the lower scores of FWAQ had higher anxiety levels. This suggests that scores of FWAQ is a negative predictor of anxiety level. The results of present study provided further evidence to the idea that anxiety originates from a feeling of uncertain personal control of future life. Thus, promoting prisoners' belief on free will might be an effective way to relieve anxiety.

In summary, prisoners belong to a very special population and focusing on their mental status is beneficial. It not only helps them to rehabilitate, but also helps to promote social stability and security since most prisoners will return to society. Probably one of the effective ways to reform the prisoners is to start with promoting their positive attitudes on free will. First, lacking the responsibility which they should have for their behavior is bad for their repentance, which might induce negative consequences including a re-offense after being released. Secondly, uncertain personal control could increase their anxiety levels. Beginning with prisoners' attitudes on free will, reforming their cognition of the entire world could more effectively change their behavior, and it is also beneficial to improve the prisoners' mental health and the long-term efficacy of their rehabilitation.

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Male Criminals' Self-Control and its Relationship with Emotional Stability

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[Abstract] This study explored the relation between criminals' self-control and their emotional stability. The Self-Control Scale and Eysenck Personality Questionnaire were used and 222 male criminals from a prison in central China finished the test. The results showed that: (a) the self-control level of criminals was generally low, and the self-control level of violent criminals was lower than non-violent criminals; (b) the emotional stability level of criminals was generally low; (c) the self-control level of criminals was positively correlated with their emotional stability and the latter could positively predict the former. Increasing the criminals' emotional stability is a practical way to improve their self-control. Further research on the emotional mechanisms of criminals' self-control is needed to decrease their re-offending.

[Keywords] criminal; self-control; emotional stability

Introduction

Self-control plays a positive role in an individual's psychological activities and social life. Individuals with high levels of self-control have stronger adaptability, healthier bodies, higher life satisfaction and subjective well-being (Tangney, et al., 2004; Glassman, et al., 2007; Wills, et al., 2007). In contrast, failure of self-control may lead to negative effects such as impulsive behaviors, overeating, excessive consumption, substance abuse, drug addiction, violent crime and other problems (Baumeister, et al., 1994). According to the general crime theory proposed by Gottfredson and Hirschi (1990), an essential element of criminality is the absence of self-control.

Self-control and emotion are closely related. Eysenck described that criminals had lower cortical arousal level (extraversion), higher autonomic arousal level (neuroticism) and were quite indifferent (psychoticism) (Blackburn, 2000). Emotional stability may be a basic personality factor of 12 types of personality disorders of prisoners (Liu & Huang, 2005). Therefore, criminals are likely to have low emotional stability.

Previous research of criminals' self-control mostly focused on their impulsiveness. Studies indicated that impulse was related to bad behaviors such as gambling, drug abuse, and violent attacks (Slutske, et al., 2012; Audrain-McGovern, et al., 2009; Luo et al., 2014). Impulse reflects low emotional stability. Exploring the relationship between emotional stability and self-control has important implications. It allows us to understand the emotional mechanism in self-control. For instance, it can explain why some non-impulsive criminals are poor in self-control. It is also possible to increase criminals' emotional stability with emotional regulation, and then enhance their abilities of self-control, ultimately reducing the rate of relapse and improving the social adaptability of prisoners after release. Thus, the current study explores the relationship between emotional stability and self-control so as to provide insights or suggestions for psychological assessment and intervention into criminal behaviors.

Method

Participants

230 male prisoners in Hubei province (aged 19 to 57; $M = 33.8$, $SD = 9.24$) completed the test and 222 questionnaires were valid. The average term of imprisonment was 45 months, or about 3.75 years. Of the participants, 23.9% were elementary school educated and 52.7% were junior middle school educated. Violent criminals (e.g. kidnapping, robbery, rape, violence, intentional assault, affray and illegal detention) accounted for 44.6% participants and 55.4% were non-violent (e.g. fraud, theft, corruption, bribery, illegal business operations, misappropriation of public funds, drug trafficking).

Materials

Eysenck Personality Questionnaire (EPQ). The neurotic component table of EPQ in the Chinese version (Gong, 1996) was used to measure the emotional stability of criminals. Previous studies have proved that this scale has a good reliability and validity (Sun & Yang, 2013). In this study, the alpha coefficient of scale was 0.894.

Self-Control Scale. The Self-Control Scale revised by Tan (2008) was used to measure the level of self-control. It contains five factors: impulse control, healthy habits, resistance to temptation, focus on work and control of entertainment, with a total of 19 items. In this study, the alpha coefficient of total scale was 0.838. The coefficients of the five factors were 0.752, 0.627, 0.554, 0.558 and 0.359.

Procedure and Measures

The test was carried out collectively and anonymously in the prison. Data was analyzed by SPSS21.0.

Results

Self-Control of Criminals

Participants were divided into four age groups: 18 to 25 years old, 26 to 35 years old, 36 to 45 years old and 46 to 60 years old. The research showed that the scores of self-control were significantly different among the age groups ($F = 2.994$, $p < .05$), particularly in impulse control ($F = 2.787$, $p < .05$) and healthy habits ($F = 2.836$, $p < .05$). Self-control of violent criminals was significantly lower than that of non-violent criminals ($t = 2.023$, $p < .05$), particularly in control of impulse ($t = 2.764$, $p < .01$).

There was no significant difference among terms of imprisonment (3 years and more than 3 years) ($t = 1.304$, $p = .194$), education levels ($F = 1.577$, $p = .168$) and marital status ($F = 1.443$, $p = .231$) in self-control of the criminals.

Emotional Stability of Criminals

The scores of neuroticism of criminals was significantly higher than the Chinese norm ($t = 8.822$, $p < .001$). This suggests that the emotional stability of criminals is lower than that of the general population. Moreover, there was no significant difference among age groups ($F = 0.854$, $p = .466$), types of crime (violent and non-violent) ($t = 1.567$, $p = .119$), terms of imprisonment (3 years and more than 3 years) ($t = 0.689$, $p = .491$), education levels ($F = 0.252$, $p = .939$) or marital status ($F = 0.746$, $p = .526$) in the emotional stability of criminals.

Relationship between Self-Control and Emotional Stability

As in Table 1, emotional stability has an obvious strong positive correlation with self-control. Emotional stability correlated significantly with the five factors of self-control, especially impulse control. The correlation coefficients varied from 0.3 to 0.9.

Additionally, the results indicated that the age of criminals was significantly positively related with the type of crime ($r = .414, p < .001$). This proves that young criminals are more likely to conduct violent crimes. When the factor of age group was controlled, we found that education level was significantly positively correlated with type of crime ($r = .205, p < .01$). In the same age group, lower levels of education were more likely to result in violent crimes.

Table 1. *The Relation between Self-Control and Emotional Stability*

Variable	<i>M ± SD</i>	Emotional Stability	Self-control	Impulsive Control	Healthy Habits	Resistance to Temptation	Focus on Work
Emotional Stability	9.41 ± 6.05						
Self-control	49.89 ± 10.43	0.556**					
Impulse Control	2.65 ± 0.75	0.569**	0.833**				
Healthy Habits	2.30 ± 0.78	0.310**	0.720**	0.459**			
Resistance to Temptation	2.95 ± 0.66	0.303**	0.643**	0.315**	0.372**		
Focus on Work	2.59 ± 0.75	0.336**	0.710**	0.417**	0.485**	0.508**	
Control of Entertainment	2.51 ± 0.81	0.397**	0.707**	0.562**	0.427**	0.258**	0.333**

Note: N = 222; ** $p < .01$

Regression analysis showed that the demographic variables including age, term of imprisonment, education level, type of crime and marital status had little influence on self-control ($R^2 = 0.08$). However, when the demographic variables were controlled in regression analysis, this result demonstrated that emotional stability significantly predicted criminals' self-control ($F = 19.842, p < .001$) and its explanatory power increased greatly ($R^2 = 0.356$). The Beta coefficient of emotional stability was positive ($t = 9.613, p < .001$). In other words, emotional stability has a positive predictive effect on criminals' self-control. Furthermore, emotional stability significantly predicts the impulse control factor ($F = 84.422, p < .001$) and it has a strong explanatory power ($R^2 = 0.702$).

Discussion

In the study, there was a significant positive correlation between emotional stability and self-control. Further regression analysis showed that emotional stability had a significant positive predictive effect on self-control, especially on impulse control.

Self-Control of Criminals

We found the self-control of high-age criminals was higher than the low-age criminals. It suggests that individuals' self-control levels may increase as they grow older. As to the type of crime, the self-control of violent criminals is weaker than non-violent criminals, especially in impulse control, which proves that it is more difficult for violent criminals to control their impulses.

In addition, the average age of violent criminals was significantly lower than that of non-violent criminals, indicating that low-age criminals favor violent crimes. It is proven that the violence of young criminals is more serious, which is related to psychological factors, such as immaturity of psychological

development, emotional instability, rebellion and insufficient awareness of criminal consequences. In the same age group, the lower the education level, the more violent the crime. It demonstrates that young people with a high education level are less likely to commit violence.

Emotional Stability of Criminals

Eysenck indicated that people with certain personalities tended to engage in criminal activity, such as juvenile criminals who were distinct from normal adolescents (Weaver & Wootton, 1992). Later, many researchers examined personality traits that were prone to crime (Morton, et al., 2002). Deng and Gang (2000) indicated that compared to the normal samples, juvenile criminals obtained significantly higher scores on the dimensions of E and N. Xiao (2001) suggested that criminals' extroversion and emotional instability were significantly higher compared to the norms. Luo, et al. (2014) showed that neuroticism and impulsiveness of personality characteristics effectively predicted criminal aggressive behaviors. Our result also identified that the emotional stability of criminals was lower than that of general population.

Relation between Self-Control and Emotional Stability

Improved emotional stability can reduce resource depletion. According to the strength model, individuals' emotional states have an important impact on self-control: on one hand, negative emotions increase ego depletion. Schmeichel, et al. (2006) proposed that suppressing or exaggerating emotional expression would lead to ego depletion. Heatherton and Wagner (2011) suggested that self-regulation was undermined by failure to transcend overwhelming temptations, negative moods and resource depletion; on the other hand, positive emotions may promote the recovery of ego depletion. A series of researches by Tice, et al. (2007) found that positive mood or emotion counteracted ego depletion. Ren, et al. (2010) proved that implicit positive emotion might counteract ego depletion.

In addition, improved emotional stability can increase the capacity for self-control. Based on the dual-systems model, impulsive strength may provoke impulsive behaviors, while impulse processing was automatic and intuitive; self-control strength can consciously overcome temptations and difficulties. When self-control resources were sufficient, self-control strength played a greater role. But impulsive strength was more powerful at ego depletion (Baumeister, et al., 2008). Therefore, high emotional stability helps reserve self-control resources and then enhances self-control strength.

Our study also found that emotional stability was significantly correlated with impulse control. Eysenck and Eysenck (1977) decomposed impulsiveness in the broad sense into four factors: narrow impulsiveness or ImpN, risk-taking, non-planning and liveliness, and found that ImpN correlated positively with neuroticism and psychoticism. Whiteside and Lynam (2001) argued that individuals with strong impulses in negative moods tended to take impulsive actions to reduce negative emotions. Cyders, et al. (2007) noted that an extreme positive emotional state could lead to impulsive behavior. Therefore, high emotional stability is more likely to inhibit an impulse and decrease impulsive strength, ultimately achieving self-control.

Limitations and Prospects

At the present time, we mainly conducted a cross-sectional study. The cause-and-effect relationship between emotional stability and self-control needs more evidence. Apart from this, the length of serving time of the criminals was not taken into account. Chen (2006) suggested that with the years of imprisonment increasing, prisoners became more stable emotionally and impulsiveness tended to decrease. In addition,

we only investigated the trait of neuroticism; more emotional processes relating to self-control need to be studied in the future.

Future research might develop in the following three aspects:

- the use of experimental methods and design of longitudinal tracking studies to further explore the emotional process in criminals' self-control;
- more demographic variables need to be investigated, such as gender, time of imprisonment, cultural background and other factors;
- investigate mediators and moderators between emotional stability and self-control, so as to promote the reform of criminals in prison.

Moreover, we can try to improve the capacity of criminals to control themselves by effectively regulating emotions. Previous studies have proved that self-control performance could be improved through practice (Muraven, 2010). Self-control training in a particular field might help to improve control capacity in other areas (Baumeister, Vohs, & Tice, 2007). Therefore, practicing emotion regulation may increase emotional stability, and then improve criminals' self-control ability in their daily lives, so that they not only maintain psychological health, but also comply with social norms and pursue positive goals after release. In short, future research on self-control can be applied to the reform of criminals.

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Adolescents' Social Representations of *Zhongyong*: A Content Analysis Study of 288 Word Association Questionnaires

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[Abstract] *In order to explore adolescents' social representations of Zhongyong in China, a word association questionnaire survey was conducted. Over 1700 association items were collected from 288 college students. The analysis of these items shows that the college students' general attitudes toward Zhongyong are positive. Two images of the Men of Zhongyong are presented – the intelligent and generous gentlemen as well as the benign, but commonplace men. The image that Zhongyong is active or passive depends on the individual initiative.*

[Keywords] *Zhongyong; social representations; adolescent*

Introduction

As an important philosophical thought of Confucian culture, *Zhongyong* is deeply rooted in the Chinese mind so that it can be regarded as representative of traditional Chinese culture. The social scientific research of *Zhongyong* aims to find out whether the traditional culture and thought still work and what roles they play in modern China. To do this, various constructs of *Zhongyong* have been proposed by psychologists and sociologists. For example, Yang (2012) suggested that *Zhongyong* can be treated as a comprehensive and multi-level thought system which covers all the existing conceptions of *Zhongyong* and consists of the value, perception and behavior pattern, including outlooks on the world, values and life, individuals' thinking ways, strategy choices and behavior patterns in dealing with their matters. Based on the constructs, various empirical researches aiming to explore the values and effects of *Zhongyong* have appeared, mainly concentrating on the fields of management, psychological health and interpersonal conflicts by questionnaire surveys and experiments. By using college students as one of the major study objects from different perspectives, all of these studies have confirmed that *Zhongyong* still has a great effect even on modern adolescents.

The common approach of these researches is that by assuming there is a kind of *Zhongyong Thinking* affecting Chinese, scholars raise their own construct of *Zhongyong* according to their understanding of *The Doctrine of the Mean* and observations on life, and then they conduct empirical research based on it. However, it must be admitted that the meaning of *Zhongyong* in the Chinese classics, the scholars' constructs and ordinary people's actual understanding of it in contemporary China may not necessarily be in sync with each other. In some contexts, "*Zhongyong is always considered to be the culprit of the national inherent weaknesses by Chinese, such as compromise, half measure, equalitarianism, unthoroughness, commonplace, philistinism, unprincipled, muddling and so on, all of which are peremptorily regarded as Zhongyong*" (Yang, 2009). But in the view of some people, "*Zhongyong means striving to become*

extremely wise but pursuing the doctrine of mean”, which is a great wisdom of life. In other words, scholars and ordinary people may have different answers to the questions of what *Zhongyong* means and what the images of *the Men of Zhongyong* are (there are actually differences even among scholars). All of these diverse images, views and attitudes not only are present in the people’s cognition of *Zhongyong*, but are also reflected in public cultural psychology.

Therefore, it can be a new perspective to study the modern influences of *Zhongyong* so that researchers don’t need to put forward a conception of it or presuppose it, but only to research what the adolescents’ social representations of *Zhongyong* are. Social representations are defined as the concept, thought, image and knowledge about a “Social Object” (Moscovici, 1984), integrating individual experiences and presenting the community-shared social norms, values and knowledge at the same time (Katja & Erich, 1998). As the determiner of “Social Representations”, “Social” was divided into three different meanings by Moscovici (1981): first, representations constitute common culture and define the symbolic boundary of community’ social identification; second, representations are built on and are effective only in the communication and interaction of social communities; third, the content and concrete form of representations are greatly influenced by history, and economy, as well as social and cultural background. In other words, we can explore whether there are some kinds of collective cognition and understandings about *Zhongyong* existing in the adolescents, which are usually expressed in group interactions and constitute a shared culture and a common psychology of present adolescents.

Methods

Participants

Quota sampling generated 288 valid samples from adolescents at Xiangtan University in Hunan province, with gender, major and family address under consideration. In all of these samples, males accounted for 41.7% (120), and females 58.3% (168); people majoring in humanities accounted for 26.7% (77), social sciences 24.7% (71), natural sciences 10.4% (30), engineering 31.3% (90), and art 6.9% (20); participants from rural areas accounted for 67.4% (194), and urban areas 32.6% (94); the general average age was 20.

Data Collection Method

The data of this study were collected by the words association questionnaire which was divided into two parts. The first part was about the demographic variables; the second part was the word association which required participants to associate two words respectively about *Zhongyong* and *The Men of Zhongyong*, and then write down the first six to eight words or phrases under the lines of each word. Four hundred questionnaires were sent to the library self-study zones, classrooms and dormitories of Xiangtan University by four assistants in March 2015, and 288 effective questionnaires were acquired with a 72% of collection rate.

Analytical Tools

The eight dimensions of the personality image of *the Men of Zhongyong*. As the words obtained of *The Men of Zhongyong* were mostly about the personality images, a seven-dimension of Chinese personality structure (*the Big Seven*) mainly presented by Yang and Wang (1999) was adopted to analyze the words obtained in this study. In addition to *Abilities, Behavior Styles, Life Attitudes, Interpersonal Relationships, Extroversion, Kindness* and *Neuroticism* of *the Big Seven*, *Innovation* was added as a new eighth dimension. It’s said that *the Big Seven Personality Theory of Chinese* is more suitable than the western *Big Five* for

understanding the Chinese personality in its cultural context (Wang & Cui, 2003). Nevertheless, *Extroversion*, defined as an innovation factor in *the Big Five*, was excluded in *the Big Seven*. But it was found that there were many innovation-related words in participants' descriptions of *Zhongyong* and *the Men of Zhongyong*. Therefore, *Innovation* was added to *the Big Seven personality* for analyzing the personality image of *the Men of Zhongyong* in this study.

The six dimensions of *Zhongyong* characteristics. The existing constructs of *Zhongyong* thinking (Wu & Lin, 2005; Yang, 2009) can be regarded as scholars' representations of *Zhongyong*. By analyzing and integrating all of these *Zhongyong* conceptualizations, six dimensions of *Zhongyong* characteristics are presented in this study, including ***internal and external harmony*** (a harmonious state and motivation, including self-consistency and interpersonal harmony), ***mid-view thinking*** (remaining neutral or choosing a compromising solution), ***holistic perspective*** (taking all parties' interests into consideration and integrating their views), ***flexibility*** (the ability to adjust coping strategies according to different circumstances and targets in a roundabout way), ***self-restraint*** (including forbearance, compromise and retreat-advance tactics), and ***initiative*** (meaning being independent, principled and proactive).

Results

General State of the Word Associations

A total of 1757 free association items emerged by using *Zhongyong* and *the Men of Zhongyong* as stimuli, with three to four items on average being written under each of them by participants. The second stimulus word, *the Men of Zhongyong*, was designed to help the participants visualize and embody their free association in order to prime more specific attitudes, emotions and cognition of *Zhongyong*. Therefore, by deleting the identical items written by the same participants, a total of 760 different association items were finally obtained, including 186 nouns, as well as 574 adjectives and descriptive phrases. According to the paraphrases in *Modern Chinese Dictionary* (the 5th edition), the similar meaning items of all 574 descriptive words and phrases were combined, and 147 descriptions of *Zhongyong* and *the Men of Zhongyong* were finally acquired, with the 43 high-frequency-items (more than 10 recurrences) being presented in Table 1. The attitudes of all the 147 descriptive items were assessed by 13 independent assessors, who graded the attitudes from one to five corresponding to "very negative" to "very positive". All of these assessors were volunteers elected from the class of Psychology, who came from 7 different provinces, 8 of which were from rural areas, while 5 came from urban areas. Within the 43 high-frequency-items, there were two items that score 3 points on average, 12 below it and 29 above it, suggesting that most of these items represent positive attitude.

The Analysis Results of the Personality Image of the Men of Zhongyong

Within 147 descriptions, there were 118 which were categorized into the eight-dimension personality structure, with a total frequency of 965. The classification results shown in Table 2 indicate that factor (1) to (4) and factor (8) were all the high-frequency dimensions, recurring more than 100 times. In addition, the positive and negative descriptions of these dimensions were compared; results shown in Table 2.

It indicates that the personality image descriptions of *the Men of Zhongyong* were relatively consistent in the dimensions of *Behavior Styles* (descriptions which were mostly categorized into "Rigorous and Self-constraint"), *Life Attitudes* (mostly into "Stoicism and Integrity"), *Interpersonal Relationships* (mostly into "Gentle and Easy-going"), and *Innovation* (mostly into "Traditional and Pedantic" instead). All of these can be regarded as the steady part of the social representation structure of *Zhongyong*, namely the common

personality image of *the Men of Zhongyong* shared by the adolescents. The unsteady part concentrated on the descriptions of *Abilities*, within which the descriptions were classified into “Astute and Competent”, as well as into “Dull and Cowardly”, having high internal consistency respectively. This means there were disagreements on the *Abilities* of *the Men of Zhongyong*.

Table 1. The High-Frequency Items of the Free Association of Zhongyong

	Freq	Mean Value		Freq	Mean Value		Freq	Mean Value
1. Mediocre	69	2.3	15. Harmony	20	4.4	29. Integrity	14	4.6
2. Impartial	47	3.4	16. Virtue	19	4.8	30. Profound thought	13	4.7
3. Mild	41	4.3	17. Calm	18	4.5	31. Low-key	12	4.2
4. Neutral	41	3	18. Not extreme	18	3.6	32. Rational	12	4.6
5. Conservative	39	2.4	19. Balance	18	3.7	33. Hesitant	11	2.5
6. Tradition	36	2.4	20. Principled	17	4.2	34. Stoicism	11	4.2
7. Compromise	26	2.8	21. Cowardice	16	1.4	35. Tolerant	11	4.5
8. Just	25	4.5	22. Neutralize	16	3.3	36. Integration	11	4.2
9. Tactful	24	2.3	23. Elegance	15	4.6	37. Urbane	11	4.7
10. Gentle	24	3.8	24. Moderate	15	3.8	38. Honest	10	4.8
11. Medium	24	3	25. Just the right	15	4.4	39. Mannered	10	3.8
12. Pedantic	23	1.3	26. Wisdom	14	4.7	40. Sophisticated	10	2.5
13. Dependent	22	1.3	27. Just the right	14	1.4	41. Contentment	10	4.5
14. Mediate	20	3.5	28. Prudent	14	4.4	42. Never competitive	10	3.5
						43. Rigid	10	2

Table 2. Analysis of the Personality Image of the Men of Zhongyong

	Positive		Negative		Sum	
	n	f	n	f	n	f
1. Abilities	20	111	14	167	34	288
2. Behavior Styles	16	115	3	4	19	119
3. Life Attitudes	12	230	5	16	17	246
4. Interpersonal Relationships	12	98	4	5	16	103
5. Extroversion	4	21	6	25	12	46
6. Kindness	4	24	1	4	5	28
7. Neuroticism	4	10	1	1	5	11
8. Innovation	4	8	6	116	10	124
Sum					118	965

The Analysis Results of the Descriptions of Zhongyong Characteristics

Of all 147 items, there were 93 (totaling frequency of 704) classified into the six-dimension structure of *Zhongyong* characteristics (results shown in Table 3). This indicates that the highest frequency of the dimensions is *Mid-View Thinking*, followed by *Internal and External Harmony*, *Flexible and Tactful*, *Initiative*, *Self-Restraint and Concession* and *Holistic Perspective*. By the comparison of positive and negative descriptions on each dimension, Table 3 shows that college students hold almost consistent attitudes toward the characteristics of *Zhongyong*. In particular, the general descriptions on the dimensions of *Internal and External Harmony*, *Mid-View Thinking*, *Holistic Perspective* and *Flexible and Tactful* are basically positive, which can be viewed as the stable parts of the social representations of *Zhongyong*, while they are roughly equal on the dimension of *Initiative*, which can be regarded as the controversial and unstable part.

Table 3. The Analysis Results of Zhongyong Characteristics' Description

	Positive		Negative		Sum	
	n	f	n	f	n	f
1. Internal and External Harmony	28	189	0	0	28	189
2. Mid-view Thinking	15	226	2	6	17	232
3. Holistic Perspective	8	32	0	0	8	32
4. Flexible and Tactful	12	77	4	25	16	102
5. Self-constraint and Concession	8	47	1	2	9	49
5. Initiative	7	44	8	46	15	100
Sum					93	704

Discussion and Conclusion

“Gentlemen” and “Benign but Mediocre Men”: Two Images of “the Men of Zhongyong”

By analyzing the personality images of *the Men of Zhongyong*, it was found that the frequency and total number of description items about *Abilities* tops the list, while that of *Life Attitudes* ranks second. It is consistent with the research findings of Yang and Wang (1999), who suggested that when describing one’s own characteristics, Chinese always talk about their own abilities first and then about their aspirations and inclinations.

Moreover, it was found that *the Men of Zhongyong* are generally regarded by college students as a kind of aggressive man, hard-working, precise and self-disciplined, as well as mature on the dimension of *Behavior Styles*; mild, stoic and upright on the dimension of *Life Attitudes*; kind and generous on the dimension of *Interpersonal Relationships*, while being pedantic to new things and opposing innovations. However, on the dimension of *Abilities*, some people considered that *the Men of Zhongyong* were wise and capable, while the others thought they were mediocre and common. In general terms, there were two images of *the Men of Zhongyong* presented in this study: the intelligent and generous gentlemen, and the benign, but commonplace men.

“Active Zhongyong” or “Passive Zhongyong”: The Decisive Role of Individual initiative

In the analysis of all association items using the tool of six-dimension characteristics of *Zhongyong*, it was found that college students hold relatively consistent views on some characteristics, including *Internal and External Harmony*, *Mid-View Thinking*, *Holistic Perspective* as well as *Self-Restraint* and *Concession*, but have opposite views on *Initiative*. Some considered that “the Doctrine of the Mean” is sticking by one’s own principles, having initiative as well as autonomic advance and retreat initiative, while others, however, thought it is passive, escaped and rigid. To conduct further analysis on the items already classified into the four dimensions above, it would be found that almost all positive descriptions included in every dimension can also be divided into active ones and passive ones, which mainly depends on individual strength of *Initiative*. For example, *Active Harmony* manifests as the active pursuit of accordance on the premise of sticking by one’s own principles and bottom-line, with “harmony but not uniformity” as its representative, while *Passive Harmony* shows that someone would rather give up their bottom-lines in order to evade conflict for fear of disharmony, presenting “being afraid of giving offence to others” and pretending to be friendly with each other. For another example, *Active Mid-View Thinking* shows as “impartiality”, while the *Passive* version presents as “equalitarianism” and “muddling through”. Moreover, *Active self-constraint and concession* shows as “conscious retreat for advance”, while the *Passive* item presents as “cowardice” and “suffering dignities or unfairness without protest”.

Overall, the attitudes about *Zhongyong* and *the Men of Zhongyong* held by the college students were generally positive. Specifically, as far as personality images, people's descriptions were relatively stable and consistent on the dimensions of *Behavior Styles*, *Life Attitudes*, *Interpersonal Relationships* and *Innovations*, but not on *Abilities*. As for the descriptions of *Zhongyong* characteristics, it was generally believed that *Zhongyong* has features such as pursuing *Internal and External Harmony*, sticking by *Mid-View Thinking*, holding a *Holistic Perspective* and behaving *Flexible and Tactful*, as well as *Self-constrained and Concessional*. However, there were disagreements on whether *Zhongyong* possesses initiative.

Some explorations on adolescents' social representations of *Zhongyong* were conducted in this study, with certain preliminary acquaintances acquired. But there were also many limitations. First, the method of content analysis largely depends on analysts and tools, and it is also difficult to do more accurate quantitative analysis. Second, although some image descriptions of *Zhongyong* and *the Men of Zhongyong* were obtained, they are still a little shallow without detailed and specific explanations. What are their deeper meanings? Why do they present like this? How do the adolescents' attitudes and views present more specifically? To answer these questions requires further explorations, both quantitative and qualitative studies.

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Horizontal or Vertical, Which is Better? The Direction Effect of the Classics Reading for Moral Education

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[Abstract] *Classics reading was critical in moral education for ancients. We read the Classics differently from ancients, especially in the reading direction (horizontally vs. vertically). Is there any difference in moral educational significance? Studies in embodied cognition have found that head-nodding enhanced the persuasion and produced a preference for originally neutral-valenced targets. This may shed some light on this issue. College students were asked to read the Great Learning for Cultivating Great Self Personality (GSP), either vertically or horizontally, which was measured before and after reading with both explicit and implicit measures (self-reported GSP scale and the q-IAT). Results showed that reading the Great Learning vertically was better than horizontally in enhancing the implicit association between self and GSP. Limitations of this study are discussed and suggestions are also given for future study.*

[Keywords] *classics reading; reading direction effect; moral education; embodied cognition; the great self-personality*

Introduction

The core of traditional Chinese culture is ethical, especially for indigenous Chinese psychology (Hwang, 2011). For ethical and religious systems, self-cultivation (Xiushen) is basic (Liu, & Macdonald, 2016). Self-cultivation has long been regarded as a basic way to foster the good traits of personality, such as compassion or benevolence (Cibei) in Buddhism, love in Christianity, or Ren of Junzi in Confucianism, etc. These traits share a common characteristic: the Great Self Personality (GSP), depicts an individual with expanded self-concept by including others as a part of himself and by assuming responsibility for other as for himself.

Self-cultivation, especially of the Great Self Personality, can be achieved step-by-step (see the classic of the Great Learning.) We speculate that something must change in the personality during the process of self-cultivation by reading the classics. And also, this change of personality self-concept may be moderated by the body experience. Our ancestors seemed to understand this more clearly than modern people. Maybe we can be better inspired by the wisdom of the ancients at the time when we read a vertically-arranged classic after taking a bath and putting on clean clothes, and sitting seriously in a great state, or maybe when we are doing a self-contradictory and foolish thing quite in our carelessness when we shake our heads to what is inherited. This paper concerns only whether the reading direction would moderate the cultivating effect of reading a classic on one's self-attribute personality self-concept.

Embodied cognition studies tell us that cognition is embodied, i.e., the states of body influence the mind (Barsalou, 2008; Ye, 2010; Peng & Yu, 2012). The first evidence on the role of head movement in cognition comes from Wells and Petty's (1980) research. Subjects were asked to test headphone sets and then they engaged in either vertical, horizontal, or non-instructed head movements while listening to a

simulated radio broadcast. They found that subjects in the vertical head movement conditions agreed with the editorial content of the radio broadcast more so than those in the horizontal conditions. Tom, Pettersen, Lau, Burton and Cook (1991) found that a nodding head resulted in an increased preference for a neutral object, whereas a shaking led to a decrease in preference for the neutral object. Förster & Strack (1996, 2004) induced head-nodding and head-shaking by asking their subjects to trace valenced objects presented moving horizontally or vertically on a screen. They found that induced nodding led to more favorable evaluations of positively valenced products but did not affect the evaluation of negatively valenced ones. However, head shaking led to more unfavorable evaluations of negatively valenced products but did not affect the evaluation of positive ones.

Given the fact that the *Great Learning* has been regarded as the first of the Four Classical Books, then the essence of reading the classics is to cultivate Great Self Personality. As vertical reading provides us a unique reading environment with its ubiquitous meaning that a nodding head means saying yes, or agreement, in the Chinese culture, we wonder whether vertical reading might help us in accepting or internalizing the material. Specifically, is reading *Great Learning* vertically better than horizontally in cultivating GSP?

Method

Participants

In total, 774 college students participated in our study, among which, 592 were validated for the explicit GSP scale (no data were excluded; there were 114 males, and 478 females). There were 182 for the pre-test part of the experiment (70 males, and 112 females); one month later, 107 of them participated in the post-test (45 males, and 62 females), and finally 89 students were analyzed with complete data (83.2%). The mean age was 20.6 years with a SD of 1.11. Students came from more than 50 majors from a university in Henan province.

Design

We used a single factor repeated measurement design. The independent variable was reading direction (vertical vs. horizontal reading). Participants in the vertical (or horizontal) reading condition read vertically- (horizontally) arranged text of *Great Learning* (the first three paragraphs, 215 Chinese characters, which expresses very concisely the main connotation of cultivating GSP, see Appendix I). The dependent variables were the explicit and implicit measures of the Great Self Personality, both of which were measured twice: the pre-test, and the post-test 1 month later immediately after the reading direction manipulation. We also included two covariate variables (the participants' interest towards the *Great Learning* and their intention to introduce it to others, because these variables indicate if the participants have already been influenced deeply by the *Great Learning* before our experiment, and thus will contaminate the final result) and some validation criterion variables.

Materials

The explicit measure of GSP was a 7-point Likert scale with 8 items (see Appendix II, 1), 4 of which came from Kim, et al.'s (2013) *Public Service Motivation Scale* (the self-sacrifice dimension, with connotations very similar to the GSP expressed in the *Great Learning*), and 4 other items were newly developed according to the connotation of GSP expressed in the *Great Learning*.

We also included the corresponding implicit measure of GSP because there maybe Social Desirability Bias in measuring such a highly social sensitive topic in the explicit level according to Kim

& Kim (2016). The procedure was adapted from Yovel and Friedman's (2013) questionnaire-based Implicit Association Test (q-IAT). The q-IAT was designed to closely resemble the procedures of explicit measure. Compared to other implicit assessment paradigms, this task uses stimuli which are identical to those sentences in explicit measure. The procedure and principle of the q-IAT are identical to IAT. Participants are asked to categorize sentences presented on the center of the screen into four categories by pressing "E" or "I" on the keyboard according to labels presented on the left or right upper corner of the screen. There are four categories of sentence, one pair of which are target stimuli depicting the fact or non-fact of the participants' state, and another pair which are attribute stimuli, which describe the traits of high or low GSP (see Appendix II). Labels of each pair (fact or non-fact, high GSP or low GSP) are separately presented on the left or right upper corner. If a participant with high GSP presses the same key for both fact and high GSP stimuli with the same finger (compatible), it would be easier and faster than pressing the same key for both fact and low GSP stimuli with the same finger (incompatible). The standardized difference between incompatible and compatible blocks is the final IAT effect which indicates the relative implicit association between the participant's self-concept and GSP attributes. We used the new algorithm for computing IAT effect (D, see Greenwald, Nosek and Banaji, 2003). Previous studies have found that the IAT method for measuring individual difference has good reliability (Schmukle & Egloff, 2005).

The independent variable was reading direction, which was manipulated by reading vertically or horizontally arranged materials. The content, font style (Qigong style), font color (black), font size (primary for title, and no. 1 for content), page numbers (3 pages for introduction and 8 pages for the *Great Learning*) of materials, and the hue of background (deep yellow) were all the same for both conditions. The background was vertical or horizontal arranged bamboo slips. The introduction asks the participant to ruminate on the following sentences of the *Great Learning* by referring to the annotations and translate sentence by sentence and type them into blanks.

Procedure

Both of the pre-test and post-test of the experiment were administered by groups on the computer in the Inquisit 3.0 environment. The pre-test included a demographic survey, the self-reported GSP scale, and an implicit GSP by q-IAT. The post-test substituted the first part with Classic Reading, during which participants were asked to read the *Great Learning* either vertically or horizontally, and then translate the ancient writings on each page (8 pages in total) according to our annotations and their own understanding into the blanks on the screen. Data confirmed their understanding.

Results

Exploratory Factor Analysis was conducted via SPSS 18.0 for the GSP scale. Data are from the 592 participants in the validation test and from the 89 participants in the pre-test and post-test of the experiment. We obtained a steady one factor structure consistently across three times of the test (see Table 1). The unidimensionality of the GSP Scale was confirmed due to that the ratio of the first eigenvalue to the second one was above 5 (Yang, 1998).

Table 1. Component Matrix of the Explicit GSP Scale

	<i>n</i> = 592	<i>n</i> = 89	
	Component 1	Pre-test Component 1	Post-test Component 1
SSC1 I'd like to be a person who concerned first about the welfare of all	.826	.834	.921
SS3 I am willing to risk personal loss to help society	.813	.778	.882
SS1 I am prepared to make sacrifices for the good of society	.797	.795	.872
SS4 I would agree to a good plan to make a better life for the poor, even if it costs me money	.773	.769	.882
SS2 I believe in putting civic duty before self	.773	.762	.819
SSC4 I wish I could gives up the empirical ego to become Great Self	.764	.814	.782
SSC2 I'd like to practice moral cultivating principle of Xiushen, Qijia, Zhiguo and Pingtianxia	.744	.647	.740
SSC3 I'd like to expand my heart to include more people	.711	.706	.831

Cronbach's alpha coefficients for the explicit GSP scale were 0.91, 0.90 and 0.94 respectively, and the test-retest reliability across a 1-month period was 0.73 ($p = 0.000$). The test-retest reliability for the implicit measurement across a month was 0.42 ($p = 0.000$). The correlations between the explicit and implicit measures of GSP are low ($r = -0.031$ in the pre-test, and $r = -0.067$ in the post-test), which is not rare in the field of IAT researches (Hofmann, 2005), and is indicative that the implicit and explicit measures tapped two facets or levels of Personality self-concepts, and indicates that there may be heavy Social Desirability Bias in the explicit measure of GSP.

To examine whether different directions could affect reading effect, we conducted variance analysis of repeated measures with explicit and implicit GSP as the dependent variable respectively, and with testing stages (the pre-test before reading and the post-test after reading) as within-subject variables, reading direction and gender as the independent variables, and interest in *Great Learning* and intention to introduce it to others as two covariates. Multivariate test of explicit GSP revealed that the main effect of reading stages was not significant (Figure 1 top), and that the second order interaction between each pair of reading stages, gender and direction were all not significant, while their third order interaction was marginally significant ($F(1, 79) = 3.368, p = 0.070, \eta_p^2 = 0.041$). Further ANOVA on the post-test explicit GSP revealed a marginally significant difference between horizontal and vertical reading groups for males ($F(1, 31) = 3.887, p = 0.058, \eta_p^2 = 0.111$, see Figure 1 middle), but not for females (See Figure 1, bottom).

Results of the multivariate test of implicit GSP revealed a significant interaction effect between reading stages and direction ($F(1, 81) = 5.071, p = 0.027, \eta_p^2 = 0.059$) as shown in Figure 2.

