Yiyin Yang   *Editor*

Social Mentality in Contemporary China

SSAP

Springer

Research Series on the Chinese Dream and China's Development Path

Project Director

Xie Shouguang, President, Social Sciences Academic Press

Series Editors

Li Yang, Chinese Academy of Social Sciences, Beijing, China
Li Peilin, Chinese Academy of Social Sciences, Beijing, China

Academic Advisors

Cai Fang, Gao Peiyong, Li Lin, Li Qiang, Ma Huaide, Pan Jiahua, Pei Changhong, Qi Ye, Wang Lei, Wang Ming, Zhang Yuyan, Zheng Yongnian, Zhou Hong

Drawing on a large body of empirical studies done over the last two decades, this Series provides its readers with in-depth analyses of the past and present and forecasts for the future course of China's development. It contains the latest research results made by members of the Chinese Academy of Social Sciences. This series is an invaluable companion to every researcher who is trying to gain a deeper understanding of the development model, path and experience unique to China. Thanks to the adoption of Socialism with Chinese characteristics, and the implementation of comprehensive reform and opening-up, China has made tremendous achievements in areas such as political reform, economic development, and social construction, and is making great strides towards the realization of the Chinese dream of national rejuvenation. In addition to presenting a detailed account of many of these achievements, the authors also discuss what lessons other countries can learn from China's experience.

More information about this series at http://www.springer.com/series/13571

Yiyin Yang
Editor

Social Mentality in Contemporary China

Editor
Yiyin Yang
Beijing, China

Series Preface

Since China's reform and opening began in 1978, the country has come a long way on the path of Socialism with Chinese characteristics, under the leadership of the Communist Party of China. Over 30 years of reform efforts and sustained spectacular economic growth have turned China into the world's second largest economy, and wrought many profound changes in the Chinese society. These historically significant developments have been garnering increasing attention from scholars, governments, and the general public alike around the world since the 1990s, when the newest wave of China studies began to gather steam. Some of the hottest topics have included the so-called "China miracle", "Chinese phenomenon", "Chinese experience", "Chinese path", and the "Chinese model". Homegrown researchers have soon followed suit. Already hugely productive, this vibrant field is putting out a large number of books each year, with Social Sciences Academic Press alone having published hundreds of titles on a wide range of subjects.

Because most of these books have been written and published in Chinese, however, readership has been limited outside China—even among many who study China—for whom English is still the lingua franca. This language barrier has been an impediment to efforts by academia, business communities, and policy-makers in other countries to form a thorough understanding of contemporary China, of what is distinct about China's past and present may mean not only for her future but also for the future of the world. The need to remove such an impediment is both real and urgent, and the *Research Series on the Chinese Dream and China's Development Path* is my answer to the call.

This series features some of the most notable achievements from the last 20 years by scholars in China in a variety of research topics related to reform and opening. They include both theoretical explorations and empirical studies, and cover economy, society, politics, law, culture, and ecology, the six areas in which reform and opening policies have had the deepest impact and farthest-reaching consequences for the country. Authors for the series have also tried to articulate their visions of the "Chinese Dream" and how the country can realize it in these fields and beyond.

All of the editors and authors for the *Research Series on the Chinese Dream and China's Development Path* are both longtime students of reform and opening and recognized authorities in their respective academic fields. Their credentials and expertise lend credibility to these books, each of which having been subject to a rigorous peer-review process for inclusion in the series. As part of the Reform and Development Program under the State Administration of Press, Publication, Radio, Film and Television of the People's Republic of China, the series is published by Springer, a Germany-based academic publisher of international repute, and distributed overseas. I am confident that it will help fill a lacuna in studies of China in the era of reform and opening.

Beijing, China   Xie Shouguang

Acknowledgements

Introduction

If we observe a society and the people of which it is made up, we sense a psychic force driving, guiding, and shaping them, from personal values and preferences to rules in social interaction, and from market transactions to mass social events. As calm and gentle as clouds and water, such strength looms and changes from time to time, but yet is based on some relatively stable factors. Consisting of social consensuses, social values, as well as feelings and social emotions based on the satisfaction of needs, this spiritual strength is a social state of mind that disperses among the whole society or social group/social category during a given period of time. As a society steadily evolves, such a state of mind manifests itself as the spiritual temperament or "Zeitgeist" of the whole society. When a society experiences sharp changes, however, this social state of mind may rapidly change and assume more complicated components and forms. It is like a keynote which serves as a foil to the internal state of mind of numerous individuals and groups; meanwhile, it is continuously altered by the inner feelings, intentions and behavior expectations, and choices of these individuals and groups, thus converging into the spiritual "chorus" of a whole society. Such amorphous but ubiquitous state of mind is nowadays referred to as "social mentality".

In China, the expression "social mentality" has been used quite frequently in academic and public discourse since the 1980s. The term has become a familiar one for Chinese people, who have been witnessing their country going through informatization, globalization, and significant social and economic transformations. In fact, the need to "cultivate a positive social mentality centered on care and compassion, psychological health, self-confidence, self-respect, rationality and even-temperedness" was codified in the report of the 6th Plenary Session of the 17th CPC Central Committee. This clearly shows that both the public and the government are more acutely aware of the impact of social mentality on individuals, society, market, and nation than they had ever been before, and taking this issue very seriously.

As a manifestation of social change, social mentality is an important component of the study of social changes for any society undergoing them. Changes in social mentality allow us to witness social changes and the consequences of such changes.

For example, the prevalence of materialism is an inevitable stage of social development leading from poverty to prosperity. On the one hand, it forms the internal impetus for the social behavior of individuals; on the other hand, the excessive pursuit of riches may have negative effects on economic, social, and cultural development. Second, the ability to grasp and adjust social mentality is also an important psychosocial resource and condition that cannot be neglected in the study of social changes. The government, at both the legislative level and the executive and administrative level should endeavor to facilitate social integration and social cooperation by realizing the potential of social mentality, which can be influenced by ideology and social atmosphere, as a form of resource. Third, as the outward expression of the atmosphere created by the social behavior of individuals and groups, social mentality is also closely related to each member of a society. Not only does it influence these members, it also provides them with a foundation and a sense of belonging.

In today's information-dense society, channels for the social transmission of ideas have changed, and the mechanism for the formation of social mentality has become more complicated, showing characteristics that did not previously exist. As a result of rapid social changes and polarization, social values, which lie at the very psychological foundation of social mentality, have shown signs of disorientation and fragmentation. It does not help advance the cause of constructing a harmonious society when a powerful core system of basic values capable of bringing people together in both how they think and what they do is absent. We need to pursue new breakthroughs in social psychology and social mentality to strengthen social trust, restore social morality, improve public participation, facilitate social cooperation, adjudicate social conflicts, and mobilize resources. Therefore, we should organically combine the construction of a harmonious society with studies of social mentality by looking for the kind of social mentality most conducive to societal harmony, understanding how that kind of social mentality can be forged, and create those conditions for its emergence in pursuit of a harmonious society and better life for all.

For any society undergoing rapid development and change, the significance of studies of social mentality is beyond doubt. But it is no easy task to either understand it or to analyze it. This is first and foremost because social mentality is, as both a psychological fact and a social reality, something that evades straightforward conceptualization. It is amorphous yet ubiquitous; it is easy to reflect on but difficult to inspect closely; it can be perceived, but only ever so indistinctly; it has to do with an individual's mental states but is also much more than these; it is a shared reality jointly built by members of a society, and yet somewhat removed from individual value choices, attitudes and feelings, and emotions and intentions. It is exactly such characteristics that make the concept of social mentality so challenging to study.

For a long time, Chinese academic circles were faced with a lack of systematic study of studies of social mentality. From the point of view of current domestic studies, there are four main issues: first, no clear theoretical framework has been formed yet. The definition of the concept of social mentality is unclear and

inoperable; research perspectives are too uniform; content is scattered, informal, and lacks intrinsic logic; study of the mechanisms leading to the formation of social mentality is too weak and therefore fails to explain the reasons and courses for the occurrence, preservation, change, and extinction of various social mentalities. Second, survey and analysis methods are not scientific and systematic enough, resulting in the lack of effective and reliable measurement and analysis tools based on a definite theoretical analytical framework. Most studies stop at opinion polls, and analysis of the surveyed data is often too weak and scattered, as it involves almost no focal event, fashion, group behavior, daily lifestyle, or behavior style relating to social life. Third, predictions are still hard to make in the field of social mentality. The lack of a theoretical framework and efficient survey methods in the field is similar to a weather broadcaster having no knowledge of basic meteorological theory or a reliable atmospheric monitoring system: this greatly influences the ability to predict things and makes it harder to be aware of significant and influential social mentalities. Fourth, when it comes to the regulation of social mentality, methods have not been tested or summarized. To regulate social mentality is one way of intervening in society. How does one control and grasp social mentality? Through what channels is this achievable, and how could one test the effect of these various channels? These are all significant topics in social practice. These topics haven't been incorporated in a systematic research framework yet, and there especially lacks cooperation between academics and the government's macroscopic management departments, as well as grass-root social organizations and mass media. In spite of the large number of surveys and analysis with the words "social mentality" in their titles, we can hardly speak of a scientific consensus yet among social psychologists, sociologists, politicians, and communications experts when it comes to this important issue. Nor has constructive interaction between governmental administrative departments and grass-root social organizations been taking place. All of these have made the tasks of measuring, analyzing, forecasting, and fine-tuning social mentality especially difficult.

Seen from the perspective of social psychology, popular will and public opinion are the expression and representation of social mentality, rather than social mentality itself. We can try to understand social mentality through folk proverbs, grumbles, street gossips, rumors, hearsays, jokes, posts and blogs on the Internet, text messages, buzzwords, etc.; we can try to understand it through assemblies, riots, disturbances, strikes, petitions, etc.; we can also try to understand it through patterns of consumption, fashions, interpersonal relationships (hierarchical, inter-generational, familial, etc.), market risk tolerance, savings, panic purchases or investments, reading preferences, social trust, etc. However, none of these aspects is directly equal to social mentality.

Social mentality permeates views and opinions. It does not only represent individual social minds but also the social state of mind of particular groups and even society as a whole. It needs to be analyzed and grasped, and in most cases relatively long time intervals should be allowed for researchers and society members to "retrospect" and "review". For example, the mentality of the Chinese society in the 1980s, at the initial stage of the "reform and opening-up" initiative, was, in

"retrospect", obviously permeated with joy and happiness, a mix of hesitation and worries caused by ideological emancipation, as well as strong motivation, participation, and efficiency in the face of rapid social and economic development and changes. "Emancipation" was the base feeling dominating social mentality then. Not only were many people eager to try their chances, even more people started practicing what was being preached. People walked fast, were quick-witted, were willing to debate, and were hopeful for the future. They accepted risks, feared no failure, and were passionate for new things. They trusted in the future and believed that all their efforts would pay off. Then, along with the economic progress in China, people became more and more determined in their pursuit for riches, social power, and status, whereas the values of materialism and consumerism had an increasingly evident influence. The possession of money and material goods gradually became the leading index for the formation and judgment of social status and reputation. Unscrupulous hustling and legal competition for benefits simultaneously occurred. For those who have experienced the 1980s and the beginning of the twenty-first century, it is not difficult to pinpoint everyday examples verifying the changes in social mentality during these 30 years. The properties of social mentality such as those above can explain one-sidedly why some historians research the "history of mentalities", but little profound and scientific analysis on our actual social mentality, this latter being what we hope to see. In one of his articles, Xia Xueluan once identified eight negative social psychological traits common among Chinese today which he believes not only deserve more research attention but also warrant correctional efforts. They are (1) fickleness, (2) garrulousness, (3) manipulativeness, (4) gimmicky-mindedness, (5) showiness of one's wealth, (6) the disposition to feign being poor, (7) ruthlessness, and (8) apathy (Xia Xueluan 2011). Zhang Huiqin's list of social psychological traits prominent in our time includes mental unsteadiness, mental disorientedness, a sense of insecurity and injustice, and pessimism. Many others have made similar observations engaged in similar reflections, some of which rather insightful. These observations and reflections cannot, however, be used directly for purposes of the thorough documentation and analysis of trends in social mentality. The systematic monitoring of these trends is only possible with a set of operable research tools, which is yet to be fully developed.

From these conclusions and summaries distilled from observations, it is not hard to see that studies of social mentality still suffer from the lack of adequate and easy-to-use measurement tools that are needed to carry out systematic documentation and analysis studies. In one commonly used method for describing and documenting social attitude, survey subjects are asked to grade the strength of a particular feeling or attitude on a scale from weak to strong. The preparatory work is very time-consuming, especially since questions must be designed to be appropriate for Chinese. Moreover, for those questionnaires about some particular feeling or attitude, e.g., the sense of security, survey subjects' reporting of their subjective feeling by no means gives a full picture of the society as a whole, and must be supplemented by quantitative measurements needed for explanation and analysis. The construction of a full picture of the current status of and trends in social mentality requires the establishment of a content structure and an index system.

The third difficulty resides in the accumulation of long-term data. The variability of social mentality means surveys based on relatively stable social rules or social values are not valuable replacements for social mentality records. This requires the support of an investigation mechanism and system, including the systematic collection of data by means of relatively mature measurement tools and longitudinal design. So far, the multiple data survey systems we rely on should provide, if efforts are consistent, trace data for researchers to conduct analysis and make predictions about the future changes in social mentality.

The fourth difficulty concerns the in-depth analysis of social mentality. Without a sharp perspective and profound insight, even the greatest abundance of survey data and individual cases would only be a pile of soulless and lifeless waste paper. In-depth analysis requires profound knowledge. One cannot complete such a task simply by piling up data and enumerating cases. Therefore, this is not a field for "quick" achievements.

In this book, we try to overcome the above-mentioned difficulties and try to answer the following questions: What is "social mentality"? What are the characteristics of social mentality? Which research perspectives offer the richest insight on the characteristics of social mentality? How to observe and document social mentality? What impact social mentality has on factors that determine how individuals, groups, society, markets, and countries operate? How cultural, social, economic, political, and mental factors shape social mentality? Is social mentality amenable to control and management? Is the distinction between right and wrong applicable to social mentality? Are there corresponding criteria for judgment? In order to systematically answer these questions, scholars from various disciplines should work together to clarify relevant concepts and to capture the basic structural properties of social mentality, with an aim of uncovering, through observation and analysis, regularities and patterns inherent to this subject. Most contributing authors of this book have worked for a long time in the frontline of social psychological research. They carry on the two academic traditions of sociology and psychology in regards to socio-psychology, and attempt to present the latest academic achievements on social mentality from this perspective.

This book is written in two parts. In the first part, Chap. 1 discusses the conceptual and theoretical framework of social mentality; Chap. 2 discusses the mental characteristics of its formation process; Chap. 3 discusses its mental mechanism and influential factors; Chap. 4 analyzes its structure and its measurement index; and the eight chapters in part two sort out the existing concepts and studies in the major fields of social mentality, as well as evaluate and analyze related measurement tools.

In the face of such a great and complicated research subject as social mentality, which moreover offers little accumulation of knowledge in the academic circle, we sometimes have no choice but to make conclusions based on incomplete data, and hope that results, by way of survey, analysis and reflection, approach the reality of social mentality.

Yiyin Yang

Contents

Theoretical Framework for Studying Social Mentality

Yiyin Yang

A theoretical framework for the study of social mentality can be obtained via the theoretical analysis of the basic concepts and structures of social mentality. This work is preconditional to as well as an important part of the research of social mentality. Generally speaking, it includes at least the definition of social mentality, the evaluation, analysis and choice of research perspectives, the establishment of an intrinsic structure, and the analysis and discussion of related concepts.

1 Proposal and Application of the Concept of Social Mentality

When it comes to social sciences in China, social mentality is a widely accepted yet ambiguous concept. So far, social psychologists haven't reached a consensus on issues such as the correct definition of social mentality, its mental structure and "its formation process", which directly influences progress in terms of the assessment of social mentality, the analysis of its influences factors and formation mechanism, and its regulation. Therefore, it is necessary for us to start from the definition of social mentality in order to set the foundation for a theoretical framework for research.

Y. Yang (✉)
Beijing, China

1.1 Proposal and Application of the Concept of Social Mentality

In a literal sense, "social mentality" is generally understood as the "psychological state of society", the "mental condition of society", the "common mental state of society", the "feelings of the people", or the "will of the people". It is a word quite frequently used, but it has yet to be included in most dictionaries.[1] The definition of "social mentality" in Chinese newspapers and academic documents is not strict at all in fact, and most of them are direct presumptions of its conceptual connotations from different theoretical perspectives (such as philosophy, sociology, psychology, communication, politics, etc.) made by individuals, which results in a lack of adequate arguments. Even more people employ this concept based on its conventional meaning to engage in straight discussions on the relationships between social mentality and other phenomena, or on the issues of early warning and regulation.[2] In some disciplines, social mentality is regarded as a kind of perspective; the history of mentalities in historical sciences is an example.[3] In the course of document retrieval, we can find that this word is quite frequently used in history, sociology, economics and politics, and is regarded as an influential factor of macro-economic and social development in periods of transition.