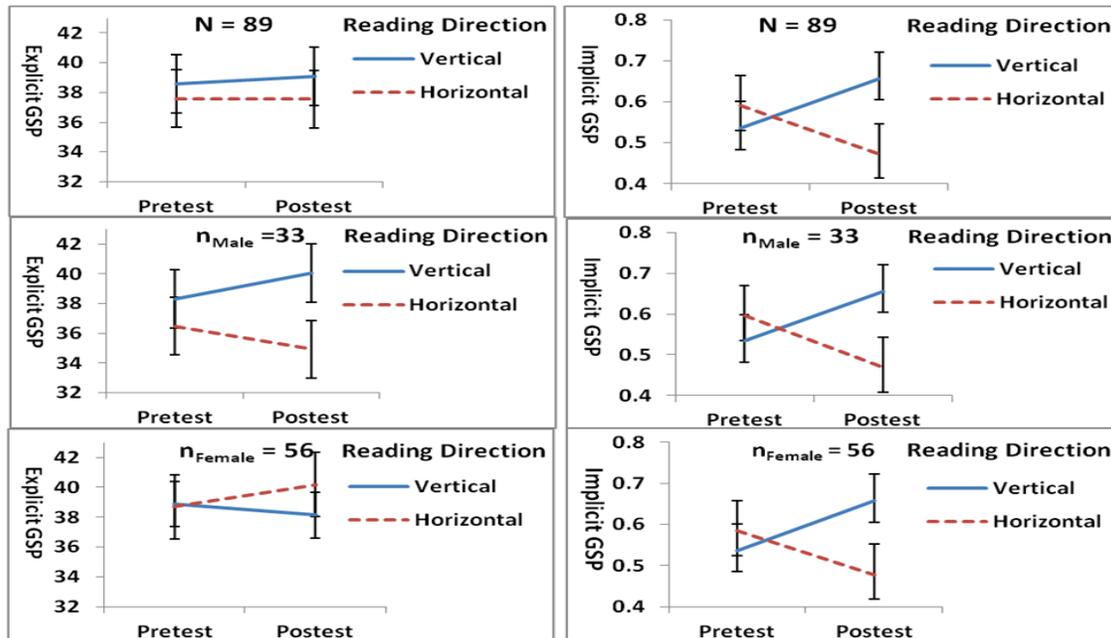


Figure 1 Reading Direction Effect on Explicit GSP

Figure 2 Reading Direction Effect on Implicit GSP

Discussion

The Direction Effect on Explicit and Implicit GSP

Results showed no direction effect on explicit GSP in moral educational reading, but showed an obvious gender difference. As for males, reading the *Great Learning* vertically resulted in higher self-reported GSP than horizontal reading. Such results presumably are connected with social desirability. Xu, et al. (2014) noted that females rated higher in social desirability than males through analysis of 6350 samples in constructing a national norm of social desirability. This makes explicit measurement of GSP difficult to detect a direction effect. Further investigation is needed to decide whether social desirability is the essential cause.

Contrary to explicit measurement, implicit measurement of GSP displayed an identical pattern for both genders: vertical reading resulted in higher implicit GSP than horizontal reading. This pattern supported our hypothesis that vertical reading would facilitate and horizontal reading would weaken the internalization of the GSP in reading the *Great Learning*. According to Peng and Yu's (2012) *Psychophysics of Morality*, this Direction Effect of Moral Educational Reading may happen in different levels, such as at the concrete behavioral level, or at the abstract conceptual level. Similar findings about vertical and horizontal head movement are reported in many researches (Wells & Petty, 1980; Tom, et al., 1991; Förster & Strack, 1996; De Houwer, Thomas, & Baeyens, 2001; Briñol & Petty, 2003). However, this result can also be interpreted by Lakoff and Johnson's (1999) Conceptual Metaphor Theory (CMT) in cognitive linguistics: highly abstract concepts without head movements can also be understood embodiedly via metaphors, which may result in the same reading direction effect. Will the concrete vertical and horizontal direction indicate abstract meaning of yes and no by metaphor as we suspect? If such metaphorical embodiment effect does exist, we want to know, if there were no overt head movements, will the horizontal and vertical arrangement of the text itself lead to a difference in reading

direction effect? Or will the mere presentation of clues of direction, such as horizontal or vertical static lines or moving backgrounds on the screens of mobile phones or computers, lead to similar reading direction effect? The clarification of the mental mechanism is important for news and publishing press and should be explored in future research.

Theoretical and Practical Significance for Moral Education

Theoretically, this study: 1) proposed an indigenized self-concept of GSP as the core of self-cultivation; 2) introduced the explicit and implicit level of GSP; 3) supported the embodied cognition theory by finding the reading direction effect on moral educational reading. Practically, the reading direction effect revealed in the study is quite enlightening for moral education. Previous studies on reading psychology focused on the degree of comfort, reading efficiency and reading speed, but consistently neglected the effectiveness and the aim of reading. In the light of the reading direction effect, we should also care about the content, as well as the form of reading. Of course, good use of the reading direction effect cannot be simplified as learning by nodding, and some differentiation should be made in terms of the reading content. On one hand, we may read and nod to facilitate the internalization of the ancient's wisdom in Chinese traditional culture. On the other hand, we may read and shake our head for the sake of innovation when we need to learn to think analytically from the western wisdom or learn natural scientific knowledge which renovates constantly. This may offer insight for publishing and the content providers of internet; should formats vary with content?

Limitations and Future Research

One of the limitations of this study was the small sample, with which we couldn't conduct further precise statistical analysis. Another possible limitation was the representativeness of the items of GSP scale. This limitation depends on the researchers' accomplishment in Chinese classics and their personal cultivation, which is crucial for accurate and comprehensive grasp of the GSP and finally, the representativeness of the items, and therefore, future research in this field should be not only a matter of academic question, but also an issue of continuous self-cultivating. The third limitation lies in that this study did not make clear the mechanism of the direction effect. Head movement in reading may not be so overt, would the covert head movement be robust enough to elicit the above effect? According to Theory of Metaphor in linguistics (Whorf, Carroll, Levinson, & Lee, 2012), simple direction cues of up and down or left and right may trigger images of agreement or disagreement. This could be better explained by Peng and Yu's Psychophysics of Morality (2012), which insists that the psychological mechanism that uses physical variables to understand abstract moral concepts involves three thinking strategies: representative cognition, metaphorical cognition and embodied cognition. It should be determined in future researches which strategy is the main source of the direction effect.

Conclusion

This study found that direction effect existed in classics reading for moral education, mainly in the implicit level. Specifically, reading the *Great Learning* vertically was better than horizontally in enhancing the implicit association between self and GSP, however, gender difference existed in direction effect on explicit GSP, i.e., reading direction effect only existed for males but not for females in explicit level. The head movement may be slight, and the vertical or horizontal image in the mind may be flickering, but statistically, these small effects of the implicit association test societally can have large

effects (Greenwald, Banaji, & Nosek, 2015). If there is a slight effect on moral education in reading classics vertically, the effect on society must not be trifling.

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The Influence of Military Training on College Students' School Adaptation

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[Abstract] Military training is the first practice class for college students, playing an irreplaceable role in the process of helping college students adapt to college life. This study starts from the perspective of psychology and semi-structured interviews conducted with 17 college students and 5 instructors at a university in Hangzhou, in order to find out the impact of various military training subjects on college student's psychology and behavior, and then to reveal the mechanism that military training affected college students. Results showed that all training subjects in military training can play a positive role in developing self-control, will power, cooperation awareness, self-care ability and a sense of honor in college students. Military training accelerates the overall cognition of college students for college life and improves their role adaptation, interpersonal adaptation, study adaptation and group living adaptation. This study not only broadens the horizons of the research on the effect and significance of military training in college students, but also provides a theoretical basis for colleges and universities to carry out their military training better.

[Keywords] military training; college students; school adaptation

Introduction

Military training refers to military skill training and military theory course teaching, as well as other activities related to military training, that is organized by colleges and universities. According to the Teaching Syllabus for Military Courses in Colleges and Universities, newly revised by some national departments such as the Ministry of Education in 2006, military training is a required course for college students and it is a required practical course for all Chinese college students (Zhai, 2015). Generally, military training is conducted in the first month of admission; the length is usually two to three weeks and the actual training time is not less than 14 days. Main training items include: (1) Queue exercises: for example, military postures, goose steps and uniform steps; (2) Exercises of military boxing, crawling, queue drill, chorus and joint performance; (3) Internal affairs; (4) Field drills; and (5) Firing practice. According to incomplete statistics, nearly 500 colleges and universities and 3,000 secondary schools have carried out military training for students so far, and the students participating in military training account for about 50% of all recruited students each year.

Military training is closely related to college students' school adaptation. According to investigation, freshmen generally face adaptation problems of various degrees (Huang & Yang, 2011). Military training is the first practice course for college students after they are admitted; it can improve freshmen students' adaptation to schools to a certain degree and lay a solid foundation for them to successfully adapt to their future college life (Cai, 2004). Some researchers think that military training is an effective way to help college students make self-adjustments and grasp the ways of mental health education; \military training plays a positive role in helping them adapt to college life as soon as possible (Qin & Wang, 2006).

Ladd, Kochderfer, and Coleman (1997) were the earliest researchers who studied school adaptation. They pointed out that school adaptation is a dynamic process of students trying to adapt to the objective environment changes and requirements of their schools. Based on this concept, subsequent scholars made further improvements; they pointed out that school adaptation refers to successful adaptation of students to the overall atmospheres of the schools, including the cognition and fondness for their schools and the

willingness to cooperate with peers (Sturge-Apple, Davies, Winter, Cummings, & Schermerhorn, 2008). According to existing definitions on school adaptation, we conclude that school adaptation is a process of students constantly adjusting their mental states and behaviors as per school environment changes to reach a balance with school environment requirements (Zhang & Zhang, 2007). As for the contents of college students' school adaptation, researchers generally think that it should include learning adaptation, interpersonal adaptation, role adaptation, economic adaptation and group living adaptation.

So far, the research on military training and the adaptation of college students is still quite inadequate. The research on military training is mainly focused on discussing the significance of ideological and political education, or national defense education. This research aims to reveal the mechanism of the impacts of military training on college students' school adaptation, to provide theoretical basis for colleges and universities to better carry out military training by investigating the impacts of various training subjects in military training on the psychology and behavior of college students.

Method

Semi-structured interviews were used; the length of each interview was 90 minutes. All interviews were recorded with the consents of interviewees. therefore, a transcription text of 130,000 characters was acquired. The main contents of the interview included their perceptions, feelings and behaviors on military training, their opinions on military training and military training subjects, and their feelings and behaviors during military training.

Interviewees were selected on a voluntary basis. They were required to have relevant experiences and willing to share their military training experiences. At a university in Hangzhou, a total of 17 interviewees were selected, including seven freshmen who just finished military training, five sophomores and five junior students. Their average age was 20 ± 3 years. In addition, five male instructors were selected.

Influence of Military Training Subjects on the Psychology and Behaviors of College Students

Military training time arrangements and formation of good behavioral habits. In 14-day military training, college students can form good behavioral habits by repeatedly training some behaviors. For example, college students must strictly follow the arrangements of relevant military training on each day of military training sessions; they are not allowed to be late, or leave early; they must finish the required tasks within specified periods, which gradually enable them to establish the concept of time. In addition, the strict requirements on internal affairs during military training periods can urge college students to cultivate and form good habits of being clean and living independently.

In the interviews, the instructors generally thought that *“Two weeks are necessary and obligatory for military training. If the period is too short, students will not be in required states and they will not behave themselves once military trainings are finished. Set the period as two weeks, the routine behavioral habits of students will be unconsciously influenced by many things. Correct postures and good health habits can be consolidated as well.”*

Queue practice and self-control cultivation. In military training, queue practices are the most regular routine training, such as standing at attention, goose steps, strides and running. Through the interviews with the above interviewees, it was found that military training is in favor of cultivating the self-control of college students. Self-control refers to the ability of one person controlling his or her own mind and behaviors. To simplify this, it refers to a mental process of one person striving to persuade himself to do something he is actually not willing to do. Military training is usually conducted in late

August and early September, which is quite hot, and the college students must stand regularly under the sun and keep one certain posture for about 30 minutes. Such students are not allowed to move randomly without the permission of an instructor, which is quite effective for exercising and cultivating the self-control of college students, as well as helping them enhance their self-discipline, teaching them how to resist temptations in their lives and restrain their words and deeds to enable them to have better growth and development in colleges and universities.

According to one freshman interviewee: *“It is quite torturous during standing regularly, and I still feel quite unforgettable when recalling it now. First, it has exercised my patience and persistence for standing regularly was especially boring, and nobody was allowed to move. My eyes must be vital and I could not wipe our sweats. I really wanted to stop and have a rest, but my instructor did not allow it. I had to insist for others who were doing the same. Therefore, I had to force myself to get rid of those external distractions. I must learn how to restrain myself, which is quite significant for my future study. For example, some students like playing games and mobile phones. They may fail exams if they do not study hard. Therefore, college students have to compel them to study hard, restrain themselves and know how to get rid of external distractions and temptations.”*

Cultural life and motivation of competition and cooperation awareness. In military training, cultural life is a training step designed for creating a military training atmosphere, motivating students' enthusiasm and displaying their good spiritual outlook. The morale of college students is quite high during military training due to the excitement caused by the fierce competitions that are held. College students' spirits of being brave in the competitions and striving to be aggressive can be motivated with cultural activities such as singing contests during military training. In addition, activities such as singing contests pay attention to the overall performance of a squad, which also motivates students' awareness of solidarity and cooperation, and this will play a positive role for them to take part in future club activities and all various competitions in universities.

According to one interviewee: *“The competition among squads is quite fierce in activities such as singing contests and performances. We feel that everyone has high morale and wants to be the only winner. In order to get the only honor, each squad is sparing no efforts. I feel that each squad is quite united with strong cohesive force.”*

Internal affairs and improvement of self-care ability. Arrangement of internal affairs is one of the most important practice subjects in military training. It refers to the placement of articles in dormitories, the arrangement of internal affairs and dormitory sanitation during military training; it must strictly comply with relevant requirements, and the above items are assessed and examined. Self-care ability refers to the ability of college students to take care of themselves. Currently, most college students are the only children in their families and they are a generation growing up with care from their parents. Therefore, they generally lack the ability of living independently. College students can form good living habits such as being clean and tidy and improving their ability of living independently by training for their internal affairs in military training. In addition, college students can learn the rigorous behaviors of soldiers during the arrangement of internal affairs, which also cultivates their rigorous and careful attitudes for different things.

According to one interviewee: *“My parents used to do all chores before I came here, and I had no awareness for these trivial matters; Now I live with others in one dormitory. Therefore, I have to sweep the dormitory on my own and maintain its cleanliness as well as take care of myself. I feel that my self-care ability has been greatly improved recently.”*

Military parade and enhancement of collective sense of honor. A military parade is the last task for military training. It is a kind of ceremony for students to receive the reviews made by school leaders and army chiefs on military training achievements as per specified ceremonies. Through our interviews, we found that such ritual processes play an important role in cultivating the collective sense of honor for college students.

A collective sense of honor is the moral feeling of college students for loving, caring for their collectives, performing duties, making contributions and obtaining honors for their collectives. It is a kind of positive psychological quality and a kind of spiritual strength for motivating college students to be aggressive. For example, the competition among squads on a military parade can motivate the enthusiasm of college students to make contributions and obtain honors for their respective collectives, which will not only enhance the collective cohesive force of all squads, but also improve the sense of honor and sense of pride the college students have for their respective squads. College students will have a sense of belonging after they have the sense of honor and pride for their collectives. In addition, they will work hard to make more contributions for their collectives and get better developments from their collectives.

According to one interviewee: *“In my opinion, a military parade is a wonderful way to improve the collective sense of honor for everyone for it is a review of military training achievements and everyone wants to display the best state. Therefore, everyone will carefully practice for obtaining honors for the collective. Each of us can feel that the whole squad has quite strong cohesive force and the collective sense of honor is greatly enhanced as well.”*

Influence Mechanism of Military Training on College Students’ School Adaption

Accelerate overall cognition for college life. Overall cognition for college life refers to the mental recognition, affirmation and acceptance of college students for their new environments during the interactions with such new environments after they are admitted; it is a kind of cognition and emotion of college students by linking themselves with their schools. It mainly includes the recognition and acceptance of college students for the campus culture, school environment, lifestyles and interpersonal relationships. After starting college life and facing a totally strange environment, freshmen need to get their sense of safety and sense of belonging in their college life. Military training provides an opportunity for freshmen to improve their adaptation to their schools and accelerate their overall cognition for college life. College students can have a better understanding of relevant campus culture and school environment after conducting a period of military training; the sense of strangeness of such students for college life is relieved and students can gradually link themselves with relevant schools to obtain a sense of belonging. In addition, after a period of military training, college students can establish a preliminary interpersonal relationship network with their classmates, roommates and teachers, which greatly alleviates the anxiety and loneliness of freshmen in new environments and accelerates their overall cognition of college life.

Promote college students’ role adaptation. Role adaptation refers to a process of an individual facing role changes, and whether they can positively adjust their mental state and behaviors to conform to the requirements of a new role. It is a main problem for freshmen. At the beginning of each academic year, many students easily confuse their roles because they cannot adapt to their new roles and environments.

During the interviews, we found that freshmen usually have indolent lifestyles due to spending a lengthy summer vacation. Therefore, they cannot make reasonable arrangements for their abundant spare time and they will easily be confused and discursive; consequently, they lack reasonable planning for

their future college life. As a kind of compulsory external measure, military training can adjust the physical and mental states of college students from discursive states with strict time and discipline requirements to make them focus on intense and orderly college life. In addition, military training can arouse their self-awareness and make them change their ideas from their uneasy aspirations of college life to the reality that they have now begun it.

One interviewee mentioned that *“The largest function of military training for me is that it has changed my lazy and slack states in vacation.”* One instructor also mentioned that *“By conducting military training, students get intense mentally. They are quite lazy and slack at the beginning. They are slow after an instruction is made and it takes a long time to gather. Naturally they become conscientious and they have fast responses.”*

Improve interpersonal adaptation. Interpersonal adaptation is an important factor that affects the mental health of an individual, as well as one of most common problems in college students’ school adaptation. It refers to a process of an individual who breaks away from a familiar interpersonal relationship and enters a new environment to reestablish harmonious interpersonal relationships such as handling interpersonal relationship in an appropriate manner and making new friends. According to some research, the adaptation of college students to new interpersonal relationships is harder than other adaptations (Tao, 2000). After being admitted by colleges or universities, all freshmen will face new classmates with different habits and personalities, and it is of great importance to develop new relationships with classmates and establish harmonious and friendly interpersonal relationships, and the progress of the process will have great impacts on the future college life of such college students.

All students with different family backgrounds and personalities from different areas gather in military training because such training is compulsory. During military training, all students must abide by unanimous work and rest schedules, and activity contents, and they must cooperate with one another to finished specified tasks. Such training can increase the time and opportunities for college students to get along with one another, and it also makes participating students have common topics, which improves the their mutual understanding and enhances the affections among roommates and classmates.

According to one student: *“The affections among roommates are rapidly improved during military training for we get up and have dinner together every day; we have basically the same pace of life; After we come back, we will talk about military training and share the same topics. All of us think that it is so rapid to be familiar with one another, and we don’t feel so restrained as we were when the term began.”*

Facilitate learning adaptation. Learning adaptation is a kind of tendency for acquiring favorable learning results. It refers to a mental and behavioral process of an individual positively adjusting to the environment and learning requirements to maintain a balance (Simon, & Roland, 1995). Study at college is totally different from that in high school. In college, the learning contents are more extensive and learning time is more independent; the supervision functions of teachers and parents are greatly reduced and college students have more initiative for their learning. Freshmen cannot promptly adapt to the relatively free life of colleges and universities, nor reasonably plan and arrange their learning. Therefore, it is easy for them to lose learning objectives and lack learning motivation. Military training can cultivate the consciousness of the freshmen and improve their learning motivations to make them take more initiatives in their future school life. The improvement of college students’ self-control gained from military training enhances the abilities of such students for constraining themselves, resisting temptations and eliminating distractions. The exercises of college students’ will power during military training make

such students keep firm beliefs and unremitting perseverance when encountering learning difficulties and setbacks.

Conclusion

The military training in colleges and universities with reasonable time arrangements and scientific and standard subject designs can effectively exercise and cultivate self-control, will power, competition and cooperation awareness, self-care ability and a collective sense of honor of students. In addition, such military training can play an important role in helping freshmen adjust their mental states, change their roles, smoothly spend freshmen adaptation period and successfully adapt to college life. Military training can accelerate the overall cognition of college students on college life and improve the role adaptation, interpersonal adaptation and learning adaptation of college students. Therefore, military training has a positive impact on helping college students pull through the adaption period of freshmen and eventually successfully adapt to their college life. Above all, military training accelerates the process of college students school adaption.

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The Study of the Characteristics of the Li Nationality's Acculturation

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[Abstract] Under the multi-cultural environment, the Han culture is a mainstream culture. The Li nationality that live on Hainan island in China have a conflict with the Han culture, and the acculturation problems have become increasingly prominent. However, little attention has been paid to the Li nationality's acculturation. Participants consist of 676 adults from the Li nationality. A Li nationality acculturation questionnaire (LNAS) and difference test method were given to explore the general characteristics of the Li nationality's acculturation. The results showed: (1) The Li have a higher level of acculturation. In the acculturation models, their assimilation type scored highest, however, their integration, separation and marginalization types scores were lower than their assimilation successively. (2) The Li's acculturation is affected by gender, age, regional influences, education level, work status, profession and other demographic variables. The results reflect the inherent characteristics of the Li's acculturation, which have a certain theoretical and practical significance in its promotion.

[Keywords] Li nationality; acculturation; characteristics

Introduction

Ethnic minorities often face the problem of cultural acculturation under the influence of historical changes and social development. In the background of multiculturalism, the minorities, as a vulnerable nation, generally face the challenge of acculturation due to the differences between the mainstream culture and their source culture. They want to identify with their own source culture, but they are also worried that they cannot integrate into mainstream society because of too much identification with the source culture. On the contrary, they want to identify with the mainstream culture too, but they are also worried they will lose their source culture by recognizing too much of the other. So, they often caught in the crack in the process of culture acculturation (Wan, 2004). Li minorities, as the southernmost minority in China, have formed a very unique island culture because of historical reasons and their unique geographical location. In the process of economic development and the construction of an international tourist island in Hainan Province, the traditional culture of Li has been confronted with the challenges and dilemmas brought by acculturation under the impact of the mainstream culture. On the one hand, acculturation and human life are closely related (Belizaire, 2011). There is also a close relationship between national cultural identity and career (Zhao, 2016). At the same time, the characteristics of the Li nationality's acculturation has seldom attracted attention in the academic field. So, in this study, it is of great theoretical and practical significance to study the Li nationality's acculturation at the individual level.

Method

Participants

In this study, the Li adults (both their parents are Li) were selected as the participants by stratified random sampling. A total of 800 questionnaires were distributed and 676 effective questionnaires were retrieved. The effective rate of recovery was 84.5%. The participants' ages ranged from 18 to 76 years, and the mean age was 35.09 ± 12.13 . All participants were informed that participation was voluntary, and that responses were anonymous. The socio-demographic characteristics of the participants are listed as follows: gender (male, 54.1%; female, 45.90%); regional (city, 30.5%; town, 23.7%; village 45.9%); educational level (primary and below, 12%; junior middle education, 22.3%; senior middle education, 23.7%; bachelor degree or above, 42.0%); profession (farmer, 42.0%; worker, 14.5%; official/teacher, 12.0%; student, 17.0%; retirees/unemployed, 6.2%; others, 8.3%).

Measure

The Li Nationality Acculturation Questionnaire (LNAS) was used. The characteristics of the Li nationality's acculturation was assessed using the 36-item LNAS (Wang, 2013). Participants were asked to respond to items on a 5-point Likert-type scale that ranged from strongly agree to strongly disagree. Internal consistency reliability estimates for this measure was 0.862, the split half reliability coefficient was 0.841. The internal consistency reliability coefficient of each factor ranged from 0.762 to 0.837, and the split half reliability coefficient ranged from 0.736 to 0.816.

Results

The Types of Li Nationality Acculturation

The results of the analysis are presented in Table 1. From the results, it can be seen that the factors of acculturation are significantly different. The scores were compared with the median values of the factors. We can see that only the marginalization type was significantly lower than the median, and the other factors were significantly higher than the median. The results showed that the Li people have a higher level of acculturation. In the acculturation models, the assimilation type scored highest, however the integration type's scores were lower, followed by separation and then marginalization.

Table 1. The Paired T-Test Results of Li Nationality 's Acculturation (N = 676)

	Integration	Assimilation	Separation	Marginalization
Average score	(3.45±0.50)	(3.37±3.30)	(3.15±3.11)	(2.96±3.00)
Integration				
Assimilation	3.515***			
Separation	25.188***	21.673***		
Marginalization	65.634***	59.973***	34.260***	
Median	39.309***	32.844***	6.883***	-42.946***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$, the same as below

The Demographic Differences of Li Nationality Acculturation

In order to investigate the relationship between the Li's acculturation and demographic variables, this study made a stratification analysis of their acculturation according to gender, age, region, educational level and work. The results are shown in Tables 2 and 3. It was found that the Li's acculturation showed

significant gender differences. The scores of integration and assimilation type of Li women were significantly higher than men, however, there was no significant difference between the other two types.

The results showed that there were significant differences in the scores of assimilation and integration type among Li people of different age groups, but there was no significant difference between separation and marginalization type. Multiple comparisons showed that there was no significant difference between the ages of 18-29 and 30-39, 40-49 and 50 years of age in the assimilation and integration type, however, the 40-49 and the over 50 years age groups were significantly higher than those in the ages of 18-29 years and 30-39 years.

In terms of regional variables, the integration type scores of the Li people in the city was significantly higher than that in the town and village, while that of those living in cities and towns was significantly higher than that of village residents. In addition, the scores of the Li people living in the town were significantly higher than those of the city and village with regard to marginalization.

Table 2. The Demographic Characteristics of Li Nationality's Acculturation (N = 676)

	Integration	Assimilation	Separation	Marginalization
Gender				
male	33.76±5.41	32.44±4.77	28.49±6.77	20.79±3.47
female	35.18±4.49	34.83±5.54	28.16±3.80	20.63±4.08
	F=13.817***	F=35.846***	F=0.739	F=0.313
Age				
18—29	34.21±4.21	31.72±4.04	28.44±6.19	20.80±3.35
30—39	33.42±5.46	32.29±4.44	28.10±3.70	20.86±3.93
40—49	35.53±5.15	36.57±5.99	28.04±4.37	20.38±4.53
≥50	35.97±5.23	37.64±4.66	29.07±3.91	20.76±3.16
	F=7.756***	F=56.764***	F=0.885	F=0.583
Regional				
city	34.88±5.53	35.59±4.67	28.58±3.66	20.86±3.95
town	34.73±5.59	34.45±5.01	28.44±6.89	21.23±3.38
village	31.34±3.84	34.04±5.05	28.10±3.92	20.26±3.97
	F=32.215***	F=5.203**	F=0.585	F=4.219*

There were significant differences in the scores of assimilation and marginalization type among the Li people of different education levels in acculturation. On the assimilation type, the scores of primary school, junior high school, high school, and university and above categories showed significant differences between the each of them. The Li people with junior high school education had the highest score, followed by primary school, high school education level, and the university and above education level had the lowest score. On the borderline, the Li people with university or above had the highest score, which was significantly different from those of the Li nationality with an education level of the primary school and the junior high school, however, there were no significant differences between the three classes of primary school and junior high school and the following.

There were significant differences in the scores of acculturation among the Li people of different income levels. The results of multiple comparison test showed that the income level of 2001-3000 RMB and 3001 RMB group was significantly higher than 1001-2000 RMB group and 1000 RMB group. On integration type, the income level of 2001-3000 RMB group was significantly higher than the other groups, and the less than 1000 RMB group was significantly lower than the rest of the group. In the separation type, the income level of 1001-2000 RMB group and 2001-3000 RMB group were

significantly higher than the less than 1000 RMB and more than 3001 RMB groups. In marginalization type, the income level of 2001-3000 RMB group score was higher than other groups.

The Li's acculturation scores have significant differences in the type of integration, assimilation and marginalization among different occupational groups as well. After multiple comparison test, we found that in assimilation and integration, civil servants/teachers scored the highest, significantly higher than the other groups and the scores of workers, civil servants/teachers, and students were significantly higher than those of peasants, retired/unemployed and other occupational groups. In addition, in the marginalization type, farmers, workers, retired/unemployed groups scored significantly higher than the rest of the group.

Table 3. The Demographic Characteristics of Li Nationality's Acculturation (N = 676)

	Integration	Assimilation	Separation	Marginalization
Education				
primary	35.03±5.84	35.13±6.13	28.59±4.90	20.40±4.33
junior	36.67±4.64	34.44±5.06	28.08±3.63	20.30±3.97
senior	34.91±6.00	34.97±4.59	27.95±3.46	20.35±3.94
bachelor	31.26±3.77	34.11±4.62	28.52±6.08	21.19±3.40
	F=45.819***	F=1.622	F=0.621	F=2.758*
Income(¥)				
≤1000	32.62±5.40	33.37±5.09	27.73±4.00	20.96±3.33
1001-2000	32.88±4.83	34.70±5.18	28.93±5.52	20.56±3.68
2001-3000	34.45±5.72	35.39±4.64	28.73±5.63	21.27±3.73
≥3001	34.61±5.12	34.28±4.90	27.69±4.12	20.09±4.23
	F=6.272***	F=4.445**	F=2.936*	F=3.304*
Work				
famer	33.56±5.22		28.11±5.64	20.98±2.69
worker	36.88±5.83	35.03±4.47	27.72±3.71	20.67±3.84
Official/teacher	38.73±4.04	39.33±2.47	29.14±3.61	18.60±3.39
student	36.26±4.53	35.70±2.42	28.77±2.47	19.45±3.98
Retirees/unemployed	34.55±6.04	34.89±5.31	29.80±4.52	20.67±3.84
other	30.65±3.23	33.33±4.31	27.91±2.47	18.78±3.49
	F=16.296***	F=4.364**	F=1.049	F=3.087**

Implications and Conclusion

This study finds that the Li's acculturation strategies are mainly assimilation and integration in the present. Berry, Phinney, Sam and Vedder (2006) argued that integration is the most culturally appropriate type, while the marginalization type is incompatible with both cultures with the lowest score. At the same time, both assimilation and segregation are highly adaptable to a culture, so the scores should be between the integrative and the marginalization types. The Li's acculturation of contemporary is high, which shows a high adaptability to the Han culture. When the Li people adapt to the lifestyle and values of the Han, the rejection of the Li's traditional culture is not high. The study shows that immigrant age, education level and resettlement time are the important factors that affect the cultural adaptation of immigrants (Sun, 2012; Zheng & Sang, 2003). Studies have shown that socio-cultural adaptation is mainly affected by the source culture, individual cultural intelligence and other factors (Wu, et al., 2013).

In the process of acculturation, different minorities will develop their own cultural identity attitudes model (Zhang & Zhang, 2007). Comparing the results of previous studies, we can see that the Li's acculturation has similarities with other ethnic minorities in China. For example, when the Wa people

faced the impact of urban civilization and Chinese culture, they not only maintained their source culture, but they also actively sought interaction with the mainstream culture in Yunnan province (He, 2009). Differing from existing studies, the Li are more inclined to actively seek interaction with the mainstream culture.

The results show that gender can affect the Li's acculturation, and that Li female's degree of acculturation is higher than that of the male, especially in the Han culture's adaptability and its acceptance. Although previous studies have not reached a definitive conclusion on the relationship between gender and cultural acculturation (Duru & Poyrazli, 2007; Tran, 1993), the authors believe that Li females may be more likely to adapt to the daily life environment and social changes of the mainstream culture, which may also indicate why the women face fewer acculturation problems than the men. In addition, it is easier for females to establish new relationships with new neighbors, friends and colleagues.

The age of the Li individuals had significant effects on integration and assimilation types of their acculturation. Compared with the acculturation of Li people aged 18-29 and 30-39 years old, Li's acculturation is better than those aged 40-49 years old and over 50 years old. Some studies have shown that the relationship between age and acculturation is very complex. Adolescents and the elderly may all be high-risk groups for acculturation problems. Acculturation problems and pressures of adolescent immigrants mainly come from the recognition and development of adolescents, while the problems of acculturation in the elderly immigrant is that learning a new culture is more difficult (Berry, Phinney, Sam, & Vedder, 2006; Beiser, 1988). The reason for the results of this study may be that the Li people over 40 years of age with the mentality of maturity and social life experience increases, and the attitude of acculturation becomes more rational but less paranoid and has fewer contradictions. They are not only more actively seeking the relationship between the Han culture and the Li, but they also have a more objective view of the Li culture and the integration of the Han culture.

The Li's acculturation has significant regional differences. The results show that the Li nationality in the city has better adaptability to culture, and at the same time, previous studies have also shown that the growth region and the degree of settlement have an important effect on the individual's cultural adaptation (Fang, 2012). The city's economic and tourism development have had more widespread contact with the Han culture for a longer time, and the impact of the Han way of life and values is more significant which may mean that the Li people in the city can adapt to the culture better.

In summary, we can summarize the basic characteristics of the Li nationality's acculturation:

- the Li have a higher level of acculturation;
- in their acculturation models, the assimilation type scored highest, however, integration type's scores are lower than the assimilation type;
- the Li's acculturation is also affected by gender, age, regional, education level, work status, profession and other demographic variables.

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The Construction of Li Nationality Acculturation Questionnaire in China

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[Abstract] Cultural changes under this new era context have had a tremendous impact on the existing social and psychological systems of the Li nationality, which is a test of the Li nationality acculturation too. However, there are few academic studies of Li nationality acculturation, and particularly, a lack of empirical research tools. The purpose of this study is to develop a questionnaire that is suitable for measuring Li nationality acculturation. Based on literature analysis, through the method of in-depth interviews, and an open-ended questionnaire, the authors have come up with the theoretical structure of Li nationality acculturation. The research selected 1326 Li people as participants, and through item analysis, exploratory and confirmatory factor analysis, compiled the Li Nationality Acculturation questionnaire (LNAS) in China. The results showed the questionnaire has a good reliability, validity, and stable characteristic, which means it is an ideal measurement tool.

[Keywords] Li nationality; acculturation; questionnaire construction; acculturation models

Introduction

Located in the southernmost part of China, the Li Nationality is relatively conservative in terms of cultural psychology as a minority. However, cultural changes under this new era context have had a tremendous impact on the existing social and psychological systems of the Li nationality, leading them to inevitably undergo acculturation. Therefore, psychological research with regard to their acculturation cannot be ignored, in order to deal with these changes to ensure national unity, harmonious development and social stability.

Acculturation refers to the dual process of cultural and psychological change that takes place as a result of direct and continuous contact between two or more cultural groups and their individual members (Berry, 1999). The process includes psychological adaptation and sociocultural adaptation (Ward, 1996). Psychological adaptation is restricted by the cultural adaptation as the premise of individual cultural adaptation (Yang & Wan, 2010). Based on this theory, Lee, Sobal., & Frongillo (2003) identified three types for Korean-American acculturation: integration, assimilation, and separation; Berry, et al. (2006) concluded that there are four types of acculturation in adolescents with different cultural backgrounds in 13 immigrant countries; Dominguez and Isidro (2008) found that in acculturation there is not only an integrated type, assimilated type and separated type, but also an integration type (not having traditional cultural practice) and a marginalization type (with traditional cultural practices). Simon Ozer and Seth J, Schwartz (2016) found that the tri-dimensional acculturation model compared with the bi-dimensional acculturation has a better significance.

According to the studies of acculturation in China, Zhang (2008) studied the bi-dimensional model of acculturation, and found that minority college students in the southwestern region showed 3 types in attitudes: integration, separation, and marginalization, 4 types in behavior: integration, separation,

assimilation, and marginalization. Sun (2011) divided migrant workers' acculturation into four types: separation, dispersion, assimilation, and integration. Through a questionnaire survey and in-depth interviews, Xu, Pi and Wang (2016) constructed a new model of minority college students' acculturation, which included integration, adaptation, treatment, development and harmonization. In this study, Li nationality acculturation refers to the sociocultural and psychological change of the Li and Han groups or those members who have contact with each other under the background of economic construction and tourism development in China.

Although Berry's theory of acculturation is of theoretical guidance and general applicability to studies of Chinese minority acculturation, Berry and other researchers have found that there are no generally applicable questionnaires or scales for acculturation. Because acculturation is a complex psychological phenomenon, in different cultural backgrounds, individual acculturation presents different contents and characteristics, changing with time and different contexts (Berry, 1999; Kosie, 2004). Therefore, this study is based on Berry's theory of acculturation, in constructing the Li Nationality Acculturation Questionnaire. There are three steps in the preparation of the Li Nationality Acculturation Questionnaire (LNAS): the first step is an in-depth interview and the open-ended questionnaires; the second step is to check the items and formulate the questionnaire; the third step is to test the reliability and validity.

Method

Participants

In-depth interview subjects were 26 Li nationality adults as interview participants. Interviews were conducted on a way of one-to-one basis and the researchers carried out targeted questions according to the interview outline. In the interviews, the researchers explained the confidentiality principle and the main purpose of the study to the participants.

Open-ended questionnaires were collected from 80 Li nationality participants (74 valid questionnaires were collected) by purposeful sampling method. The participants' age ranged from 19 to 73 years (mean age was 39.22 ± 11.79 years).

The initial test selected 20 Li nationality adults as participants. In the second test, the participants were selected from Hainan Province, Haikou City, Sanya city and other regions by a stratified random sampling method. A total of 380 Li nationality acculturation prediction questionnaires were distributed and 302 valid questionnaires were retrieved. The age span of the participants was 21-68 years old, with an average age of 37.31 ± 13.15 years. In the formal survey, 800 Li nationality acculturation questionnaires were distributed and 676 valid questionnaires were retrieved, a recovery rate of 84.5%. The age span of the participants was 19-76 years old, with an average age of 35.09 ± 12.13 years.

Procedure

Open survey and the initial formation of questionnaire items. In this study, the researchers collected data through in-depth interviews, evaluated the data, and then developed an open-ended questionnaire. Then, the researchers conducted an open-ended questionnaire on Li people from different backgrounds, coded and classified the content of the questionnaires, and selected the higher frequency and representative cultural attitudes and behaviors. After collecting and sorting out the data, the researchers extracted representative and universal content, divided these into four types (integration, assimilation, separation, and marginalization), and then selected items with distinctiveness to make the

questionnaire items representative, resulting in the first draft of the Li Nationality Acculturation Questionnaire with 48 items. After determining the draft, the researchers selected 20 Li people. According to the feedback of the participants, the researchers adjusted some items, revised and screened out unreasonable items, and then determined the nationality acculturation questionnaire with 40 items.

Item analysis and exploratory factor analysis were carried out on the preliminary questionnaire. The item analysis found that the discernment index of the 13th question and the 37th question was not high, so these questions were deleted. Next, exploratory factor analysis of the remaining items showed that the 28th question and 36th question should be deleted. Item analysis and exploratory factor analysis were performed on the results of the second test. The final form of the Li Nationality Acculturation Questionnaire has 36 items.

Statistical Analysis

SPSS 21.0 and LISREL 8.30 were used to analyze the items.

Results

Item Analysis

The results of the item analysis showed that the discriminant index of the 13th question was 0.199, $p < 0.05$, and the discriminant index of the 37th question was 0.105, $p > 0.05$. These were not acceptable in the statistic, so they were deleted.

Exploratory Factor Analysis

After deleting these 2 items, exploratory factor analysis was conducted on the rest of the items. The integration-questionnaire has 10 items, the assimilation-questionnaire has 12 items, the separation-questionnaire has 9 items, and the marginalization-questionnaire has 7 items. The reference standards of the qualified items: Eigenvalue > 1 , Consistent with the score test; $\alpha > 0.40$; Community > 0.20 ; Explaining the total variation of 3% at lease. According to these standards, exploratory factor analysis found: 7th ($\alpha = 0.297$) and 28th ($\alpha = 0.346$), so we deleted these 2 items, retaining the other 36 items. Then, the second results of exploratory factor analysis showed that Eigenvalue of four common factors (assimilation, integration, separation, marginalization) were 7.865, 4.891, 3.115 and 1.530, and accounting for 21.847%, 13.568%, 8.652% and 4.250%, respectfully, which accounted for 48.308% of the total variance (as shown in Table 1).

Table 1. Total Variance Explained (N=302)

Factor	Eigenvalue	Variance (%)	Cumulative (%)
1	7.865	21.847	21.847
2	4.891	13.586	35.433
3	3.115	8.652	44.058
4	1.530	4.250	48.308

As shown in Table 2, $\alpha_{\max} = 0.83$; $\alpha_{\min} = 0.421$. Finally, a formal Li Nationality Acculturation Questionnaire (LANS) was established: 4 factors and 36 items.