We can roughly sort out the existing concepts of social mentality into the following categories: (1) social mentality is the sum of social mental states that people universally have under specific social, historical and cultural conditions and within a certain region. For example, Ma Guanghai defines it as the sum of emotions, feelings, social cognitions, behavioral intentions and value orientations extensively present within various social groups and periods of time and related to specific states of social operation or processes of major social change. It is a dynamic part of the social mental state. Meanwhile, such an understanding stresses three points. The first is the particularity of social conditions that cause or generate social mentality. The second is the difference between the content of social mentality and common social mental states. The former is the dynamic and direct reflection of the current functioning of society or social changes; its content consists of mental activities with strong affective and

---

[1]None of *Ci Hai, Encyclopedia of China—Psychology Volume, Encyclopedia of China—Sociology Volume, Succinct Dictionary of Social Psychology* (editor-in-chief, Ronghua 1988), *Succinct Encyclopedia of Psychology* (editor-in-chief, Qicheng 1991) and *The International Handbook of Psychology* (editor-in-chief, Pawlik et al. 2002) included this entry. And there is no content corresponding to this concept in ay textbook of social psychology or sociology. Only the word "mentality" was found in *A New Dictionary of Social Sciences* (editor-in-chief, Xin 1988), which is paraphrased as: "all public opinion, customs, traditions, beliefs and value systems that influence the thoughts of individuals, human groups and various nations". The annotation of this entry points out from the angle of etymology that, the world mentality was the product in British philosophy in the 17th century and it represents the group properties of mental state and the special thoughts and way of feeling of a nation or a human group.

[2]For example, Bolin 1995; Zhiyong 1997; Yang 1999; Yingbo and Wang 2001; Hongsheng 2001; Yunfeng 2002, etc.

[3]See also the papers by Zheng 2000; Wang and Xuewang 2000; Wang 2002, etc.

emotional overtones. The third is the instantaneity, the dynamism, the directness and other superficial characteristic of social mentality. Content at the psychological level is most easily sensed and apprehended (Guanghai 2008). Ding (1996) defines "social mentality" as "[…] the social mental reaction or mental state caused by the development and change of economic relationships, political institutions and social environments as a whole, which are direct, extensively existing and of a certain communality. It is social, popular and general." (2) Social mentality consists of the states of mind and social moods, such as the emotions, feelings and attitudes of various social groups, under the certain domination of thoughts and mentalities and expressed via speeches, behaviors, customs and public opinions. It is the "barometer" of social, political, economic and cultural changes (Yang 1999), and it is contemporary and relatively stable. (3) Different from individual mentality, social mentality refers to the mental state of social groups; it is the subject of social psychology and social ideology presented as a whole, and is of the masses, integral, objective, practical and historical. For example, Erfang (1996) believes that, the state structure formed by the interpenetration and organic combination of social psychology and social ideology is a mental state existing as a whole, popular among members of society, and internalized as the spiritual structure of a social subject. It is the intermediary between rationality and irrationality, and is integral, convertible, dynamic, tendentious, vacillating and self-regulating.

These definitions stress the relationships between social mentality, social existence, social consciousness and individual behavior, as well as the overall social features and external characteristics of social mentality. They formed the difference between "social mentality" and other similar concepts (such as social consciousness, public mentality and group psychology), as well as between "social mentality" and non-academic concepts (such as popular feelings, popular will and social intuition). However, the above definitions merely point out the difference between "social mentality" and individual psychology and some of its functional characteristics. As these definitions are not so operational, they fail to explain the fundamental source of social mentality, i.e., they fail to clearly describe the social mental mechanism linking up the social attitudes, value preferences and behavior orientations of individuals with social mentality.

In the West, the concept "mentality" initially appeared in the "history of mentalities" established by the Annales School of France. As textually researched by French historian J. Legoff of the "Annales School," seen from the viewpoint of etymology, the adjective mental in French was derived from the Latin word *mens*, meaning ideological, spiritual and mental. The Latin word *mentalis* in the Middle Ages—which didn't exist in classical Latin—belonged to the scholastic vocabulary. In French, the noun *mentalitité* was not directly derived from the adjective mental; rather, it was borrowed from English in the mid-nineteenth century. The English noun mentality derived from the word mental, which already existed early in the 17th century. Therefore, the word mentality was the product of 17th century British philosophy (Xin 1988). It represents the collective properties of psychology and the thoughts and perceptions specific to a nation or a human group, which is different from official ideologies. In 1929, the Annales School of France launched the revolution of traditional

western historical sciences, the main objective of which was to incorporate subjects other than military and political activities in the discipline. Afterwards, neo historical sciences included social culture, social faith and the common consciousness and ideas of a group into its scope of research (Fengli 1998). Historians of mentalities believe that, "mentality is mainly collective and it seems to keep its distance away from the vicissitudes of social struggles; however, it would be a serious mistake if we were to separate it from social structure and social development" (Xin 1988). The perspective of the history of mentalities puts forward the concept of social mentality one-sidedly; however, because of the limitations of the characteristics of the discipline, there is still lack of further analysis of what social mentality is.

Fei Xiaotong, the renowned Chinese sociologist, anthropologist and ethnologist, once pointed out in his old age that, "as I look back on how my thinking has evolved over the course of my academic career, with its twists and turns, I arrived at this understanding, which is that community studies must be further advanced, and covering individuals as well as the social structure which is what I mean by the study of mentality" (Xiaotong 2004). He mentioned the word psycho-mental complex, used by his Russian teacher S. M. Shirokogoroff, which is "the phenomenon of mental physiology, psychology, consciousness and spiritual realm expressed by a group", "a kind of complicated and syncretic integrity", and "responsible for the formation of the upmost subject of anthropological studies", He simplified the phenomenon of social culture, denominating it "mentality"; nevertheless he still failed to express its meaning, resulting in a "vague summary" (Xiaotong 1999).

1.2   The Concept of Social Mentality from the Perspective of Social Psychology

Seen from the academic perspective, social psychology should be a discipline most suited for studies of social mentality. What social psychology studies are psychological matters concerning society (Shu 1983). It tries to explain the thoughts, affects and behaviors of individuals and what actual, imaginary or potential influences other people might have on them (Allport 1985); meanwhile, it also discusses how the thoughts, affects and behaviors of individuals influence other people and society through a constructive mental process which permeates individual cognition, affect and intention in regards to reality (Taylor 1998). It is thus clear that researching social mentality from the angle of social psychology can reveal the process and mechanism of the interaction between individual mental states and group and social mental state, as well as between micro and macroscopic perspectives. This should be a very important academic angle and provides guarantee for the proper operational definition of the concept of social mentality.

However, in the centenary academic history of social psychology, the field of "social mentality" did not actually accumulate many achievements. This is because in the two major academic traditions of social psychology, social psychology in the field of psychology, especially the mainstream of social psychology represented by North American social psychology, establishes systems and fields for socio-psychological research mainly from the angle of individuals. Being part of this academic tradition, social psychology stresses study of how individuals are influenced by other people and society, as well as explain and respond to social relationships and social environment in their own way. Therefore, social mentality, which surpasses individuals and takes the whole society as the unit of analysis, is not regarded as the research object in social psychology. However, as the most macroscopic research object in social psychology, social mentality is based on individual mental states; therefore, we can still find the path for research from the existing academic accumulation in mainstream social psychology. Meanwhile, we can also find a certain awareness of problems related to social mentality in the tradition of social psychology pertaining to sociology, especially when looking into earlier studies in the field of social psychology. For example, studies on the popular mind, the revolutionary mind and category behavior during the French Revolution (Bon 1895, 1913), and studies on the integrity of psychology in European Gestalt psychology.

1.3 Differentiation and Analysis of Concepts Related to Social Mentality

1. National Mentality

In prior relevant studies, some people substituted the concept of "national mentality" for that of social mentality. National mentality stresses the nation to which a mentality is applicable, or the mentality of the citizens of a whole nation, but fails to show its properties as a social mental state. There is quite an important correlation between national mentality and the concepts of "national character" and "national personality". The concept of national character considers citizens as a relatively stable whole and makes general observations by observing differences between citizens of other nations; therefore, it puts a greater emphasis on cultural, historical and socio-institutional factors, rather than engage in generalizations from the perspective of the formation and expression of social mental states and its mental relationship with individuals. Lu Xun's criticism of deep-rooted bad habits and suggestions concerning the remolding of national character were also based on his profound and thorough insights into Chinese cultural psychology. Therefore, using the concept of national mentality may alienate us from our discussion on social mentality (namely, in a period of economic and social transition, the two-way process of individual values and lifestyles being condensed into social values and these social values influencing individual value choices as well as social mental mechanism and structure); moreover, it also misfits the socio-psychological theoretical perspective, to some extent.

2. **Popular Will, Popular Feelings, Popular Opinion, Public Sentiment and Public Opinion**

The terms popular will, popular feelings, popular opinion, public sentiment and public opinion are all closely related to the concept of social mentality. Particularly in terms of how they manifest themselves, they constitute a part of social mentality. In academic papers, scholars often confuse these terms with that of social mentality. However, from the perspective of social psychology, these terms are expressions and manifestations of social mentality, rather than social mentality itself.

Another difference between social mentality and popular will is that the latter consists in viewpoints and suggestions based on specific events, policies and facts, whereas social mentality is somehow intangible and permeates said viewpoints and suggestions. For example, people may hold all kinds of attitudes and viewpoints regarding such aspects as housing system reform, choice of profession, job training, consumption patterns, spare-time activities, choice of spouse, and education of children; these may reflect choices in terms of behavior and values, and may not be necessarily be agreed upon by others but do however influence understanding, judgment and confidence in others, institutions and social organizations or rules. People are therefore also forced to choose certain behaviors as countermeasures. Thus, social mentality does not only manifest the social psychology of individuals but also that of some groups or even society as a whole. The latter might not necessarily represent the former and it may even be contrary to the social psychology of individuals. The difference with public opinion polls lies in the fact that the study of the social mentality endeavors to discover not individual viewpoints but rather their social and individual influence through their understanding and integration, as well as how and why these influences are produced and how they can be changed, so as to demonstrate the mechanism and function of social mentality. Furthermore, it endeavors to develop corresponding measurement, prediction and intervention methods.

3. **Social Mental State**

People often confuse social mentality with social mental state (the mental state of the whole society). Such confused application of the terms stems from the fact that social mental state is an umbrella concept with a broad scope. As an overarching concept in social psychology, social mental state or social mentality cannot be directly defined per genus and differentiae. Social mental state, social mentality, spirit of the time, and social mind, share the same connotation. As social mental state is often confused with microscopic or mesoscopic social mental state (such as individual's social mental state, a group's social mental state, or interpersonal social mental states, intergroup social mental states), it is difficult to distinguish and position what is meant by social mentality when the term is specifically referred. Moreover, the concept of social mental state also includes the analysis of social psychological processes and social psychological mechanism on different levels and its due content will be concealed if it is confused with social mentality. The correct discrimination is that social mentality is the most macroscopic analytic unit or level of social mental states, i.e., its uppermost object according to Fei Xiaotong. Social mentality is formed by

way of a socio-psychological mechanism, and its occurrence and development must undergo corresponding social psychological processes. Therefore, using the concept of social mentality (instead of social mental state) can highlight its nature as a specific concept.

2   Theoretical Perspective of Social Mentality Studies

2.1   The Psychological Structure of Social Mentality from the Perspective of an "Individual in the Group"

In global social psychology, individualism, rationalism and liberalism featured in the rhetoric of the dominating North American school of social psychology have brought studies in all fields to refer to the relation between mental state and society from individual perspectives, such as rationality, independence, and liberty. The group is only seen as the background of individual mental state and behavior.

Nearly one hundred years of development have allowed theories and widely acknowledged conclusions on the mechanism for individual socio-psychological processes to establish themselves in the field of social psychology. For example, the study of attitude structure and function, attitude change, social psychological representation and social memory, control and autonomy in social life, behavior decision and judgment, social motivation, social feeling, etc., from the perspective of an individual's internal socio-psychological phenomena; the study of ego, individual development, social gender, etc., from the perspective of individual socio-psychological phenomena; the study of communication, language and social behavior from the perspective of interpersonal socio-psychological phenomena, including social influence mechanisms like social norms, conformity and obedience, attraction and intimacy, altruistic and prosocial behaviors, aggressive and anti-social behaviors, stereotypes, prejudices and discrimination, etc.; the study of organizational behavior and social conflict from the perspective of group socio-psychological phenomena; and the study of group identities and social movements from the perspective of intergroup socio-psychological phenomena (Deniel et al. 1998). From the above we can see that the structural approach to individual social mental state follows a pattern, from explicit to implicit, from part to system, from surface to deeper layers, from stability to change, from individual to interpersonal, and from group to intergroup. This pattern stems from the individual, focuses on the individual in the group; the group is only the background of the individual's mental activities. In addition, this pattern presupposes that if others' influence on the individual is necessarily inappropriate, ignominious, and dependent, which should be avoided. Obviously, such perspective cannot be directly used for the study of social mentality. Despite of this, it can provide an important reference for mental structures. Here, a brief explanation accompanied by a schematic diagram is offered (see Fig. 1).

Structure of Social Mentality of the Individual
External manifestation,Changes,Parts,Surface,Personal

Structure of social mentality
External manifestation, change, surface,
inter−personal, group, inter−group

| Personal views and opinions |

Representation, memories, judgments
Personal, Comparative external manifestation,
relative changes, part and surface

| Attitude |

Motive, mood
Personal, private, systematic,
deep−rooted, relatively stable

| Value judgment and choice |

Personal values
Personal, private, systematic, deep−rooted, stable

| Belief, faith |

| Social consensus, public opinion, popular, in vogue |

Social representation, social memories, social stereotype,
social pressure Inter−personal Comparative external
manifestation, part and surface

| Group attitude |

Motive, mood
Personal, private, systematic,
deep−rooted, relatively stable

| Value judgment and choice |

Social value judgment
Group, systematic, deep−rooted, stable

| party affiliation, religious sect, religion, ideological leaning |

Fig. 1 Deriving the structure of social mentality from that of individual mentality

From Fig. 1 we can roughly see that, from the perspective of individualism-orientated social psychology, individuals tend to base their choices and decisions on their values and beliefs, which also form part of the deeper structure of individual attitudes and ideas. They dominate individual perceptive and responsive tendencies to the external world, and thus they are important part of the individual socio-psychological process and characteristics. Meanwhile, values and beliefs are important basis of group identity, i.e., they constitute a system of shared symbols, and are thus important group socio-psychological phenomena.

On the analytic level, values can be divided into individual values, social values and cultural values. Individual values refer to an individual's "value system", including (1) the individual's conception of people, his relation with the cosmos, the natural, the supernatural, etc., and his conception of his relationship with society and its members (hereinafter referred to as worldview); (2) values necessary to the maintenance of his existence in the specific society where he culturally belongs (hereinafter referred to as social view); and (3) values that the member himself must have (hereinafter referred to as individual view). This value system provides a significant life goal and a set of behavioral standards to the members of a cultural society, which ensures the stability and normal operation of the social system (Yang 1994). In the individual value system, the relation between individuals or between individuals and society is generally also called "social values", but this mainly refers to the "social" component of the value system, such as an individual's cooperation and competition with others in a small group, rather than to values at the social level (Beggan and Allison 1994). Societal values refer to "a set of value implied in the social structure

and system", and the possession of such a set of value maintains the existing social structure. The term social system here includes concepts such as socialization, social control, social norms and social rewards and penalties. It puts an external pressure on people by way of norms, values, penalties, etc., and it also puts a submissive pressure on people via the internalization of social values (Yang 1994). For the sake of clarity, we call social values in the individual value system "social values", and the values implied in the social system "societal values". Such discrimination is necessary for the study of values to focus on the level of social values instead of solely focusing on the level of individual values (Yang 1998).

At the analytic level, the distinction between social values and societal values provides a theoretical basis for our study of social mentality. An individual's "social values" correspond to "societal values"; personality corresponds to theoretical "social character", which is expressed as "national character" in modern times after the formation of the concept of national-state; an individual's social mental state (including attitudes, emotions, values, expectations, coping strategies, etc.) corresponds to "social mentality". Therefore, individual values, social values and their mutual mapping should become the core concept in the academic field of social mentality.

From the existing research results of the individualism-oriented North American socio-psychology school, we understand the psychological hierarchy ranging from individual opinions and attitudes to beliefs, and with such a hierarchy, we presume that the psychological hierarchy of social mentality concepts is also a constituent relation from the external to the internal. However, how does individual psychology relate to social mentality? And how does such mutual mapping concretize? For this, one might wish to refer to resources from another socio-psychological intellectual tradition.

2.2 The Formation Mechanism of Social Mentality from the Perspective of the "Individual in the Group"

Another socio-psychological (i.e., socio-psychology in the field of sociology) academic tradition, compared with socio-psychology in the field of psychology, further involves the group, contributing especially to the behaviors of formal groups and informal groups, integration and categories (such as mass behavior caused by group polarization, communication network, competition and cooperation, rumor mongering, fashion formation, riot and violence). Particularly, European social psychologists inherited the tradition formed by Durkheim E., Tarde, Gustave Le Bon, Lvy Bruhl Lucien, Wilhelm Wundt, etc., which bestows social psychology its "social" nature.