Table 2. Component Matrixa (N=302)

Item	Factor			
	1	2	3	4
a20	.823			
a19	.718			
a21	.704			
a14	.694			
a17	.624			
a25	.560			
a34	.552			
a11	.527			
a22	.442			
a27	.436			
a5		.831		
a15		.793		
a9		.716		
a8		.677		
a3		.639		
a4		.516		
a16		.475		
a39		.468		
a12		.427		
a24		.421		
a29			.801	
a1			.714	
a33			.641	
a18			.622	
a10			.571	
a40			.516	
a32			.476	
a23			.474	
a26			.435	
a2				.783
a36				.735
a6				.708
a30				.664
a35				.654
a38				.639
a31				.636

Validity Analysis

Criterion-related validity. Previous studies have shown that acculturation and coping styles interact with each other. Therefore, this study can examine the validity of the questionnaire by examining the correlation between acculturation and coping styles. A Coping Style Questionnaire(CSQ) was developed by Xiao (Markus, 2003; Wang, Wang, & Ma, 1999). The questionnaire is made up of 62 items, including positive coping style and negative coping style. The results of correlation analysis showed the assimilation and integration of the Li nationality acculturation had significant positive correlation with positive coping style, but had significant negative correlation with negative coping style. Meanwhile, there was a significant positive correlation between the separation type and negative coping style, and a

significant negative correlation between the marginalization type and negative coping style (as shown in Table 3).

Table 3. Correlations ($N=676$)

	Positive Coping Style	Negative Coping Style
Assimilation	.221**	-.118**
Integration	.403**	-.283**
Separation	-.059	.192**
Marginalization	-.147**	.220**

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Construct validity. The correlation coefficient of factors was between 0.271 and 0.484, and the correlation coefficient between factors and the total questionnaire was between 0.650 and 0.793 (as shown in Table 4).

Table 4. Correlations ($N=676$)

	Assimilation	Integration	Separation	Marginalization	Total
Assimilation	1				
Integration	0.348**	1			
Separation	0.312**	0.304**	1		
Marginalization	0.359**	0.484**	0.271**	1	
Total	0.713**	0.793**	0.650**	.729**	1

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Reliability analysis. From Table 5, Cronbach's Alpha of the questionnaire was 0.862 and the split half reliability coefficient was 0.841. Cronbach's Alpha among the four factors was between 0.762 and 0.837, and the split half reliability coefficient was between 0.736 and 0.816.

Table 5. Reliability ($N=676$)

	Cronbach's Alpha	Split Half Reliability Coefficient
Assimilation	.837	.816
Integration	.828	.809
Separation	.762	.736
Marginalization	.809	.793
Total	.862	.841

Discussion and Conclusion

The aim of this study was to develop a Li nationality acculturation questionnaire. Based on his understanding of acculturation, Berry thought that two distinct dimensions (being consistent with traditional culture, and contact with other cultures) could be used in acculturation of different minorities. On this basis, Berry and his colleagues conducted a number of studies to summarize four types of acculturation (individual acculturation tendency to mainstream culture) in minority groups: integration, assimilation, separation, and marginalization (Berry, 1990). In this study, both the preparation of the questionnaire and the test of the reliability and validity supported a two-dimension structure of acculturation. The results supported theoretical framework, and found that the two-dimensional model of acculturation can effectively explain the responses of the subjects. Meanwhile, with the development of

economic and tourism, the Li Nationality Acculturation Questionnaire can be applied to Li nationality with cultural changes.

In this study, based on the status of Li nationality acculturation, using the method of developing the psychological questionnaire, researchers developed the Li Nationality Acculturation Questionnaire (LNAS) through literature analysis, in-depth interviews, open-ended questionnaire surveys, and analyzed psychometric indexes of this questionnaire. The data showed that the Li Nationality Acculturation Questionnaire (LNAS) meets the standard of mental measurement well, and is a reliable measurement tool to measure Li nationality acculturation.

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When Mood and Comparative Thinking Reduce Stereotype

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[Abstract] *The purpose of the current study was to explore whether mood and comparative thinking have an interaction effect on wealth stereotype expression. Participants' mood was induced by music, and their comparative thinking were also manipulated followed by a stereotype evaluation task. The ANOVAs showed that mood and comparative thinking were important predictors of the wealth stereotype. There is interaction between mood and comparative thinking. In the positive mood condition, the wealth stereotype on competence evaluation was higher in the priming similarities thinking condition than in priming dissimilarities comparative thinking condition. The results provide a further understanding of the mechanism of the comparative thinking affects stereotype.*

[Keywords] *comparative thinking; mood; wealth stereotype*

Introduction

Comparative thinking has been considered to be an important cause of the expression of stereotypes (Mussweiler & Damisch, 2008), and it has two alternative comparative thinking: similarity comparative thinking refers to the target being assimilated toward a given standard, and dissimilarity comparative thinking refers to the target being contrasted away from a given standard (Mussweiler, 2001, 2003). It has been demonstrated that priming participants to engage in dissimilarity comparative thinking reduces behavioral and judgmental stereotyping effects, compared with priming similarity comparative thinking (Corcoran, et al., 2009). However, the mechanisms of comparative thinking influencing the stereotype expression is still not clear. There are moderator variable influences direction and/or strength of the relation between the comparative thinking and stereotype. It is necessary to explore the moderator effect to get a further understanding of the effect of comparative thinking on the stereotype expression.

The affection can be one of the moderator. It has been suggested that people in positive moods rely more on stereotypes than those in negative moods (Huntsinger, Sinclair, & Clore, 2009; Huntsinger, et al., 2010; Stroessner, Mackie, & Michalsen, 2005). Positive affection signals that people would apply heuristic, simple, and quick processing strategy, and would likely use routine or automatic perception (Gasper & Clore, 2002; Storbeck & Clore, 2005). Whereas, negative affection signals applying detailed, systematic processing strategy that involves spending more experience and time. Thus, we assume that the effect of comparative thinking on the stereotype exists in the positive affection condition. Whereas this effect may disappear in the negative affection condition, because as in negative affection, detailed, systematic processing strategy would inhibit the stereotype expression (Kunda, 1999) no matter whether in the similarity/dissimilarity comparative thinking. In this current study, we examine the role of diffuse affective states (i.e., moods) and comparative thinking, and determine whether they might influence the stereotype's co-instantaneous nature.

Previous research has mainly explored the effect of affection and comparative thinking on the gender stereotype. The present study focuses on the wealth stereotype. Based on stereotype content model (Kang & Bodenhausen, 2015; Kang, Chasteen, Cadieux, Cary, & Syeda, 2014), competence and warmth were two of the basic indexes of evaluating the group. The stereotype link to the rich is high competence, whereas

the link to the poor is low competence; the stereotype link to the rich is low warmth, whereas link to the poor is high warmth (Fiske, Cuddy, Glick, & Xu, 2002).

Methods

Participants

A total of 112 students from a university in central China participated in this study. The participants' ages ranged from 17 to 28 years ($M=20.82$, $SD=2.46$), including 21 male (18.8%), 91 female (81.3%); 58 came from the rural areas (41.8%), 54 came from the city (48.2%); 2 participants believed themselves to be very poor (1.8%), 25 participants felt themselves to be a little poor (22.3%), 77 participants believed themselves to be general (68.8%), and 8 participants believed themselves to be a little rich (7.1%).

Procedure

Once participants arrived in the laboratory, they were given an overview of the study, and were told to complete three different tasks. First, participants were randomly assigned to one of two mood inductions that lasted 5 minutes each. Second, as the music continued to play, they were given two pictures and asked to take 5 minutes to describe the similarities vs. the differences between them (the time allocation refers to Huntsinger, et al., 2010, Experiment 2). Last, they completed a brief questionnaire. After receiving a description of the study, participants voluntarily gave a written informed consent. When participants finished all parts, they were thanked, debriefed, and dismissed.

Materials

Mood manipulation. Instructions for this task were “the purpose of the study was to pre-test a set of music that would be used in subsequent research”. Participants listened to Mozart's *Eine Kleine Nacht Musik* to induce a positive mood, or listen to Mahler's *Symphony No. 5-Adagietto* to induce a negative mood (Wang, Wang, & Chen, 2015).

Comparative thinking manipulation. Instructions for this task pointed out that the purpose of the study was to pre-test a set of pictures that would be used in subsequent research on event memory. Participants were given sketches of two scenes which were printed on one page, and they were randomly asked to write down all the similarities or difference they could find between the two scenes (Mussweiler, 2001).

The stereotype evaluation questionnaire. The participants were asked to evaluate the competence and warmth of the poor and rich target. Competence was evaluated with three traits: competence, confident, and lazy. Warmth was evaluated with an additional three traits: warmth, friendliness, and indifference. Participants were asked to rate each adjective according to its descriptiveness of the target on a scale from 1 (not at all descriptive) to 5 (very descriptive). The negative items were reverse scored, and the sum score of all three items was the final score. The higher the score was, the higher the perceived competence/warmth of the target was. This measurement has been extensively used in stereotype study (Corcoran, et al., 2009; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Kang, et al., 2014). The score of wealth stereotype related to competence can be calculated by the competence evaluation score of the rich target minus the competence evaluation score of the poor target, and the variation was the final score. The score of wealth stereotype related to warmth can be calculated by the warmth evaluation score of the poor target minus the warmth evaluation score of the rich target, and the variation was the final score. The higher the score was, the higher the stereotype was.

Mood-manipulation check. Participants were asked four questions to determine the efficacy of the mood induction (Huntsinger, et al., 2010; e.g., How delighted/sad did you feel while you listened to the musical), and they answered these questions ranging from 1 (not at all) to 7 (very much). The two items about sadness were reverse scored, and the sum score of all the items was the final score, with the higher the score, the more delighted the participant was while listening to the music. In the current study, the questionnaire had good reliability with $\alpha=0.93$.

Results

Mood-Manipulation Check

Participants felt less positive during the negative-mood induction ($M=10.11$, $SD=3.25$) than the positive-mood induction ($M=16.38$, $SD=2.67$), $F(1,110)=125.21$, $p<0.001$, $\eta^2_p=0.53$. Thus, the mood manipulation in the current study was successful.

The Effect of Mood and Comparative Thinking on Stereotype Expression

Two-way ANOVAs with mood (positive mood, negative mood) and comparative thinking (similarities, dissimilarity) as between-subject factors were used to examine differences in wealth categorization stereotype on competence evaluation. The results show that the main effects of mood are significant, $F(1,108)=6.89$, $p<0.05$, $\eta^2_p=0.060$, but not significant related to comparative thinking $F(1,108)=0.50$, $p>0.05$, $\eta^2_p=0.005$, but their interaction effect was significant, $F(1,108)=5.60$, $p<0.05$, $\eta^2_p=0.049$.

In order to further understand their interaction effect, simple effect analysis was conducted, and the results indicated that the effect of comparative thinking on the wealth stereotype was not significant in the negative mood condition, $F(1,108)=2.07$, $p>0.05$, $\eta^2_p=0.019$, but it was significant in the positive mood condition, $F(1,108)=3.63$, $p<0.01$, $\eta^2_p=0.033$. Specifically, only in the positive mood condition, the wealth stereotype on competence evaluation was higher in the priming similarities thinking condition ($M=3.14$, $SD=1.90$) than in the priming dissimilarities thinking condition ($M=1.54$, $SD=3.48$). Thus, compared with the participants in the positive mood and with the dissimilarities thinking, the participants in the positive mood and combined with the similarities thinking have higher wealth stereotype on the competence evaluation, and believe the rich are more capable than the poor. However, in the negative mood condition, the wealth stereotype on the competence evaluation in the priming similarities thinking condition was not significantly different with the priming dissimilarities thinking condition.

With regard to the wealth categorization stereotype on warmth evaluation, two-way ANOVAs with mood (positive, negative) and comparative thinking (similarities, dissimilarity) as between-subjects factors were used. The results show that main effects of mood and comparative thinking on the wealth categorization stereotype on warmth evaluation were both not significant, $F(1,108)=0.92$, $p>0.05$, $\eta^2_p=0.008$; $F(1,108)=1.82$, $p>0.05$, $\eta^2_p=0.017$, and their interaction effect was also not significant, $F(1,108)=1.69$, $p>0.05$, $\eta^2_p=0.015$. Thus, the comparative thinking and the mood both cannot predict the wealth categorization stereotype on warmth evaluation. The comparative thinking and the mood can only affect the wealth categorization stereotype on competence evaluation.

Discussion

The purpose of the current study was to explore whether the mood and comparative thinking have an interaction effect on the wealth stereotype expression. We found that the mood and comparative thinking are important predictors of the stereotype expression. There are also interactions between mood and

comparative thinking in the stereotype evaluation. The perceiver with similarities comparative thinking have a higher wealth stereotype related to competence than those in the dissimilarities comparative thinking, only in the positive mood condition, and no gap exists between the two types of comparative thinking in the negative mood condition. Discussions on the theoretical and practical implications of these findings are included in the following part.

Mood and comparative thinking have interaction effect. A robust body of evidence has emerged to demonstrate that positive affection increases stereotype, and the individual in the positive mood appears to promote global focus (Fredrickson & Branigan, 2005), widen attention (Rowe, Hirsh, & Anderson, 2007), trigger heuristic processing, make the perceiver fall prey to the availability bias (Ruder & Bless, 2003), and make judgment reliance on gender or race stereotypes (Huntsinger, et al., 2009). Meanwhile, priming participants to engage in dissimilarity comparative thinking reduces stereotype, and priming similarities comparative thinking increases stereotype (Corcoran, et al., 2009). The current research extends the effect of mood and comparative thinking on gender or race stereotype to wealth stereotype.

The negative affection appears to promote local focus, narrow attention, trigger item-based processing, and reliance on behavioral information (Krauth-Gruber & Ric, 2000), rather than reliance on stereotypes (Huntsinger, et al., 2009). Thus, priming the dissimilarities or similarities comparative thinking, focusing on the individual difference or the individual similarity will not affect the judgment and evaluation of the target, as the perceiver would not make tendentious judgment just based on the category information.

With regard to limitations and potential extensions of the current work, there are several issues worthy of note. First, in the measurement of the stereotype, we only focused on the direct competence evaluation based on the stereotype content mode (Fiske, Cuddy, Glick, & Xu, 2002); it is valuable to pay attention to the indirect and implicit stereotypes as well. Thus, future studies should simultaneously employ multiple informants and methods to collect data. Second, this current stereotype measure did not consider the context variables. It has been shown that social stereotypes are organized as specific mental schemas that are triggered by a combination of category and context information (Casper, Rothermund, & Wentura, 2011). Thus, it is necessary to explore the moderation effect of the context information in the relation between the mood, comparative thinking and stereotype in further research. Third, in-group identification is one important mechanism for reducing prejudice and decimation against a cross-categorization group (Crisp, Hewstone, Richards, & Paolini, 2003; Ray, Way, & Hamilton, 2010). Further investigation related to stereotypes of cross-categorization groups requires a focus on the in-group and out-group participants to explore the important role of self-identification. Moreover, the judgments of people in positive moods were assimilated to primed information, whereas those of people in negative moods were contrasted away from primed information (Avramova & Stapel, 2008). Thus, the affection manipulate may be connected to comparative thinking manipulate. Further research should verify this effect, and further explore their effect on the serotype expression.

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Effects of Intelligence with Morality on Evaluation of Wisdom

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[Abstract] *To explore the effects of intelligence with morality on the evaluation of people's wisdom, a within-subjects repeated experiment with 2 intellectual levels (high/low) × 2 moral levels (high/low) was conducted. The results show that the main effects of intelligence and morality are significant, and the interaction between intelligence and morality is significant as well. The study reveals that intelligence with morality plays an important role in the evaluation of people's wisdom; those with both a higher level of intellectual quality and moral quality are more prone to be regarded as wise people.*

[Keywords] *wisdom; intelligence; morality; wise people*

Introduction

As early as 700 years ago, Thomas Aquinas (1923, p. 3) proclaimed “Of all human pursuits, that of wisdom is the most perfect, the most sublime, the most profitable, the most delightful”. The most-focused themes like what wisdom is and how to define it have been always broadly studied by philosophy, religion, anthropology, politics, education, psychology and so forth.

What is Wisdom?

Due to the miscellaneous meanings of wisdom, these researchers believe that it is difficult to examine the components and define what wisdom really is in the sense of science, but it is easy to recognized when wisdom is manifested in real life. Thus, lots of psychologists adopt the methods of biographical analysis and autobiographical narrative analysis of those who have been recognized as wise exemplars to conclude the conception and components of wisdom.

By measurement and analysis of adults who show “ wisdom-related performance” in the process of dealing with complex real-life problems, Baltes and Staudinger (2000) defined wisdom as expertise in the fundamental pragmatics of life; meanwhile, wisdom also includes the purpose of helping oneself and others to gain a better life. Ardelt (2003) believed that wisdom is cognitive (on information receiving, processing and application), reflective (intuition, perspicacity) and affective (sympathy, compassion, caring for others) integrating personality characteristics, and for the proposal of developing wisdom, people must be willing to learn from their life lessons, and be willing to “transfer their knowledge into wisdom” in this process. Through the study of life stories of famous people such as Einstein, Mozart, and the description of wise people in life, it is advocated that wisdom is, as Sternberg (1998) defined, a process in which intelligence, creativity, and knowledge are applied to balance the intrapersonal, interpersonal and extra personal interests in the short term, or even in the long term, so as to better adapt to the environment, shape the environment, choose a new environment and obtain the common good. Sternberg (1998) also emphasized that wisdom distinct from practical intelligence was that it directed toward the common good rather than the personal benefit maximization. After studying the analysis of Teresa's biography and the autobiographical narrative analysis of Taiwan leaders, Yang (2013, 2014) claimed that wisdom was a process of real life; the interaction of at least three core components can manifest wisdom: (1) different ideas and conflicting ideals are cognitively integrated into forming an idea

or a vision promoting a better life; (2) the integrated ideas and visions are applied into the actual action; (3) these actions have a positive effect on the actors and others. Only when these three components occur can the course of wisdom be completed.

From the connotation of the definition of the mainstream psychological wisdom research, it can be seen that people's wisdom in daily life process usually involves high levels of intellectual qualities such as cognitive ability, knowledge experience or thinking strategies, and a high level of moral quality of compassionate concern for others (Chen & Wang, 2014).

Who is Wise and Who is Not Wise?

Many researchers also defined who is wise through wise nomination. Participants were asked to nominate historical or famous people who are actual "wise exemplars" so as to explore the essence of wisdom with the characteristic analysis of the nominated figures. For example, Paulhus, et al. (2002) used the wisdom nomination method to obtain the top 15 wise people in the minds of American college students: Gandhi, Confucius, Jesus, Martin Luther King, Socrates, Teresa, Solomon, Sakyamuni, the Pope of Rome, Oprah Winfrey, Churchill, Darai Lama, Ann Landers, Mandela and Queen Elizabeth. Wang and Zheng (2014) used the same method to obtain the top 20 wise men in the mind of Chinese College students: Lao Tzu, Socrates, Confucius, Mencius, Marx, Plato, Chuang-tzu, Mo-tse, Xunzi, Aristotle, Zhou Enlai, Engels, Deng Xiaoping, Shakyamuni, Mao Zedong, Zhu Geliang, The Duke of Zhou, Einstein, Jesus, and Mohamed.

It can be known from the analysis of the nomination of the wise exemplars' life stories that, although the wisdom between the Chinese and Western culture is not exactly the same, the acknowledgment of wisdom between the Chinese and Western cultures have something in common: they have generally shown outstanding talents or success in the field of natural science and technology or in the field of humanities and social sciences, and the results of their actions have not damaged the legitimate interests of others, but instead have enhanced the well-being for others or themselves. In turn, individuals may engage in a wide variety of jobs and careers, and achieve success, unless the outcome of these actions can be successful in improving the lives of one's own and the lives of others, otherwise, these actions will be seen as a lack of wisdom. Such as Wang and Zheng (2014) found in Chinese culture nominated unwise people surveyed that college students regarded the farmer in "*The Farmer and the Snake*", Xia Jie, King Zhou, Sister Luo Yufeng, Sister Lotus, Chamberlain (the former Prime Minister), Qin Hui, Madoff, Yuan Shikai, Wang Jingwei and so on as the top 11 foolish men. These so-called "The foolish" were lacking a high level of mental quality to solve practical problems in the face of a variety of real problems (as Adam Smith said, "there is no wisdom in ordinary intelligence") or lacking a high level of moral quality to produce good results for themselves or others. As Sternberg (2003) pointed out in the theory of successful intelligence that, like Hitler and Machiavelli, although they were likely to be geniuses (they would get high scores on IQ tests) they were only clever, their wisdom was never used in this way; on the contrary, wisdom is used to for the public's interest.

What We Have Claimed

Therefore, it can be learned from the above biographies and nominees' relevant wisdom that, wisdom is a process of displaying in real situations, when individuals respond to specific occasions through their thoughts and actions, and based on which, their reactions invent good results, they show the wisdom. Wise people also tend to show high levels of concern for others, in addition to being cognitively able to

see others' perspectives; they transcend their self-interests and care deeply for the well-being of others (Staudinger & Gluck, 2011). And wisdom is not only a kind of personality quality or practical knowledge, but also the wisdom recognized by individuals should include two important factors: first, a high level of intellectual qualities, which ensures that individuals can recognize and integrate complex issues, and then use precise, innovative, efficient, flexible action to solve these issues; second, a high level of moral quality, which ensures to catalyze the coordination and balance of individual intelligence, emotion and motivation in the process of carrying out the integration of cognitive objectives, thereby, ensuring the results of their actions to enhance the well-being of others or themselves in the long run. To put it in another way, a high level of intelligence and moral quality may be the two vital factors to improve the individual's outstanding wisdom and being recognized by others.

Based on the above, this study will further adopt the method of experiment, in which the participants will be asked to evaluate the wisdom of the subjects by providing them with the information of the subjects' intellectual and moral levels, to study the effects of their intelligence and moral levels on wisdom evaluation, to verify the above assumptions, in order to provide a useful reference for understanding the essence of wisdom and carrying out the practice of wisdom education.

Methods

Participants

Participants in this experiment included 108 students, and the valid data returned were 108, including 41 boys and 67 girls; 45 participants majored in arts, and 63 participants majored in science and engineering; and the average age of the participants was 19.65 ± 1.22 .

Design

This study manipulated two independent variables of intellectual level and moral level, and compiled 4 essays according to the 4 kinds of combination of 2 (intelligence level: high / low) \times 2 (moral level: high / low). The dependent variable was wisdom evaluation. Four essays were printed on A4 paper in a random order; participants were asked to read each essay and evaluate each character's intelligence level, moral level and wisdom level in accordance with "1" (very low) to "7" (very high) grades.

Materials

Four essays were formed as follows: first, according to 2 (intelligence level: high / low) \times 2 (moral level: high / low), the outcomes of the high level of intelligence were that the individuals could solve all kinds of practical problems creatively, and the individuals with the low levels were unable to solve any kinds of practical problems creatively; high moral level information showed that the individuals' actions resulted in their own or other people's well-being, the individuals with a low level could not bring their own or other people's well-being. According to relevant literature and experts' suggestions, 4 representative historical figures such as Cao Chong, Wu Qi, Duke Xiang of Song, and Emperor Hui of Jin were selected in line with the requirements of the independent variable combination in the aspects of intellectual and moral quality performance.

Second, according to the control requirements of the independent variables, we took typical events in the life processes of the 4 historical figures' as the prototype and compiled 4 essays. In the short essays, we omitted the dynasties and the names of the characters and other information, and the descriptions of the characters in the aspects of intelligence level and moral level was the same. Essay One described how

A creatively made the pheasant dance in front of a mirror and intelligently save the life of library official; Essay Two described *B*'s military talents of fighting against longer odds with less troops, but killed local people and his wife for a brilliant future, and did not grieve for mother's death; Essay Three described *C* who was defeated by the enemy for poverty at military affairs due to his philosophy of never taking unfair advantage; Essay Four described *D* who was eventually caught and poisoned under the pressure of the court's chaos and enemy invasion because he neither understood the common sense of people's living, nor could he solve the common problems for people.

Finally, a preliminary experiment was conducted on 30 graduate students, and the results showed that the participants were able to understand the meaning of each essay correctly and the logical relationship among the controlled conditions. They were able to name the 4 essays according to the control conditions of the characters' behaviors.

Results

Effects of Intelligence and Moral Levels on Wisdom Evaluation

In order to investigate the effect of the intelligence and moral levels of the subject on wisdom evaluation, the scores of the subject's intelligence and moral levels were taken as the independent variables, and the wisdom level score was taken as the dependent variable for the variance analysis of 2×2 .

The results showed that the main effect of the intelligence level was significant, $F(1, 107) = 528.87$, $p < 0.001$, $\eta_p^2 = 0.83$; the wisdom score of the figures with high intelligence level ($M = 4.99$, $SD = 0.08$) was significantly higher than the wisdom score of the figures with low intelligence level ($M = 2.36$, $SD = 0.09$); the main effect of the moral level was significant, $F(1, 107) = 353.08$, $p < 0.001$, $\eta_p^2 = 0.77$, and the wisdom scores of the figures with high moral levels ($M = 4.57$, $SD = 0.07$) were significantly higher than that of the figures with low moral levels ($M = 2.78$, $SD = 0.09$). The interaction of intelligence and moral levels was significant, $F(1, 107) = 56.99$, $p < 0.001$, $\eta_p^2 = 0.35$. The simple effect test showed that the difference was significant between the two moral levels in the high intelligence level, $F(1, 107) = 254.63$, $p < 0.001$. In the low intelligence level, the difference between the two moral levels was significant too, $F(1, 107) = 77.86$, $p < 0.001$.

The Difference of Wisdom Scores Among the Four Figures

In order to further investigate the wisdom levels reflected in the 4 target figures under the 4 conditions of interaction between intelligence and morality, the wisdom levels of the four figures were described statistically. The results showed that in the four kinds of combinations of intelligence and moral levels, the figure with the highest intelligence level and the highest moral level had the highest wisdom, and the figure with the lowest intelligence level and the lowest moral level had the lowest wisdom, demonstrating the trend from high to low of the figure with the highest intelligence and highest morality ($M = 6.27$, $SD = 0.85$) > the figure with higher intelligence and lower morality ($M = 3.70$, $SD = 1.46$) > the figure with lower intelligence with higher morality ($M = 2.87$, $SD = 1.23$) > the figure with the lowest intelligence and lowest morality ($M = 1.85$, $SD = 1.01$). Variance analysis showed that the difference was significant among the four figures, $F(3, 428) = 286.41$, $p < 0.001$, $\eta_p^2 = 0.67$. Multiple comparisons showed that the figure's wisdom level with the highest intelligence and the highest morality was significantly higher than that of other three figures.

Discussion

The study shows that the figure's wisdom level with a high intelligence level is significantly higher than that of the figure with low intelligence level, which indicates that intelligence level has an important effect on the wisdom evaluation. In other words, intelligence quality is an important factor influencing the manifestation of individual wisdom, and wisdom should be based on the premise and foundation of higher intelligence, such as creativity, insight and judgment. In Chinese traditional culture, Liu Shao put forward "wisdom is the king of morality" (*The Characters Records - Eight Views*), and he believed that intelligence is the understanding of the nature of things, is the differentiation of the interest relationship between people and people, people and objects. Only under the guidance of intelligence can morality truly care for people, benefit people, otherwise it will be counterproductive. This is consistent with the previous research results: there is a nonlinear relationship between wisdom and intelligence, which is relatively independent and related in certain conditions. For instance, Staudinger, et al. (1997) indicated that intelligence was a necessity, but not a sufficient condition for wisdom, and wisdom was a wise application of knowledge or intelligence. Sternberg (1985) showed that there was a high positive correlation between wisdom and intelligence, and the correlation coefficient between the two was between 0.42 and 0.78.

The study shows that the main effect of the target figure's morality level is significant. The figure with a high morality level is significantly higher than the figure with low morality level, indicating that the morality level reflected in the figure's action has an important effect on his wisdom evaluation. In other words, the level of moral quality is an important factor influencing individual wisdom. And wisdom is not the cleverness or intelligence in the common sense, wisdom is always related to ethics and righteousness (Zhang, 2010). Dong Zhongshu of the Han Dynasty believed that wisdom was an ability to distinguish between right and wrong, conduct value choice and value judgment, and that it could guide people to speak and act in accordance with moral principles; he also put forward "All normal performances urgently need benevolence, and wisdom" (Zhao, 1995). Socrates made it clear that a person can often see "flashing narrow intelligence from a clever thief in his shrewd eyes". But this must not be considered wise. Therefore, the wisdom evaluation reflected in an individual's efforts depends on whether it helps individuals and those related people to live a good life. The intelligence which successfully creates a good life for oneself, but also helps others to live a better life is often seen as wisdom (Yang, 2013). This is consistent with Ardel's viewpoint (2003) that wisdom can only describe wise people and is not a specialized knowledge or skill, and wisdom is not only professional knowledge, it contains the personal characteristics of reflection and affection, and pro-social behaviors and attitudes, such as sympathy, and others-centered and altruistic behaviors.

The study also shows that the figure's wisdom level with high intelligence and high morality is significantly higher than that of the other three, which indicates that integration of a high intellectual quality and moral level has promoted the individual's wisdom. In the book of *Xunzi -Jun Tao*, it was once said, "Being intelligent without benevolence is a defect, being benevolent without intelligence is a defect, too. Being both intelligent and benevolent is the treasure and also the escort of the king." Ardel and Oh (2010) showed that wisdom was a psychological quality which was inclined to integrate virtue and intelligence; wisdom is manifested when people use life knowledge and various personal qualities in real situations, and when their actions have a positive effect on themselves and others (Yang, 2013; Sternberg, 2007). This is consistent with the previous biographical analysis results of the nomination wisdom, in which the most typical cases were the analyses of Einstein and Gandhi. Studies have shown that Einstein

was highly creative, and with a high moral level as well. When he learned that the atomic bomb was used in the war, he strongly opposed and deeply regretted his participation. He had a profound ethical reflection on the significance of his research and carried out moral thinking. Many researchers believe that Gandhi was the leader of the national liberation movement. The quality of bearing people's suffering in mind came from his high moral level, and he creatively put forward and successfully used the "Nonviolent, Non-cooperation Movement" to win the political struggle (Moll & Oliveira-Souza, 2008). These biographies of famous people and their analyses provide the most powerful support for demonstrating that wisdom is the integration of high intellectual quality and high moral quality.

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Housing, Lifestyle and Subjective Well-being: A Positive Research on the Middle-Class Youth in China

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[Abstract] The rapid development of the housing market and the steep rise of housing prices has intensified housing inequality in urban China over the past ten years. Housing has become a main source of life stress for the Chinese urban youth. Based on a positive study of middle-class youth in Guangzhou, this article reveals how the homeownership and how the housing condition influences lifestyle and subjective well-being. By analyzing the structural elements of subjective well-being, we find out the effect mechanism of housing on subjective well-being.

[Keywords] housing; lifestyle; subjective well-being; middle-class youth

Introduction

Housing is a crucial part of individual's life. It has been regarded as a symbol that represents various social classes and becomes an important angle from which to view social stratification since John Rex and Robert Moore's introduction of the concept of "housing class" (1969). It is believed that private ownership is a crucial part of all market economies and an important aspect of individual freedom (Dietz & Haurin, 2003). This includes the right to own the dwelling, which constitutes the person's or family's home. In addition to the impact on personal welfare, housing and homeownership may also affect the social behavior of individuals. There is abundant literature focus on detecting whether or not homeownership has a positive influence on the welfare of individuals measured as the self-reported or subjective well-being in the western academic world. However, it is a relatively new research area needing to be studied in China.

Since the implementation of the reform and opening-up, Chinese society has been in the process of transformation from a reallocation system to a market economy system. As an important part of economic system reform, housing commoditization and privatization reform has been strongly promoted by the government through various policies since 1979 (Liu & Hu, 2010). The rapid development of the housing market and the steep rise of housing prices has intensified housing inequality in urban China over the past ten years. Housing and homeownership has become an important indicator of lifestyle and subjective welfare. Therefore, the relationships among homeownership, lifestyle and subjective well-being have aroused more and more attention. Based on positive research, we try to answer the questions: how does the housing condition and homeownership affect the lifestyle and the subjective well-being (SWB) for the middle-class youth in recent China?

Our analysis led us to the conclusion that homeownership positively affects the respondents' lifestyle and SWB. By analyzing the structural elements of subjective well-being, we found out the effect mechanism of housing on SWB.

The next section gives a short overview of previous research and discusses the conceptual framework. Section Three describes the data and Section Four presents OLS and the ordered logit regression models. Five regressions models for lifestyle and SWB are respectively presented. Section Five brings our conclusion.

Previous Research and Conceptual Framework

For a social planner – and so for economists – it is of decisive importance to know what affects life satisfaction, happiness and the well-being of individuals, and this has led to an increasing amount of literature trying to explain the determining factors for this. It is proved that the reported SWB is a fairly reliable measure of the respondents' SWB, and can be meaningfully used for empirical analysis (Krueger & Schalke, 2008).

There is abundant empirical literature on factors determining human well-being or happiness: Clark and Oswald (1994), Oswald (1997), Van Praag and Ferrer-I-Carbonell (2004), Graham (2005), Shields and Wheatley (2005) just to mention a few. Some of those take housing into account, including housing conditions and homeownership. Some research showed that owner households rate their well-being more positively than renters (Rossi & Weber, 1996). Diaz-Serrano (2009) used the eight waves of the European Community Household Panel to study the effects on reported housing satisfaction and found that homeowners derive more satisfaction than tenants from the same housing context. Also, the shift into homeownership without 5 changes of dwelling was found to raise the level of satisfaction. Bucchianeri (2009), using a sample of 809 women, showed that homeowners are happier than renters.

Some empirical research in recent China discussed the relationship between housing and individuals' welfare, and it reached three conclusions: First, homeownership has a significant positive influence on happiness. Homeownership could provide the sense of economic security and resistance to economic risk (Lin, et al, 2012). Second, the housing area size influences happiness, there lies an inverted u-shaped curve relationship between them (Liu, 2013). Third, the housing environment and life convenience could significantly improve the self-reported well-being (Gao et al, 2014).

Most previous literature studied the general SWB and somehow ignored the inner structure of subjective well-being. Diener and Emmons (1984) decomposed the conceptual structure of SWB into two parts: affect component, including pleasant affect (PA) and un-pleasant affect (NA), and cognitive component, showing as life satisfaction. Therefore, after the study on general SWB, we try to measure SWB from two dimensions – the affective state and the social status cognition – in order to find out the effect mechanism of housing on SWB. In addition, we try to analyze how the housing conditions affect lifestyle; therefore, we try to explain why SWB are affected by housing.

From the life-course perspective, individuals' housing demand and life satisfaction would change at different periods of time. We believe that one social group needs to be particularly studied when it comes to the relationship between housing and happiness, which is the middle-class youth. In our research, the middle-class youth is defined as the middle-income group under 40, who are well-educated and engaged in management, professional technology, business and other non-manual occupations. The middle-class youth grows up in the era of marketing transition which expands housing sources and intensifies housing inequality. The soaring prices of housing in the past ten years not only intensified the housing inequality, but also put greater pressure on the youth who are about to set up a family. In a traditional family oriented culture in eastern Asian, the real estate property, including land, provides the ontological sense of security.

In recent years, with the housing prices escalating in urban China, especially in some first-tier cities such as Beijing, Shanghai and Guangzhou, purchasing a dwelling makes the middle-class youth bear a huge pressure. Housing price-to-income ratio in Guangzhou was 11.8 in 2015 (E-house China R&D Institute, 2016). In most cases, homeownership is accompanied by a heavy housing loan which could cause the paring down of household expenses.

In our research, it is assumed that the homeownership significantly improves SWB and lifestyle for the middle-class youth in China. It militates in favor of individuals' welfare both in affective state and in the social status cognition. But the economic pressure of housing consumption would reduce the SWB and life quality at some point. There lies an inverted u-shaped curve relationship between housing area and the SWB.

Data

The data are from the survey of middle-class youth in Guangzhou conducted by Guangzhou University in 2014. Guangzhou is one of the most economically developed cities in southern China. The fostering of market economy and the restructuring of the ownership system enabled Guangzhou to make headway in the level of market compliance. According to the concept of middle class in China, we chose three typical occupation groups: young teachers at higher education institutions, young civil servants and young white-collars in enterprises. We received a total of 635 valid samples. Concerning lifestyle, we established a scale containing ten items. Based on the principal component analysis, we extracted three common factors representing luxury factor, diligence factor and ease factor. The three factors explained 50% of the total variance. Table 1 shows the component matrix of principal component analysis.

As for well-being, the enquiry contained the often-used question, "All in all, do you feel satisfied with your life" to construct a measure for self-reported well-being (SWB). In addition, we analyzed the different dimensions of subjective well-being by using the answers to two questions: "how do you define your social-economic status comparing to your peer group?", and "All in all, how happy do you feel about your life now?" Apart from housing conditions and homeownership, the data allows us to control for a number of changes in the respondent's living conditions that may potentially influence her or his well-being. Table 2 gives a description of the variables at our disposal.

Table 1. The Component Matrix of Principal Component Analysis on Lifestyle

Lifestyle	Factors		
	Luxury	Diligence	Ease
Use durable consumer goods of famous brand	.706	-.233	-.304
Most of cloth are of famous brand	.752	-.308	-.202
Own private car or take tax while going out	.651	.012	-.088
Regularly go to the gym to exercise	.619	-.033	-.192
Go to travel a few times a year	.692	.075	.277
Often dining out in fancy restaurant with friend	.658	.153	.338
Self-study during the spare time	.229	.520	-.311
Engaged in intense work	-.049	.646	-.359
Like to watch TV drama	.331	.532	.478
Stay at home during spare time	.050	-.145	.491

Table 2. Variable Description

Variables	Values
Lifestyle factors	factor scores of luxury, diligence and ease
Subjective well-beings(SWB)	1-5 (Higher=Better)
Affective state	1-10 (Higher=Better)
Social status cognition	1-5 (Higher=Better)
Homeownership	No homeownership as the reference, two dummy variables: owning one dwelling, owning more than one dwelling.
Housing consumption ratio	Ratio= (housing rent or housing mortgage/family income) * 100%
Housing area per capita	housing area per capita = family housing area/family population
Family income per capital	Family income per capital=LN (family income/ family population)
Male	Male=1, female=0
Age	Respondents' age at the time of investigation
Marriage	Married=1, single=0
Occupation	young teachers at higher education institutions as the reference, two dummy variables: Young civil servants and young white-collars in enterprises

Empirical Analysis

Model 1 to 3 presents the OLS regression model of lifestyle. Three factors of lifestyle are affected by housing at different levels. After controlling variables in *gender*, *age*, *marriage*, and *occupation*, the factor of *luxury* is positively affected by household income and homeownership. As to the factor of *diligence*, we found that the housing consumption ratio significantly increased job stress. Compared to the young teachers at higher education institutions, the white-collars in enterprises lead an easier life.

Model 3 to 5 presents the regression model of SWB. We examined the housing effect on general SWB. By differentiating the affect component and the cognition component of SWB, we try to explain the influencing mechanism of housing. Our dependent variables such as *general SWB* and *social status cognition* are discrete with ordinal scale, so we established two ordered logit models. The ologit coefficients give the expected change in the ordered log-odds scale of the dependent variables. As we expected, homeownership positively affects the general SWB. For those middle-class youth who own 1 dwelling, the cumulative odds ratio of higher SWB is 2 times higher than for those middle-class youth without homeownership ($\exp(0.694) = 2.00$), and for those owning two or more dwellings, the cumulative odds ratio comes up 3.8 times higher ($\exp(1.338) = 3.81$). However, the pressure of housing consumption negatively influences the SWB. While the housing consumption ratio increases 1%, the cumulative odds ratio of higher SWB decreases 2% ($\exp(-0.017)=0.98$). The SWB climbs up with the increase of housing area and then declines. It is noted that with the housing related variables entering into the model, the household income's positive influence on SWB is replaced, which indicates the prominent role of housing effect on SWB. It is shown that the household income and homeownership could promote a higher status cognition. By contrast, affective state is less influenced by housing.