From the perspective of socio-psychology in the field of sociology, although groups or masses consist of social individuals, they exist as a whole and in turns influence every social member, which brings people to think that these are their own values, attitudes and wills, or brings them to believe these values, attitudes and wills

control them. As early as a century ago, Le Bon, a French socio-psychologist, initiated the study of group psychology. His study of the social mentality of French people during the period of the French Revolution, especially his study of the popular mind in his book *Crowd: The Study of Popular Mind*, has become a classic in the field of socio-psychology (Moscovici 2003). Among Le Bon's contemporaries, Tarde. G., a sociologist and social psychologist, and his *Imitation Law*, Durkheim's "collective representation" concept, as well as Freud's later *Group Psychology and the Analysis of the Ego*, Jung's "collective unconsciousness" concept, and McDougall's "group mind" concept, all made important contributions to group psychology concepts and group psychological mechanisms. Although they used different words and expressions, all stressed that the group mind is entirely different from the individual mind.

Baptized and influenced by behaviorism and cognitive trends, the field of social psychology, after several decades of silence, made its presence felt again in Europe through Tajfel's social identity theory (Tajfel 1978), the self-categorization concept proposed by Turner et al. (1987) on the basis of Tajfel's social identity theory, and Reicher's discussion of "self-stereotyping" (2001) which expounded social identification models of mass behavior. All of these stress the reorientation of research, returning to Le Bon, and reemphasize the social nature of socio-psychology. Such return is probably derived from a situation alleged by Moscovici in *L'age des foules*, "We live in a time of mass society and mass men," (2003).

The contributions to group psychology made by socio-psychology in the field of sociology and European socio-psychology from the perspective of group structure and category, group norm and pressure, group social role, group behavior (temporary crowd behavior, riot, unrest, panic), mass behavior (fashion, popularity, rumor, gossip), social activities, etc., and especially the study of popular will and public opinion in political psychology and mass communication psychology, are already drawn the concept of social mentality closer to the research levels or fields where it is located.

Among them, the study of social emotions, such as the concept of group affective tone concept (George 1990), the concept of socially induced affect (McIntosh et al. 1994), and the discrimination between "group affective", "group emotion", "group mood" and "group dispositional affect" (Kelly 2001), provides a certain basis for study of the emotional aspect of mass mentality.

Meanwhile, the social identity theory of the European school of socio-psychology of the 1970s, as a theoretical system on the relation between individual mind and group mind, is valuable for advancing studies of social mentality. This theory grasps the key process of "psychological group formation" from the perspective of social identity through the categorization of perceptual processes. It mainly explores the social psychological mechanism of individual group affiliations and integration, as well as the relation between individuals and between the individual and the group, and explains aggregation phenomena instead of group and group integration phenomena, which has made it the most significant theoretical progress of post-ward European socio-psychologists to socio-psychology in the world. Social identity theory also explains the phenomena of de-individualization and conformity in-large scale integration, as well as social psychological phenomena such as cooperation

and competition, the functions of language identity, social mobility, etc., and has developed a precise method based on many studies, which makes it comparable with mainstream social psychology.

Social identity theory transforms the perspective of the mainstream North American social identity theory, i.e. that of the "individual in the group", into "group in the individual", which bridges the gap between the individual mind and the group mind. Even so, it is still from the perspective of the individual that discussion on the integration of the group is integrated in the individual by the individual. For example; the most typical theories are that "self-categorization" (Turner) and that of "group motivation" (Hogg, M. et al.). From these angles it is revealed to us the mechanism for individual social integration.

In the process of "group in the individual", an individual will determine whether the group will impact him or her, because the initiative to be identified with the group is in the hands of the individual. However emotional contagion has unconscious components, which is an aspect individuals easily lose control of. An individual will lose its original individuality or responsibility once the individual is identified with and affected by the group, and thus disappears in the group.

2.3 Mutual Constitution of Individuals and Social Mentality from the "Group and Individual" Perspective

Social mentality, understood as the "mind of the people" and the "heart of the people", refers to the "group mind" formed after individuals experience social activities such as social interaction and social involvement, as well as mental social identification, de-individualization, emotional contagion, imitation, etc., and are finally integrated into the group. When our analysis unit expands from "group" to "society", "group mind" is also expanded to "social mind", "social consensus" and "commonsense knowledge".

Here, the term social mind, already different from that of formal groups or small groups, refers to the mind of large groups, informal groups, statistical groups and social categories, and even to the mind of the whole society. It is no longer equal to the simple collection and summary of individual mind; rather it forms a kind of new social psychological force that may or may not be the same as the individual mind, and that is not easy to grasp or distinguish but does indeed exists and has a great influence. It is just like some experience in occasion when people feel "united as one", "impassioned", are "sharing a bitter hatred of the enemy", "attracting worldwide attention", etc. It is exactly in such social mental states, a significant and emotional net spun by thousands of individuals, that the individual's mental activity process takes place.

Even if we could integrate individual social attitudes and social values with group social attitudes and societal values so that we could find (1) the structure of the individual mind and group mind in terms of social mentality; and (2) the mechanism

of the mind as constituted by social mentality in the process of the interaction between the individual and social minds, we still would not be able to define the concept of social mentality. From these two perspectives, individuals remain the core and starting point. In fact, the influence of the group on individuals and the choices of individuals to integrate the group do not involve the inevitability and necessity of a mutual construction between individual and group. Therefore, an analysis model for the mutual construction needs to be put forward from the perspective of inter-subjectivity.

As mass media, mass consumption and social mobility become increasingly extensive and profound, the face-to-face communication relationship between individuals is no longer a whole individual relationship, and the relationship between individual and group, between individual and category, and between individual and the whole society, all become inseparable. Social mentality is linked to the individual and the group, to the individual and the social stratum, to the individual and the market, and to the individual and the nation. It is a window reflecting the interaction of these social elements. In this sense, social mentality is not only a noun, but also a verb that describes active states. Individual feelings, imagination, conjecture, judgment, and assumption of the mind of the group and even of the whole society will, after being transformed directly or indirectly, at a conscious or unconscious level, in turn influence another individual's mind and behavior. Although people of our modern society are no longer as close and dependent as people of the acquaintance society used to be, they are inseparable in virtue of social mentality. Therefore, social mentality allows for the construction of individual societies. Individuals are not only influenced by social mentality; on the contrary, they are also creators of such survival background (Reicher 2001). While social mentality is inevitably embedded into each individual's life, individuals also become mass men through the process of massification. Such link between individuals and society is not necessarily established through production, allocation, exchange and consumption, but by way of mental links, or to be more precise, the association of mental states. In such association, individuals are subject to social mentality and meanwhile, social mentality is also individualized.

Such angle on the "individual and group" perspective should also be understood against the background of China's unique cultural psychology. This is because of the association between the "I" and the "we" in traditional Chinese society. "I" is not independent from "we" nor disappears in "we"; instead, "I" is expressed via "we", and "we" (the greater self) is formed through the cultivation of "I" (the lesser self). This is neither different from "self-identification" that seeks to differentiate "I" from "we", nor different from "social identification" that seeks to differentiate "we" from "they" (Yang 2001). This may be the psycho-cultural reason why China especially needs to understand social mentality concept.

From the same angle we notice that social mentality can be regarded as a kind of social resource, or rather, a kind of social psychological resource. Just like other natural resources, these social psychological resources are understandable in terms of their generation, discovery (or expression), cultivation, motivation, deployment, use, reduction, regeneration, etc. Social mentality is the socio-psychological support system of the government, of social organizations and of the folk society. Whether

or not this system can successfully offer its support affects a government's success or failure in dealing with emergencies. In other words, "the water that bears the boat is the same that swallows it up." Moreover, the individual's behavior in response to emergencies is also stimulates, invokes, cultivates and maintains social psychological resources in the individual social support system, and individuals, both as providers and beneficiaries of such resources, participate in the greater system. Therefore, social mentality is a complex system reflecting the multiple interactions, resource intergrowths and shared relationships between individuals and groups and between individuals and their government, i.e., a relation of mutual construct.

3 Analytical Framework of Social Mentality

The theoretical framework for the study of social mentality is structured according to the systematical generalization of the basic characteristics and structure of social mentality, including its conceptual definition and basic structural outline. By discriminating and selecting theoretical angles, we redefine social mentality and on this basis propose basic construction ideas for the structure of social mentality content, which provides the basis for its theoretical study, as well as for that of the expression system, cause and effect process, and social mental state effect of social mentality.

3.1 Conceptual Definition

Under the analytical framework of "group and individual", we define social mentality as follows:

> Social mentality is a macroscopic social mood that diffuses through the whole society or social groups (or categories); it is the summation of the basic emotions, social consensuses, and social values of the whole society. Social mentality is expressed through fashion, popularity, public opinions, and social members' perception of social life, confidence in the future, social motivation, social emotions, etc. It interacts with mainstream ideologies and causes obscure, potential and emotional impacts on social actors through mechanisms such as social identification and emotional contagion. It stems from the homogeneity of social individual mentalities but it is not equal to the simple total of individual mentalities; instead, it is a mental phenomenon that is newly generated and has its own traits and functions, which reflects the most macroscopic psychological relation formed by the mutual construction of individuals and society.

First, such definition refers to the individual and group analytic framework for the study of individual social attitudes and group social attitudes to propose a social analytic framework. Second, this definition defines the psychological levels of social mentality outward in: social emotional tone, social consensus and social value orientation. Third, this definition explains the link mechanism between the individual and the group from the perspective of social identification, emotional contagion, and

mutual construction. Fourth, it places social mentality into the input-process-outcome model to define its functions. In short, this definition reveals that the essence of social mentality lies in the most macroscopic psychic relation mutually constructed between individuals and society. Definition is a logical method revealing the unique attributes of things. From a logical angle, this paper proposes the expression that defines the essence of social mentality by using generation, reciprocal causation and relation as specific differences.

3.2   Formation Mechanism and Content Structure

The basic structure of social mentality includes two aspects. The first is the individual's inward out system, namely beliefs, values, attitudes, opinions, comments, emotions, feelings and reversed interactions. The second is the multi-level system from the microscopic to the macroscopic world, from the individual to the interpersonal, from the interpersonal to the communal, from the communal to the inter-group, and from the inter-group to the whole society. With the mechanism being formed by specific social mentalities, the two aspects mutually connect and influence each other, forming the unique effect and dynamic process of social mentality. We will analyze and discuss in detail this issue in chapters "The "Mutual Construction" of Society and Individual in the Formation Process of Social Mentality" and "Formation Mechanism and Psychological Effect of Social Mentality".

3.3   Relationships Between Individual Mentality, Social Mentality and Realistic Society

Social psychologists have found that the socio-behavioral logic of society members is closely linked with their social environment. When mass media, mass consumption and social mobility become increasingly extensive and profound, face-to-face communication no longer constitutes a complete inter-personal relationship. Social mentality connects individuals with community, social class, market as well as nation. Therefore, social mentality is a form of individual social construction. Individuals are not only influenced by social mentality; on the contrary, they are also creators of such survival background. While social mentality is inevitably embedded into individual lives, individuals also become mass men through the massification process. Then, social mentality becomes a tie linking individuals and society, and profoundly transforms social members.

First, by communicating social attitudes, opinions, and views, as well as selecting social behaviors and lifestyles, the individual social mental states of social members, with the help of the media, form social wills and social forces. Such communication and expression is supported by many technologies today (such as Internet and mobile phones), which make the "onlooker" phenomenon ever stronger.

Second, social mentality, despite frequent changes, can also be regarded as a group of psychological state of society. It enriches the types of tangible social groups based on social membership, as well as individual social lives.

Third, social members construct social mentality via self-expression, and meanwhile, via their understanding of social mentality, know their own desires and ideals while maintaining their sense of belonging and identification to particular psychological groups. This goes beyond the conditions of other particular categorization, as well as meets the demand for a balance between individual identification and social identification. This is also the realization of the sociality of individuals. Therefore, understanding social mentality is to understand social members themselves; understanding and analyzing social mentality is to understand and analyze social members themselves; and cultivating and guarding social mentality is to cultivate and guard social members themselves.

In short, social mentality, as a social mental fact, is not only an important theoretical subject, but also closely related to the social practices of the Chinese society in its transitional period. On the basis of the definition of the concept of social mentality from the "community and individual" perspective, feasible measurement indexes should be developed, and social mentality studied as an effect variable, process variable and outcome variable in order to achieve the target of describing, explaining, predicting and regulating social mentality.

References

Chinese-Language Sources

Ding, S. M. (1996). The theoretical significance and revelation of the study of social psychology. *Academic Quarterly of Shanghai Academy of Social Sciences, 1*, 107–114.

Fei, X. T. (1999). *Collected works of Fei Xiaotong* (Vol. 13). Beijing: Qunyan Press.

Feng, B. L. (1995). Study of social psychology in the market economy circumstances. *Sociological Research, 2*, 79–90.

Gao, Y. F. (2002). The evolution process of social mentality during the social transformation. *Journal of Liaoning Teachers Colleges (Social Sciences Edition), 2*, 54–56.

Fei, X. T. (2004). *On anthropology and cultural consciousness*. Beijing: Huaxia Publishing House.

Hu, H. S. (2001). The objectives and its approaches of social mentality adjustment. *Gansu Theory Research, 1*, 36–40.

Jing, Q. C. (1991). *Concise encyclopedia of psychology*. Changsha: Hunan Education Publishing House.

Le Bon, G. (1895/2000). *The crowd* (K. L. Feng, Trans.). Beijing: Central Compilation and Translation Press.

Le Bon, G. (1913/2004). *The psychology revolution* (D. Z. Tong & X. L. Liu, Trans.). Jilin: Jilin People's Publishing House.

Li, Y. B., & Wang, Y. M. (2001). Social mentality of Beijing people and capital economic development. *Journal of Beijing Union University, 1*, 108–111.

Luo, F. L. (1998). *History and psyche: Theory and practice of western psychohistory*. Beijing: Central Compilation and Translation Press.

Ma, G. H. (2008). A simple analysis on social mentality under the background of large gap between rich and poor. *Dongyue Forum, 29*(5), 111–117.

Moscovici, S. (2003/1981). *The age of the crowd* (L. M. Xu, D. Y. Xue, & J. H. Li, Trans.). Nanjing: Jiangsu People's Publishing.

Pan, S. (1983). A tentative study on social psychology. In Pan Shu (Ed.), *Psychological selections of Pan Shu* (pp. 231–241). Nanjing: Jiangsu Education Publishing House.

Pawlikand, K., & Rosenzweig, R. R. (2002/2000). *The international handbook of psychology* (H. C. Zhang, et al., Trans.). Shanghai: East China Normal University Press.

Ru, X. (Ed.). (1988). *A new dictionary of the social sciences.* Chongqing: Chongqing Publishing House.

Shi, R. H. (1988). *Dictionary of social psychology*. Chengdu: Sichuan People's Publishing House.

Song, Z. Y. (1997). Analysis of social mentality in transitional China. *Jiangxi Social Sciences, 2,* 42–43.

Wang, X. (2002). The Influence of the evolution of Chinese intellectuals' social mentality on modern thoughts. *Journal of Yunnan Nationalities University (Philosophy and Social Sciences Edition)*, *19*(4), 99–101.

Wang, Z. W., & Guo, X. W. (2000). Analysis of Chinese social mentality in the "Great Leap Forward" period. *Expanding Horizons, 2*, 50–52.

Yang, C. (1994). Are Chinese people collectivistic? On the value system of Chinese culture. In G. Yang (Ed.), *Thevalues of the Chinese* (pp. 321–434). Taipei: Guiguan Book Co, Ltd.

Yang, J. (1999). Social mentality in the period of transition and its effective guidance. *Journal of the Communist Party Institution of Zhejiang Provincial Committee of the Communist Party of China*, *5*, 53–57.

Yang, Y. Y. (1998). Studies of values in social psychology. *Social Sciences in China, 2,* 82–93.

Yang, Y. Y. (2001). People on one's own side: A case study on classification of Chinese people's relations. *Indigenous Psychological Research, 13,* 277–316.

Zhang, E. F. (1996). Studies of social mentality and its significance. *Theoretical Exploration*, *1*.

Zheng, Y. H. (2000). Changes of social mentality of secret societies during the Xinhai Revolution period. *The Qing History Journal, 1*, 7–13.

English-Language Sources

Allport, G. W. (1985). The historical background of social psychology. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (3rd ed.). New York: McGraw-Hill.

Beggan, J. K., & Allison, S. T. (1994). Social values. In Ramanchandran (Ed.), *Encyclopedia of human behavior* (Vol. 4). New York: Academic Press.

Deniel, T., Susan, G., Fiske, T., & Lindzey, G. (Eds.). (1998). *The handbook of social psychology* (4th ed.). Boston: McGraw-Hill Co., Inc.

Goerge, J. M. (1990). Personal affect, and behavior in groups. *Journal of applied psychology, 75*.

Kelly, J. R. (2001). Mood and emotion in group. In M. A. Hogg & R. S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes*. Malden, M.: Blackwell Publishers Ltd.

McIntosh, D. N., Druckman, D., & Zajonc, R. B. (1994). Socially induced affect. In D. Druckman & R. A. Bjork (Eds.), *Learning, remembering, believing: Enhancing human performance.* Washington: DC: National Academy Press.

Reicher, S. (2001). The psychology of crowd dynamics. In M. A. Hogg & R. S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes*. Malden, M.: Blackwell Publishers Ltd.

Tajfel, H. (1978). *Differentiation between social groups.* London: Academic Press.

Taylor, S. E. (1998). Social being in social psychology. In T. Deniel, Susan G., Fiske T., & Lindzey G. (Eds.), *The handbook of social psychology* (4th edn.). Boston: McGraw-Hill Co., Inc.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Basil Blackwell.