Conclusion

Our research reveals the relationship among housing, lifestyle and the subjective well-being for the middle-class youth in recent China. The analysis leads us to three main conclusions. First, housing affects lifestyle for the middle-class youth. Homeownership improves life quality while the economic pressure on housing drives them to work harder. Second, general SWB is significantly influenced by housing condition. Homeownership positively affects SWB while housing consumption ratio negatively affects SWB. The

SWB climbs up with the increasing of housing area and then declines, an inverted u-shaped curve relationship between housing condition and the SWB has passed the testing. Third, based on the analysis of the SWB structure, housing may affect SWB through social status cognition. It follows that the housing situation is a very important reference for the middle-class youth in comparing their social status with their peers.

Table 3. OLS and Ordered Logit Estimates of the Determinants Lifestyle and SWB

Independent Variables	Lifestyle OLS Model			Subjective Well-Being Model		
	Luxury (Model 1)	Diligence (Model 2)	Ease (Model 3)	General SWB Ologit Model (Model 5)	Social Status Cognition Ologit Model (Model 6)	Affective State OLS Model (Model 7)
Control Variables						
Male	-0.042 (0.089)	0.082 (0.100)	-0.354*** (0.097)	-0.599** (0.193)	0.039 (0.208)	-0.409* (0.179)
Age	-0.133 (0.128)	0.123 (0.143)	0.217 (0.139)	-0.541 (0.281)	-0.503 (0.300)	-0.362 (0.260)
Age ²	0.002 (0.002)	-0.002 (0.002)	-0.004 (0.002)	0.007 (0.004)	0.006 (0.005)	0.005 (0.004)
Married	-0.416** (0.126)	-0.415** (0.141)	-0.195 (0.137)	0.610* (0.269)	0.372 (0.299)	0.338 (0.253)
Civil servants	0.094 (0.114)	-0.172 (0.128)	0.127 (0.124)	0.018 (0.244)	-0.700* (0.273)	0.554* (0.228)
White-collars in enterprise	0.168 (0.119)	-0.245 (0.132)	0.323* (0.128)	-0.066 (0.251)	-0.608* (0.280)	0.447 (0.237)
Explanatory Variables						
Family income per capital	0.359*** (0.066)	0.024 (0.074)	0.030 (0.072)	0.061 (0.141)	0.783*** (0.160)	0.081 (0.133)
Homeownership of 1 dwelling	0.465*** (0.115)	-0.054 (0.129)	-0.006 (0.125)	0.694** (0.252)	0.942*** (0.270)	0.403 (0.233)
Homeownership of more than 1 dwelling	0.989*** (0.158)	0.110 (0.177)	-0.129 (0.172)	1.338*** (0.347)	1.190** (0.377)	0.711* (0.320)
Housing consumption ratio	-0.004 (0.002)	0.007** (0.003)	-0.003 (0.003)	-0.017*** (0.005)	-0.016** (0.006)	-0.004 (0.005)
Housing area per capita	0.088 (0.097)	-0.037 (0.109)	0.045 (0.106)	0.025** (0.008)	0.011 (0.009)	-0.003 (0.007)
Housing area per capita ²				-3.92E-5** (0.000)	-1.43E-5 (0.000)	2.60E-6 (0.000)
Observations	434	434	434	457	457	457
LR chi					79.86***	
F	10.97**	2.26*	4.14***	71.66***		2.37*
R-squared	0.222	0.056	0.097	0.069	0.092	0.060

Standard errors in parentheses. Cut constants in ologit models are omitted, constants in OLS models are omitted.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The contemporary middle-class youth in China grows up in a transitional society, and their living environment, value system and social attitudes have shown strong characteristics of the times. A housing policy that supports homeownership may carry positive effects for their welfare, as well as important positive behavioral effects. In the background of intensified housing inequality, it should become an

important issue focusing on how to effectively meet the basic housing needs of the youth and how to improve their social status cognition and subjective well-being.

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The Intention of Mental Health First Aid for Depression and its Relationship with Stigma in Chinese University Students

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[Abstract] *The present study aims to investigate the impact of stigma on the intention of Mental Health First Aid (MHFA) for depression. Using a vignette of one person suffering from depression, emotional reactions to and social distances from depression were measured. A scale was developed based on MHFA guidelines to measure students' first aid intentions for friends with similar problems at one Chinese university. The results showed that the final 16-item scale had a three-factor structure: Com (approach and communication), Help (encourage professional help-seeking and provide crisis assistance) and Inf (provide other information and supports). The respondents highly intended to provide first aid actions involving all of the three above dimensions. The affective reaction fear indirectly (through social distance) decreased the intention of Com for depression. Anger and social distance were negative predictors of MHFA intentions for depression, whereas pity was a positive predictor. The results suggested that reducing depression stigma would probably improve the intention of mental health first aid.*

[Keywords] *mental health first aid; depression; fear; pity; social distance*

Introduction

Both western and eastern studies provided evidence demonstrating that university students with mental health problems prefer to seek out unprofessional help from their friends, rather than from professionals (Chew-Graham, et al., 2003; Jiang, & Wang, 2003; Li, et al., 2016; Reavley, et al., 2012). The helping behaviors that young people provide to someone they are close to are in the range of mental health first aid (MHFA) (Mason, et al., 2015).

Mental health stigma has been recognized as a major barrier to individuals' recovery and has created serious costs on the individual and society. Evidence has documented the damaging effects of mental health stigma on seeking psychological treatment, a few surveys of Australian adults and adolescents showed that people with more stigmatizing attitudes were less likely to provide first aid for a mental health problem (Yap & Jorm, 2011, 2012; Davies, Wardlaw, Morriss, & Glazebrook, 2016). These studies' results showed that it was lower levels of personal stigma other than perceived stigma that were statistically associated with higher MHFA intentions and predicted more first aid actions using the depression stigma scale (DSS). Personal stigma is an individual's personal attitudes towards a person with mental illness (Griffiths, Christensen, & Jorm, 2008). A theoretical stigma model of desired social distance has been supposed to explain the personal stigmatization process and evaluated in several studies (Corrigan, 2000; Angermeyer, Matschinger, & Corrigan, 2004; Janulis, 2013). These studies demonstrated that perceived danger arouses emotional reactions of fear, which in turn predisposes behaviors such as social distancing and rejection. The stereotyping (weak-not-sick and danger/unpredictability) and social distance were measured in DSS used by previous studies, while affective reactions were not measured. Since both danger and social distance

were negatively correlated with MHFA (Yap & Jorm, 2011, 2012; Davies, Wardlaw, Morriss, & Glazebrook, 2016), we predicted that affective reactions (fear, anger or pity) directly or indirectly (through social distance) predict first aid intentions for depression according to the stigma model of desired social distance.

Methods

Participants and Procedures

The sample consisted of 385 college students from Wuhan University. Participants were surveyed in their respective classes or during restroom breaks between February and June 2016. They were presented with an unlabeled case vignette of a person with depression, and then answered the scales measuring emotional reactions, social distance and intentions of MHFA. The socio-demographic variables were also collected.

Case Vignette

Participants were presented with one vignette depicting an adult (someone named *A*) experiencing depression without indicating specified gender. The vignette was written to satisfy DSM-IV criteria. Before being used in the survey, the vignette was submitted to two psychologists (both proven experts on psychopathology) for blind diagnostic allocation. Both experts were able to provide the correct diagnose.

Emotional Reactions

Respondents were asked to indicate their emotional reactions (ER) to the person described in the vignette by means of ten five-point Likert-scale (1=“definitely disagreement” to 5=“definitely agreement”); items included three dimensions (fear, anger and pity), which were identified in previous studies (Schomerus, Matschinger, & Angermeyer, 2013; Angermeyer, et al., 2014). Higher scores indicated stronger emotional reactions.

Social Distance

For the assessments of respondents’ desire for social distance (SD), we adopted a scale used by (Adlaf, Hamilton, Wu, & Noh, 2009). The final version included four items:

1. Would you be afraid to talk to *A*?
2. Would you be upset or disturbed to be in the same class with *A*?
3. Would you make friends with *A*?
4. Would you feel embarrassed or ashamed if your friends knew that *A* was your family member?

Answers were given on 4-point Likert-scales (1 = “definitely would not” and 4 = “definitely would”), yielding a score from 1 to 4 points. The score of Item 3 was reversed for analyses, and high mean scores indicated a high desire for social distance.

Mental Health First Aid Intentions

We presented respondents with a scale (MHFA-IS) consisting of 19 items describing possible first aid actions for *A*, asking them to indicate their willingness to take these actions for helping *A*. Answers were scored on a four-point Likert-scales with 1=“would not do definitely” and 4=“would do definitely”. Higher scores indicated stronger mental health first aid intentions (MHFAi). A 2.5-point value was defined as midpoint of the scale so that respondents were regarded as willing to help *A* if they scored above the 2.5 midpoint.

These items were developed based on the mental health first aid guideline and a series of Delphi expert consensus studies (Colucci, Kelly, Minas, & Jorm, 2009; Ross, Kelly, & Jorm, 2014; Cairns, Yap, Reavley, & Jorm, 2015), involving six categorical components of MHFA: “approaching the person; assessing their risk and assisting the person with any crisis; listening non-judgmentally; giving support and information; encouraging appropriate professional help; and encouraging other supports” (Kelly, et al., 2011).

Socio-Demographic Variables

Information about participants’ gender (male or female), age in years, origins (urban or rural), degrees of study and levels of study (grade) was collected.

Analysis

All statistical analyses were conducted in PASW Statistics, version 17.0. Internal consistency of the scales was estimated using Cronbach’s Alpha. In addition to general descriptive statistics, an exploratory correlational analysis using Pearson’s revealed the associations among ER, SD and MHFA intention. Then, a series of regression models were conducted.

Results

A total of 385 students consented to participate, and after removing the invalid data, 356 participants were included in analysis. All the respondents were young adults aged 18-25 years (mean age 20.2 years); 57% were female and 43% were male; 34.6% of the students were from rural areas and 65.4% were from urban areas; 34.3% of the students study psychology, followed by 33.1% in science and technology, 19.1% liberal arts, and 13.5% medicine.

Internal Consistency of the Scales

Using participants’ first questionnaire responses (356 observations), we conducted an exploratory factor analysis to examine the factor structure of the 19 items of the scale. After rotation, items with loadings less than 0.4 on any of the first three factors were not retained (Items 4, 6, and 7). The analysis of the remaining 16 items of the scale yielded three factors (KMO 0.897, Barlett $p < 0.001$, see Table 1): The first factor (46.35% of the variance) contained five statements with factor loadings above 0.4. These five statements focused on providing some mental health information and resources concerned with therapy and counsel. Thus, this factor was labelled as Information and Support (Inf). The second factor (11.83% of the variance) was labelled as Communication (Com) involving six statements that loaded at the 0.4 level or above, which was mainly concerned with approach, observation, listening and encouraging the person who is suffering depression directly. The third factor (8.07% of the variance) contained five statements that concerned professional help-seeking and crisis intervention (Help), such as encouraging the client to seek professional help, accompanying the person to or contacting other help and not leaving him/her alone when finding out they may have suicidal thoughts.

Table 1. Rotated Factor Loadings, Mental Health First Aid Intention to a Person with Depression (n=356)

Items (in Chinese)	Inf	Com	Help
5 provide information on the resources and services available for services such as We chat subscriptions and hotlines	.873		
14 provide information on treatment settings such as hospitals and mental consultation organizations	.792		
16 look up information and resources mentioned above with him/her	.786		
13 provide knowledge about the person's condition	.714		
19 encourage him/her to take part in appropriate group counselling or self-help groups	.615		
1 talk to the person at an appropriate time		.857	
18 encourage him/her to communicate with someone he/she trusts		.822	
3 listen to him/her patiently		.813	
2 show him/her my concerns		.734	
17 encourage him/her to communicate with family members		.678	
5 assess whether the person might be having suicidal thoughts or plans		.599	
12 accompany the person to see a mental health professional if he/she agrees			-.853
11 assist the person to make an appointment if he/she agrees			-.847
10 Encourage the person to get appropriate professional help			-.845
9 if the person is suicidal, I would not leave him/her alone			-.740
8 if the person is suicidal, I would immediately contact with his/her family/teacher/others trustworthy			-.683

Internal consistency of the final scale (and sub-scales) was estimated using Cronbach's Alpha: MHFA-IS 0.915 with Factor 1 (Inf) 0.834, Factor 2 (Com) 0.847 and Factor 3 (Help) 0.852. No single item deletion improved the internal reliability. Cronbach's Alphas for responses to the other scales were as follows: emotion reactions (anger 0.687, fear 0.856, pity 0.720), and social distances 0.634.

The mean score of MHFA intentions reported was 3.83 (± 0.54) out of a possible 4, with Inf 3.18 (± 0.60), Com 3.41 (± 0.55) and Help 3.48 (± 0.55). A main effect was found for types of degree ($F(3, 352) = 4.718, p < 0.01$), and those studying a psychology degree had the highest MHFA-IS score and scored significantly higher than those studying science and technology. There were no differences in MHFA-IS scores between other socio-demographic conditions.

Exploratory correlational analyses using Pearson's revealed the associations among ER, SD and MHFA intention in Table 2. Generally, MHFA intention was significantly positively associated with more pro-social emotional reaction (Pity) ($p < 0.01$), and negatively with negative emotions (Anger and Fear) and social distance ($p < 0.01$).

Table 2. Correlations between ER, SD and MHFA

	Fear	Anger	Pity	SD	Inf	Com	Help
SD	.513**	.344**	-.107*				
Inf	-0.032	-0.162**	0.272**	-0.142**			
Com	-0.197**	-0.279**	0.227**	-0.303**	0.561**		
Help	-0.095	-0.244**	0.280**	-0.258**	0.642**	0.631**	
MHFA	-.145**	-.237**	.278**	-.266**	0.814**	0.859**	0.814**

** $p < 0.01$; * $p < 0.05$

Tables 3-5 shows the results of our regression analyses relating SD and emotional reactions to MHFA. Effects of the three emotional reactions on SD and MHFA differed. The results revealed that fear was a significantly negative predictor of Com and SD mediated associations between Fear and Com. Anger also negatively predicted MHFA, and Pity was a significantly positive predictor of MHFA. SD played a partial mediation role in associations between Anger/Pity and MHFA.

Table 3. Results from the Mediation Regression Analysis Examining the Relationship among Com, Fear and SD

	Predictors	Unstandardized B	Standardized β	Sig.
Com	fear	-0.247	-0.197	0.000
Com	fear	-0.070	-0.055	0.348
	Social distance	-0.318	-0.275	0.000

Table 4. Results from the Mediation Regression Analysis Examining the Relationship among MHFA, Anger and SD

	Predictors	Un-standardized B	Standardized β	Sig.
MHFA	anger	-0.792	-0.237	0.000
MHFA	anger	-0.551	-0.165	0.002
	Social distance	-0.640	-0.209	0.000

Table 5. Results from the Mediation Regression Analysis Examining the Relationship among MHFA, Pity and SD

	Predictors	Un-standardized B	Standardized β	Sig.
MHFA	pity	1.072	0.278	0.000
MHFA	pity	0.973	0.252	0.000
	Social distance	-0.730	-0.239	0.000

Discussion

This study found that university students' first aid intentions were negatively related with negative emotions (anger and fear) and social distance towards depression, on contrast, pro-social reaction predicted less social distance and higher intentions of mental health first aids. The findings indicate that young people's stigmas towards mental diseases have important effects on their intentions of help important others. In addition, the students who major in psychology intended to help someone suffering depression more strongly than other majors if they care.

The scale MHFA-IS was developed based on previous MHFA studies and guidelines (Colucci, E et al., 2009; Kelly et al., 2011; Ross et al., 2014; Cairns et al., 2015). The results showed that the final scale and sub-scales had good internal consistency (Cronbach's Alphas of all the scales were above 0.800) and good construct validity since each of the three factors (Inf, Com and Help) was moderately correlated with the other two and highly correlated with total scores of MHFA-IS.

The results showed higher intentions (a mean of 3.83 out of 4) than the previous study (a mean of 2.89 out of 12) in university students (Davies, Wardlaw, Morriss, & Glazebrook, 2016). This divergence was probably attributed to the methods' difference of measuring MHFA intentions, although all the participants in both the present study and previous studies were surveyed with case vignettes. In previous studies, respondents were asked to answer the open question of "If Mark/Emily (names of vignettes) was your friend, what would you do (if anything) to help him/her?" Then, participants' qualitative responses were rated using a standardized scoring scheme developed by experts in mental health first aid and based upon the adult standard MHFA action plan (Minas, Colucci, & Jorm, 2009). According to the scoring scheme, a score of '0' was given if respondents did not mention one of the six MHFA components or they gave

unhelpful responses. If the respondents had poor skills of MHFA, they were supposed to be unhelpful and got low scores even though they had a strong desire to help their friend. Thus, the scores from the standardized scoring scheme were affected not only by attitudes but also knowledge and skills about MHFA. The present study measured MHFA intentions by counting mean scores of a scale developed on MHFA guidelines. The final 16 items fell into three dimensions that were mainly involved with the five (approaching the person; listening non-judgmentally; giving support and information; encouraging appropriate professional help; and encouraging other supports) of six categorical components of MHFA. Two items (Items 6 and 7) were about directly asking the person if he/she has a suicidal thoughts or plans had been not retained because of their loadings were less than 0.4. According to Davies, Wardlaw, Morriss, & Glazebrook (2016), assessing their risk and assisting the person with any crisis needs more professional skills than other five components. “Few people identified the need to assist with a potential crisis or assess the vignette character’s risk of harm” when they were asked one open question. Moreover, most people believed that it is harmful to ask recipients about suicide ideas or plans directly so that they would not do it. The mean scores of the final scale revealed more willingness to help other than skills of MHFA since the scores of items about assessing their risk were excluded. Even so, it might be supposed that there is a significant correlation between quantitative data and qualitative data. Future studies would be necessary to test the hypothesis in order to improve the MHFA-IS.

The present results have further confirmed previous findings that social distance from people with depression predicted less helpful first aid actions to close friends or family members experiencing similar mental health problems (Yap, Wright, et al., 2011). Moreover, the hypothesis about relationships between emotion reactions and MHFA intentions has been testified. Fear indirectly predicted MHFA intentions through the social distance, and Anger or Pity not only indirectly (through the social distance), but also directly, predicted intentions of first aid. Perceived danger was not measured in the present study. According to the stigma model of desired social distance (Corrigan, 2000), perceived danger was supposed to reduce the intentions of MHFA. But perceptions of danger/unpredictability were found to prompt the helpful action of professional help seeking on behalf of the recipient. These results suggest that different stigma dimensions differentially predict people’s intentions and actions of MHFA. Further research is required to clear the influence of stereotyping such as perceptions of dangerousness on MHFA intentions and actions.

While the cultural variables were not measured in the present study, but the impact of culture is indeed not negligible. Another potential limitation is the effect of social desirability caused by directly assessing intentions of helping others suffering from depression through a scale. A final limitation is that we sampled a convenience sample of college students; results therefore might be generalizable only to this group. Future research might better address these methodological and study limitations.

In conclusion, there was converging evidence to demonstrate the influence of stigma and types of degree on intentions of MHFA no matter what measuring method was used. It suggested that the enrichment of mental health literacy and reduction of mental disorders stigma would help to improve college students’ intentions of mental health first aid.

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Effect of Culture in Visual Influence on Taste Perception

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[Abstract] *It has been known that cultural background plays a role in cognitive perception. This so-called culture is related to previous exposure or familiarity of a previous environment. Vision influences taste. Earlier we showed that circular shape and semantic familiar words enhance sweetness sensitivity. Invariant effect of vision on taste has been observed with both Chinese and Indian volunteers, although the absolute sweetness threshold of Indians is higher than that of the Chinese. To further understand the role of culture plays in crossmodal cognitive perception, we compare our data from China and India. We discuss the possible hypotheses of culture's influence on perception, and particularly focus on culture and familiarity, cognitive status dependent perception.*

[Keywords] *cross-culture; vision; taste; cross-modal; perception*

Introduction

Appealing food is a trend that our society demands and pursues. "Eating with your eyes" has become more and more popular in our society. Enjoying food implies that all our sensory pathways are activated to conjure an overall appreciation of it. This multi-sensory integration process involves olfaction, vision, audition and even tactile perception, in addition to taste. Plenty of research groups have studied the crossmodal correspondences between tastes and the processing of information in other modalities of sensory perception (Matusz, Retsa & Murray, 2016; Spence & Deroy, 2013; Velasco, Salgado-Montejo, Marmolejo-Ramos & Spence, 2014). For instance, some particular color and music sounds have both a significant impact upon a person's enjoyment of sweet tastes (Chambers, Patera & Cox, 2016). It has been suggested that colors and their meanings are usually built into a person's culture and might be able to affect the brain's cognition (Aslam, 2006). Hence, color perception is situational and dependent on local associations. Some studies have shown that color plays a key role in taste identification (Spence, Levitan, Shankar & Zampini, 2010; Shankar, Levitan & Spence, 2010). However, its effect on intensity of taste evaluation is still unclear, and in some cases, even conflicting. Such inconsistent observation from different research groups indicates that culture may contribute specifically to crossmodal interaction. Previous different life experiences or growing-up environments may shape people's cognitive maps and tune the associations of the brain's perception with their environment. Hence, a more detailed understanding of cultural influence on cross-sensory perception poses an immediate challenge for scientists.

Culture has been demonstrated to play a role in social behavior and sensory perception (Smet, Lin, Nagy, Németh, Duque-Chica, Quintero, et al., 2014; Sorokowska, Sorokowski & Frackowiak, 2015; Barlas & Obhi 2014; Goetz, Keltner & Simon-Thomas, 2010). The taste sensitivities and evaluations may vary among people with different cultural backgrounds, or even with different locations (Baharuddin & Sharifudin 2015; Calderón, Angulo, O'Mahony & Wichchukit, 2015). A recent study about a coffee cup experiment has shown that participants from the UK expected the mugs to be hotter than those from China

and Colombia (Van Doorn, Woods, Levitan, Wan, Velasco, Bernal-Torres & Spence, 2017). All the evidence suggests that the human brain shaped by different cultures may influence the individual sensory perception. Shankar, et al (2010) has found that there are significant cultural differences between the color-flavor associations for certain colors but not for others. Depending on their previous experience, people generate sensory-specific flavor expectations when they see a particular color. An interesting observation has shown that the color-flavor association may not exist with one particular group any longer if global commercial marketing influences the local people's perceptions. Hence, no difference may be observed for taste preference for some commercially available products for people from different cultural backgrounds. On the other hand, the cultural influences might be from a cognitive bias developed from previous experiences, such as the previous food habits of different cultures. It has been noted that cross-cultural factors, such as a listener's familiarity with a music's tonal system plays an important role in emotional cognition and ratings (Balkwill, & Thompson, 1999). The familiarity has been suggested to be associated with pleasantness in odor detection (Distel, Ayabe-Kanamura, Martínez-Gómez, Schicker, Kobayakawa, Saito, & Hudson, 1999). People generally feel happy with familiar smells, although pleasantness is more complex and is related to familiarity (Delplanque, Grandjean, Chrea, Aymard, Cayeux, Le Calve, et al., 2008). Here, we would like to address the following questions: what does the "role" of culture exactly mean in crossmodal sensory perception? How does it affect and why does it affect? Why do different groups have inconsistent observations with different subjects? How is our perception system shaped by the so-called culture? With these questions, we aim to put cross-culture in perspective geographical determinism (Diamond, 2009) and biological determinism (Dawkins, 2005) in the context of visual-taste perception in humans.

Visual Influence on Taste

The sensory behavior experiments were performed on *Homo sapiens hominins* living around the regions of deltaic deposits of Yangtze River (Liang, Roy, Chen & Zhang, 2013) and on *Homo sapiens hominins* living around the regions of deltaic deposits of Ganges River (Liang, Biswas, Vinnakota, Fu, Chen, Quan, et al., 2016). We define cultural conditioning as the cognitive conditioning of the individual habituated to a geographically localized area with a particular food-habit and, of course, a particular way of life. Our observation of sweetness threshold is consistent with the previous opinions that cultural influences induce familiarity biases in our cognitive perceptions (Baharuddin & Sharifudin 2015; Calderón, Angulo, O'Mahony & Wichchukit, 2015). The local palate of people in West Bengal, India, due to higher exposition to sweetness may have been skewed to higher sweetness threshold level than that of people from east China.

Cross-Cultural Comparison of Shapes Affecting Sweetness Sensitivity

Influence of shape in crossmodal sensory perception research, particularly, in psychophysical consumer research is increasing in importance. A recent review has shown that people reliably correlate a certain taste with a specific shape symbolism in a sort of crossmodal coherence and association (Velasco, Woods, Petit, Cheok & Spence, 2016). Back to our previous data, it is not surprising the taste sensitivities of people from different locations or cultural backgrounds fluctuate. The absolute average sweetness threshold of the volunteers from Kolkata (close to 4.7 g/L, see Liang, Biswas, Vinnakota, Fu, Chen, Quan, et al., 2016) is higher than the Chinese group from Changshu (close to 3.9 g/L, see Liang, Roy, Chen & Zhang, 2013). However, both studies in China and in India confirmed that the circular shapes and semantic familiar words enhance the sweetness sensitivities, particularly at the sugar concentration of around sweetness threshold

level (Figure 1 A1 & A2). The influence is significant at sub-threshold level, 3.9 g/L for the Indian group and 3.1 g/L for the Chinese group. It is at around the threshold level, i.e. the uncertain sweetness perception area, the additional visual input influences the sweetness sensitivities. Circular or more rounded shapes, enhance sweetness sensitivity in Kolkata volunteers just as it did in Changshu volunteers. A shared affective space of tastes and shapes may explain these associations. We believe the aspect that such shapes induce cognitive ease is applicable as much to Indians as it was to the Chinese subjects. It further implies that this aspect of induction of cognitive ease is independent of cultures. Our observation is consistent with another recent cross-cultural online study from China, Colombia and UK that the coffee was expected to be sweeter from wider diameter mugs (Van Doorn, Woods, Levitan, Wan, Velasco, Bernal-Torres & Spence, 2017). Moreover, as we induce sharpness among the shapes, we observe that sharp objects induce cognitive stress and thus, reduce sweetness sensitivity both in Indians and in the Chinese. Before tasting, the visual cue such as the curved shapes may induce pleasantness (higher hedonic ratings), and may induce expectation of sweetness. Especially, at the sub-threshold sweet taste level, i.e. in a zone of taste uncertainty, the sweetness perception is enhanced by the bias of sweetness expectation. However, one minor difference between cultures is worth noting. The average sweetness detection with pentagram is lower with the Chinese group, whereas it is relatively higher with the Indian group. The hedonic rating questionnaire demonstrates that the Indian group prefers more the pentagram than the Chinese group does. Probably due to some religious meaning, structures with a five-fold symmetry are popular among Indians and thus, induce preference bias and cognitive ease in Kolkata subjects. Along the lines of evolutionary biology, it may be explained that circular or elliptical shapes elicit comfortable evolutionary memory and thereby induce correspondingly enhanced sweet sensitivity.

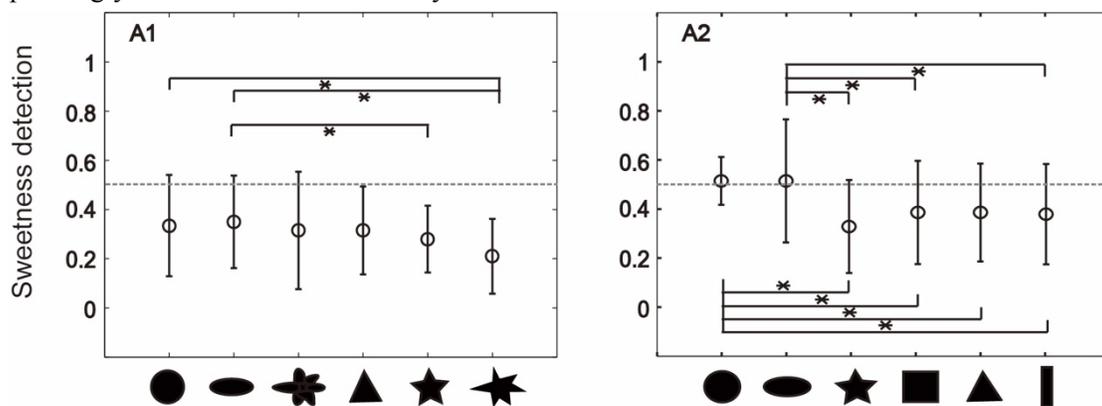


Figure 1. Shapes' Influence on Sweetness Detection. A1 and A2 present data from India and China respectively, which were modified from Liang et al 2013 and Liang et al 2016. The empty circles represent the sweet detection ratios averaged across all the subjects and the error bars denote the standard deviations across all the subjects. Y-axis represents the sweetness detection ratio, from 0 to 1. Along x-axis, the icons represent the corresponding shapes displayed in front of the subjects during experiments. * indicates significant difference by the pair-wise t-test ($p < .05$)

Cross-Cultural Comparison of Words Affecting Sweetness Sensitivity

To support the hypothesis that semantic familiarity induced cognitive status is associated with the sweetness sensitivity, words with different degrees of familiarity were chosen for both the Indian and Chinese volunteers, respectively. A similar effect has been observed for both groups (Figures 2 B1 & B2). With

decreasing semantic familiarity of the words, sweetness detection of both Indian and Chinese is decreasing. Consistent with our hypothesis, higher the semantic familiarity, more is the induction of cognitive ease, more sensitive are the subjects to sweetness detection. The Chinese are most familiar with “007” and “麦当劳” (McDonald), while the Indians are most familiar with “McDonald” and “007”. For both groups, the most familiar words induced enhanced sweetness detection. The surveys from both groups show that the subjects feel pleasant with semantic familiar words, even though the order of familiarity ratings is not completely the same as that of hedonic ratings. This may be explained along the lines of results obtained from cognitive research and heuristics. For instance, familiarity is known to induce ‘cognitive ease’ (Kahneman, 2011), which means, a repeated previous experience makes people feel effortless and pleasant. Such ‘ease’ is reflected in the action of the evaluation of what is perceived as familiar and as pleasant. When something is easy; the response is fast and intuitive. On the contrary, unfamiliarity induces ‘cognitive strain’, which makes people feel less comfortable and leads people to increase attention and to invest more effort and the corresponding response is much slower. Familiarity has been shown to play a ‘priming’ effect in sensory perception (Kahneman, 2011). Different from many literature, the words applied in our experiments are more general and irrelevant to food taste but semantically familiar to the subjects, even though we observe sweet perception is enhanced with familiar words. Such semantic familiarity induced by visual words makes people feel pleasant, feel at ease (cognitive ease), while unfamiliar words which the subjects have never experienced before make them feel uneasy, cognitively strained. If the semantically familiar stimuli induce a similar cognitive status, no matter the cross-cultural influence, the vision affecting taste may lead to invariant integration. Regarding semantically hedonic cognition, some studies have demonstrated that online food blogs show an increased use of positively connoted descriptive adjectives and an increasing contextual focus on lifestyle terminology (Diemer, 2016). The positive semantic words induced positive and hedonic cognition, and thus, may lead to taste sensitivity enhancement. Hence, the familiarity and hedonic cognition is more dominant in the cross-modal associations.

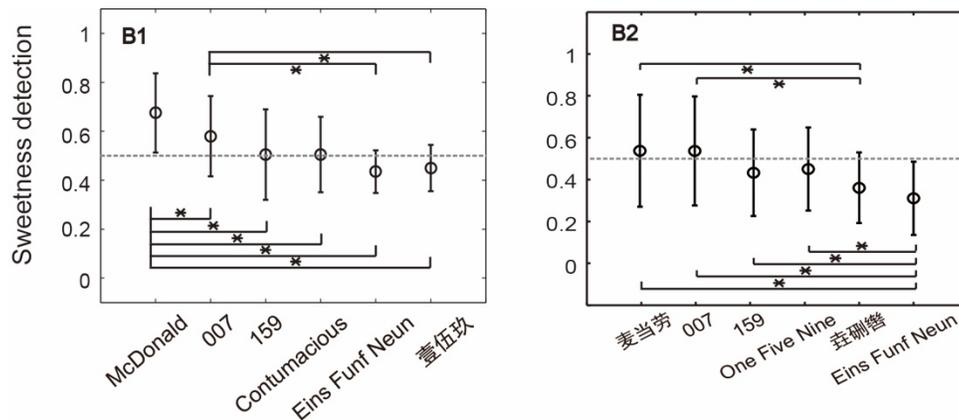


Figure 2. Word influence on Sweetness Detection. B1 and B2 present data from India and China respectively, which were modified from Liang et al 2013 and Liang et al 2016. X-axis demonstrates the words stimuli in the order of decreasing familiarities. The empty circles, the error bars, Y-axis, dotted lines and * denote the similar as Figure 1.

Implications and Conclusion

In short, we have compared the Indian and Chinese sweetness sensitivities and the effect of visual influence on taste between these two groups. Although the absolute threshold sensitivity for sweetness perception is

higher in Kolkata subjects as compared to Changshu subjects, the modality of visual influences on sweetness sensitivity is the same in both sets of subjects. With circular shapes, the sweetness sensitivity is enhanced while with sharper visual cues the sensitivity decreases. The semantic familiarity of words that enhances sweetness sensitivity in Indian subjects is just the way it does in the Chinese subjects. It has been thought that the sensory expectations generated by visual sign may in turn have an effect on attention or on post-perceptual decisions (Shankar, Levitan & Spence, 2010). Indeed, such symbolic shape and word semantic expectation associations have been applied in the labelling and packaging of food and have been shown to influence taste evaluation (Becker, van Rompay, Schifferstein & Galetzka, 2011). Through online media, more and more industries are paying attention to affective visual presentation, especially, on the cross-cultural impact on multi-sensory perception. This paper may lead to a better understanding of consumer behavior across cultures. More research work is underway in our laboratory to understand the crossmodal sensory processing.

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Constructing Court Culture in China in the Perspective of Cultural Psychology: A Case from Base Court in Zhejiang Province

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[Abstract] As court culture can affect the outcome of a judicial process, it can then evoke many attempts of cultural manipulation. In recent years, China officially calls on massive constructions of court culture and tries to steer the direction of Chinese legal culture. Recent theories of cultural psychology now offer useful tools and scopes to measure and interpret these new attempts. This paper examines the practice of court culture construction in the case of a small cell – a base court in Zhejiang province, eastern China since 2010 with the methods of questionnaire and in-depth interviews. It finds out that, although culture engineering prevails more than artistic treatment, it does obtain some obvious positive effects. Meanwhile, whether this result is representative enough still needs further investigations.

[Keywords] court culture, culture construction, cultural psychology, base court

Introduction

As is evident that legal performance is deeply influenced by organizational cultures of legal entities such as courts, police, law firms, and so on, among which, court culture plays a much more decisive role than others in determining the final legal outcome. Court culture is actually a very complex concept, including internal, external, material and spiritual forms. In analyzing the content of the legal culture, we will find that the realm of the construction of court culture is very broad. It includes the construction of the court system and institution, the formation of legal consciousness and legal thinking, the training of judges and conducting propaganda of advanced characters, etc. (Huang, 2006).

Although court culture, as a branch of legal culture, is a rather new concept, it continuously arouses academic and political interest all over China. After the intellectual work of “legal culture and social development” from Lawrence Friedman, Chinese scholars also began to discuss legal culture in the 1980’s (Liu, 1998). It was then followed with a derivative conception of “construction of court culture” in the beginning of the 21st Century (Wang, 2002). This conception was cultivated in a typical mentality of culture engineering. Against the slow natural process of culture evolution, it was assumed that the culture could be consciously manipulated and steered to a certain desirable direction through some artistic or scientific actions (Wang, 2002). These actions may be selected from toolboxes of ideology persuasion, massive propaganda, education, political mobilization, and even legal instruments.

What kind of tool would be picked out to trigger a large political-cultural event is mainly determined by the relative effectiveness of each tool and the timing for political leaders in power. For example, in July 2010, when the National Conference on Construction of the Court Culture was held in Beijing, Wang Shengjun, the chief judge and president of China Supreme People’s Court at that time, said that strengthening the construction of court culture was an irreducible requirement of promoting the whole socialist cultural development, and all the courts in the bureaucratic hierarchy should be more conscious and active to put the construction of court culture into practice to further enhance the spirit of socialism (Fa, 2010).

At the macro level, it is quite hard to analyze and interpret the real motivation and final efficiency of those actions. But in the micro level, how these political-cultural waves from the elite top officials transmit to the ordinary base cells of legal organization, and finally change the micro ecosystem, is the truly interesting part. This paper tries to interpret the Chinese political-cultural events on court culture construction and the micro responses at the base court level.

Cultural Psychology: Theory

Cultural psychology has offered us a good scope to measure and interpret the massive political-cultural events ignited by the elite top Chinese officials in recent years. It is one of the newest research fields of psychology, revealing the relationship and mechanism of mutual integration between psychology and culture, offering insight on the subtle balance of subjectivity and objectivity, self and others, and individuals and society, etc.

Although the history of cultural psychology can be traced back to the emergence of psychology, in precise academia, it appeared in the late 1980s (Ding, 2002; Tian & Ge, 2005). Psychological research on cultural issues have boomed in the international academic community. As a new branch of psychology, it is quite different from general psychology, cross-cultural psychology, psychological anthropology and national psychology, and its rapid development shows that its booming time has come.

Some scholars believe that, from the standpoint of cultural psychology, culture can influence humans from three levels: (1) observable external items which differ from each other in different cultures, such as customs, dress, languages and so on; (2) values which vary among cultures; and (3) underlying assumptions which unconsciously and ultimately determine people's perceptions, thoughts, emotions and behavior modes (Zhong & Peng, 2005). As culture influences human beings in a multilevel way, the most profound of which is through the impact on people's underlying biased assumptions which leaves a huge virginal, but hazardous sphere, for the politician, scholars and media to manipulate others' emotions and behaviors through changing the mental and cultural input.

Core Values in Judicial Systems: The Political-Cultural Event

In 2010, the most important political-cultural event in Chinese court systems was the wide discussion of "core values of courts". Of course, it was one of the waves of national discussion on core values of socialism. Although it appeared to be a stance or gesture manifestation to the main political ideology righteousness, it was meant to redirect the culture of courts. How did they make it happen?

Political Speeches and Conferences

In March 2010, during the eleventh session of the 3rd National People's Congress, Chief Judge Wang Shengjun proposed that the people's judges should establish the core value of "*judicial justice, honest and for the people*" (Fa, 2010). In July, he stressed the feasibility of using the core value of socialism to engineer the construction of the court culture, called on all the court members to realize the creativity of court culture and to fully embody the judicial philosophy so as to improve the judicial capacities and build public confidence in the Chinese judiciary. According to the guidance of the Supreme Court, a "consensus" of this ideology finally spread out to all the judges: the court culture is an integral part of the advanced socialist culture, it represents the direction of the legal system construction, plays an important role towards legal society, and functions as the value of justice. In August 2010, the Supreme People's Court announced the file "*On Further Strengthening the Construction of Culture of the People's Court*",

which officially established these core values of the Chinese judiciary for the first time (Fan, 2012). And in December 2015, the Supreme People's Court continued to announce the file "*Guiding opinions on strengthening the cultural construction of the people's court in the new situation*", which meant that the necessity and importance of the construction of court culture was emphasized again officially (Supreme People's Court of the PRC, 2015).

Propaganda and Doctrines

After preparation of the ideology persuasion was finished, then it was time for massive propaganda. New doctrines of lawyers and judges were introduced, such as the following:

"Thinking in the way of law" is the new goal of the training programs of lawyers in China. Chinese lawyers are required to understand that, values of legal culture vary in different countries as they are closely related to a country's political system, ideology, extent of reform and development, and even international interests. Of course, the forming of the lawyer group cannot be realized if the legal culture failed to be a driving force.

The lawyers need to think about real problems and do things in legal ways, and to influence society as to construct a society based on the rule of laws. The formation of legal thinking will be a process. The history of laws, the logic of laws, the concept of rights and obligations of law and the education of legal acts should all be paid more attention to.

The culture of law mainly reflects the dominant culture which presents the will of the dominant class. And it forms a set of comprehensive consciousness of legal concepts and guides the behaviors of lawyers. Because the patterns of behaviors of lawyers will affect the people around, legal consciousness and legal thinking would gradually become the values of all members of society. In this sense, laws are not just a set of rules and procedures, but also a belief. Courts are very sacred places to resolve disputes according to law. If there is no legal awareness and legal thinking in the mind of lawyers, the "ruling of law" in China would be a utopia.

Academic Persuasion: Offering Systematic Understanding

During this session, academic persuasion matters greatly in providing a systematic understanding of this new ideology (Gao, 2010). The understanding of core values is well organized, such as:

Justice is the soul of judicial work. When handling cases, the basic principle for judges is to strictly enforce the laws. It is justice if judges behave in accordance with the procedures prescribed by laws when examining the cases, to try cases in accordance with the laws. A fair procedure is the guarantee of a fair judicature. While the judges have the right of judicial discretion, the value of justice also is the guarantee of the fair judicature.

Honesty is the guarantee of justice and the eternal theme of judicial work. As a discipline with long history, honesty is the basic virtues of official politics and also the basic requirement of a judge. As we all know, when sitting in the trial seat, both civilians and officials will feel the relentless law. The judge's jurisdiction is a balance, and the parties won't spare any expense to tilt the balance. Therefore, the integrity and honesty of a judge now becomes a prerequisite and guarantee of justice.

The value of "for the people" should be derived from the source of judicial power. Although the western theory of "separation of powers" has been widely accepted and advocated by the later generations, the source of jurisdiction in China is quite different. Chinese judicial power comes from the people, and is subject to the supervision of institutions elected by the National People's congress. Judges

should use legal power to settle disputes and provide stability and harmonious of social environment for the people. The core value of “for the people”, could be understood as serving the people wholeheartedly and considering interests of the people above everything else. So, the judges should make a fair use of the judicial power, on the basis of fairness and justice, for the interests of the people.

The proposal of the core values of justice reflects the urgent need of reality. Vigorously carrying forward judicial core values can improve the cohesion of the judge’s spirit, and promote the development of the people’s court. Therefore, it is an important task for the people’s courts to fulfill at the present and in the future.

In a sentence, politicians provide ideology persuasion, while the media and academicians offer systematic understanding.

A Case of Base Court Culture Construction: X Court in Zhejiang Province

Constructions of court cultures vary according to different regions and different courts. Our observation was X Court, which is located in the eastern coastal province of Zhejiang – one the most developed areas where residents have a strong sense of right and wrong in China (Wu, 2009). Every year there are a large number of cases that need to be dealt with by this court, and the judges are faced with great pressures. Obviously, constructing a reconcile court culture is badly needed. Since 2010, X Court has carried on cultural construction in the fields of spiritual culture, trial culture, system culture and material culture (Shao & Wang, 2011). This study is introduced in the following three parts: (1) principles, (2) specific measures of the court’s cultural construction, and (3) a brief investigation and analysis on the effect of the construction of court culture through questionnaire survey.

Principles in X Court’s Culture Construction

They Established a General Principle: “People-Oriented”

“People-oriented” in court culture has two meanings: paying attention to the demands of the masses and paying attention to the demands of judges. The former guarantees basic legitimacy of courts in socialism and the latter encourages the establishment of proper incentives, competition and security mechanisms for judges. This general principle could be divided into three sub principles (Shao & Wang, 2011).

Serve for judicial trial. The court is the entity to settle civil disputes, resolve contradictions, and defend justness and fairness in the last resort. The task of this court is to try cases, therefore, the court culture must be built on the principle of serve and trial.

Cooperation. The organization of the Court involves different departments and judicial roles. Any decision-making and implementation of culture engineering involves cooperation between various departments. Each unit of the court should adhere to the basic duties and responsibilities of their positions as well as cooperate with each other.

Accumulation of tiny progress. Constructing court culture is not only a promotion of court achievements, but also a long-lasting social promotion in people’s values and behaviors. Any kind of formalism could not achieve really good results. And if there is no overall planning, anything will be in chaotic situation. Overall planning and doing things step-by-step is an effective method and has passed the test of history. Therefore, this principle should be adhered to in the case of promoting the construction of court culture.

Specific Measures of Culture Construction

In the process of constructing the court culture, it has been divided into several systems, including spiritual culture, trial culture, institutional culture and material culture. It is dealt with in the same method as engineering a project.

Great importance has been attached to the cultivation of a spiritual culture. The spirit culture of this court is formed in the long history of trial work. By reflecting the judge's occupation, connotation and humanistic characteristics within the group's consciousness and cultural values, the spiritual culture is regarded as the core and soul of the court culture.

In order to carry forward spiritual culture, the X Court has built an exhibition room covering an area of 120 square meters to show its history since its establishment in 1955. The exhibition room has been taken as a classroom where the judges can take traditional historical education and enhance their sense of professional dignity and responsibilities. Also, in 2010, X Court launched a song "*West Lake Mirror*" as the song of court to agglomerate court culture. It was the first time for a basic court to launch a song of itself in Zhejiang Province. Then the court started to carry out a series of activities of "Sing Court Song loudly" to further enhance the cohesion and sense of pride among judges. Various forms of art and sport activities have been carried out too, such as organizing "responsibility and dedication" Spring Festival Gala, displaying judges and court officers' positive and dedicated spirit, organizing badminton, table tennis, climbing and other sports, and carrying out quarterly activities like "reading a good book" to exchange reading experiences.

Trial culture is a combination of value concepts, thinking modes, behavior criterion and the material carriers characterizing judicial work. To construct a court culture, the cultivation of judges' advanced judicial philosophy, proficient professional skill, and normative judicial etiquette are needed. Located in China's economically developed province, X Court has been dealing with a quite large number of disputes with many new types. Thus, there is a high demand for the judge's professional competence and efficiency of dealing with disputes.

The court attaches great importance to the construction of trial culture with its own need. The X Court is committed to improving the efficiency of trials by using network technologies. In 2008, it first tried remote video trial for simple penal cases to speed up the trial process. In 2009, it began to handle simple civil cases through the internet, for easy participation and quick dispute resolution. According to the nature of the disputes, X Court designed different mediation rooms called "Home", "Harmony", "Honesty" and "Forgive". The decoration of the mediation rooms are not the same as that of an ordinary courtroom: they each have a set of specially designed furniture and paintings. They were designed to release signals of warmth and harmony, to make the litigants feel relaxed, and to change the atmosphere from confrontation to communication. In 2012, a team composed of 56 specially invited mediators, including "the most beautiful mother" Wu Juping, was organized in X Court. The mediators were from various occupations, such as teachers, doctors, and architects who have excellent political and professional education, and will play important roles in mediating disputes (Xiao, 2012).

Court systemic culture refers to the overall rules of the court. These rules are formed in judicial activities and management activities. Rules are required to adapt to the spirit of judicial values and socialist ideology. Court systemic culture is aimed to act according to the rules, rely on the rule to manage the people, and promote the scientific and standardized trial management.

The court sorted out "the management rules system of the court", and gradually completed the management system. In the offices of all departments, in meeting rooms and other places, important

regulations were hung on the wall to enhance the consciousness of implementing the rules and regulations.

The material court culture is culture in the physical form, and it mainly refers to the cultural element of the building and equipment. Material court culture should reflect the rich implication of trial ideas, aesthetic consciousness and concept of values, and should play a role in uniting and inspiring people.

X Court has been paying great attention to strengthening the hardware to signify the feeling of a solemn and just judicial environment. The trial court and the office area are designed to be dignified, spacious and clean, and the equipment is standardized and modernized. In order to make the judges relaxed and keep healthy, there is also a gym and a reading room for improving the judge colleague friendships and enhancing the cultural charm of the judges.

Achievements of Court Culture Construction in X Court

X Court has achieved good results during and after the practice of the cultural construction. In 2011, as the sole representative of the Zhejiang provincial court, Judge Chen Liaomin of X Court was granted the highest honor “National Model Judge”. In 2015, she was awarded the honor of “National Advanced Worker”, and was a representative of the national court system to receive the award (Wang, 2016). Under the guidance of advanced models, X Court judges have been inspired to work harder and make more contributions. So, in recent years, X Court was rewarded as “national outstanding court” and “judicial education training base”. According to an official of X Court, it was also made a base for college students from Hong Kong to accomplish their practical sessions, and many universities such as Zhejiang University and Zhejiang University of Technology have been seeking cooperation with X Court in training their students.

In October 2016, the writer of this paper organized a questionnaire survey, in which the objects of the study were the judges and administrative personnel of X Court. A total of 90 questionnaires were issued and 83 were recovered with a recovery rate of 92.2%, with a recovery of 83.3 questionnaires were invalid, and the efficiency was 96.3%. Analyzing from the information reflected in the table, the effect of the construction of X Court culture is intuitive.

Table 1. 2016 X Court Questionnaire Survey

About the Court Culture Construction	Yes	Hard to tell	No
Concern	80%	15%	5%
Know the content	27%	45%	28%
Evaluation (useful of not)	76%	19%	5%

In the survey, about 80% participants were concerned about the construction of court culture, and about 72% knew the content of the construction of court culture. On the evaluation of the court culture construction, about 76% thought it useful with high proportion. At the same time, we also observed that a proportion (11%) thought the court culture construction was very useful. It should be pointed out that it was a preliminary conclusion. The psychological recognition of the respondents did not manifest that they really agreed with and accepted the influence of the construction of court culture in practice.

Conclusion

Through this study, although the mentality of culture engineering prevails more than artistic treatment, it does obtain some obvious positive effects. The development of cultural psychology in China has affected the construction of court culture especially at the micro level, and the construction of court culture has

also affected the characteristics of courts and judges. However, whether this result is representative enough still needs further investigations.

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The Perceived Control of Chinese Elderly People – A Qualitative Study in a Nursing Home in Wuhan

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[Abstract] The mental health of elderly people is being paid more and more attention with their increasing number. To explore the perceived control and negative label of Chinese older people, this study conducted field research in a nursing home in Wuhan, and the results suggested that: 1. The level of the perceived control is declining with the aging, however, older people still want more self-control of their own life. 2, The target of the perceived control is often about the elderly themselves, as they want to deal with their life events as before. 3, Instead of relying on children, the elderly people hope that they could have the ability to cope with life events by themselves; 4, Old people have a clear understanding of their own principles, and they also pay more attention to social responsibility. These conclusions help to understand the aging process and the psychological needs of the elderly, so as to provide significant implications to the attempts of successfully aging.

[Keywords] elderly people; mental health; perceived control; field research

Introduction

“The first demographic transition” happened around the world in the 20th century, when the population structure changed from high fertility and high mortality rate to low fertility and low mortality rate. This will profoundly affect the population structure in the 21st century. It will also lead to the rapid growth of an aging population. Demographers believe that the aging population will reach its peak in 2050 once the trend continues. With the onslaught of the “silver wave” today, more and more people are focusing on the problem of population aging. How to age healthily and how to give elderly people serene twilight years have becoming emergent social issues. As for China, the proportion of people older than 65 was 4.9% in 1982 and increased to 10.1% in 2014. This trend demonstrates that China’s aging population is increasing rapidly (Xie, 2004). In addition, there are some specific characteristics about China’s aging population. For example, the degree of population aging is beyond the normal level, the speed of the aging population is much higher than regular speed, and the number of older people is transnormal. From 2015 to 2050, China’s population aged 60 will increased from 210 million to 490 million (Mo, 2011). In the face of such a serious problem, exploring elderly people’s mental health has a great significance for providing some advice to China’s population policy.

Social Stereotype of Elderly People

With the acceleration of the aging population, some negative problems have also emerged. People who are affected by cognitive biases, traditional culture and other factors have placed a stereotype on the elderly and made them at a rather disadvantage status, thus they become marginalized and stigmatized. So, the discrimination to older people tends to be much more severe. Similar to gender and racial discrimination, age discrimination refers to the action that violates older people or the negative perspective toward the elderly (Hoyer & Roodin, 2008). With regard to careers, older people are facing retirement issues; for family, they are considered to be a burden; for society, older people are considered

as non-contribution people. Some people point out that even the research on age, gender and race discrimination could be essentially discriminatory (Cole & Stewart, 2001). Based on the stereotype toward the elderly, people will always have some wrong cognition such as older people are more dull, forgetful and arbitrary, most of them are stubborn, or most of the elderly are, or have already, separated from society (Lubomudrov, 1987).

First of all, what needs to be acknowledged is that with the increase of age, there are some irreversible recessions on people's somatic functions, when the processing speed of an individual slows down, this will affect their expression of cognitive levels (Salthouse & Meinz, 1995). Research shows that the elderly have inhibitory mechanism problems. They can't effectively overcome the disturbance from irrelevant information, it will lead to the recession of cognitive capacity (Hasher & Zacks, 1988). Park and his colleagues (2003) found that although the behavioral expression data has no distinct difference between old and young, the distinct difference in encephalic region activation degree could be seen through neuroimaging. It means that the encephalic region activation degree of older people is deeper than youth, so the elderly need more cognitive resources for the same action. Research about the aging of conflict strategy also shows that both the young and old can adopt a proactive control strategy, but young people's proactive control abilities are better than the old (Zhou, 2014). The natural physiological degeneration is regarded as an unacceptable burden. It makes the status of older people become embarrassed and "old age discrimination" becomes more frequent.

Phenomenon of "old age discrimination" is ubiquitous in the service industry where young people are the main working group and it affects RS-A (Polat, Karadağ, Ülger, & Demir, 2014). Research shows that social support, self-esteem and mental resilience are relevant factors which can influence the physical health of older people (Yao, Cai, & Jiang, 2016). Older people need to be cared for and social support can directly affect their mental health of them (Wu & Cheng, 2011). Due to all sorts of constraints and the social cognitive bias, older people not only receive insufficient social support or care, but also separate away from the society. It makes older people use defensive interpersonal interaction patterns and hostile relationship adjustment strategies. It also induces the activation of RS-A. A negative cognitive model can be presented through high rejection sensitivity which is associated with senile depression levels (Duan, Gao, Wang, Xin, Liu, & Wang, 2015).

The Perceived Control of Elderly People in China

In addition, the general evaluation towards older people in China received negative affect due to more and more "*peng ci*" accidents. Thus, older people are given negative labels. More and more people think older people take advantage of their age to catch attention and gain benefits, especially when Chinese culture emphasizes the absolute respect for the elderly. A report from social media makes some people think that older people are extorting from society through the convenient access of traditional social values. These statements are widespread, even exaggerated and warped. Whether older people have such thoughts or the problems are exaggerated, this is the question that needs to be deliberated.

Research shows that older people are well respected and encouraged to take part in the family or other social activities in China and Japan (Kinoshita & Kiefer, 1992). The relationship among generations is interactive but not linear. In Chinese and Japanese culture, older people can participate in children's upbringing and social culture emphasizes the harmony and solidarity between the family. In China, filial piety culture has occupied the mainstream position. Chinese people usually respect and submit to the elderly, it's a kind of life-style. Chinese filial piety can be divided into two forms: authoritative filial piety

and reciprocal filial piety. Researchers think the rearing patterns between Chinese and western parents has a significant difference because of the disparate cultural and social regulations (Wang & Fu, 2005). Children should obey their parents through traditional culture requirements, so Chinese parents have a certain control over their children (Hill & Taylor, 2004)

With the acceleration of modernization, older Japanese people's position and social status are declining (Hashimoto, 1996; Kumagai & Keyser, 1996). Although it seems that the elderly in Japan spend so much time with their children, older people still feel lonely and have emotional alienation. In China, social mobility is increasing and the youth choose to carve out their careers in other provinces far away from their parents. The mobility switched off the connection between the younger generations and their parents. The youth began to establish new relationships and started to get rid of collectivism simultaneously. Intensification of independent consciousness threatened the control from parents. Children no longer follow their parents' advice completely and parental authority has been challenged.

A classic research shows that the elderly are not in a passive role in our regular cognition (Langer & Rodin, 1976). They also hope they can have the initiative and their own independent consciousness. Researchers think one of the difficult changes that older people probably suffer is after they enter a rest home, giving up control of their daily lives. This means whether they remain having the control power has a significant impact on themselves. Researchers divided the elderly participants into two groups according to their living floors in a nursing home. The information that the "sense of responsibility promotion" group (the elderly in the 4th floor) received was that they have the duty to take care of themselves and they can decide how to arrange their spare time. They can decide the decoration of their room, whether to accept the gifts or not, to look after their plants and whether to watch a film or not by themselves. However, the elderly in the second floor were completely controlled by researchers. In this case, these older people had no individual choices for their lives. The experiment results finally supported Lange and Rodin's prediction. The opportunity for choice and control power have positive affect on old people. The elderly in the experimental group were more likely to take part in activities (Langer & Rodin, 1976). Older people hope that they can have the right to decide their lives although their physical ability has degraded. It also has positive affect on successful aging.

In addition, under the special cultural background in China, older people's perceived control is also an aspect worth exploring. Aging problems emerge almost every day, and the elderly should be paid more attention to in society, especially to focus on how to age healthily. The mental health of the elderly is not only related to the aging process but also to the attitude of facing death. It also has an impact on the development of family and the harmony of society. This research has two purposes. One is to clarify the problem about the negative label on older Chinese people. Another is to explore the mental transformation of the elderly with their degeneration of cognition and physical aging. This research performs field work and analysis through relevant record and data by means of open interviews of the elderly in a nursing home in city of Wuhan.

Method

Participants

Seven individuals were interviewed, ranging from 70 to 95 years ($M=82$, $SD=6.85$). The participants are all female and all of them are retired. Before entering into the nursing home, they all lived in the city, the family's SES (social economic status) are in or above average level. The details of participants are in Table 1.

Table 1. The Information of Seven Participants

Number	ID	Age	Gender
1	Huang	95	Female
2	Yi	83	Female
3	Yang	79	Female
4	Dong	83	Female
5	Shao	70	Female
6	Ma	80	Female
7	Qian	83	Female

Procedure

This study interviewed seven participants in a nursing house. This study chose field study because the older people could not clearly understand what we expressed, and sometimes their answers did not coincide with the questions on the scales. So, this study represents an attempt to discuss the individuals' experiences in their lives with open interviews. This approach allowed the participants to have the flexibility to express and share relevant experiences freely.

Data Analysis

First, the researchers decoded the recording, then, by analyzing the transcripts, made some themes by using inductive thematic analysis and semantic analysis methods (Braun & Clarke, 2006).

Results

Four themes emerged from the research data: (1) the self-awareness of old people; (2) the perceived control of old people; (3) the target of the perceived control; (4) moral values or cognition of old people.

Theme One: The Self-Awareness of Old People

The first theme is how old people think about themselves. An important component of self-awareness refers to their cognition of aging. In most interviews, older people would say, "The people like us....." This indicates that the old people have a sense of identity of their own age, in particular, they can distinguish the difference between themselves and young people.

"I don't like to intrude upon your privacy, older people know about that code of conduct." (Yi)

"Something that young people can say, but we cannot say." (Dong)

Theme Two: Perceived Control of Old People

The second theme is the perceived control of older people, and the results indicate that although losing a certain part of action, and the perceived control of their lives is not as good as before, they still want to do things on their own. In particular, they take freedom of action into account, however, there is a contradiction. On the one hand, they really want to go out of the nursing house, but on the other hand, they are worried about getting hurt. In addition, they want to deal with things in their daily lives, for example, washing their faces, taking baths, and washing clothes. They take pride in their ability of control.

"If I can take free walk anytime, I think I can do anything I want. Now, I need help to do many things, it makes me grieved." (Dong)

"Some people think that older people have few things to do, but I want to do a lot of things." (Dong)

Theme Three: The Target of Perceived Control

Another significant finding is that older people not only value their own ability of control, but they are also more willing to rely on their own abilities, because this can reduce the burden to their family. In this case, their children do not need to take much time and energy to look after them. This is contrary to the traditional Chinese value. Actually, as for old people, the aim of control is their daily lives. In addition, the social stigma labels in Chinese society which describe old people as incapable, or taking advantage of their seniority are not true, at least it cannot represent all older people.

“I hope everyone in the world don’t fall, otherwise it makes you feel painful, and your children worry more.” (Shao)

“Many older people want to prepare for her funeral by themselves, relying on children makes us feel guilty.” (Yang)

Theme Four: Moral Values or Cognition of Older People

In the process of our interviews, older people referred to something about moral concept and principle. In contemporary Chinese society, due to some negative reports in newspapers, many people hold the view that the most older people make unlimited demands, or even displease others. However, the results suggest that the older people pay more attention to social morality; they have their principles that are prone to be altruistic.

“I do things for the good of the collective, and I am dead against the crooked ways.” (Yi)

“The courtesy in modern society is shallow.” (Huang)

“A radish should in the pit, if you aren’t quite qualified for the work, let other people do. Do not occupy the position with no contribution.” (Yang)

Discussion

The research explores psychological problems of the elderly in a nursing home, and according to the interviews and conversations, this study discusses the social stigma labels and the perceived control of old people. China is a country that values filial piety, respecting the elderly people has always been considered a social responsibility and behavioral norm. So therefore, older people should have high status in the society, and most people think the elderly seem to have the authority, and can rely on their children with any requirements. However, this study found that older people hope to reduce the burden of their children. In addition, some social media have reported negative news that can be detrimental to the positive image of the elderly. The actual image of the elderly on Chinese social media are often depicts them as presumptuous of their seniority and making unlimited demands. So, in our study, we wanted to know the real thoughts of older people, and the results show that most older people prefer taking care of their children. They also have moral standards and social virtue. For example, they conscientiously maintain public order and security in the nursing home; if someone breaks orders or does immoral things, they will blame them or disclose the things without telling real names. Our results also discovered that there is some altruistic behavior between older people in the nursing home.

Along with an increase in physical and cognitive limitations, older people are less likely to have a sense of self-control (Lachman, Neupert, & Agrigoroaei, 2011; Wrosch, Heckhausen, & Lachman, 2006). With the development of society, the children gradually move away from the family, and the link between generations becomes weaker. This is a great challenge to parental power. The results indicate that the power or the perceived control which older people want to have is not aimed at their children, instead,

they want to control of their own lives. In the interviews, the elderly said that they wanted to go on living with their own efforts. Research about depression in a German nursing home showed that a low degree of perceived freedom could predict depression (Krampe, Hautzinger, Ehrenreich, & Kröner-Herwig, 2003). That is to say, having an alternative choice and perceived control is critical to successful aging. The more options people have for control in the nursing home, the happier, healthier, and more stable aging process will be (Rodin, 1986).

Generally speaking, the older people's perceived control is mainly aimed at their own. They hope that they can control their own lives, and the radical reason for this is their love for their children, they do not want to become their children's burden.

Limitations and Future Research

The current study has several limitations. First, the research shows that there is a response bias in elderly people, especially in people who are over 50 (Vigil-Colet, Morales-Vives, & Lorenzo-Seva, 2013). Because of social desirability, future studies should enhance the reliability and validity of the interviews. Second, the open interviews we used had some limitations, so research on perceived control of the elderly people was not thorough and comprehensive. Finally, the interviewees in the nursing home had relatively high SES and they were all female, so their life experiences and cognitive levels may have distinctive characteristics, so future studies should expand the effective range and the number of samples (eg. Low-SES, male). This would be useful for better understanding of the aging process and psychological condition of elderly people.

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The Correlation between Adult Nostalgia Psychology and Alienation: From the Perspective of Cultural Individualism-Collectivism

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[Abstract] This study focused on the correlation between nostalgia and alienation existing among Chinese adults. There were 707 participants randomly selected who completed surveys through taking interviews and filling out questionnaires. The results suggested that the average score of family nostalgia was the highest. Alienation had a significant positive predictive effect on nostalgia. So, this study furthered the current research of nostalgia psychology and demonstrated that adult nostalgia psychology and alienation were consistent with the Chinese family collectivism.

[Keywords] adult; nostalgia psychology; alienation; collectivism; dual culture orientation

Introduction

Nostalgia Psychology

Nostalgia was viewed as a physiological disease or psychological symptoms first, then turned into a human universal, and then recently, a normal psychological experience (Batcho, 1995). Nostalgia was a complex emotion which was related to the self-consciousness, and had characteristics of cross age, culture and group (Sedikides, 2008).

There are two angles of views of the study of nostalgia psychology that include two dimensions: the lateral path is the content and experience of nostalgia, and the longitudinal path is the degree of nostalgia (Xue, 2011). At present, the most recognized nostalgic psychology is divided into four dimensions: individual nostalgia, interpersonal nostalgia, cultural nostalgia and virtual nostalgia (Havlena, 1991).

Compared with fruitful results on nostalgia in foreign countries since 1688, domestic nostalgia psychology research is still in its infancy (Lu, 2008), because of lacking mechanisms and the impact of individual in-depth analysis has manifested in: less research tools for Chinese cultural backgrounds, less attention on the elderly population over 30 but more was confined to college students, more related research but less experimental research, most adopted content analysis and questionnaire methods, and related variables research focused on consumer psychology and mental health levels.

Psychological Connotation of Individualism and Collectivism

Hofstede (1980) concluded that western culture was individualism, and East Asian culture was collectivism, and then academic circles set off a sustained boom cross cultural research on individualism and collectivism. The concept of the individualism and collectivism dimension in the content was basically the same between domestic and abroad, but the understanding of the meaning of the collective in the concept of collectivism was inconsistent. Domestic scholars mainly referred to the big collective that was, the fuzzy collective, the collective and fuzzy collective mixed, with a certain degree of ambiguity, while the foreign focused on relations (Chen, 2013).

Previous studies emphasized the great importance of family and home for Chinese and held that Chinese collectivism was collectivism in inner groups, especially families. Chen (2013) found Chinese

collective mode focused on the relationship between groups of collectivism, which had dual cultural orientation in the face of intimate relationship groups and their own.

Question Put Forward

Under the influence of Chinese traditional culture and historical background, the study of Chinese people's nostalgia psychology must take into account that the Chinese people attach importance to the family of collectivism (Lu, 2008). On the basis of the research from the content path, nostalgia was divided into personal nostalgia and collective nostalgia (Davis, 1979). Family nostalgia and social nostalgia were stripped from collective nostalgia. Social nostalgia was understood as an individual remembrance of the characters and events of an era and the social or collective fell under the model of Chinese Collectivism. Zhang (2003) defined alienation as an individual awareness of the alienation of the normal relationship and a sense of distance and difference, resulting in a sense of powerlessness, loneliness and other negative emotions. According to Emotional Restoration Theory and Interpersonal Interaction Theory, when the individual felt lonely or rejected, nostalgia psychology can help to promote individual communication, obtain social support and improve happiness (Wildschut, 2006).

Accordingly, this study used interviews and the questionnaire survey method with a local nostalgia scale and an alienation scale as research tools to investigate nostalgia and alienation of domestic adults and discuss the relationship between them. On this basis, the study analyzed the mutual construction of adult nostalgia and alienation with culture based on the perspective of cultural individualism and collective.

Method

Participants

The survey randomly sampled 800 subjects in total for the questionnaire survey and discarded 93 invalid ones. So, there were 707 valid scales with 88.4% valid rate. The basic information of objects is shown in Table 1.

Table 1. Object Distribution (N=707)

		People counting	Percentage (%)
Gender	Male	341	48.2
	Female	366	51.8
Occupation	Postgraduate	159	22.5
	Employee	147	20.8
	Soldier	116	16.4
	Teacher	168	23.8
	Civil Servant	117	16.5
Age	20-29	253	35.8
	30-39	199	28.1
	40-49	180	25.5
	50-59	75	10.6

Materials

The study used the localization of Nostalgia Scale developed by Lu (2008) and the Adolescent Alienation Scale developed by Yang (2002). The Nostalgia scale includes personal nostalgia, social nostalgia and family nostalgia. With an intermediate value of 4 as the reference value, the higher the average score, the greater the level of nostalgia. Preliminary tests proved that the internal consistency coefficient of the total

scale reached 0.900, and the internal consistency coefficient of the three components of personal, social and family nostalgia is 0.863, 0.824 and 0.850, respectively.

Alienation scale included 9 second-order factors and 3 first-order factors. The scale used as Likert 7 review method, with the intermediate value 4 as the reference value, the average score was higher, and then the alienation was more serious. Preliminary tests proved that the internal consistency coefficient of the total scale reached 0.920, and internal consistency coefficient of three components of social, interpersonal and environmental alienation was 0.870, 0.840, and 0.710, respectively.

Data Processing

SPSS 19.0 software for windows.

Results

The General Description of Adult Nostalgia Psychology and Alienation

The total average and each factor score of adult nostalgia psychology were higher than intermediate value 4 which are shown in Table 3. The total alienation of adults was slightly lower than the middle value 4. Among the second-order factors, the sense of environmental alienation was the highest, and interpersonal alienation was the lowest, as shown in Table 2.

Table 2. Independent Samples T Test for Alienation Scale (N=707)

	Total (N=707)	Male (N=341)	Female (N=366)	<i>t</i>
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>	
<i>F1</i>	4.014±1.013	4.058±1.035	3.973±0.992	1.114
<i>F2</i>	2.936±0.933	2.903±0.900	2.967±0.963	-0.912
<i>F3</i>	3.416±0.977	3.537±1.003	3.303±0.939	3.188***
<i>F4</i>	4.305±1.186	4.436±1.146	4.182±1.211	2.866**
<i>F5</i>	2.838±1.104	3.060±1.040	2.632±1.123	5.250***
<i>F6</i>	4.418±1.237	4.522±1.233	4.322±1.235	2.159*
<i>F7</i>	3.944±1.136	4.087±1.192	3.811±1.066	3.235***
<i>F8</i>	3.863±1.128	3.813±1.191	3.909±1.065	-1.128
<i>F9</i>	3.234±1.182	3.345±1.212	3.130±1.145	2.432*
<i>FF1</i>	3.689±0.888	3.715±0.924	3.665±0.855	0.749
<i>FF2</i>	3.400±0.920	3.561±0.909	3.249±0.905	4.578***
<i>FF3</i>	4.361±1.089	4.479±1.067	4.252±1.099	2.789*
<i>F</i>	3.663±0.842	3.751±0.868	3.581±0.809	2.693**

Notes: *FL*: Sense of meaninglessness; *F2*: Self-alienation; *F3*: Isolation; *F4*: Natural alienation; *F5*: Family isolation; *F6*: Environmental isolation; *F7*: Oppression sense; *F8*: Uncontrollable sense; *F9*: Social isolation, *FF1*: Social alienation; *FF2*: Interpersonal alienation; *FF3*: Environmental alienation; *F*: Alienation. "*"denotes $P<0.05$; "***"denotes $P<0.01$; "****"denotes $P<0.001$; The same below.

Difference Test of Demographic Variables of Adult Nostalgia Psychology

Multi-factor analysis of variance. Table 3 data showed the main effect of age and occupation was significant. The interaction between occupation and age was significant, so were occupation, gender and age. In order to investigate specific differences, the total score of the nostalgic psychology of adults and the average score of each factor were analyzed by t-test or multiple comparison analysis.

Table 3. The MANOVA of Each Dimension for Nostalgia Scale (N=707)

	Gender	Age	Occupation	Gender× Occupation	gender× Age	Occupation ×Age	Gender× Occupation×Age
<i>F1</i>	0.139	24.798***	2.097	1.225	1.607	6.678***	2.102*
<i>F2</i>	0.004	6.497***	4.489***	1.109	1.551	1.335	4.962***
<i>F3</i>	0.047	21.435***	0.961	0.322	1.764	6.545***	1.279
<i>F</i>	0.079	22.578***	2.480*	0.458	1.239	5.543***	1.454

Notes: *F1*: personal nostalgia; *F2*: social nostalgia; *F3*: family nostalgia; *F*: total nostalgia.

The gender differences of adult nostalgia psychology. The total score of nostalgia and the average score of each factor were analyzed by t-test, and results are shown in table 4. The difference between males and females was not significant in the average score of adults' nostalgia psychology.

Table 4. Independent Samples T Test for Nostalgia Scale (N=707)

	Total (N=707)	Male (N=341)	Female (N=366)	<i>t</i>
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>	
<i>F1</i>	5.642±1.024	5.618±1.062	5.665±0.988	-0.604
<i>F2</i>	5.658±0.993	5.686±1.035	5.633±0.953	-0.707
<i>F3</i>	5.741±1.118	5.716±1.173	5.765±1.064	-0.576
<i>F</i>	5.669±0.861	5.663±0.896	5.675±0.829	-0.176

The age differences of adult nostalgia psychology. Table 5 data showed that the differences among the four age groups were extremely significant. After the further LSD Post hoc multiple comparison, it was found that the adult nostalgic psychology showed increasing trend with age.

Table 5. One-Way MANOVA of Each Dimension on Age for Nostalgia Scale (N=707)

	20-29 (①)	30-39 (②)	40-49 (③)	50-59 (④)	<i>F</i>	Post hoc comparison
	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>	<i>M±SD</i>		
<i>F1</i>	5.384±1.029	5.292±1.045	6.102±0.797	6.336±0.620	43.144***	③ > ①, ②; ④ > ①, ②
<i>F2</i>	5.374±0.986	5.600±0.884	5.951±0.790	6.083±1.354	18.217***	③ > ①, ②; ④ > ①, ② ② > ①
<i>F3</i>	5.368±1.130	5.518±1.193	6.280±0.846	6.307±0.627	37.428***	③ > ①, ②; ④ > ①, ②
<i>F</i>	5.378±0.871	5.449±0.863	6.086±0.654	6.239±0.543	46.584***	③ > ①, ②; ④ > ①, ②

The occupation differences of adult nostalgia psychology. Table 6 data shows that the differences among the five occupation groups were extremely significant. After the further LSD Post hoc multiple comparison, it was found that adult nostalgia psychology among five occupations ranked from high to low are as follows: employee, teachers, civil servants, soldier and postgraduates.

Table 6. The MANOVA of Each Career Type for Nostalgia Scale (N=707)

	Post-graduate (①)	Employee (②)	Soldier (③)	Teacher (④)	Civil Servant (⑤)	F	Post hoc comparison
	M±SD	M±SD	M±SD	M±SD	M±SD		
F1	5.348±1.030	5.927±0.784	5.509±1.043	5.742±1.108	5.630±1.017	8.086 ***	②>①③⑤, ④>①, ⑤>①②
F2	5.279±1.103	6.046±0.717	5.479±1.221	5.774±0.878	5.697±0.817	13.910 ***	②>①③④⑤, ④>①②③, ⑤>①
F3	5.375±1.155	6.093±0.825	5.65±1.255	5.847±1.233	5.732±0.904	8.830 ***	②>①③④⑤, ③④⑤>①
F	5.329±0.926	6.020±0.587	5.530±0.892	5.776±0.878	5.676±0.814	14.781 ***	②>①③④⑤, ③④⑤>①, ④>③

Correlation Between Adult Nostalgia and Alienation

Correlation analysis showed that there was a significant positive correlation between nostalgia psychology and alienation, and the correlation coefficient was 0.272 (P<0.01). The results are shown in table7.

Table 7. The Correlation Coefficient between the Latent Variables

	Personal Nostalgia	Social Nostalgia	Family Nostalgia
Social alienation	0.264**	0.301**	0.141**
Inter-personal alienation	0.143**	0.207**	0.009
Environmental alienation	0.313**	0.332**	0.223**
M	5.642	5.658	5.742
SD	1.024	0.993	1.118

Discussion

The Level of Nostalgia Psychology of Adults is Consistent with Chinese Family Collectivism

According to the Davis definition of nostalgia, nostalgia is the process of memory reconstruction which filters negative emotions. The results which showed that family nostalgia was the highest while personal nostalgia was the lowest explained when individuals produced negative emotions of anxiety and fear of reality, or talked about deceased friends in interpersonal conversation, nostalgia would be evoked. The memory related to family would be reconstructed and extracted first, which explained that the reconstructed memory related to family could bring a positive emotional experience (Davis, 1979). All of this was confirmed by the Chinese family collectivism.

Chinese society has a characteristic that the structure of state and family is the same which shows that the Chinese traditional culture that advocates and emphasizes collectivism has precipitated in modern Chinese.

Analysis of the Difference of Adult Nostalgia Psychology in Demographic Variables

The gender differences of adult nostalgia psychology can be explained by differences between men and women. The emotional experiences of women are much more profound. On the other hand, according to Chen’s (2013) research, women collectivism was only reflected in the treatment of close groups, rather than the general population. From the point of view of evolution and culture, men needed to participate in more cooperative groups for social status. Therefore, it can be found that the memory of the individual and family was easier to be extracted.

The increasing trend of the psychology of adult nostalgia can be explained from two aspects. First, the occurrence of nostalgia was closely related to the individual life experience which was supported by Routledge's (2008) research. Second, according to Maslow theory, after entering middle age, the physiological function and cognitive ability begins to decline, so do cognition and social function. According to the theory, the reconstructed memories can be used to repair and compensate the conflicts and negative emotions (Wildschut, 2008). Therefore, when the conflict in reality intensified, the nostalgia tendency would be significantly improved.

This study found that the sense of alienation had a significant positive predictive effect on nostalgia. When the individual felt lonely or rejected, nostalgia could help to enhance the individual communication, obtain social support and improve the sense of happiness, which confirmed the theory of emotional restoration and interpersonal interaction theory in turn (Wildschut, 2006).

The Level of Adult Alienation is Consistent with the Chinese Dual Cultural Orientation

The results showed that interpersonal alienation was the lowest, while environmental alienation was the most serious. In the first-order factor, self-alienation and family alienation were significantly lower than natural alienation and living environment alienation, which was confirmed by the dual cultural orientation of close relationship group and self. In this study, the sense of distance and differences between the self and the relatives of adults were the lowest.

From the point of view of alienation, this paper demonstrated that the Chinese people showed dual cultural collectivism from the four aspects of self-definition, behavior, responsibility and value in the face of the inner group.

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Expectation of Future Residential Mobility Decreases Subjective Well-Being: Evidence from In-Depth Interviews with Chinese Urban Residents

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[Abstract] It has been widely confirmed that residential mobility decreases Subjective Well-Being (SWB). However, it is not clear whether residential mobility is the individual's moving history in the past or the individual's expectation of moving potentiality in the future. The current study addressed this question by conducting an in-depth interview with seven urban residents from first-tier, second-tier, and third-tier cities in China. The results suggested that compared with the history of residential mobility, expectation of future residential mobility is a better predictor of one's SWB. The impairment of SWB by expectation of future residential mobility could attribute to the deprivation of need for belongingness. Finally, the reason why individuals choose to move at the expense of their SWB is that they value more meaning in life than SWB.

[Keywords] history of residential mobility; expectation of future residential mobility; subjective well-being; belongingness; meaning in life

Introduction

Social mobility in China has grown rapidly in recent years. It was reported that during 2000 to 2010, the migrant people in China had increased 11.7 million with 81% growth rate (Qiao & Huang, 2013). Social mobility has drawn attention from sociologists, economists, historians and psychologists. In empirical studies, the social mobility construct was operationalized as residential mobility, relational mobility, and job mobility. Residential mobility refers to the frequency with which people change their residences (Oishi, Schug, Yuki, & Axt, 2015), and is the focus of the current study.