The "Mutual Construction" of Society and Individual in the Formation Process of Social Mentality

Ying Wu and Yiyin Yang

The concept of social mentality refers to a macroscopic social mood, including emotional tones as well as social consensuses and social values, diffused through the whole society or through social groups. It is homogeneous but not equal to the simple sum of individual mentalities in society (Yang 2006). In this sense, the study of social mentality is neither about the individual psychological mechanism nor is it about pure macroscopic social facts, but rather about exploring the process of the mutual construction of individual mentality and society. In previous mainstream studies, social psychology was understood as a "behavioral science". These studies focus more on how individual behaviors are influenced by the environment, seldom considering possible co-variations of the environment and the individual and ignoring the "social science" property of social psychology (Moscovici 2011). Such a perspective emphasizing the individual is not suitable for the study of social psychology. Actually this individualized perspective has been questioned by social psychologists and continuously revised in respective fields.

This chapter will review three socio-psychological theories on "consensus"—the shared reality theory, the inter-subjectivity consensus theory, and the social representation theory. Focusing on the mutual construction of social facts and individual psychology, this chapter attempts to discuss the influences of the three theories on socio-psychological studies, as well as the special significance of social psychology in the study of social mentality.

Y. Wu (✉) · Y. Yang
Beijing, China

1 Shared Reality Theory

1. **Definition**

Psychologist Higgins (1992) first put forward the concept of "shared reality" to discuss the formation of cognition or notion in vague situations. With regard to its definition, Echterhoff et al. (2009) explained the theory in details and thought that the formation of shared reality is motivated by the inner state commonalities that bring people to share their worldly experiences with others. Specifically, there are four possible shared states: first, a state in which the transmitter and the transmitted information are jointly apprehended; second, a state in which the information is jointly formed by communicators, so this kind of sharing bears a cooperative nature; third, a state in which people hold consistent views, i.e. they share the same view, and; fourth, a state in which communicators perceive in fact that their inner states are consistent.

Echterhoff et al. (2009) explained this so-called "reality" as follows: reality is people's subjective perception of reality and truth, but is not proved by explicit (scientific) means. The shared reality is the expected product of a common inner state shared by all people, and this inner state concerns our world. The understanding of the concept involves four aspects (or four conditions for the existence of shared reality). The first aspect is inner state: people expect to share with others a kind of inner psychological state, rather than to experience what others have experienced in the formation of such an inner state; therefore, people need to understand or refer to other people's inner states. Second, this type of shared reality features target referents, for example, other people's feelings and beliefs. Third, shared reality cannot break away from the sharing process, which includes the formation of common inner state motivations including cognitive motivation (the need for a reliable and effective understanding of the real world) or associated motivation (the need for feeling connected with others). Fourth, shared reality implies having shared experience with others.

2. **"Saying-is-believing" experimental paradigms**

To demonstrate the shared reality theory, Higgins and his colleagues applied the saying-is-believing paradigm. For the initial paradigm, subjects (mostly college students) were invited to participate in the experiment. First, subjects were asked to read material describing a college student (the target). Afterwards, a subject would describe the target to another college student (the recipient), the target being one of the recipient's friends. Researchers were creating two conditions: either the subjects knew that the recipients hated the target, or they knew they fancied it, and thus were asked to describe its characteristics to the recipients.

The findings have shown that if the subject knows the recipient hates the target, he/she will use more negative and derogatory vocabulary when describing the target to the recipient; however, if the subject knows that the recipient likes the target, he/she will use more positive and commendatory vocabulary. Even more interesting, the subject was asked to recall and write down as accurately as possible the description

of the target that he/she had originally read after the task had been completed for a period of time. It turned out that, in comparison with the original description, the memories the subjects had of the target were closer to the descriptions they themselves had given to the recipients, that is to say, the subject had a consistent memory bias. Hereafter, studies endeavored to prove the existence of certain conditions of shared reality by altering specific components of the above paradigm.

Higgins once proposed that communication is not solely a messenger-oriented behavior. On the contrary, people will adjust the method through which they communicate as well as the content of their information in accordance with the attitude and cognition of the targeted recipients. Actually, communication is the processing of information by the messenger and the recipient to establish common sense on the basis of the content of the information, namely to form a shared reality (or meaning). More significantly, no matter how the messenger had interpreted the information beforehand, after communicating it, the messenger identifies with the interpretation formed in the process of communication and insists it is the same as his original. In other words, the shared reality formed in the process of communication with the recipient can adversely affect the memory and understanding of the messenger, which is the "saying-is-believing" phenomenon. Once a certain kind of shared reality is formed, it will not be affected again by later communication, that is, after communicating and reaching a shared reality with former recipients, if there is no doubts on meaning, the messenger will adopt the same method of communication with later recipients and no longer care about whether later recipients share the characteristics of his/her former recipients or not.

Consequently, Higgins put forward that "shared realities" originate from the purpose of communication, and are the result of a search for meaning. The study of "saying-is-believing" reflects that when people face new cognitive objects or are in uncertain cognitive situations, their cognitive motivations follow two principles, namely, cognition and relevance: faced with vague cognition, people feel the urgent need to make a judgment on the cognitive object, whether the judgment is objectively factual or not; in addition, in the same situation, people maintain cognitive results consistent with those of others, which perhaps helps them, to a certain degree, in their search for a sense of security.

3. Applied study of the shared reality theory

Echterhoff et al. (2005) integrated elements such as trust, insider and outsider groups, and information confirmation into the "saying-is-believing" paradigm, and found that the judgment recipients make on the memory of people changes remarkably when the assessed information is confirmed by recipients who are members of an insider group. In addition, when people are more trustful in the judgments of recipients, their memory changes obviously, which shows that shared reality, with the mediation of trust, can change the attitudes and judgments of people. This study clearly illustrates the conditions for the formation of the shared reality, namely the satisfaction of the credibility criterion (trust for insider group membership) and the effectiveness criterion (sharing and recognition of specific cognitive judgments). Moreover, the

study introduced the concept of trust, further combining the "saying-is-believing" experimental paradigm with social issues.

In the subsequent studies of Higgins et al. (2007), recipient membership was increased from a single recipient to a three-member recipient group. They found that the effect on people's memory of vague information is significantly greater when facing a recipient group rather than a single recipient, whereas trust still plays an intermediary role, that is, people's trust for the recipient group is higher than that for a single recipient. This shows that shared reality is required to meet two prerequisites, credibility and effectiveness, namely trust in the judgment of other community members and confirmation of the judgment of others, both based on sharing and communication.

After Higgins proposed the concept of shared reality, researchers have confirmed in different studies that shared reality, as a psychological mechanism that integrates society, community and culture, exists in all aspects of society. This includes how shared reality affects judgments and attitudes. Pinel et al. (2010) found that adopting or accepting the opinions of others generates subsequent conformist behaviors. Huntsinger and Sinclair (2010) found that an individual's objective to join a specific group and his/her positive mental state encourages him/her to conform to the attitude of other group members, while also increasing his/her negative evaluation of stigmatized groups. Being so important in the formation of shared reality, interpersonal communication strengthens the essentialist division between existing social categories (Kashima et al. 2010). Kopietz et al. (2010) pointed out that epistemic needs are key factors in the formation of shared reality, which expounds psychological phenomenon in religion, culture, economy, group identity and intergroup relations. Magee and Hardins (2010) indicated that the existence of a cognitive shared reality between intimate family members and the type of attachment between them affect people's attitudes toward religion and other related themes, such as in the case of the anti-atheist prejudice. Ledgerwood and Liviatan (2010) extended the effects of shared reality from familial affinity to public life. They found in their studies that, when group members become concerned with their group identity, and when more insiders share the symbols of the group, these symbols are considered more valuable. Wan et al. (2010) found that when an individual delivers a speech that denounces his/her own culture, positive evaluation of his/her own culture increases instead of the contrary. At this point culture, serving as the shared reality on which individuals rely, brings individuals to react and compensate when this shared reality is threatened. In addition, when people believe they are able to represent an individual considered famous in their national culture, their positive evaluation of this person increases. Mannetti et al. (2010) found that the shared reality of group norms impacts peoples' evaluations of group betrayers, that is to say, stronger normalized shared realities in groups imply more negative evaluations of betrayers. Moreover, shared reality can also serve as an intermediary variable, adjusting individuals who have a need for cognitive closure (NCC) in their negative evaluation of betrayers. In other words, the stronger shared reality is felt in the group, the more negative are the reactions people with NCC show to betrayers. When shared reality shows a strong sense of loss.