At present, research on residential mobility was mostly conducted by S. Oishi and his colleagues (e.g. Oishi & Schimmack, 2010; Oishi, et al., 2013), which suggested that residential mobility affects individuals' psychology and behavior performance. For example, residential mobility decreased subjective well-being (SWB), and increased the risk of mortality in adults (Oishi & Schimmack, 2010). Meanwhile, residential mobility affected the individuals' interpersonal relationships, destroyed the old social networks, caused a stronger motivation to make new friends (Oishi, et al., 2013), and adopted friendship compartmentalization to build larger social networks (Lun, Roth, Oishi, & Kesebir, 2012).

However, it should be noted that, as far as we know, the operation definition of residential mobility in available studies was not uniform. For example, in the measurement, it often measured the frequency of residential mobility during childhood (Oishi & Schimmack, 2010). While in some experiments, the material of residential mobility had led to the expectation of future residential mobility (eg, Oishi, Miao, Koo, Kisling, & Ratliff, 2012). We consider that these two kinds of residential mobility may have different effects on SWB, but this point has not been explicitly proposed and studied in previous studies. In the current study, we call the frequency of residential mobility in the past the history of residential mobility, and we call the expected frequency of residential mobility in the future the expectation of future residential mobility.

The current study tries to explore these two different kinds of residential mobility, and their different effects on SWB and its mechanism. Our questions are: Do these two different kinds of residential mobility both affect individuals' SWB? Which kind of residential mobility has a greater impact on SWB? And why?

Method

Seven participants using convenient sampling method obtained from first-tier, second-tier, and third-tier cities were interviewed by in-depth interviews. Participants had no idea about the purpose of study before interview. All interviews were completed within a week by the researcher. The demographic data of participants as follows:

Table 1. The Demographic Data of Participants

Code	Age	Gender	Education	Marital status	Frequency of residential mobility in the past	Current residence	Have one's own house
1	31	Female	Bachelor	Married without children	3	Jinan ²	Yes
2	28	Female	Master	Single	3	Beijing ¹	No
3	26	Female	Bachelor	Married with children	3	Beijing ¹	Yes
4	30	Male	Master	Married without children	4	Jinan ²	Yes
5	29	Female	Master	Married with children	5	Yantai ³	Yes
6	31	Male	Bachelor	Unmarried with Fiancée	4	Beijing ¹	Yes
7	26	Male	Bachelor	Single	2	Beijing ¹	No

Note: ¹ = the First-tier cities, ² = the Second-tier cities, ³ = the Third-tier cities

At the beginning of the interview, participants were asked to complete the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) with four items that were rated on a 7-point scale ($\alpha = .86$, $r = .72$); the higher numbers indicate a higher level of well-being.

Results

There were three findings in the current study; the most important one was that compared to the history of residential mobility, the expectation of future residential mobility had greater effects on the present state of the life.

Expectation of Future Residential Mobility Affects Subjective Well-Being (SWB)

The previous studies indicated that residential mobility reduced SWB (Oishi & Schimmack, 2010), but in our interviews, the individuals' history of residential mobility didn't seem to have effects on the present SWB. All seven participants had more than 2 moves (all were caused by going to college), but these participants' SWB were different. It can be distinguished by whether they had a house, had the house related to the higher level of SWB, or had no house related to the lower level of SWB. On the whole, the score of SWB of participants who had the house was 21.4 on average, but the score of participants who had no house was 12. It differed significantly. Moreover, there was corresponding information in the interview, when talking about the present states of life.

If I have a house now, my well-being will be greatly improved. (#7, Beijing)

We further explored the mechanism behind the house and found the house meant stability. Having a house meant that participants would not move in the next few years, and having no house meant that participants would move in the future. In other words, the expectation of future residential mobility greatly affects the individuals' assessment of their current state of life. The participants that owned houses said, as follows:

I feel happier now, the price of the house in Beijing is so high that I can not afford it, but I can buy a house in Jinan, it is easy to settle down relatively. And Jinan is near to my town (refers to the place where the participant was born and raised, and his parents still live in that town now), I can often go to my town to see my parents. I feel warm in my heart, and feel less pressure, feel more secure. I am not going to leave Jinan in the next few years. (#4, Jinan)

I feel more sureness after buy the house. I am not as worried as before. The pressure of the loan is not so much when my fiancée and I in charge of the loan together. Moreover, the value of the house will increase. After buy the house, I do not worry about the rent increase, and do not worry about happened to the agencies that do not honor the commitment. I feel unstable without a house, sometimes I have to fight with the landlords or the agencies. I have to move, not to buy too many things. Have a house means have home, I won't leave Beijing in the next few years. (#6, Beijing)

Meanwhile, the participants without a house had different feelings:

I feel very unhappy now, there is huge gap between the ideal and reality. For example, the price of the house is so high that I can't afford it. I also can't afford the marriage. Under the current state of work, if parents do not give financial support, it is impossible to buy a house in Beijing, even if use a lifetime. So now my consideration is how to quickly earn the wanted money, then to live in another city. (#7, Beijing)

Residential Mobility Deprives the Need to Belong

All seven participants mentioned that they didn't have belongingness after migrating. Just like Oishi's (2010) research, residential mobility destroyed the individuals' old social network, and it was hard to build a new one. Participants felt lots of negative emotions such as wander, unstable, loneliness, anxiety, confusion, and so on. So, we can say that residential mobility resulted in the deprivation of the need to belong (Baumeister & Leary, 1995). When talking about their feelings in Beijing, different people had the same opinions.

I feel wandering with restless heart in Beijing. Because the city is too big, and has too many people, the individuals become too humble. Moreover, Beijing far away from Shandong (the province where participant was born and raised), there are few relatives and friends there, the incomes is not high. I don't know which way to go in the future, and how to do is right. I don't have a clear plan for the future. (#4, Jinan)

I feel drifting and rootless in Beijing. I am just a worker with mechanical effort, tired out from the press. There is no place to settle down and get on with my spirit. Although Beijing is very good and very big, these have nothing to do with us, we can't enjoy much. (#2, Beijing)

However, after choosing to go back to the place where the participants were born and raised, or after a plan to settle down, in other words, when individuals expected that the future will no longer include a move, people had more motivation to make new friends, and meanwhile there were also many friend resources around.

I prefer to make friends after moving back to Jinan, because I intend to develop in Jinan in the future, it is necessary to make more friends. (#4, Jinan)

There are more acquaintances in Jinan, relatives and friends exist in everywhere. In the company, we all speak dialect, I feel very warm. In Beijing, I feel I am cold, now I can't be cold anymore, naturally become more cheerful, more talkative. Now when colleagues get married, we will give a red envelope with money (this is a Chinese custom), the bride and groom will send candies to us, invite us to wedding. But in Beijing, I seldom go to the wedding of colleagues. And there nobody gives the invitation. I don't feel like we are all in the same boat. (#1, Jinan)

Once the social network was built, the need to belong was met, the feelings of individuals were very different:

After I moved back to Jinan, it is convenient to go to my town. I can get together with my family and friends on weekends. When I am in Beijing, I feel like I'm alone in a strange city. Now I have the feelings with security and belongingness in Jinan. Once people have the sense of security, do anything full of confidence, will not feel the much pressure. (#1, Jinan)

The Self-Selected Residential Mobility in Order to Pursue the Meaning in Life

As stated earlier, residential mobility reduced SWB, causing deprivation of belongingness. Then why had individuals chosen residential mobility? In the current study, all seven participants self-selected residential mobility. By coding the information of the participants, the current study found that the reason individuals chose to move rather than to stay at the expense of their SWB was probably that they value meaning in life more than SWB. The stabilizers pursued their meaning in life in their personal relationships, and the migrants pursued their meaning in life by self-accomplishment (including treasure, fame) (Eggleston & Oishi, 2013).

Internet industry of Qingdao is trash, an aspiring programmer is unable to stay in Qingdao, there are more opportunities in Beijing and have more vitality and vigor, the payment in Beijing is much high than Qingdao's. The things we do are more valuable. Young people are more likely to play their part and reflect their own value. Some people like me will not adapt to work in Qingdao completely. It's difficult to play their role. And it's hard to find your own level of people to cooperate. Many people who want to escape from Beijing had never lived in the second-tier or third-tier cities for a long time, most of the best resources to concentrate in the first-tier cities. (#6, Beijing)

The job has a bright future with superior work environment in Beijing. You could get high pay as long as you own ability. If your English is good enough and give professional legal views, customer will choose you, not too care about the price. However, you need the relationship in Jinan, customer pay more attention on your relationship than your ability. (#1, Jinan)

In Beijing, we are outsiders. At the beginning, we have our own purpose, for example, I came to Beijing just to make money, and already have a residence in my mind. My consideration is how to quickly earn the wanted money, and then to live in another city. (#7, Beijing)

Implications and Conclusion

The current study provides novel findings regarding the expectation of future residential mobility that have important implications for SWB from the perspective of social ecology. First, psychology emphasizes that the past affects the present in psychology and behavior. However, the present study found that compared to the individuals' history of residential mobility, the expectation of future residential mobility is more likely to affect an individuals' SWB; happiness is low if the expectation for the future is mobile, and happiness is high if the expectation for the future is stable. It is consistent with the theory of perception of social change, and compare to the social past, the perception about the future plays a more important role in guiding the current activities of the human (Chen & Xie, 2017).

Second, the current study explored the mechanism behind residential mobility affecting individuals' psychology and behavior. In Oishi's opinion, the explanation was that residential mobility destroyed interpersonal relationships. The present study found a more fundamental explanation mechanism. Residential mobility causes the deprivation of the need to belong, so that individuals elected a series of goal-oriented behaviors, such as becoming more motivated to make friends, using friendship compartmentalization to build a larger social network, conditionality of group identification, and more familiarity-seeking. The ultimate purpose of these acts is to meet the need to belong.

Third, the current study explored the reasons why individuals choose to move. The available studies show that residential mobility caused negative consequences greater than the positive consequences. The current study found that the individuals select residential mobility in order to pursue meaning in life by self-accomplishment, such as reflected self-value, or money. For the meaning of life, they can suffer negative emotion, such as loneliness, anxiety, insecurity, unstable. This may help answer a philosophical question that humans are living for their meaning in life.

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The Relationship Among Individualism/Collectivism, Autonomous Motivation and Employee Creativity of Newcomers in Careers¹

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[Abstract] *To explore the relationship among individualism/collectivism, autonomous motivation and employee creativity, 238 employees were surveyed, including 208 newcomers in careers and the mean working years were 1.69. The results showed that compared with the older employees, the newcomers had higher levels of employee creativity and autonomous motivation. The two dimensions of autonomous motivation, individualism and collectivism were significantly and positively correlated with creativity. Regression equation analysis showed that individualism significantly and positively predicted employee creativity, while collectivism had no predictive effect on creativity. The autonomous motivation had a mediating effect between individualism and creativity, in which identified motivation had a complete mediation effect while intrinsic motivation played a partial mediating role.*

[Keywords] *employee creativity; autonomous motivation; individualism/collectivism; newcomers in careers*

Introduction

With the development of society, employee creativity has become increasingly important in academia and business circles. Improving employee creativity is an essential condition to gain a competitive advantage (Amabile, 1988; Shalley, 1995). In the knowledge economy, an organization will be driven out of the market if the employees lack creativity (Shalley, Zhou & Oldham, 2004). Creativity is a classic topic in the field of psychology, while employee creativity is a more recent topic (Shalley & Zhou, 2010). In an early study, employee creativity was believed to be a novelty and useful in work situations (Amabile, Conti, Coon, Lazenby & Herron, 1996). Now it turns out to be the exploitation ability of a product, practice, service, and work flow (Zhou & Shalley, 2003). So, it can be an improvement in work flow, as well as a breakthrough of technics (George & Zhou, 2007). In this study, we focus on its application and its specific representation in real life, instead of the abstract and immensurable concepts such as creative thinking.

Researchers have suggested that production of creativity is influenced by the difference of the personality, and culture values. In general, people believe that individualism is more conducive to creativity than collectivism. Individualism identifies the self as automatic and separated from collectivity, however, collectivism grants responsibility and rules to the self in social situations in order to define it. Nowadays, individualism and collectivism also exist in the same culture as personal tendency differences, indicating

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that individualism and collectivism are two independent dimensions (Van Hooft & De Jong, 2009; Oyserman, 2002).

While individualism regards independence, freedom, and creativity, collectivism regards cooperation, obedience, and obligation. Uniqueness, autonomy, independence and spontaneity, which are emphasized in individualism, are factors that have an important effect on the novelty of creativity (Jones & Davis, 2000). Goncalo & Kim (2010) found that individualistic team members, based on equity (rather than evenness) to approve the reward system, will produce more and more novel ideas.

However, there are different views on the relations of creation and the tendency of individualism and collectivism. The research has shown those employees who cooperate closely to achieve common goals possess more creativity than those who do not cooperate (Bechtoldt, De Dreu, Nijstad, & Choi, 2010). A researcher on staff in China also found that the collective tendencies of employees had positive impact on their team's creativity (Qi, 2014).

Newcomers in careers generally refer those employees with working experience less than 3 years, and they are usually viewed as automatic, dependent and having high creativity tendencies (Wu, 2012). Previous studies have shown that individual autonomy is associated with autonomous support from the senior in a team (Mierlo, et al., 2006), while autonomous support can enhance individual creativity and job performance (Ryan & Deci, 2006; Liu, et al., 2010). Newcomers in China nowadays are usually late 90s' which have more individualistic tendencies. The aim of this research is to explore the effect of personal tendencies of individualism/collectivism on creativity in newcomers in China and whether the autonomous motivation has a mediation effect on individualism and creativity. We believe this kind of research could deepen the study of the relationship between people's value orientation and creativity under the modern Chinese culture, but also help enterprises to learn how to encourage employees with different careers in the context of China's culture.

Method

Participants

Convenient sampling method was used to collect data on a network platform. A total of 260 questionnaires were dispatched in which there were 238 valid questionnaires returned. Of the 238 questionnaires, 208 were classified as newcomers. The number of male employee was 116. Most of them were high educationists. The number of working in state-owned enterprises, private enterprises, foreign-funded enterprises, and government organizations and institutions were 74, 79, 31, and 24, respectively; for working nature, the numbers in technology, market, administrative services and manufacturing were 55, 63, 74, and 16, respectively.

Materials

Autonomic Motivation Scale. The Autonomic Motivation Scale (AMS) was the work's motivational subscale in the Motivation Rating Scale (Gagnè, Forest, Gilbert, Aube, Morin & Malorni, 2010). AMS was scored on a 5-point Likert scale from 1 (totally disagree) to 5 (fully agree), with six items divided into two dimensions: identity motivation, which refers to the employee's sense of consistency on their work to their self-concept, including three items, and intrinsic motivation, which refers to the staff's initiative to work from their own internal enthusiasm. In this study, the Cronbach's coefficient of the two dimensions and the scale were 0.732, 0.881, and 0.872.

Employee Creativity Scales. The Employee Creativity Scale (ECS) is a 5-point Likert scale scoring from 1 (totally disagree) to 5 (fully agree) evaluated from the senior employer, including 7 questions such as whether the employees could come up with creative ideas. The Chinese version of the ECS was developed by Su (2008) based on the original ECS composed by Tierney, Farmer, and George (1999) and used a self-evaluation method. In this study, the scale's Cronbach's coefficient was 0.952.

Individualism/Collectivism Orientation Scale. The Chinese version of the Individualism/Collectivism Orientation Scale was compiled by Van Hooft & DeJong (2009) and revised by Yu (2011). The 15-Item scale measures the individualism and collectivism orientation on a scale of 1 (totally disagree) to 6 (fully agree). The Individualism dimension consisted of seven items, such as "I want to know who I am", and "I can do it myself". Examples of items in the collectivism dimension was "Begin to know me from my colleagues". In this study, the Cronbach's coefficients were 0.766 and 0.827.

Data Analysis

Since all methods used in this study were self-reported, the same characteristics of the measurement environment may lead to common method bias. The data were subjected to the Harman single factor test. The factor analysis of all scores showed the explanation rate of primary component was 41%, which barely met the standard, so the impact of common method bias was not considered. Multivariate analysis and regression were computed.

Results

Demographic Variables Analysis

Multivariate analysis included 5 demographic variables: gender, education, working age, organization type, and nature of work. We found significant main effects: (1) in autonomous motivation for education ($F=16.006, p<.01$), working age ($F=10.019, p<.01$), organization type ($F=12.313, p<.01$), and nature of work ($F=11.463, p<.01$); (2) in employee creativity for education ($F=2.271, p>.05$), organization type ($F=22.028, p<.01$), and nature of work ($F=68.903, p<.01$); (3) in individualism and collectivism for education ($F=3.597, p<.05; F=6.086, p<.01$), working age ($F=12.32, p<.01; F=5.883, p<.01$), and nature of work ($F=12.984, p<.01; F=8.085, p<.01$); and collectivism for organization type ($F=17.426, p<.01$).

Correlation Analysis

As predicted, the autonomous motivation ($t = 4.092, df = 206, p = 0.000$) of newcomers was significantly higher than that of non-newcomers. The correlation of individual motivation, individualism, collectivism and the employee creativity are shown in Table 1.

Table 1. Correlation Matrix

	1	2	3	4	5
1 Identity Motivation	1				
2 Intrinsic Motivation	.481**	1			
3 Autonomous Motivation	.867**	.854**	1		
4 Individualism	.317**	.567**	.510**	1	
5 Collectivism	.350**	.546**	.518**	.561**	1
6 Employee Creativity	.632**	.381**	.582**	.299**	.199**

Note. * $p<.05$. ** $p<.01$

Both identity motivation and intrinsic motivation had positive and significant correlations with individualism, collectivism and employee creativity and individualism and collectivism were positive significantly correlated with employee creativity.

Autonomous Motivation and Individualism/Collectivism as a Predictor of Employee Creativity

Table 2. Regression Analysis for Autonomous Motivation and Individualism/Collectivism Predicting Employee Creativity

	β	R^2	ΔR^2		β	R^2	ΔR^2
The first layer		.115					
Gender	-.028				.014	.115	
Education	.016				-.014		
Working Age	-.103				.025		
Organization Type	.046				.246		
Nature of Work	.072				.168		
The second layer							
Identity Motivation	.122*	.217	.102*	Individualism	.189**	.134	.019**
Intrinsic Motivation	.582**	.413	.298**	Collectivism	.094	.145	.030

Two linear regressions were conducted to determine whether autonomous motivation individualism/collectivism predicted employee creativity separately after controlling demographic variables (see Table 2). The results showed that employee creativity was significantly predicted by identity motivation ($\beta=.122, p<.05$) and intrinsic motivation ($\beta=.582, p<.01$), explaining added variances of employee creativity of 10.2% and 29.8% after controlling for five demographic variables. Employee creativity was also significantly predicted by individualism ($\beta=.189, p<.01$), while the predictive effect of collectivism was not significant ($\beta=.094, p>.05$).

The Mediating Role of Autonomous Motivation on the Relationship Between Individualism and Employee Creativity

Since collectivism did not have a significant predictive effect on employee creativity, collectivism’s mediating effect was eliminated. Linear regression analysis was conducted to test the mediation effect of autonomous motivation on the relationship between individualism and employee creativity (see Table 3).

Table 3. Mediating Effect Test of Autonomous Motivation in Individualism Predicting Employee Creativity

Path		β	R^2	ΔR^2
The mediating role of Identity Motivation	a(Sa)	.567**	.322	.318**
	b(Sb)	.312**	.089	.085**
	c(Sc)	.122	.155	.147
The mediating role of Intrinsic Motivation	a(Sa)	.317**	.101	.096**
	b(Sb)	.598**	.411	.405**
	c(Sc)	.109	.089	.085*

The results showed that (1) after entering identity motivation, the predictive effect of individualism on employee creativity was not significant, which indicated a wholly mediating effect of identity motivation on employee creativity; (2) after entering intrinsic motivation, the predictive effect of individualism on employee creativity was not significant, which indicated that intrinsic motivation had a wholly mediating effect on employee creativity.

Discussion

Working Characteristics of Newcomers in Careers

The results showed a significant difference in autonomous motivation and employee creativity between newcomers and non-newcomers in careers and newcomers had higher autonomous motivation. Newcomers in careers had more curiosity and expectations in their work so they were willing to take the initiative to accept the challenges of heavy tasks in order to incarnate the value of their own and to gain achievement satisfaction, which made a higher autonomous motivation than non- newcomers.

In addition, education had a significant effect on autonomous motivation, employee creativity, individualism, and collectivism, indicating that the higher level of education, the higher autonomous motivation and employee creativity. The results suggested that education could develop creativity (Cai, 2001). Organization type had a significant effect on autonomous motivation, which was consistent with previous research (Chen, 2012) that the newcomers in enterprises had higher autonomous motivation.

Relationship between Individualism /Collectivism, Autonomous Motivation and Employee Creativity

The data showed that both individualism and collectivism were positive significantly correlated with employee creativity. There is a great deal of research on the impact of individualism on creativity in that individualism included public expression of views, emphasis on autonomy, independence, and multiculturalism (Jones & Davis, 2000; Goncalo & Staw, 2006). In contrast, collectivism culture has diversity including the characteristics of individualism and collectivism. Besides, collectivism emphasizes the team consistency and interdependence, encouraging the members to consider the pressure of the herd and other people's ideas, which will help members to cooperate better when they accomplish common goals. In the case of corresponding to team norms and team benefits, the cohesion will become stronger and ultimately conducive to produce more novel ideas in the fierce discussion, accompanied by increasing the employee creativity (Qi, 2014).

While excluding the effect of demographic variables, employee creativity was significantly predicted by individualism, but the predictive effect of collectivism on employee creativity was not significant. It might be that in this study most of the participants were newcomers in careers, whose individualism was significantly stronger.

Mediating Role of Autonomous Motivation on the Relationship between Individualism and Employee Creativity

The results showed that both identified motivation and intrinsic motivation had mediating effects on the relationship between individualism and employee creativity. Individualism made employees more creative by allowing them to work more in recognition of the work and work on the intrinsic enthusiasm, which can put the employees to produce more ideas on work, which is more creative (Jones & Davis, 2000).

The spontaneity and independence of a high individualistic style often means that these employees have higher professional skills, which constitutes an important component of employee creativity. In other words, individuals with high individualism tend to be more engaged in their work, and they will be able to think more about their work from different views, which will evolve into meaningful ideas and improve their professionalism. Eventually, these will evolve into workflow improvements, or breakthroughs.

Conclusion

This research indicated that newcomers had different characteristics in working so managers need to develop appropriate management methods to ultimately allow their creativity to flow at work. There are also several limitations in this study. For example, we focused on the newcomers in careers while overlooking the non-newcomers. We only investigated 30 employees with more than 3 years of working age. Therefore, we cannot know whether the predictive effect of individualism is only restricted to newcomers in careers.

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The Research on Cultural Perspective for the Virtual Survival of Undergraduates

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[Abstract] *With the comprehensive infiltration of information and network technology, the virtual survival of undergraduates has inevitably become a cultural phenomenon. With the guidance of the Marxism spirit of human concern and cultural psychology style, this paper conducts an in-depth analysis on the sorts of situations, and presents a theory structuring on the regulation from a cultural perspective. This paper gets original data from questionnaires done by 678 students from Zhejiang University of Finance & Economics, and preprocesses the initial data into useful data. Then the differences between six contents of the Internet are confirmed by chi-square test. This paper proposes a possible way of establishing a virtual survival space with the spirit of humanistic concern and a cultural atmosphere.*

[Keywords] *virtual survival of undergraduates; ethic regulation; humanistic concern*

Introduction

With the comprehensive infiltration of information and network technology, a new form of survival called virtual survival of undergraduates has inevitably become an important survival method and a cultural phenomenon (Mao, 2016). Virtual survival of undergraduates is a kind of living activity which is based on the real world of college students but it goes beyond the real world. Surviving in this kind of state, removal or hiding the physiological characteristics of college students as a physical object, or even hiding or creating their own actual identities, undergraduates can engage successfully in virtual economic, political, cultural and other social activities with the aid of the computer network (Lei, 2016). Virtual survival should be based on the reality of the objective world, and should not be separated from the natural physical environment (Zhu Zhang, 2001). According to this, this author believes that the primary characteristic of undergraduates' virtual existence is the coexistence of virtual reality and reality. Compared with the reality of life, transcendence is the second characteristic. Meanwhile, transcendence is not without restrictions; it is subject to certain constraints, so the conditionality is the third characteristic of virtual survival (Liu, 2015).

In this study, we focus on the connotation and characteristics of the virtual survival of undergraduates, and considering it as a cultural phenomenon, we discuss the positive humanistic significance of undergraduates' virtual survival. However, besides the momentous current cultural significance and far-reaching historical significance of virtual survival, it also has its inactive effort.

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Facing these negative problems, we construct beneficial ways to solve these problems. One of them is to construct an ethic regulation for the virtual survival of undergraduates from a cultural perspective. Specifically, in line with the functionalist method of ethic regulation, we present that undergraduates' virtual survival ethics should follow the perspective of humanistic care – creating a cultural atmosphere in virtual survival (Wang, 2007).

The paper is organized as follows. Theoretical background contains the revaluations on undergraduates' virtual survival, the connotations, characteristics and positive humanistic significance of undergraduates' virtual survival. The section of the ethical misconduct of undergraduates' virtual survival mainly discusses the negative consequences. The method section introduces a possible way to deal with these problems. The conclusion section is where we summarize the research, abstract the significance for inquiry and practice, and admit limitations that refer to future research direction.

Theoretical Background

The virtual survival of undergraduates is considered a new kind of living activity and it is also a fashionable cultural phenomenon; it has played the main role of undergraduates. Based on the humanistic concern spirit of Marxism, the most important point is to examine the positive significance of undergraduates' virtual survival, which gives full play to the subjective initiative of college students. “Angry Birds”, for example, is considered one of the favorite games for college students. It was developed by Finland-based Rovio Mobile as a casual puzzle game. The game is full of 2D cartoon pictures. You can get pleasure from watching the angry red bird thrown to the fortress of the green pig regardless of its personal danger. A feeling of joy, a relaxed rhythm, and the cheerful style of the game make people feel relaxed. In March 18, 2016, the United Nations Secretary General Pan Wenji instituted a ban on the appointment of the game's red bird for the green honor master. Obviously, for modern people, it has become a kind of psychological real experience, but it is also a symbol of our culture. For another example, “QQ Happy Farm” is also a manifestation of our culture. Players feel the realization of self-value in the process of their self-farm. A variety of crops and farms are presented with fresh and beautiful scenery is very attractive in the Virtual farm, and it allows college students to narrow the psychological distance between each other.

Virtual survival has fully promoted the free and comprehensive development of college students' personalities. It provides a wider stage for the all-round and free development of their personalities (Yang, 2010). The text has mentioned before that the ultimate goal of the spiritual pursuit of Marx's humanistic care is to realize the free and comprehensive development of humanism.

In virtual survival, the personality of undergraduates has unprecedented publicity. The self presented in the network is what they expect often. It can't be a way to do so in the face of the self between the real world by the life of the process and its social relations (Huo, 2008). MUD (Multiple User Domain) is a major college-oriented role-playing game for players according to the characteristics of their own interests in playing different roles in reality and it provides a wide stage for the students. When you enter the MUD, you can create one or more characters, and give them special, somewhat physical and psychological characteristics; the other players in the MUD can also see these descriptions. In reality, you might be one of the elegant and refined scholars, but in the MUD, you can become a heroic, martial artist. In reality, you may be a man of enormous strength, but in MUD you can become an exquisitely dainty and ravishingly beautiful woman. College students show their own distinct personalities in virtual survival, which are deep in the heart of the real world.

Virtual survival fully meets the needs of undergraduates' self-realization. Most importantly, virtual survival of the undergraduates' spiritual life satisfaction is reflected in the respect of the various concepts of the undergraduates' changes, such as the concept of existence, time and space and the concept of communication and so on. The planned blueprint, goals, methods and steps of the undergraduates' activities are reflected in the purpose of awareness activities and planning. Undergraduates are trying to use their imaginations and a variety of symbolic systems, to break the reality of life activities, with perceptual intuitive reality, by virtue of virtual ability to open up a more abundant, wide world(Zeng, 2009). For example, in a virtual space, you can easily enter the world famous Le Louvre museum to look at the world-famous paintings; you can also be made in virtual organizations previously due to geographic and working relationships and gain access individuals and groups. This reflects the humanistic care spirit of Marx's humanism, which has always attached great importance to the development of human's spiritual potential.

The Survey Study on Ethical Misconduct

As a new kind of living state, virtual survival provides a hitherto unknown development space and opportunity for young college students, but it is also a double-edged sword, which plays a negative role on the students' free and comprehensive development and leads to the birth of Ethics Anomie (Wang, 2010). In order to illustrate the problem, we took original data from questionnaires done by 678 students from Zhejiang University of Finance & Economics, and pre-processed it into useful data. In Table 1, we classify the extent of the Internet time into 4 levels: never, occasionally, often, and always. Meanwhile, the content of the Internet time includes studying, chanting, and playing games, etc. In Table 2, we show the data statistics; we know that the percentage of playing on the Internet is high compared to the percentage of studying. Meanwhile, we tested the difference between six contents of the Internet by using chi-square test. If $P < 0.05$, there is an apparent difference between the learning style and other styles of college students on the internet, and it will generate negative results.

First, there is the alienation of subject value. There is no doubt that the virtual existence has brought a lot of convenience to the life and study of undergraduates. However, the main information provided by the network is objective information and knowledge. In addition, for the college students, the more important values and ideas of the real world can not be learned from the network, which leads to the alienation of subject value among the undergraduates (Sadikoglu, 2015).

Second, there is the alienation of network technology. With the rapid development of network technology, it is more humanized and convenient, and people, especially college students of excessive dependence and idolatry, lead to conflict in survival and survival purposes, as well as the paradox of technology existence and humanity survival (Rowe, 2012).

Table 1. The Percentage of the Internet Time

Content Extent	Studying	Playing Games	Chanting	Shopping	Video	Music
Never	21.6%	8.6%	2.2%	5.7%	10.6%	8.4%
Occasionally	34.2%	20.3%	46.8%	31.8%	10.4%	64.6%
Often	38.3%	43.7%	37.6%	48.8%	28.2%	22.8%
Always	5.9%	27.4%	13.4%	13.7%	50.8%	4.2%

Third, there is information environment pollution. With the development of contemporary information, and digital media, it has emancipated and developed human intelligence greatly.

Meanwhile, there is also a great amount of “information pollution”. As a special social group of undergraduates, the worship of information has resulted in an information explosion. A large number of false spam seriously pollutes the virtual space, and interferes with normal life. The information not only does not promote or improve the information development of the main body, but causes the rights of self to be given up or the loss of control of the students’ own information rights, such as false news, rumors, pornography and so on, which has a negative impact on undergraduate s(Wang, 2010).

Table 2. Differences between Content of the Internet by Using Chi-Square

	Content	Differences
Studying	Playing Games	$\chi^2(3) = 22.884$ (p = 0.001)
	Chanting	$\chi^2(3) = 21.3329$ (p = 0.001)
	Shopping	$\chi^2(3) = 13.790$ (p = 0.003)
	Video	$\chi^2(3) = 53.799$ (p = 0.001)
	Music	$\chi^2(3) = 20.329$ (p = 0.002)

Methodological Analysis

Based on Table 1, we know that the percentage of “always” was only 5.9% of “studying”, while the percentage of playing games is 27.4%, and 50.8% of students are watching videos. In Table 2, we know $P < 0.05$, and there are apparent differences between the learning style and other styles. These data remind us of the phenomenon that college students are addicted to the Internet, so we should focus on a method of how to deal with the problems positively.

First, it is very important to create a cultural atmosphere from the perspective of humanistic care. There is numerous network information on undergraduates’ virtual survival, which affects the college students’ cognition and judgment, the formation of personality, and is even directly related to their values. So, it is very important to purify the network information environment, and to provide the students with high quality information resources. It is very critical to use high quality information resources to occupy the position of Internet Culture, including the development of science and technology, and academic websites, digital library, digital museum. It is also very important for the construction of network information resources to promote the socialist core values and national culture, and to strengthen the information portal entrance and content display function etc.

Second, college students need to explore, to be fearless, to seek truth, and to innovate, encouraged by the spirit of science. Humanistic spirit can purify the hearts of college students, enhance the cultural character of college students and at the ideological level, make it become a broad mind, the spirit of harmony, good taste, personality and independent, self-discipline has not lost its people’s ultimate goal (Wang, 2011). For example, on January 27, 2008, during the ninth session of the Human Brain vs. a Computer Chess contest, the strongest one in the world with four sets of computer program with a score of 5:4 was defeated by a eight plus three of seven segments of professional ability, and thus it can not reach a conclusion that the digital computer beat the man, because the computer is the creation of man, the professional player created the computer “program”; the computer is only in the execution of the instruction, and the creation process of computer programs is based on the profound reflection of chess in this activity. The virtual existence of this new survival style shows that with the development of practice, constant adjustments, updates and improvements, the people’s thinking structure is all very important. In the virtual world, the living space will bring students a new world even if the students always keep in mind that their responsibility and obligations are to the reality of human society, keeping

their subjectivity and rational spirit, never forgetting to pursue the value and meaning of life (Wang, 2011).

Conclusion

With the rapid development of science and technology, people's lives will be filled with more and more digital elements. Virtual survival has formed a kind of special social cultural phenomenon, which represents a way of life. It is a product the modern technology revolution accompanied by the computer all the time, which has infiltrated the strong spirit of science. The significance of the research on the psychological changes of college students in this special cultural phenomenon is long and profound, and we should do more related investigation from the cultural perspective.

When we are in the process of understanding and studying college students' virtual survival, on the one hand, we should not "forget" the spirit of humane care while science and technology are developing. If there is no spirit of humane care in the development of science and technology, there will be a loss of ethics. On the other hand, we should not deny the necessity and importance of the development of science and technology under the guise of "humanism" nominal tendency (Zhang, 2011). The ethics statute of the rational humanistic care spirit enhances the happiness index of college students' lives through the development of science and technology intrinsically. Therefore, based on a rational look on the dual latitude between the spirit of science and technology and humane care of the virtual survival of undergraduates, it is particularly important and also a cultural requirement. However, in this passage we only discussed the views from the aspect of cultural psychology; more research on this topic is guaranteed.

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Mechanism Underlying the Matching Effect Between Construal Level and Goal Framing

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[Abstract] Recently many studies have focused on the matching effect between regulatory focus and goal framing on persuasion. Based on these studies, some researchers have also examined the matching effect between construal level and goal framing. The results have indicated that the matching effect between construal level and goal framing had a positive effect on persuasion. Likewise, when a low-level construal and high-level construal were respectively matched with loss framing and gain framing, people were more likely to be persuaded by the information. The purpose of this paper is to explore the mechanism underlying this matching effect. The results suggested that the processing fluency acted as a mediator on the matching effect between construal level and goal framing. This study had some theoretical and actionable implications for attitudes.

[Keywords] *construal level; goal framing; matching effect; fluency*

Introduction

Many works have indicated that people could construe behaviors in ways that are more concrete or more abstract and suggested that construal level (concrete vs. abstract) was an important determinant of the success of loss versus gain goal framing. This meant that loss frames were more efficacious when paired with low-level, concrete mind-sets, whereas gain frames were more effective when paired with high-level, abstract mind-sets. Some studies on regulatory fit effects proposed this because a match of regulatory focus with goal framing led to greater fluency, which ultimately led to positive attitudes. In other words, fluency made people “feel right” about whatever they were doing, and thus, had a broad influence on judgments and decision making, attitude and behavior change, and task performance (Higgins, 2005). Then, what’s the mechanism underlying the matching effect between construal level and goal framing? Based on previous researches about regulatory fit, this study followed as an in-depth examination of the nature of this matching effect. The study here also tries to provide a substantive applied contribution by identifying practical solutions to influencing individuals’ attitudes.

Conceptual Background and Hypotheses

Construal Level and Attitudes

Construal Level Theory (CLT) is a theory about the mental representational state. CLT divides mental construals into two levels: the low-level and the high-level. According to CLT, individuals use concrete, low-level construals to represent near events, and abstract, high-level construals to represent distant events. A low-level construal is more concrete in terms of specific, subordinate, and contextualized features, whereas a high-level construal is more abstract in that it represents events in terms of general, superordinate, and decontextualized features (Liberman & Trope, 1998; Trope & Liberman, 2000, 2003). Low-level construals highlight the means or resources used to reach the end-state of an action, that is, how or with what process one acts. Therefore, concrete and local features of an attitude target are represented at low level. On the contrary, high-level construals emphasize the values of an action’s end-state, that is, why or

with what effect one acts. Thus, abstract and global features of an attitude target are represented at high level (Lee, 2012).

Goal Framing and Attitudes

Among the various information features that might influence the degree of information processing, one natural feature is whether the appeals of the information are gain-framed or loss-framed. Goal-framing effects occur when the persuasive information has different appeal depending on whether it stresses the positive (desirable) consequences of performing an act to achieve a particular goal or the negative (undesirable) consequences of not performing the act (Levin, et al., 1998). Most, prior work has suggested that people tend to choose positive results but avoid negative results (loss aversion), thus loss-framed information is more persuasive than gain-framed information (Higgins, 2000, 2002; Lee & Aaker, 2004).

Matching Effect Between Construal Level and Goal Framing

In a situation with a negative, undesirable end state (loss framing), people would consider specific means of action alternatives by which they could increase a chance to steer away from the undesirable end state, feasibility concerns, which reflect “how aspects” of an action, would be stressed. People would focus on local details of the means and adopt concrete processing of action alternatives; that is, people would avoid negative, undesirable consequences by using low-level construals. In contrast, in the situation with a positive, desirable end state (gain framing), desirability concerns which reflect “why aspects” of an action would be highlighted (Förster & Higgins, 2005; Lee, et al., 2010; Chandran & Menon, 2004). Some studies have indicated that there is a matching effect between construal level and goal framing (White, et al., 2011; Lee, 2012; O’Connor, 2012).

Mechanism Underlying the Matching Effect

When forming our attitudes, we have access to both external cues about the world and internal meta-cognitive cues about our own mental processes. Fluency is defined as a subjective experience of ease or difficulty associated with a mental process. In other words, fluency isn’t the process itself but, rather, information about how efficient or easy that process feels (Oppenheimer, 2008). Many studies about regulatory fit have demonstrated that the fluency play a mediational role in fit effects. Following from the preceding discussion, this study also proposed that a match with a loss (gain) and more concrete (abstract) thinking might lead to enhanced fluency or ease of understanding and processing information (Lee & Aaker, 2004; Lee & Labroo, 2004).

We hypothesize here as follows:

H1. Fluency acts as a mediator between the matching effect and individual intention.

Method

Participants

A total of 180 college students participated in this study. Of all participants, 87.8% ($n = 158$) were female. They were randomly assigned to one of four manipulated conditions.

Materials and Procedure

This study was a 2 (construal level: low vs. high) \times 2 (goal framing: loss vs. gain) between-subjects design. The dependent variable was the individual’s environmental protection intention. Participants were to complete all the tasks on the computers throughout the whole experiment. They were first randomly

assigned to plan “how” they could implement an activity or to consider “why” they would engage in the activity (Freitas, et al., 2004). In the manipulation of a low-level construal, the statement “*Maintain good physical health*” appeared at the top of the computer screen and the question, “*How do I maintain good physical health?*” was at the bottom. The question and statement were connected by four vertically aligned boxes with downward arrows labeled “how.” Participants filled them in starting at the top and worked down to the bottom. The above process was designed to activate concrete mind-sets. In the contrast, during the high-level construal manipulation, the top of the screen displayed the following question, “*Why do I maintain good physical health?*” Meanwhile, the bottom of the screen displayed the following statement, “*Maintain good physical health.*” The question and statement were connected by four vertically aligned boxes with upward arrows labeled “why.” Participants filled in the boxes starting at the bottom and worked up to the top, a procedure that was expected to activate abstract mind-sets (De Martino, et al., 2006).

Then the participants randomly received framing information. The manipulation of goal framing either highlighted a loss-framed: (“*Think about what will be lost if you don’t participate in the environmental protection activities*”) or a gain-framed (“*Think about what will be gained if you participate in the environmental protection activities*”) information.

We used a self-designed questionnaire to examine the fluency. There were three questions, such as, “*I feel difficult to comprehend this reading materials.*” The sequence of questions was random in order to eliminate the impact of question-answer sequence. The responses were obtained on a five-point Likert scale from *very difficult* (1) to *very easy* (5). The coefficient of internal consistency of this questionnaire was 0.712.

We also developed a questionnaire to examine the participants’ environmental protection intentions. There were five questions, for instance, “*How much you are willing to participate in this activity?*” The sequence of questions was random in order to eliminate the impact of question-answer sequence. The responses were obtained on a five-point Likert scale from *strongly unwilling* (1) to *strongly willing* (5). The coefficient of internal consistency of this questionnaire was 0.765.

After completing the above tasks, participants were debriefed and thanked for their participation.

Data Analysis and Results

We finally collected 180 surveys, 2 responses were deleted. For further data analysis, 178 responses were used. Of all the respondents, 88.8% ($n = 158$) were female.

Correlation Analysis

The following table shows that the interaction of construal level and goal framing was significantly related to environmental protection intention. This result verified the matching effect between construal level and goal framing in accordance with earlier studies.

The results also reported that the interaction of construal level and goal framing was significantly related to the fluency; the fluency was significantly related to the environmental protection intention. These two correlations suggested the fluency acts as a mediator between the matching effect and the individual intention.

Table 1. The Correlation Coefficients between Variables

	1	2	3	4	5
1 Construal level	1				
2 Goal framing	-0.153*	1			
3 Fluency	-0.188*	0.266*	1		
4 Construal level × goal framing	-0.032	0.041	0.201*	1	
5 Individual intention	0.100*	0.187*	0.187*	0.240**	1

Note: * $p < 0.05$; ** $p < 0.01$, the same below.

Two-Stage Regression Analysis

We used multiple hierarchical regression analysis in the first step: the independent variables and the interaction term were all put into the regression equation in the first layer (Model 1); and the mediator variable was put into the regression equation in the second one (Model 2). Then we used multiple regression analysis in the second step (Model 3).

We also found that the interaction of construal level and goal framing had a significant effect on environmental protection intention. The results here showed the direct effect was 0.129, and the mediating effect was 0.049 which accounted for 27.4% of the total effect. This revealed that the fluency had a mediating effect on the relationship between the matching effect and the individual intention.

Table 2. Two-Stage Regression Analysis

	First stage regression		Second stage regression
	Model 1 <i>Intention</i>	Model 2 <i>Intention</i>	Model 3 <i>Fluency</i>
Construal level	0.154*	0.178*	-0.150*
Goal framing	0.249**	0.209**	0.253*
Construal level × goal framing	0.179*	0.129*	0.314**
Fluency		0.157*	

The Path Model and Hypotheses Test

According to the results of regression analysis, the path model was constructed. $\chi^2(3) = 0.955$, $p = 0.812$, $\chi^2/df = 0.318$, GFI=0.997, CFI=1.000, and RMSEA=0.000. All the above results indicated that the final path model fitted well. Thus, H1 was obviously supported. The model could be seen in Figure 1.

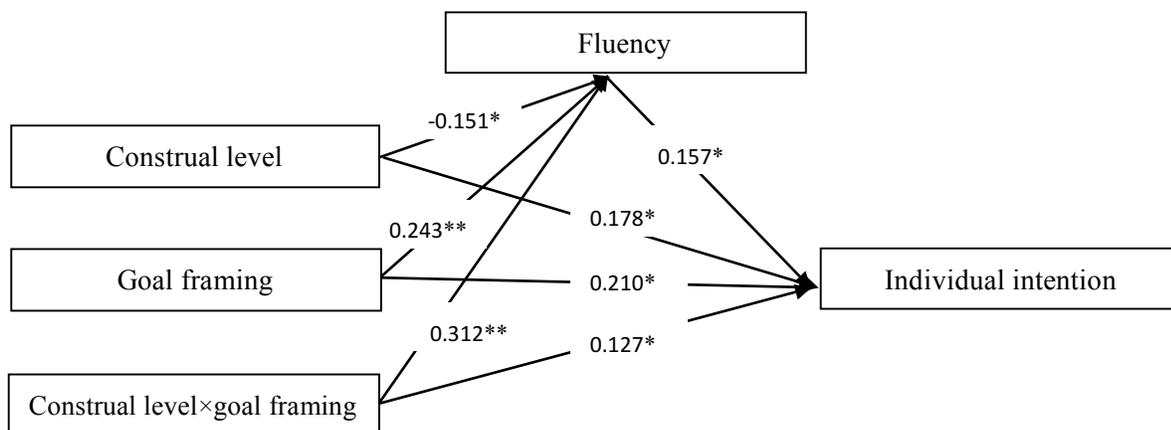


Figure 1. Path Model and Path Coefficients.

Conclusion and Discussion

The current study investigated the mechanism underlying the matching effect between construal level and goal framing. More specifically, this study confirmed that fluency acted as a mediator between the matching effect and individual intention. In other words, processing matching information (high level construal and gain frame, low level construal and loss frame) was more likely than mismatching information (high level construal and loss frame, low level construal and gain frame) to enhance the processing fluency of the information, and this enhanced fluency would induce more favorable individual intentions. The study here provides a deeper understanding of how a specific match in construal level and goal framing which provides the identified benefits. This builds on prior work (e.g., Lee & Aaker, 2004) by showing an important downstream consequence of fluency. An important outcome of enhanced processing fluency was a feeling of ease, which in turn may lead to more positive intentions and behaviors.

All the conclusions had managerial implications for marketing managers and policymakers in that it suggested a strategic way to use construal level and message frames to enhance marketing communication and advertising effectiveness. By strategically combining particular goal framing which matched with the appropriate construal level of the persuasive information, persuaders might be able to tailor persuasive information by which they could better communicate with information receivers, and then enhanced communication effectiveness.

Finally, a main limitation of this study should be noted. The study didn't examine other potential mediators such as involvement, mood, and regulatory focus which might account for the results. The study also didn't investigate the potential moderating variables which might affect the matching effect. These above-mentioned questions need to be explored in future studies.

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A Topical Structure Analysis on Chinese Aging Study and Practice in the View of Culture Psychology

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***[Abstract]** With the method of social network, this research analyzed all the publications from the data of CSSCI since 1998 on gerontology study. The results showed that America was a topic beyond all expectation, mainly relating to elderly care and lifestyle. There were several key psychological topics, such as life satisfaction and subjective well-being, but the study of the meaning of life was lacking. The formulation of older industries and the elderly market was mainly confined in sociology of aging, while the researchers seldom considered the quality of life such as the mental health of the elderly. Meanwhile, the influence of culture received little attention on the study of the elderly in Chinese publications, which might be very important topics for the aged living in a caring house.*

***[Keywords]** topical structure analysis; aging study; life motivation*

Introduction

As the number of old people in China is increasing, the problem of the elderly has become one of the much-talked-about topics in Chinese society. Because of the delayed development of psychology in China, many researchers might care about the process of Chinese Aging Psychology, which should include its occurrence and development. This article analyzes documents of study on Chinese Aging Psychology from the past twenty years. Furthermore, based on the practice of in a Chinese geracomium, this research tries to explore the shortcomings and the trends in Chinese Aging Psychology.

Data Sources

The authors first used the Chinese Social Science Citation Index (CSSCI) as a data source to collect all the research documents published on CSSCI (as of July 15, 2016) from 1998 to 2016 by inputting “old age” as index word in the method of title names or inputting “psychology for aging” as index word in the method of key words. The result is that we obtained 1898 published documents about aging research in psychology and sociology from 1998 to 2016 (Nanjing University, 2016). Second, the authors investigated all of the aging people in a Chinese geracomium called Rui Fu An in Wuchang, lasting for more than one year to deeply interview 25 elders one-by-one.

Research Framework and Method

The first step was data processing. The authors pre-treated the collected documents in Excel, and quantitatively analyzed the publication institutions, issue years, publication journals and journal distributions of research results; meanwhile, we also employed bibliometrics methods to count the documents' basic information and keywords, processing the word frequency analysis. After that, co-words

analysis was applied to obtain high frequency words and key words co-concurrence matrix in the process of further treating the statistic results.

The Second step is map drawing. The authors imported the co-concurrence matrix into Ucinet, which generated key words clustering network diagram. Thirdly, the authors combined the result of social network analysis and the practice in the geracomium to analyze the aging research theme trend in the future.

Quantitative Analysis of Research Results' General Overview

Issued Institution Distribution

Publication institution distribution in CSSCI can generally depict the research strength distribution of domestic research of old age and aging psychology, providing relevant research institutions' cooperation and communication with resources. The result illustrates that there were 126 research institutions publishing relevant research papers, while 101 of them published 4 or more, occupying 64.17% of overall published papers (Nanjing University, 2016). Recent documents quantity can reflect talent flow and development tendency. There were 13 institutions issuing over 110 documents in nearly 6 years. Precisely, Wuhan University which issues 18 papers is the important research institution of gerontology study in the South part of Yangtze River, ranking fourth in China and the first in the southern part and even the central part of China. Renmin University of China (RUC), on the other hand, holds a safe lead in the number of published paper and is the center of China gerontology study.

Analysis of Issued Years Distribution

Issued years distribution is partly an indicator to research state, research level, development speed and development stage of a specific research field. This article mainly counts issued years distribution tendency of domestic research of gerontology and aging psychology from 1998 to 2015 (Nanjing University, 2016), because publications of 2016 in CSSCI are not reflected overall (Figure 1). It is obvious that since 2010 China has already stepped into a high-speed development of gerontology and aging psychology research, and reached a climax in 2014. Recently, it has been in a smooth speed which is a sign that a mature stage has come.

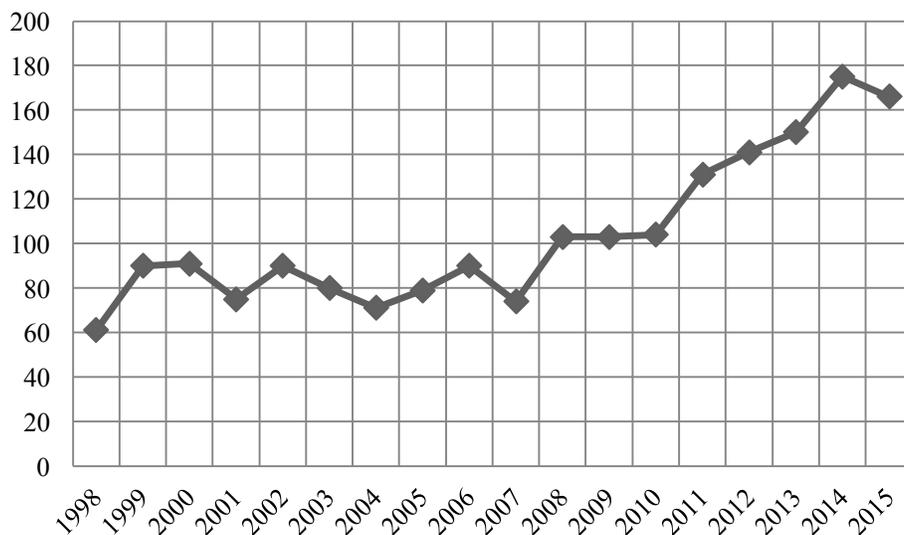


Figure 1. 1998-2015 Elderly and Elderly Psychology Research Annual Post Trend

Analysis of Distribution Years of Publication Institution

If we combined the publication institutions and publication years, we can have a better perspective of talent flow and development tendency (Figure 2). The figure shows Wuhan University and Jilin University are the ones which are developing most rapidly.

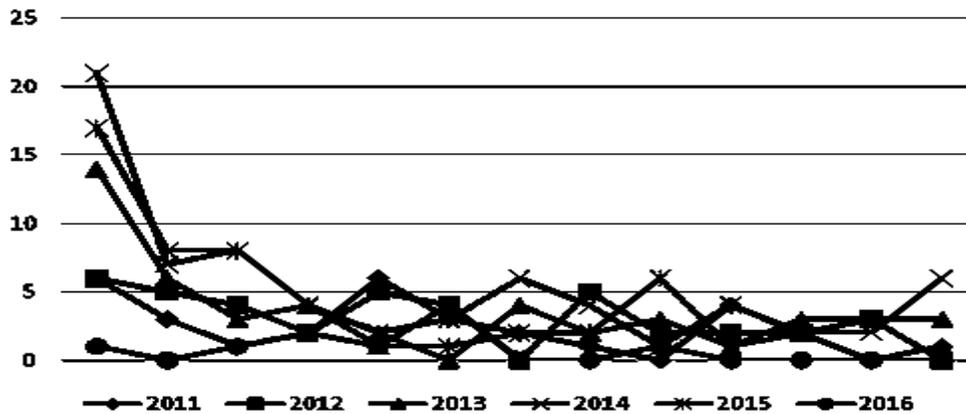


Figure 2. Annual Distribution of Years of Issued Institution about the Elderly and Aging Psychology

Publication Journal Distribution Analysis

There are 10 journals that issued over 40 papers about gerontology and aging psychology, and the ranking list and specific statistical data are shown in Figure 4, which clearly demonstrates that demography journals are the main source. This situation is related to research themes and domestic distribution of periodical room on one hand, and on the other hand, Chinese mental health journal pays close attention to aging psychology. Because of the limited number of psychology periodicals, psychology journals take up 1 to 2 in every 10 periodicals, such as China Journal of Clinical psychology (issued 34 papers) ranks the 14th, Psychology Science (issued 30 papers) ranks 15, Acta Psychologica Sinica and Advances in Psychological Science (both issued 13 papers) were ties 24th, as well as Studies of psychology and behavior and psychological development and Education (both issued 10 papers) are tied for 31st. It is necessary to note that these 6 journals are the only psychology journals in CSSCI. For this aspect, domestic psychological circle does not ignore studies of aging psychology, but pay proportional attention.

Quotation

From the point of importance of research, published results (including books) in the CSSCI that have been cited more than 10 times are:

- The one that ranks the first is *Chinese Urban and Rural Elderly Population Situation of One-Time Sampling Survey Data Analysis* (China's old-age scientific research center, 2003), which has been cited 17 times.
- The one that ranks second is *The Change of the Chinese Family and the Elderly Living Arrangement* (Zeng, 2004), which has been cited 13 times. There are three other documents that share second place, including *China Urban and Rural Elderly Population Status Tracking Survey Data Analysis* (Guo, 2006), *Study of China's Rural Endowment Will and Endowment Way* (Li, 2004), *Children of Intergenerational Support Behavior Research on the Influence of the Rural Elderly Life Satisfaction* (Zhang, 2005).
- There are 2 papers tied for fifth, *China Life Self-Care Ability and Changes of the Old* (Du, 2006), and *Influencing Factors of China's Elderly Living Ways* (Guo, 2002), both cited 12 times.

In this diagram, connected lines represent numbers of co-occurrence, nodes represent keywords. The more connected lines, the more numbers of occurrence. Hence, the times of occurrence are shown by line density.

As shown in this diagram, there are many psychological variables in Chinese aging study, such as *the degree of life satisfaction, life quality, mental health, lifespan development, subjective well-being, need, positive aging, loneliness, happiness, depression, cognition, Aging Psychology, aging depression, Alzheimer disease* and so on. They are all connected with the aged, and some of them connected with each other. What this research focused on is the topic structure, including the variables' positions, connections and the vacancy of the topics.

The Trend Analysis Based on the Practice

As you can see in Figure 3, in the study of the elderly in China, the United States was a topic, mainly about elderly care and lifestyle; there are life satisfaction and subjective well-being researches, but a lack of studies on the meaning of life (Schnell & Becker, 2006); as for the formulation of older industries, the elderly market mainly stays in the aging society structure; it is not combined with key requirement of the elders such as subjective well-being and mental health (Elliot, & Thrash, et al., 2011); the role of culture in the study of elderly gets almost no attention, especially on social motivation and emotion (Elliot, & Sedikides, et al., 2012; Gebauer, & Wagner, et al., 2013; Nikitin, & Schoch, et al., 2014). The future time perspective, which recently became an important variable in aging psychology, also was paid little attention to (Lang & Carstensen, 2002). The circumstances, in which the United States is a reference and is void of outstanding cultural variables, illustrates that current cultural studies mostly remain still at the stage of spontaneous cross-cultural reference, but there are no geriatric researches that consciously build cultural psychology (Berry, 2002).

Conclusion

To sum up, this paper uses bibliometrics technology to directly reveal the development status quo and trends of gerontology and aged research in the past five years: from the issuing institution, the existing research power is concentrated in a few colleges and universities scientific research institutions, and research results possess a high concentration. From the point of issued year, the current elderly and elderly psychological research have entered a mature stage where publications grow slowly; from the point of periodicals, geriatric research is mainly concentrated in the field of sociology, while in psychology, the quantity of gerontology research output and theme heat is largely limited by publishing positions.

From fieldwork at nursing homes for more than a year, the present domestic research did not fully attach great importance to the topics that the elders care about – life meaning occupied a very important role for people over age 85. The very old people in the caring houses always ask such a question: what do I live for? Based on the investigations in the caring houses, the researchers supposed that culture might supply some persons ultimate care. But for the most Chinese, they mainly get themselves into trouble with life motivation.

As to life motivation, Carstensen proposed a theory of socioemotional selectivity. She adopted it to construe the motivation for social contact across the life span (Carstensen, 1992). However, according to Yue and Yang (1987), the conception of achievement motivation applied in China was divided into two types: social-oriented achievement motive and individual-oriented achievement motive, but the Confucian values had an unexpected stronger connection with the latter than the former (Yang, 2004).

Furthermore, a dyadic construct called *agency-communion* may contribute to the study on the life motivation of Chinese elders. McAdams & Hoffman (1996) brought the themes of agency and communion into significant autobiographical scenes, which might bring great convenience to analyzing most of the data that come from people over age 85. Strage (1997) adopted agency and communion as constructs attached to achievement motivation, but nowadays Chinese psychologists remain puzzled by their exact meaning because of the translating confusion. This research considers *agency-communion* as a Chinese dyadic construct called *Yin-Yang*, because both dyadic constructs rooted sex and have extensive meanings for the human life. They might enlighten us about the direction to do further research.

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The Investigation of the Relationship between Academic Stress and Psychological Health of Chinese Undergraduates

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[Abstract] *With the Academic Stress Questionnaire (Cheng, Hu, & Li, 2014), Symptom Checklist 90 (Zhang, 1998), Face Scale (Andrews & Withey, 1976), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965), this study explores the relationship between academic stress and psychological health of Chinese undergraduates. Responses from 624 undergraduates revealed that academic stress was significantly and negatively correlated with self-esteem and subject well-being, but significantly and positively correlated with anxiety, depression, interpersonal sensitivity, and somatization. It indicates that academic stress would be one of the critical predictors of Chinese undergraduates' mental health.*

[Keywords] *academic stress; depression; self-esteem; psychological health; Chinese undergraduates*

Introduction

The mental health problems of undergraduates have gained a lot of research attention in recent years. Researchers have posited that stress in college life, especially academic stress (Che, Zhang, & Huang, et al., 2003; Li & Kam, 2002; Liu, 2007; Zhu, 2007) can be the main predictor of undergraduates' mental health problems (Pancer, Hunsberger, Pratt, & Alisat, 2000). For example, previous research indicated that academic stress can significantly predict undergraduates' depression and anxiety (Meng, Yang, 2012), positive and negative emotions, and also their self-esteem, as well as mental health status (Li & Kam, 2002). A recent study revealed that the academic stress of Chinese undergraduates was significantly and negatively correlated with the subscales of career decision-making self-efficacy (CDMSE), including self-appraisal, information gathering, goal selection, planning, and problem-solving, suggesting that undergraduates with higher academic stress will have a lower level of career decision-making self-efficacy (Hu, Cheng, 2015). Other researchers found that CDMSE changes significantly with the level of the undergraduates' anxiety in career decision-decision (Xiao, Xiong, & Ye, 2013). In fact, it is increasingly difficult for Chinese undergraduates to find a job in recent years (Lai, 2001). Many undergraduates have been eager to acquire good academic performance, to hold advantages in job-seeking. Their academic performance plays an important role in scholarship, and diploma, as well as their career development (Che, Zhang, & Huang, et al., 2003), and their academic stress would increase correspondingly, which in turn affects the students' psychological health. In order to systemically investigate the relationship between academic stress and undergraduates' mental health, we included not only anxiety and depression measures, which were used as mental health problem indicators in previous research, but we also included positive mental health indicators such as self-esteem and subjective well-being in the present research, which will be helpful for school counseling.

Methods

Participants

Participants were 624 undergraduates (332 males and 292 females). Their age range was 17 to 24 ($M=20.48$, $SD=1.49$). Among them, 248 were first year students, 110 were second-year, 105 were third-year, and 161 were fourth-year.

Measures

The Chinese Undergraduates' Stress Source Scale (Zhu, 2007) was adopted to measure academic stress (Cheng, Hu, & Li, 2014). This 8-item scale is aimed to measure undergraduates' academic stress from different stressors, and the questionnaire has a good validity and reliability. Participants were instructed to answer on a 4-point Likert scale (0= no stress; 3=severe stress) to what extent they experience stress from different potential stressors. Higher scores on this scale indicate more stress experienced.

The subscales including depression, anxiety, interpersonal sensitivity and somatization of Symptom Checklist 90 (SCL-90; Zhang, 1998) were used as negative mental health indicators. Participants responded on a 5-point Likert scale ("1" to "5"), with higher scores indicating more severe mental health problems.

The Face Scale was adopted to measure participants' subjective well-being (SWB; Andrews & Withey, 1976). This scale is comprised of seven faces with different expressions, ranging from very unhappy to very happy. Five faces of the scale (ranging from 1 to 5) were used in this study, with a higher score indicating a higher level of subjective well-being. Participants were instructed to choose one of the faces with the expression that are most corresponded to their own.

Self-esteem was assessed with the Rosenberg Self-esteem Scale (SES; Rosenberg, 1965). SES is a widely used measure to assess global self-esteem, which consists of 10 items. Each item is scored on a 4-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Higher score indicates higher level of self-esteem.

Results

Discrepancy Analysis of Academic Stress and Psychological Health

The averaged stress level of undergraduates was 1.31 ($SD = .64$). Females scored higher than males on stress level (1.35 vs. 1.28), however, this difference was not significant. But female's anxiety, depression and interpersonal sensitivity were significantly higher than male's. There were no significant differences on all variables among the students of different year-of-study. See Table 1. Though the differences of gender were significant on the scores of anxiety, depression, and interpersonal sensitivity, the two-way analysis of variance (ANOVA) showed the gender effects were insignificant on all measure variables, and so did the grade effects. The interaction analyses of grade \times gender were significant on the measure variables of academic stress, depression, and interpersonal sensitivity, and the $F(3, 616)$ values were 4.143, 3.231, 2.856 ($P_s < .05$), respectively, suggesting that the female scores were higher than male's in Grade one, Grade two and Grade three, but lower than male's in Grade four.

Table 1. The Discrepancies Across Genders and Grades of Measure Variables

	Academic stress		Anxiety		Depression		Interpersonal sensitivity		Somatization		Self-esteem		SWB	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male	1.28	.65	1.59	.55	1.62	.54	1.77	.59	1.42	.49	2.94	.50	3.66	.86
Female	1.35	.62	1.71	.53	1.77	.54	1.86	.58	1.44	.39	2.86	.47	3.67	.84
<i>t</i>	1.41		2.79**		3.51***		2.03*		.44		-1.88		.08	
<i>P</i>	.16		.005		.000		.043		.657		.060		.940	
Freshman	1.36	.64	1.61	.53	1.66	.53	1.80	.60	1.39	.43	2.92	.52	3.67	.85
Sophomore	1.24	.60	1.59	.58	1.62	.57	1.78	.60	1.40	.43	2.95	.49	3.67	.87
Junior	1.36	.62	1.64	.47	1.71	.44	1.81	.52	1.46	.38	2.88	.43	3.65	.85
Senior	1.25	.65	1.73	.58	1.78	.60	1.86	.61	1.49	.51	2.85	.47	3.66	.84
<i>F</i>	1.68		2.24		2.39		.54		2.07		1.14		.02	
<i>P</i>	.170		.083		.068		.653		.103		.331		.996	

* $p < .05$; ** $p < .01$; *** $p < .001$.

The Correlations of Academic Stress and Psychological Health

Correlational analyses after controlled for sex indicated that academic stress was significantly and positively correlated with negative mental health indicators such as depression, anxiety, interpersonal sensitivity and somatization, but negatively correlated with positive mental health indicators such as self-esteem and subjective well-being.

Table 2. Correlation Coefficients Between Academic Stress and Mental Health Indicators Controlled for Sex

	Anxiety	Depression	Interpersonal sensitivity	Somatization	Self-esteem	SWB
Academic Stress	.36***	.40***	.38***	.26***	-.30***	-.26***

*** $p < .001$

Discussion

Our research findings demonstrated that undergraduates' academic stress can predict their mental health status, such that the more stress they experience, the more severe mental health problems they will suffer. Our research contributes to previous research by showing that academic stress is not only related with depression and anxiety (Meng, Yang, 2012), as well as emotions and self-esteem (Li & Kam, 2002), but it also can predict undergraduates' interpersonal sensitivity, somatization, and even subjective well-being.

Lazarus and Folkman (1984) posited that perceived stress is determined by individuals' evaluation of their own coping capability. Therefore, academic stress may increase undergraduates' anxiety and depression, which would cause further negative influences on their mental and physical health. Our research demonstrated that those undergraduates with more academic stress would report more interpersonal problems, lower levels of self-esteem and higher levels of somatization.

Nowadays, undergraduates are facing more severe job hunting difficulties. Thus, researchers, should put more attention on undergraduates' academic stress in order to enhance undergraduates' mental and physical health (Lai, 2001). Che and his colleagues (Che, Zhang, Huang, et al., 2003) proposed that academic performance is vital for undergraduates in terms of financial status and future career pursuits. Previous study demonstrated a negative relationship between academic stress and perceived social support (Li, Song, & Guo, 2009). Therefore, educators should help undergraduates to form a better understanding

of stress in order to increase their coping capability. Undergraduate students may experience less stress if they are confident with their coping capabilities, and are instructed to cope with stress in an efficient way.

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Influence of Materialism on Pro-Social Tendencies: The Mediating Effect of Gratitude and the Moderating Effect of Nostalgia

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[Abstract] *This study proposed a moderated mediation model, revealing “how” materialism influences pro-social tendencies and “when” the impact was stronger or weaker. A sample of 486 college students from three universities in Wuhan were recruited to complete the scale of materialism, a gratitude scale, a nostalgia scale and a pro-social tendency scale. The results showed that: (1) Materialism and pro-social tendencies were negatively correlated ($r=-.16, p<.01$), nostalgia was positively correlated with pro-social tendencies ($r=.21, p<.001$), and gratitude and pro-social tendencies were positively related ($r=.34, p<.01$); (2) Multiple regression analysis showed that gratitude has a partial mediating effect in the relationship between materialism and pro-social tendencies; (3) Nostalgia moderated the second path of the mediation effect. These findings have important theoretical implications and practical value which can guide people to increase pro-social behavior.*

[Keywords] *materialism; gratitude; nostalgia; pro-social tendencies; college students*

Introduction

With rapid development of economics in our modern society, materialism appears to be on the rise among young people (Twenge & Campbell, 2010). Materialism refers to an individual attention, having access to material wealth values, and includes three main features: To obtain the material wealth as the center of life, the pursuit of happiness by acquiring material wealth, and material wealth defines success.

The Relationship Between Materialism and Pro-Social Tendency

Some empirical studies have shown that there is a negative correlation between materialism and pro-social behavior. For example, Richins and Dawson (1992) found that the more people pay attention to materialism, the less people pay attention to “warm relations with...”. Similarly, higher materialism will lower people’s concern on social issues, there will be less charitable donations (Kasser & Ahuvia, 2002), a higher tendency of Machiavellism (Mchiskey, 1999), and more poor behavior in public (Kasser & Ahuvia, 2002). But there is almost no specific mechanism of influence of materialism on pro-social tendencies; there is also no study to test which variables may play a mediating role between materialism and pro-social tendencies, and fewer studies have examined the mediating effect of role conditions. Research on this mediating role help to clarify the impact of materialism on pro-social tendencies. The correlation coefficient in most of the previous studies on materialism and pro-social tendencies was low, and other indicators were not high. This shows that the relationship between them is complex, which may also be affected by other factors.

The Mediating Role of Gratitude

Research has found that there is a negative correlation between materialism and gratitude (Froh, Emmons, Card, Bono, & Wilson, 2011). Adults with materialistic values reported lower levels of gratitude (Kashdan & Breen, 2007; McCullough, 2002). The level of college students' gratitude is negatively correlated with the level of materialism (Polak, 2006). Similar results have also been demonstrated in children and adolescents (Flouri, 2004), as they are less likely to help others in their neighborhood and community (Froh, Emmons, Card, Bono, & Wilson, 2011). Gratitude has been recognized as a positive emotion, and has a social function.

Compared to the individual who is not grateful, the individual with more gratitude has a higher pro-social motivation and more pro-social behavior. Grateful teens report more helpful behavior (Froh, Emmons, Card, Bono, & Wilson, 2011). McCullough (2002) put forward the moral emotion theory of gratitude – gratitude can promote an individual to help society and others. In an experimental study, McCullough (2002) proved that subjects who experienced gratitude versus those who didn't experience it would have more pro-social behavior. Individuals who were helped were likely to show more pro-social behavior in interpersonal interactions in the future, and were more likely to give to charity or others (Froh, Emmons, Card, Bono, & Wilson, 2011).

As a kind of positive emotion, gratitude can broaden people's thinking mode, making them feel that their life is full of care, safety and integrity from others; it can also be constructed as psychological and social resource, and directly offset insecurity brought by materialism, thus reducing the level of materialism (Polak & McCullough, 2006), and enables a lot of pro-social behavior to others. In addition, gratitude can reduce the negative cost caused by materialism. High arousal conditions of gratitude can lead to low materialistic values.

Based on the analysis of the literature, this research proposed Hypothesis 1: *In the Chinese cultural background, gratitude is a mediator between materialism and pro-social tendencies.*

The Moderated Role of Nostalgia

Many experimental researches have shown that nostalgia can promote pro-social behavior (Zhou, Wildschut, Sedikides, Chen, & Vingerhoets, 2012), and it is mainly manifested in physical proximity, helping (Stephan, Wildschut, Sedikides, et al., 2014), and donation (Ford & Merchant, 2010). Studies have also shown that childhood memories can promote pro-social behavior. Nostalgia also enhances the will of charity (Zhou, et al., 2012, Study 1). Kasser and Ryan's (2006) study showed that individuals who place great importance on material success experience more positive emotions, as well as more negative emotions such as depression, anxiety and narcissism. According to the theory of psychological resource depletion (Baumeister, 2002), the experience of these negative emotions will reduce pro-social behavior. But nostalgia serves as an adaptive psychological resource, which can relieve anxiety, and repair interpersonal isolation through the reconstruction of meaning, produce warm feeling of body to ease troubles and threats, and support the self-defense response against threats, and restrict the sense of meaninglessness. In other words, negative emotions have played an important positive role in our society.

Method

Participants

The research recruited five hundred and twenty (520) college students from three universities in Wuhan; four hundred and eighty-six (486) questionnaires were valid, with a valid return rate of 93.5%. One

hundred and twenty-four (124) boys and three hundred and sixty-two (362) girls were included. The average age was 20.30 ($SD = 0.92$).

Materials

Materialism Values Scale. This scale was compiled by Richins and Dawson (Material Values Scale, MVS, 1992), which included three dimensions: success, centrality, and happiness. Later it was reviewed by Li and Guo (2009). Higher scores mean higher materialism values. The reliability and validity of the reviewed Chinese revision was good. In this study, Cronbach's alpha coefficient of the scale was 0.69.

Nostalgia Scale. This research assessed trait nostalgia with the Southampton Nostalgia Scale (Routledge, et al., 2008). This scale consisted of seven items. An example item was, "It gives me pleasure to think about my past". Participants were asked to rate on the items on a 7-point Likert scale ranging from "1 = very little/no" to "7 = very frequent/so often" and the ratings were averaged. In this study, Cronbach's alpha coefficient of the scale was .79.

Pro-Social Tendency Scale. This study adopted the Pro-Social Tendencies Scale which was compiled by Carlo (2002). It included 25 items and six dimensions. Kou, Hong, Tan, and Li (2007) revised this scale, which has good psychological measurements. In this study, Cronbach's alpha coefficient of the scale was 0.89, showing satisfactory reliability.

Gratitude Questionnaire. This study used the Gratitude Questionnaire (GQ-6) which was compiled by McCullough (2002). The questionnaire consisted of 6 items, with a 7-point Likert scale ranging from "1=totally disagree" to "7=totally agree", An example item is "there are so many things in life that I need to be thankful for"; higher scores indicate higher gratitude tendency. This study was revised by Yu, Zhang, Zeng, Ye, Li, and Wang (2011). The revised Chinese gratitude questionnaire (CGQ-6) has good psychometric properties. In this study, Cronbach's alpha coefficient of the scale is 0.80.

Statistical Analysis and Processing

Data analyses were conducted using SPSS version 18.0. In order to reduce multi-collinearity effects, all predictive variables were centralized.

Results

Common Method Bias Test

This research adopted self-reported ways to collect data, which may be have common method bias. We used the Harman single factor method to test this. The statistics confirmed results showed that 14 factor eigenvalues were greater than 1, and the variance explained the first factor is 18.28%, which is far less than the critical value 40%. Therefore, this indicated the common method bias effect is not serious.

Descriptive Statistics and Correlation Analysis of the Variables

The results of preliminary statistical analysis showed that college students have certain demographic differences on pro-social tendencies, materialism is significantly higher than that from rural students, Correlation analyses are shown in Table 1, materialistic values and pro-social tendencies have a significant negative correlation ($r = -.16, p < .01$), which is a risk factor of pro-social tendencies. Gratitude, and nostalgic tendency were significantly positive correlated with pro-social tendencies ($r = .34, r = .21, p < .01, p < .001$). In addition, nostalgia was positively correlated with gratitude ($r = .22, p < .001$), namely the higher the tendency of individual nostalgia, their sense of gratitude is also stronger.

Table 1. The Average, Standard Deviation and Correlation Analysis of the Main Variables

Variables	<i>M±SD</i>	1	2	3	4
1. Materialism value	2.6±.50	—			
2. Gratitude	5.0±.95	-.20 ^{***}	—		
3. Nostalgia	4.2±.84	-.08	.22 ^{***}	—	
4. Pro-social tendency	3.3±.49	-.16 ^{**}	.34 ^{**}	.21 ^{***}	—

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$, and the same below.

The Independent Role of Materialism, Gratitude on Pro-Social Tendencies

In order to further test materialism and gratitude to predict pro-social tendencies, we took materialism as the independent variable and pro-social tendencies as the dependent variable to conduct multiple stepwise regression; the results are shown in Table 2.

Table 2. Regression Analysis of Materialism and Gratitude on Pro-Social Tendencies

Steps and Variables	Pro-Social Tendency					
	<i>B</i>	<i>SE</i>	β	<i>t</i>	ΔR^2	ΔF
Step 1: Gender	.16	.067	.14	2.37 [*]	.02	5.636 [*]
Step 2: Materialism	-.43	.12	-.44	-3.460 ^{**}	.05	4.898 ^{**}
Step 3: Gratitude	.17	.03	.32	5.67 ^{***}	.10	32.166 ^{***}
Step 4: Nostalgia	.08	.03	.13	2.35 [*]	.02	5.499 [*]
Total R^2	.185					

Table 2 shows that after controlling for demographic variables of gender, materialism scores have a significant negative predictive effect on pro-social tendencies ($\beta = -.44$, $p < .01$), gratitude can positively predict pro-social tendencies ($\beta = .32$, $p < .001$), and nostalgia has a significant positive predictive effect on pro-social tendencies ($\beta = .13$, $p < .05$). The total explanatory power was 18.5%.

The Moderated Mediation Model

The results can be seen from Table 3, Equation 1 in materialistic values has a negative predictive effect on pro-social tendencies ($\beta = -.44$, $t = -3.46$, $p = .005 < .01$). Equation 2 in materialism has a negative predictive effect on gratitude ($\beta = -.45$, $t = -3.54$, $p = .004 < .01$). In Equation 3, gratitude has a positive predictive effect on pro-social tendencies ($\beta = 0.29$, $t = 5.05$, $p < .001$). This shows that gratitude can promote pro-social tendencies, and materialism still has a significant effect on pro-social tendencies ($\beta = 0.31$, $t = 1.77$, $p = .073 < .10$), which indicates that gratitude plays a mediating role between materialism and pro-social tendencies. Hypothesis 1 was supported. Equation 4 on gratitude and nostalgia for the interaction between pro-social tendencies has a negative predictive effect ($p = -.16$, $t = -2.96$, $p < .001$). Nostalgia has a moderating effect on the relationship between gratitude and pro-social tendencies, the regulation effect of $R^2 = 0.026$, this additionally explained 2.6% of the variance, and the interpretation rate increased from 18.5% to 21.1%. Hypothesis 2 was supported – nostalgia is a moderator between gratitude and pro-social tendencies.

Table 3. Pro-Social Tendencies of College Students' Model Test

Variables	Equation 1 (IV: Pro-social tendency)		Equation 2 (IV: Nostalgia)		Equation 3 (IV: Pro-social tendency)		Equation 4 (IV: Pro-social tendency)	
	β	t	β	t	β	t	β	t
Gender	0.14	2.34*	-0.05	-0.79	0.14	2.53*	0.13	2.36***
Materialism	-0.44	-3.46**	-0.45	-3.54**	-0.32	-2.58*	-0.29	-2.34*
Nostalgia					0.13	2.35*	0.15	2.58**
Gratitude					0.29	5.05***	0.31	5.39***
Nostalgia×Gratitude							-0.16	-2.96**
ΔR^2	0.07		0.07		0.185		0.211	
ΔF	5.142**		4.87**		10.25***		10.288***	

The focus of this study is how to moderate the influence of nostalgia on gratitude and pro-social tendencies, so Z scores of nostalgia were collected for 0 and ± 1 , and the interaction effect graph from Figure 2 can be seen. A simple slope test showed that (Dearing & Hamilton, 2006) in the low nostalgia condition (-1), with gratitude increasing, pro-social tendencies showed a significant upward trend ($\beta=0.31$, $t=5.39$, $p<.001$); with 1 SD of gratitude increasing, pro-social tendencies will increase 0.31 SD; in the high nostalgia condition (+1), with gratitude increasing, pro-social tendencies displayed a gently rising trend ($\beta=0.15$, $t=2.54$, $p<.05$); with 1 SD of gratitude increasing, pro-social tendencies will increase 0.15 SD. That is to say, there is an indirect influence of materialism on pro-social tendencies through gratitude change with the change of nostalgia.

Discussion

The results show that gratitude plays a mediating role between materialism and pro-social tendencies, which is consistent with previous studies (Kasser & Ahuvia, 2002). Polak and McCullough (2006) also pointed out that high gratitude reduces materialism. According to the broaden and build theory of gratitude (Fredrickson, 2004), gratitude is a positive emotional quality, which can broaden the scope of cognition, and increase cognitive flexibility. This finding suggests that cultivating college students' gratitude emotions can reduce materialism.

Nostalgia moderated materialism through gratitude on pro-social tendencies. This conclusion is also consistent with the previous researches (Zhou, et al., 2012; Ford, & Merchant, Sedikides, 2010). Nostalgia has a moderate effect on pro-social tendencies. In the lower level of gratitude, compared to those with less nostalgia emotions, individuals with higher nostalgia emotions have higher pro-social tendencies. With increasing levels of gratitude, individuals with low nostalgia increased significantly on pro-social tendencies. This showed that nostalgia has a promoter factor for pro-social tendency of college students.

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Socioeconomic Status Effects on Subjective Well-being of College Students: The Mediating Effect of Negotiable Fate

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[Abstract] This research aims to explore the relationship between social economic status and subjective well-being and the mediating role of negotiable fate. Five hundred college students were recruited from three universities, and completed the social economic status scale, the negotiable fate scale and the subjective well-being scale. The results were as follow:(1) There were significant correlations between social economic status, negotiable fate and life satisfaction; (2) The mediating role of negotiable fate between social economic status and subjective well-being was significant. These findings have important theoretical and practical implications which can guide people to promote their subjective well-being.

[Keywords] social economic status; subjective well-being; negotiable fate

Introduction

The pursuit of social status is a powerful motivation for many social behaviors. But does achieving higher status bring happiness? Prior research suggests social status plays a small role in subjective well-being (SWB). Studies have indicated there was a significant, but weak, positive association between social economic status and subjective well-being (Diener, Suh, Lucas, & Smith, 1999). This robust literature seems to indicate that the higher the status provides almost no benefits on subjective well-being. The social economic status is defined as a social position where an individual or group in society is classified, according to their own social resources, such as, family income, parental education level and occupation of parents; the main indicators of objective measurement comprises the objective social economic status (OSES). Subjective socio-economic status (SSSS) refers to the social class of the subjective cognition and belief. This is a subjective cognition on the present social status evaluation. it measures the relative position of the individual in society. A large number of studies show that compared with the objective social economic status index, subjective socioeconomic status can predict a variety of psychological and physical health indicators better (Adler, Epel, Castellazzo, & Ickovics, 2000; Anderson, Kraus, Galinsky, & Keltner, 2012), this research mainly discusses the influence mechanism of subjective social economic status on happiness.

Social comparison theory has proposed that an individual has the intrinsic driving force to compare themselves with others, and the comparison usually has important emotional consequences. A downward comparison will increase happiness, and you will experience resentment and dissatisfaction if you compare upward with others, thereby reducing your sense of happiness. Individuals with low social

economic status belong to a social disadvantaged class; they are under multiple constraints and limitations of society. Their thoughts and actions will be strongly influenced by their environment and their future life and overall cognition; they often experience low subjective well-being, but in real life, for these individuals with low social economic status, with relatively high well-being, what is the reason for it? The self-system theory argues that self-system is the core of the causal process, and most of the external influence has indirect effect on the function of people through self-process. That is to say, those with low socioeconomic status may hold certain values or belief in his perception, which affect the well-being of theirs.

The belief of negotiable fate (Chaturvedi, Chiu, & Viswanathan, 2009) refers to the belief that man can control and negotiate with fate. They believe that life events have been determined in advance by fate, but making great efforts by ourselves can bring better results (Leung, Bond, De Carrasquel, et al., 2002). Research shows that individuals who were affected by economic constraints and social constraints identify negotiable fate (Chaturvedi, Chiu, & Viswanathan, 2009). According to social cognitive psychology, a belief is an important force for behavior; the belief of negotiable fate can help people to make sense of unexpected results, and in the face of setbacks and misfortune, they still adhere to the persistent pursuit of the goal (Au, Chiu, Chaturvedi, et al., 2011). As a guiding principle for individuals to deal with the uncertainty of life, whether the belief of negotiable fate can serve as a protective factor for an individual with a lower socioeconomic status and enhance his subjective well-being, this research attempts to explore the relationship and mechanism between the belief of negotiable fate and social economic status under Chinese cultural background.

Negotiable fate plays an important role in people's well-being, especially in the countries where there are many restrictions and constraints. A study found that negotiable fate is prevalent in those culture and country where there are more restrictions and constraints on individual. People with low socioeconomic status may have more restraint in the pursuit of their own goals and experience more constraints, but Chinese old sayings contain many proverbs about ideas of the fate, some of which contain the connotation of the negotiable fate concept, such as "seeking things in person, so God disposes." Is this concept more prevalent in contemporary college students who are suffering from many restrictions and constraints?

Based on this, this study aims to investigate: (1) From the perspective of negotiable fate, whether social economic status has an impact on subjective well-being under Chinese cultural background; (2) Individual differences on social economic status; (3) Consequences of negotiable fate, on the one hand, the research can theoretically deepen the psychological mechanism of the relationship between social economic status and subjective well-being. On the other hand, seeing from the student's policy and practice, how to guide college students who were in social disadvantage is great of benefit.

This study proposes the following hypotheses:

Hypothesis 1: Under China's cultural background, subjective socioeconomic status has a positive predictive effect on subjective well-being;

Hypothesis 2: The belief of negotiable fate can predict the positive effects on subjective well-being;

Hypothesis 3: The belief of negotiable fate plays a mediating role in the relationship between socioeconomic status and subjective well-being.

Method

Participants

Five hundred (500) college students were recruited from three universities in Hubei and Guangxi, four hundred and sixty-two (462) effective questionnaires were collected on the spot, with a valid return rate of 92.4%, among which boys and girls was 155 and 307, respectively. The average age was 20.45($SD = 0.60$).

Materials

Subjective social and economic status. This research mainly adopted the MacArthur Scale of Subjective SES (Kraus, & Keltner, 2009) to measure the relative social economic status, on a scale of 1 to 10 scale to indicate their family's class. For example, a "1" represents the bottom of society, these people's living situation is the worst, with a minimum level of education, disreputable work, and low income; a "10" is the top social class, where these people's lives are the most affluent, their levels of education are the highest, high incomes, and decent work. The higher level indicates the higher social economic status.

Objective social and economic status. In order to use more comprehensive indicators to judge SES, this study also uses the educational level of parents, family income and other indicators to measure the social economic status of the family. The family income, and parents' education levels were given a 1-5, and 1-6 scores (from low to high). These were turned into standard scores, and then added to the standard score to get the family socioeconomic status score. Higher scores indicate higher social economic status of the family.

Negotiable fate scale. This research adopted the scale of negotiable fate which was compiled by Chaturvedi, et al. (2009), and included 20 items, scored on a 6-point Likert scale, ranging from "1=strongly disagree" to "6=strongly agree". Negotiable fate consisted of 6 items. An example of an item from this scale is, "When fate does not give you the most favorable situations, you need to make the best of the situations you are given." In this study, Cronbach's alpha coefficient of the scale was 0.774.

Subjective well-being scale: This study adopted a life satisfaction scale to evaluate the cognitive component of subjective well-being (Diener, Emmons, Larsen, & Griffin, 1985), and it included five items. An example item is "my life is roughly in line with my ideal", and it was scored using a 5-point Likert scale ranging from "1=strongly disagree" to "5=strongly agree". The calculation average of all the five projects were on behalf of the participants' levels of life satisfaction. The higher the score shows that the higher the level of life satisfaction. In this study, the Cronbach's alpha coefficient of the scale was 0.759.

Data Collection and Analysis

Data analyses were conducted using SPSS version 21.0.

Results

The Rest of Common Method Biases

Restricted by objective conditions, this study only used the participants' self-reported information to collect data, and the relationship between variables could have common method biases. We used the Harman single factor method to test the common method biases. The statistics results showed that 6 factor

eigenvalues were greater than 1; the variance explained the first factor is 20.29%, which is far less than the critical value 40%, so therefore, this indicated the common method bias effect was not serious (Podsakoff, MacKenzie, Lee, et al., 2003).

Variance Analysis

To compare the differences between social economic status in negotiable fate and subjective well-being, first, valid data of the subjective social economic status and the objective class rank was sorted respectively. The former 27% were chosen as the high score group, and the latter 27% were chosen as the low score group, and then an independent samples t test was conducted.

Table 1. Subjective and Objective Social Economic Status of the Group on the Core Variables of Variance

Analysis

Variables	SSES(M±SD)			OSES(M±SD)		
	High score	Low score	t	High score	Low score	t
Negotiable fate	4.65±.63	4.46±.79	2.24*	4.51±.75	4.45±.75	.55
Life satisfaction	2.96±.75	2.76±.72	2.27*	2.92±.70	2.85±.68	.76

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$; SSES=subjective social economic status, OSES=objective social economic status, and the same below.

Table 1 shows that the scores of subjective social economic status groups in negotiable fate and life satisfaction were significantly higher than that of the low group ($ns < .05$). While objective social economic status has had inconsistent results, namely, the scores of higher objective social economic status groups and lower group in negotiable fate and life satisfaction were not significant ($p = .59$, $p = .45$, $ns > .05$).

Correlation Analysis of the Main Variables

The correlation matrix of the study variables, as shown in Table 2.

Table 2. Correlation Analysis

Variable	1	2	3	4	5	6	7	8	9
1. gender	—								
2. family source	-.08	—							
3. only-child	.02	.44***	—						
4. SSES	-.02	.27***	.11*	—					
5. OSES	-.04	.55***	.38***	.51***	—				
6. negotiable fate	-.10*	-.03	.02	.13***	.01	—			
7. SWB	-.07	.04	.09 ⁺	.22***	.11*	.32***	—		
M	.33	.57	.51	4.81	.00	4.51	4.71	3.32	2.18
SD	.47	.50	.50	1.32	2.39	.72	1.00	.80	.87

Note: SWB=subjective well-being.

The results show in Table 2, subjective social economic status correlated moderately positively to objective social economic status ($r = 0.51$, $p < .001$), and negotiable fate ($r = 0.13$, $p < .001$), life satisfaction ($r = 0.22$, $p < .001$). Objective social economic status was related significantly positively to life satisfaction ($r = 0.11$, $p < .05$), and negotiable fate was negatively related to life satisfaction ($r = 0.32$, $p < .001$).

Mediating Role of Negotiable Fate

According to Baron and Kenny's (1986) proposed mediating function testing procedures, this research used multiple regression analysis to test mediating role of negotiable fate between social economic status and subjective well-being.

Table 3. Mediating Role of Negotiable Fate

Steps	Result Variables	Predictive Variables	β	R^2	F
Step 1	SWB	Subjective social economic status	0.19***	0.036	16.91***
Step 2	Negotiable fate	Subjective social economic status	0.13**	0.015	7.13**
Step 3	SWB	Subjective social economic status	0.15**	0.119	15.55***
		Negotiable fate	0.29***		

The results in Table 3 that SSES can predict subjective well-being ($\beta=0.19, p<.001$), negotiable fate ($\beta=0.13, p<.01$), Hypothesis 1 was supported. Negotiable fate can predict positively subjective well-being ($\beta=0.29, p<.001$), Hypothesis 2 was supported. Further analysis showed that after adding negotiable fate, the coefficient of social economic status on subjective well-being was lower, but still significant ($\beta=0.15, p<.01$), indicating that negotiable fate plays a mediating role. The result supported Hypothesis 3. Given the Sobel test can more accurately detect the mediating effect than step regression analysis, this study adopted the Sobel test to verify the mediating role of negotiable fate. The results show that mediating role of negotiable fate between social economic status and life satisfaction was significant ($Z = 2.13, p <.05$).

Discussion

This study found that subjective social economic status has significant predictive effect on individual subjective well-being than objective social economic status, because subjective social economic status can accurately seize the most sensitive information of social and economic status, its evaluation information is far beyond the objective indicators.

Subjective social economic status predicted subjective well-being positively, the conclusion is in line with the previous researches, for example, compared with the absolute level of their social economic status, people's subjective social economic status seems to be more important to their happiness (Adler, et al., 2000). The higher social economic status an individual is conscious of the higher happiness he experiences. A possible reason is that high social economic status is more likely to form a positive recognition of their social status, and more inclined to make a positive evaluation, then they experience a higher subjective well-being, and the people with low socioeconomic status are more likely to experience the poor lower self-related happiness and negative emotions (Adler, et al., 2000). As self-theory proposed that external factors cannot affect individual well-being alone, the real determinant is that self-cognitive process (Lawrence & Oliver, 1999). In other words, college students' subjective social economic status is a kind of relative position, it is under the certain reference group of subjective consciousness, which included subjective cognition to objective factors, such as, the parents' education level, family income and so on, it also included subjective evaluation to personal academic communities of self-efficacy, organization ability and peer relationship factors and so on, these factors also form an important source of college students' happiness.

This study found that negotiable fate played a mediating role effect on the relation between social economic status and subjective well-being. This means SSES not only can impact individual well-being directly, but also can affect well-being through negotiable fate. That is to say, social economic status is

relatively stable, and can't be improved in a short time. To enhance subjective well-being of college students with low social economic status, we can cultivate the belief of negotiable fate, the belief cause of an individual to make efforts to achieve their own goals without giving in and eventually enhance their individual subjective well-being.

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The Effect of the Family Self-Construal and the Individual Self-Construal on Altruistic Behavior and Egoistic Behavior in Chinese College Students

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[Abstract] A self-construal is an important factor on social behavior, and for Chinese people, family is a very important part of their self-concept. The current study applied the method of correlation analysis and priming paradigm to explore the existence of a family self-construal for Chinese, and whether a family self-construal and an individual self-construal of college students had an impact on their altruistic and egoistic behaviors. The aim is to find a way to decrease their altruistic behaviors and increase their egoistic behaviors. Results revealed that: (1) The family self-construal was positively correlated with altruistic tendencies ($r=.398$, $p<0.01$), and negatively correlated with egoistic tendencies ($r= -.162$, $p<0.01$); Individual self-construal was positively correlated with egoistic tendencies ($r=.298$, $p<0.01$). (2) When the family self-construal was primed, participants reported more altruistic behaviors ($t=2.377$, $p<0.05$), and when the individual self-construal was primed caused more egoistic behavior ($t=2.681$, $p<0.05$).

[Keywords] family self-construal; individual self-construal; altruistic behavior; egoistic behavior

Introduction

Self-construal is the cognitive structure about how people think about themselves – the degree to which elements of the social world (such as close relationships, contexts for behavior, or important group memberships) are included in the self (Markus & Kitayama, 1991). Cross-cultural psychology implies that members of collectivist cultures, such as Japan or India, tend to think of themselves as interdependent with close others and as defined by important roles and situations. In contrast, members of Western cultures, such as the United States, tend to think of themselves as independent of relationships and as autonomous or separated from others. Brewer and Roccas (2001) proposed that self-concept was comprised of three fundamental components: the individual self, the relational self, and the collective self. People pursue and achieve self-definition in terms of their personal, relational, or group characteristics. The relational self refers to the intimate and interactive relationship such as family/relatives, and friends, etc. The most important social relationship is family, which is especially true for Chinese. Chen and West (2008) found that Chinese people were more likely to consider the implications of their decisions for their parents than Americans. Chinese people value their families very much and it has been a part of cognitive structure for Chinese, which has been proven by intensive studies on the self-reference effect in memory. For Chinese, in addition to the self-reference effect, there is a mother-reference effect (Keenan & Baillet, 1980; Liu, X., & Zhu, Y, 2002). Conway and Pleydell-Pearce (2000) argued that parents were included in the self-concept of Chinese people, whereas it was not the case for Westerners. According to the tripartite model of self-construal, everyone has three selves and can alternate between perceiving the self as a distinct individual, as a relational partner, or as an interchangeable group member with the situation. In recent years, research about the self-construal gradually emphasized the priming effect that the self is not immutable but dynamic and a different self-construal could be encouraged through situations or priming.

Altruistic behavior, a kind of prosocial behavior, usually refers to the behaviors benefiting others at a cost to oneself (Wilson, 1976). Altruistic behavior is influenced by both the internal factors including

cognition, pro-social value orientation, internalized conduct codes and empathy (Weiner, 1980; Schmildt & Weiner, 1988; Staub & Vollhardt, 2008), and external factors including identity, personality, mood at the time and other specific contexts (Rushton, Chrisjohn, & Fekken, 1981; White & Gerstein, 1987). Research on the development of children's altruistic behavior has shown that it is significantly related to self-concept, cultural characteristics, self-attribution and parenting style (Fishbein & Kaminski, 1985). Grusec and Redler (1980) focused on developing self-concept of children of different ages. When a child demonstrated altruistic behavior, researchers told him that he was a kind person and ready to help others, and then was proven to increase the frequency of children's altruistic behavior.

Egoistic behavior, also called self-interest behavior, is directly opposite of altruistic behavior. Psychological egoism claims that humans are always motivated by self-interest, and egoism is a self-centered moral principle that personal interests are viewed as a norm of thinking and acting. The factors that influence egoistic behavior include cognition, social value orientation, sense of entitlement and social environment (Halali, 2014; Chopik, Joshi, & Konrath, 2014). Social value orientation is a personality variable that indicates how people evaluate outcomes for themselves and others (Messick & McClintock, 1968; Van Lange & Liebrand, 1991). Pro-socials generally prefer to maximize joint outcomes and establish an equal distribution, but pro-selfs prefer to maximize own outcomes (Van Lange & Kuhlman, 1994).

Different self-construals are affected and shaped in different cultures (Heine, 2001). Whereas those primed with independence would be most concerned with their own outcomes, and those primed with interdependence would be more likely to report concern for the relationship and behave in a more cooperative and generous manner. Kitayam, et al. (2009) proposed that people with an independent self-construal focused more on uniqueness, competition and personal achievement rather than interpersonal relationships. Past research has found that there were significant variances in many respects such as cognition and social communication when different self-construals were evoked. Gardner, Gabriel, and Hochschild (2002) found, in dispute resolution, after independence priming, negotiations were more likely to result in an impasse than with interdependence priming. Interdependence priming resulted in more generous distribution of resources and higher satisfaction with dispute outcomes.

Given family is especially important for the self-construal in China, and Chinese people think of themselves as interdependent with family more than others whom they have relationships with such as friends and colleagues, we focused on this special part of relational self-construal, called a "family self-construal". From the existing research on the effect of self-construals on social behaviors, we supposed that the family self-construal may have a positive effect on altruistic behavior. This research explored the existence of the family self-construal for the Chinese and then primed the family/individual self-construals to explore whether the family self-construal and the individual self-construal of college students had impacts on their altruistic behaviors and egoistic behaviors.

Study 1

Method

Participants in the study were 283 Chinese undergraduate students (142 male, 141 females; mean age=20.68). They completed a series of questionnaires including demographic information, the adapted Chinese version of Singelis' (1994) Self-Construal Scale (changed items about interdependent self-construal into family self-construal), the adapted version of Aron's (1992) Inclusion of Other in the

Self Scale (only to retain the question about family), Machiavellian Personality Scale revised to reflect Chinese colleges' Machiavellianism by Tang Shujun, et al (2011) to test egoistic tendencies, Rushton's (1980) The Self-Report Altruism Scale and self-made egoistic behavior questionnaire. The egoistic behavior questionnaire consisted of 5 items scored by a 6-point method. Each item referred to a moral situation story and participants needed to determine the possibility of the behavior described in the item if the same things happened to themselves. The Cronbach's coefficients of these scales varied from 0.650 to 0.815, which showed these scales had relatively high reliability in this study.

Results and Discussion

The results were analyzed with SPSS 18.0. Pearson correlation coefficient showed that the inclusion of family in the self is significantly and positively correlated with the family self-construal ($r=.377, p<0.01$), which means the measurement of the family self-construal is valid. Egoistic behavior (the scores of self-made egoistic behavior questionnaire) is significantly and positively correlated with egoistic tendencies ($r=.539, p<0.01$).

Table 1. The Correlation of the Individual Self-construal, Family Self-Construal, Inclusion of Family in the Self, Egoistic Tendencies, Altruistic Tendencies and Egoistic Behavior

		1	2	3	4	5	6
1	individual self-construal	1					
2	family self-construal	.299**	1				
3	inclusion of family in the Self	.073	.377**	1			
4	egoistic tendencies	.298**	-.162**	-.013	1		
5	altruistic tendencies	.257**	.398**	-.024	.178**	1	
6	egoistic behavior	.263**	.011	.009	.539**	.131*	1

Notes: * $p<0.05$, ** $p<0.01$, the same below.

The family self-construal is significantly and positively correlated with altruistic tendencies (the scores of Machiavellian Personality Scale) ($r=0.398, p<0.01$), but significantly and negatively correlated with egoistic tendencies ($r=-0.162, p<0.01$). Individual self-construal is significantly and positively correlated with egoistic tendencies. The specific results are shown in Table 1.

Results were partially consistent with previous studies. Since people with independent self-construal value personal achievement more, but people with interdependent self-construal value interpersonal relationships more, the former has more egoistic tendencies to pursue more interests, but the latter has more altruistic tendencies to seek better interpersonal relationships. For Chinese people, the level of family self-construal reflects the level of relational self-construal to a great extent so that there is a significantly positive correlation between family self-construal and altruistic tendencies. However, individual self-construal is also significantly and positively correlated with altruistic tendencies. Maybe it is because that the items of The Self-Report Altruism Scale are not contradictory to egoistic tendencies, which means that college students are willing to do some altruistic behavior when they develop the individual self-construal and pursue a private benefit.

Study 2

Method

The study was conducted to explore whether the family/individual self-construal could be evoked by experimental manipulation. Participants in the study were 60 Chinese undergraduate students (30 males, 30 females; mean age = 21.91) and they were randomly divided into 3 groups to read different materials. The family self-construal priming group read a description of a scenario where families were together and happy. The individual self-construal priming group read a description of a scenario where one person went out traveling alone. The control group read technology news. Then the self-statement test on I AM was applied to do the manipulation check.

Results and Discussion

Two research assistants coded the statements and checked to see that the reliability of coders was good ($Kappa=.747$). The difference of self-statement test among the groups were compared using LSD-test. Results showed there were distinct differences of the self-statements among groups. Participants primed with family self-construal had more self-descriptions about family, and when the individual self-construal was primed, self-description was more likely to involve their own characteristics, which means the manipulation was successful.

Study 3

Method

The same priming manipulation as study 2 was applied on 90 participants (42 males, 48 females, mean age = 22.13) who were randomly divided into 3 groups. Then all participants completed Li Yanfang's (2008) altruistic behavior scale and the self-made egoistic behavior questionnaire that was proven to be Valid in Study 1. The Cronbach's coefficients of the scales are 0.785 and 0.768, respectively, which shows the scales both have high reliability in this study.

Results and Discussion

Table 2. The Means and Standard Deviation (SD) of Egoistic/Altruistic Behavior of Each Group

	<i>N</i>	Egoistic Behavior		Altruistic Behavior	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Family self-construal priming group	30	18.27	3.162	117.37	5.398
Individual self-construal priming group	30	20.93	3.300	112.73	7.041
Control group	30	19.37	3.192	114.44	7.076

The results were analyzed with SPSS 18.0. The means and standard deviation (*SD*) of egoistic/altruistic behavior of each group are shown in table 2. Independent-sample t-test was adopted to discuss the differences between family/individual self-construal priming group and control group on altruistic/egoistic behavior. Between the family self-construal priming group and control group, the difference on altruistic behavior was significant ($t=2.377, p<0.05$), but the difference on egoistic behavior was not noticeable. Between the individual self-construal priming group and control group, the difference on egoistic behavior was significant ($t=2.681, p<0.05$), but the difference on altruistic behavior was not noticeable.

The results here partially supported the previous hypotheses. When the family self-construal was primed, participants reported doing more altruistic behaviors. At the same time, when the individual self-construal was invoked, participants would do more egoistic behaviors. It might be that when family self-construal was primed, the schedule of caring for others' benefit and sense of responsibility for others would be evoked which are typical in the Chinese family, so people would be more likely to do altruistic behaviors. However, the priming of family self-construal could have so deep effect to inhabit the egoistic behaviors, which we presumed was rooted in the inner heart of man and hard to decrease by priming effect. The difference between the individual self-construal priming group and control group on altruistic behavior were not significant, which means that the level of individual self-construal and altruistic behavior may not be contradictory, or the items of altruistic behavior and egoistic behavior involved in current study are not contradictory.

Conclusion and Discussion

The current study first explored the existence of the family self-construal for Chinese and the correlations of the level of family/individual self-construal and altruistic/egoistic tendencies. Then the priming paradigm was applied to see whether a different type of self-construal could be evoked by different reading materials. The last study explored how altruistic and egoistic behaviors would be influenced when the different self-construal was primed. Results revealed that, the family self-construal was positively correlated with altruistic tendencies and negatively correlated with egoistic tendencies. The individual self-construal was positively correlated with the egoistic tendencies and the altruistic tendencies. The different type of self-construal could be evoked by reading different materials and the family self-construal invoked caused more altruistic behaviors while the individual self-construal invoked caused more egoistic behaviors.

In the Study 1, there was a significantly positive correlation between individual self-construal and altruistic tendencies, which implied that college students with individual self-construal are also willing to do altruistic behavior even they prefer to pursue private benefit (the relation was 0.257 and 0.298 especially) and so in Study 3, participants primed with individual self-construal didn't decrease their altruistic behaviors even if they did do significantly more egoistic behaviors. This is in accordance that individualism doesn't mean egotism, it includes both personal rights and obligation to others. However, the family self-construal does have more positive effect on altruistic behavior (the correlation with altruistic behaviors was 0.398), which significantly higher than that of individual self-construal's 0.257, and at the same time, the correlation of family self-construal with egoistic behaviors was -0.162, which showed its strong inhabiting effect.

In the future, the underlying reason why the family self-construal could influence altruistic behavior, why the individual self-construal could have a more positive effect on altruistic behaviors, and whether the sense of responsibility plays a part as we inferred, need to be explored. More research should focus on the factors that may influence the general level of the family/individual self-construal such as parenting style, family environments and social culture.

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Belief in a Just World, Online Donation Acceptance, and Online Donation Behavior in a Sample of Chinese Undergraduates

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[Abstract] This research examines the relations among belief in a just world, online donation, and online donation behavior in a group of Chinese undergraduates, using the Personal Belief in a Just World Scale (Dalbert, et al., 1987) and Online Donation Acceptance Questionnaire (Liu, 2015). Results showed that belief in a just world was significantly correlated with online donation acceptance. There was also a significant correlation between online donation acceptance and online donation behavior. However, the correlation between belief in a just world and true online donor behavior did not reach significance. The relations among belief in a just world, online donation, and online donation behavior are discussed.

[Keywords] belief in a just world; online donation acceptance; online donation behavior

Introduction

The charity-linked individual behavior has attracted increasing attention of academicians and practitioners. Traditional charity-linked individual behavior, as when one donates used items or money to charity, have changed a lot. With the socialization of the Internet, charity-linked individual behavior appearing on the Internet environment becomes even more helpful than in real life because of the speed and the scope of Internet spreading. Cyberspace users tended to provide more help online compared to in real life (Wallace, 1999), and also preferred to ask for help through the Internet (Karabenick & Knapp, 1988). There are two ways to donate in charity events, spending money or spending time. In this study, we focus only on the philanthropic behavior of spending money. “2015 Annual Report of China Charity Donation” suggested that the donation network platform is one of the main channels for small donations from individuals (single amount of 10,000 yuan or less). The China Charity Federation analyzed data from four major domestic network donation platforms, respectively (Sina) micro-public platform, Tencent public, Ant financial, and Taobao public welfare. In 2015, the above four platforms donations involved more than 3 billion people, and received a total of 966-million-yuan donation, an increase of 127.29% compared to 2014, which involved one third of the donators and accepted up to 541 million yuan. However, the Internet is like a double-edged sword that either serves us or cuts us. Online deviant behaviors, such as online deception, cyber bullying and cybercrimes are an everyday occurrence (Caspi & Gorsky, 2006). The psychological research of the Internet has focused more on the Internet’s negative aspects, but has widely ignored its positive aspects. Amichai-Hamburger (2008) suggested that advocating Internet volunteering behaviors might enhance its positive potential. In China, undergraduates, as the main component of social development, make up the largest population of Internet users. This study focused on online donation behavior has great significance to improve undergraduates' positive qualities and psychological development.

Belief in a Just World (BJW) and its Relationship with Online Donation Behavior (ODB)

The Belief in a Just World (BJW) is the extent to which someone believes the world is fair. First described by Lerner and Simmons in 1966, this construct was first used to explain the human tendency to

blame the victim. If the world is a fair place, then it is plausible to believe that tragedies can be avoided through good behaviors. Although BJW is associated with harsh social attitudes (i.e. victim-blaming), it is an important construct to help sustain an internal locus of control and believe that hard work will be compensated (Dalbert & Sallay, 2004). People are motivated to believe that the world is a just place where people get what they deserve and determine their own fate (Lerner, 1980). The Belief in a Just World has three main functions: (1) Establish a confidence that one will be treated fairly; (2) provide a conceptual framework to assimilate events and make attributions; (3) and institute a personal contract with society to uphold common values (Dalbert & Sallay, 2004; Peter, Dalbert, Kloeckner, & Radant, 2012).

Zuckerman (1975) suggested that the state of need serves as a motivating force to urge individuals to look for ways in which he can satisfy his need, and BJW serves as a guiding principle implying that people who behave altruistically will be rewarded. Moreover, the empirical studies have suggested that people who have the Belief in a Just World tended to have more altruistic motive (Turner, DePalma, Madey, Tillman, & Wheeler, 1999) and behave more altruistically (Miller, 1977; Zuckerman, 1975) than those who do not. Many online group behaviors have similar social regulations as their real-life counterparts, and many scholars even consider there might not be regulation differences between online and real life (Batson & Powell, 2003; Zheng, 2013). Accordingly, BJW will also serve as the same guiding principle spurring cyber users to volunteer and help others on the Internet. Thus, one of our hypotheses is that BJW will positively predict the ODB.

Online Donation Acceptance (ODA)

Previous studies have identified many factors that can affect users’ behaviors towards using technologies. Technology Acceptance Model (TAM), shown in Figure 1, was adapted from the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) by Davis in 1986, whose purpose was to explain technology adoption behavior. In TAM, external variables are proposed to trace the impact of outside factors on users’ two primary perceptions: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). PEOU directly influences PU. These perceptions affect users’ positive or negative attitudes towards using the technology. Attitude towards using the technology influences behavioral intention to use the technology. PU also directly influences behavioral intention to use. Behavioral intention to use technology then determines actual use.

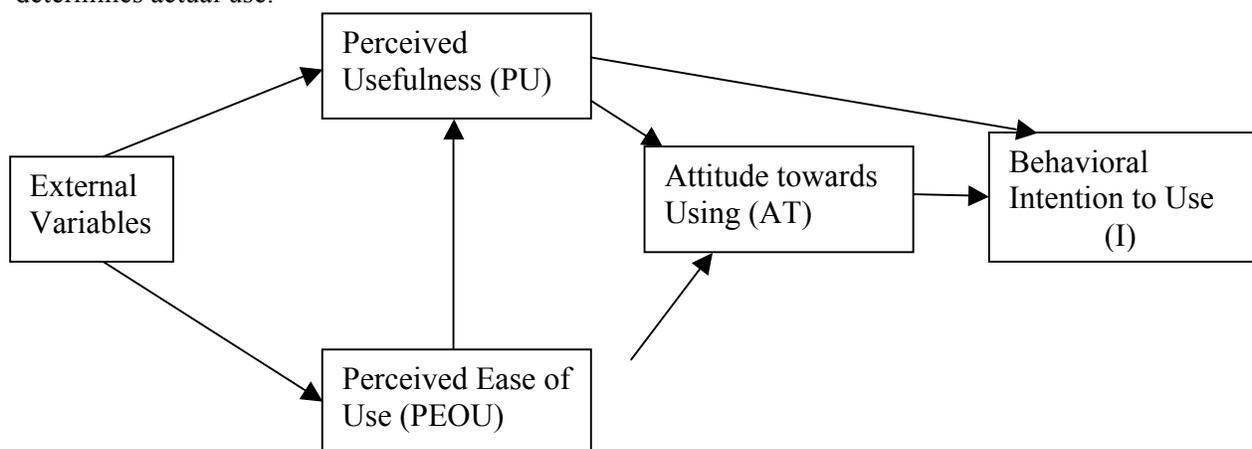


Figure 1. Technology Acceptance model (Davis, 1986).

Perceived Ease of Use and Perceived Usefulness are the most important factors in the technology acceptance model (Chen, Lin, Yeh, & Lou, 2013, p. 112). Perceived Ease of Use refers to “the degree to which a person believes that using a particular system would be free of effort”. Perceived Usefulness is explained as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989). Therefore, under the background of rapid development of network charity donation, this study will extend the acceptance model to the field of online charity donation. On the one hand, we explore its applicability and effectiveness for online charity donation. On the other hand, according to Guan's (2015) research, increasing the network-specific factors such as perceived security to enhance the accuracy and effectiveness of its enclosed as predicted.

The Current Study

Online charity donation is a product of the Internet age, still in the initial stage of development, with future with a huge potential for growth. Healthy development of network donated emergency relief and others have helped solve key issues of social concern. In spite of the frequent observations that BJW is related to altruistic behavior, it remains unclear whether BJW is also related to ODB. Similarly, whether BJW is associated with ODA is also uncertain. Therefore, based on the literature review above, we studied the relationship between BJW, ODA and ODB.

Method

Belief in a Just World (BJW)

A 13-item justice questionnaire developed by Dalbert was used for BJW assessment (Dalbert, 2002). This scale contained two dimensions: Personal BJW (P-BJW, 6 items) and General BJW (G-BJW, 7 items). Discrepancies were rated on a scale from 1 = “very much disagree” to 6 = “very much agree”. Higher score indicates more faith in justice. The Chinese version of BJW was translated by Su and his colleagues, and shows a relatively acceptable reliability and validity (Su, Zhang, & Wang, 2012). In the current sample, it had Cronbach's α of 0.771 and 0.796 for P-BJW and G-BJW, respectively.

Online Donation Acceptance Questionnaire

The Student Online Donation Reception Questionnaire (see Appendix) contained three dimensions of perceived ease of use, perceived usefulness, and perceived security, for a total of 12 questions. Discrepancies were rated on a scale from 1 = “very much disagree” to 5 = “very much agree”. The questionnaire's internal consistency for each dimension coefficients were 0.777, 0.754, and 0.739, and the total internal consistency coefficient was 0.80.

Online Donation Behavior

Online donation scenarios were selected from a real network donation platform (easy to raise 轻松筹).

Participants

A total of 132 participants were conveniently selected from the University of Fuzhou, to participate in the study and were administered the questionnaire. There were 102 male participants, and 30 female participants; the average age of the subjects was 18.7 years of age.

Results

Descriptive Findings

Descriptive statistics are presented in Table 1. The mean scores of Belief in a Just World were the following: BJW: $M=3.63$ (S.D. = 0.91); BJW-G: $M=3.42$ (S.D. = 0.99); BJW-P: $M=3.81$ (S.D. = 0.88). Since the scale uses a 6-point scale, the median was 3.5. The one-sample t test of Belief in a Just World was the following: BJW-P was significantly higher than the median, indicating that college students' Personal BJW is at a high level, and that college students believe that the world is fair to them ($t(131) = 4.063, p < 0.001$). But BJW and BJW-G, were not significantly different from the median ($t(131) = 1.728$, and -0.815 , respectively, $p > 0.05$)

The mean scores of online donation acceptance were the following: ODA: $M=35.59$ (S.D. = 6.78); PEOU: $M=12.56$ (S.D. = 3.83); PU: $M=13.75$ (S.D. = 3.20); PS: $M = 9.28$ (S.D. = 3.04). Because the scale used a 5-point scale, the median was 3. The questionnaire had 12 items, 4 items for each dimension, so the median of ODA was $3 \times 12 = 36$, and the median of each dimension was $3 \times 4 = 12$. The one-sample t-tests of online donation acceptance were the following: PU was significantly higher than the median, indicating that college students in perceived usefulness was at a high level, that college students believe that online donations are useful ($t(df) = 6.266, p < 0.001$). PS was significantly lower than the median, indicating that college students' perceived security is at a low level, that they believe that online donation is not secure ($t(131) = -10.253, p < 0.001$). But ODA and PEOU, were not significantly different from the median ($t = -0.693$, and 1.679 , respectively, $p > 0.05$)

Table 1. The Means of BJW and ODA

Variables	Factors	N	M±SD	T(131)	p
BJW		132	3.63±0.90	1.728	0.086
	BJW-G	132	3.42±0.99	-0.815	0.416
	BJW-P	132	3.81±0.88	4.063	0.000***
ODA		132	35.59±6.78	-0.693	0.49
	PEOU	132	12.56±3.83	1.679	0.096
	PU	132	13.75±3.20	6.266	0.000***
	PS	132	9.28±3.04	-10.253	0.000***

Note: BJW=Belief in a Just World; BJW-G = General BJW; BJW-P= Personal BJW; ODA= Online Donation Acceptance; PEOU = Perceived Ease of Use; PU= Perceived Usefulness; PS= Perceived Security (BJW, BJW-G, BJW-P, ODA, PEOU, PU and PS have the same meaning in next tables and figures).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Correlation Analyses

Table 2 shows the correlations between control variables, BWJ, ODA, and Online Donation Behavior (ODB). For the three control variables, online donation acceptance (ODA) was significantly correlated with BWJ ($r = 0.275$), and online donation acceptance (ODA) was significantly correlated with online donation behavior ($r = 0.209$). BJW was not significantly correlated with online donation behavior ($r = -0.025, p > 0.05$).

In Table 3, we examined the correlation between perceived ease of use, perceived usefulness, perceived security and online donation behavior. In these three dimensions, perceived security was significant correlated with ODB ($r = 0.303$). The other two dimensions, perceived ease of use and perceived usefulness, were not significantly correlated with online donation behavior ($r = 0.075$ and 0.064 , respectively, $p > 0.05$).

Table 2. Inter-Correlations Between BJW, ODA and Online Donation Behavior (ODB)

	2	3
1. BJW	0.275**	-0.025
2. ODA		0.209*
3. Online donation behavior		1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Inter-Correlations Between PEOU, PU, PS and Online Donation Behavior (ODB)

	PEOU	PU	PS
ODB	0.075	0.064	0.303**

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion

This study investigated the relations between Belief in a Just World, Online Donation Acceptance and Online Donation Behavior. Results showed that BJW was significantly correlated with Online Donation Acceptance, suggesting that, as in our sample, individuals have higher levels of just world beliefs and are more likely to accept online charity donations. There was also a significant correlation between online donation acceptance and online donation behavior, suggesting that, as in our sample, individuals who had higher levels of online donation acceptance were more likely to show a real Online Donation Behavior. However, there is no correlation between Belief in a Just World and true Online Donor Behavior. Previous research has found BJW and altruistic behavior has a close relationship, whether in real life or on the Internet (Zheng, et al., 2012). Why there was no significant correlation between BJW and Online Donor Behavior (which is also an altruistic behavior) in online donations? We examined the relationship between the three dimensions of Perceived Ease of Use, Perceived Usefulness and Perceived Security in Online Donation Acceptance and Online Donor Behavior. The results showed a significant correlation between Perceived Security and Online Donation Behavior. In our study, college students perceived security significantly lower than the general situation, indicating that college students' online donation was very insecure ($t = -10.253$, $p < 0.001$). It is possible that this perception of insecurity affects the relationship between BJW and online donation behavior, but our study does not support this, and this is one of the drawbacks of this study. Consequently, the relationship between BJW and Online Donation Behavior needs to be further explored and analyzed in future studies.

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