4. **Significance of the shared reality theory for the study of social mentality**

In fact, the consensus of a specific community or culture is not fixed or immutable, but continuously generated by the interaction between community members or the inter-construction of community members and their social environment (Wu 2011). However, the shared reality "saying-is-believing" paradigm provides an experimental and operational case in point for study of "consensus" from a constructive perspective and, to some extent, achieves a perfect combination of "social" perspectives focusing on social issues and "scientific" research methods verifying hypotheses, which is the pursuit of social psychology. Social mentality is formed by "shared reality", and it reflects the interaction mechanism between the individual and society. Studies of social mentality should not only focus on the social environment that causes social mentality issues, but is also needed for the implementation of hypothesis, experimentation and verification methodology for the individual-society interaction mechanism. In this sense, the shared reality paradigm is a worthy reference for the study of social mentality.

2 Intersubjective Consensus

1. **Definition**

The term "intersubjective consensus" refers to the individual's cognition of other community members, which can be expressed as "how I perceive others perceive me/something" or "how I believe others perceive me/something". This kind of perceived group norm, in other words, the predictive effect of shared norms or intersubjective values on people's behavior, is greater than traditional values in the statistical sense (Wan et al. 2007, 2010). For example, according to a study on the alcohol consumption of Princeton University students, most students worry that excessive drinking in celebrations may lead to injury and death, but they still feel obligated to take part in these events for fear of being marginalized by others (Wan and Chiu 2009). In the study, most students' internalized personal concept (the dangers of excessive alcohol consumption) does not allow for the prediction of individual behaviors, but the cognition of the view of the group or of other people (the importance of group celebrations) is a major factor in predicting their behavior. The cognition of other people's values in the community is the intersubjective consensus which serves as an intermediary variable affecting individual identity to group culture, and thus affecting individual behaviors (Wan et al. 2010).

2. **Related studies of intersubjective consensus**

Wan and Chiu once expounded the impact and predictive effect of the psychological mechanism termed intersubjective consensus on personal behaviors on the personal level, interpersonal level and inter-cultural level, as well as in terms of cultural identification and plural cultural experience. For example, on the individual level, in the classical cultural attribution preference study, Morris and Peng Kaiping once

pointed out that American people tend to attribute vague events to individual traits, while Chinese people tend to attribute them to circumstances. However, more recent studies have found that classical cultural attribution preference actually stems from the mediate function of intersubjective norms, namely American people think that most American people's tendency to approve of trait attribution leads to their own subsequent trait attribution, and similarly Chinese subjects think that most Chinese people's tendency to approve of situational attribution leads to their own subsequent situational attribution.

In the same way, Wan et al. (2007) set up four experiments to demonstrate the predictive function of the intersubjective consensus on cultural identification. Experiment No. 1 was used to verify the hypothesis, namely: intersubjective normative values are different from statistical normative values, and there exists no complete superposition of the two. The concrete methodology involved white American people and Hong Kongese as subjects. These people were asked to select 10 values they could identify with in a group of 9 individual values and 9 collectivist values respectively. The American subjects and Hong Kong subjects were then asked to comment on the percentage of values chosen for each topic by American and Hong Kong people respectively. The results proved the hypothesis that intersubjective normative values and statistical normative values are different, and that American subjects tend to think American people are more likely to approve individualist values whereas Hong Kong subjects tend to think Hong Kong people are more likely to approve collectivist values. What's interesting is that American subjects didn't show a greater preference for individualist values than their Hong Kong counterparts, and Hong Kong subjects also didn't show an obvious preference for collectivist values.

Experiment 2 used 56 Schwartz values as study materials. The subjects were asked to choose 10 values important to them and 10 important to general school students. The results showed that the two sets included 5 overlapping values, and among the 56 values, those that had been agreed on by individuals had a correlation of 0.68 with the perceived values of the same age group. Moreover, the study also found that the higher the correlation between self-values and intersubjective values is, the stronger the predictive effect for the cultural identification becomes; however, the correlation between self-values and general statistical values does not allow for the accurate prediction of an individual's cultural identification.

Experiment 3 observed the relation between intersubjective values and cultural identification from the perspective of development. It designed university freshmen as experimental subjects and surveyed them in terms of intersubjective values, statistical values and cultural identification at the beginning and end of their first term respectively. Analysis of the results via hierarchical regression showed that only intersubjective values at the beginning of the first term could predict the subjects' cultural identification, while statistical values and cultural identification at the beginning of the first term have no predicting function.

Experiment 4 measured whether the subjects' in-group cultural identification and preferences would be promoted when the in-group intersubjective consensus was threatened. In the pre-experiment, it was found that "enjoying life" and "true friendship" were two important values of American people' intersubjective consen-

sus, whereas "modest" and "dependence" were the least important values. Then the experimental situations were manipulated and the subjects made to deliver speeches objecting the values of "enjoying life" and "true friendship"; cultural identification was assessed before and after the speeches, as well as cultural preference after the study. The results showed that, after delivering the speeches objecting the intersubjective consensus, in-group cultural identification and tendency had been enhanced, namely that threats to intersubjective values activated the subjects' compensation mechanism.

In a word, this study has verified that intersubjective values are different from the statistical values in terms of their predictive effect for cultural identification. Compared with statistical values, intersubjective values constitute an important index for the prediction of people's attitudes and behavioral reaction.

3. **Applications and implications**

On the basis of this preliminary study, Wan et al. (2010) probed into the application of the intersubjective consensus theory in the political field, so as to discuss namely the predictive effect of the intersubjective consensus mechanism for electoral behavior. This study took the cases of the American and Hong Kong elections respectively to probe into the mechanism's influence on individual electoral behavior using three variables: the choice of individual political values, the correlation between individual and the intersubjective value of political candidate, and cultural identification. The results showed that the correlation between the individual's choice of individual political values and his/her judgment of the political candidate's choice of values determines the individual's electoral behavior, and individual identification to a certain political party mediates the relation between the above-mentioned two factors.

The intersubjective consensus theory provides an operable research approach for probing into the intermediate mechanism of the interaction between social environment and individuals. Here, the intersubjective consensus in the social group is operated as "my perception of the point of view of others", which ensures that the intersubjective consensus, being a kind of intermediate psychological mechanism, is measurable. In addition, the degree of correlation between the intersubjective consensus and personal values can also predict personal attitudes and behaviors, e.g. the self-identification and electoral behavior of the insider group mentioned in the above study. In this sense, the theory of intersubjective consensus serves in some sense as an inspiration to social mentality studies. The participatory nature of social mentality and its contagiousness in terms of people's mood has determined that social mentality is the result of sharing, propagation and contagion of concepts among social members. The intersubjective consensus of "my perception of the point of view of others" is more likely to determine social members' attitude preferences and behavioral judgment. Therefore the intersubjective consensus can be regarded as an operable index for the social mentality measurement in the actual research.

3 Social Representation Theory

1. **Origin of study**

The social representation theory was put forward by French social psychologist Sage Moscovici on the basis of his reflection on the mainstream American individualist psychology. Since its appearance in the 1970s, numerous socio-psychology researchers have been using it as a norm for the conduct of studies in various fields. The social representation theory has an extensive influence, and it has become an important theory rejuvenating European socio-psychology together with the social identity theory.

In the 1960s, the views of French structuralist psychoanalyst Jaques Lacan were very popular and much discussed. This phenomenon brought Moscovici to consider how authoritative knowledge or elite theory were received by the masses, namely how so-called authoritative knowledge permeated life and turned into part of the experience system, and how the consensus shared by all members of a community was represented. Such social consensus provides a frame of reference for situating people's everyday experiences, interpersonal communicating, and behavioral expression. People's construction of consensus by way of such social interaction is called "social representation".

The proposal of the concept of "social representation" can be traced back to the study of psychologist Wilhelm Wundt at the beginning of the 20th century, who reviewed its correlation with the thinking structure of the people from such perspectives as language, witchery, myth and religion, and put forward the two contrasting concepts of individual mind and group mind. The study of individual mind regards the individual as its most basic analytic unit, whereas the group is considered as a collection of several individuals. Wundt's view exerted a far-reaching influence on E. Durkheim, a later French sociologist (Guan and Yue 2007).

2. **Concept and mechanism**

The formation and change of the social representation system constitute the main content of discussion in the social representation theory. The core of social representation consists in the familiarisation of unfamiliar knowledge, and this transition takes shape in the course of social interaction instead of being controlled voluntarily by people. It can be divided into two processes: anchoring and objectification. Anchoring refers to the utilization of existing knowledge to absorb and assimilate unfamiliar knowledge, which is usually done in two ways: naming and classification, that is to say, we use the methods of naming and classification to establish a connection between unfamiliar knowledge and existing knowledge for better understanding and absorption. Objectification refers to the concretization of an abstract concept, that is to say, the analogizing of the perception of abstract knowledge to a concrete knowledge or concept which produces a similar experience, e.g., the analogy of "God is a strict father" (Moscovici and Vignaux 2000).

Moscovici (1988) thought that social representation has three forms: first, hegemonic representation, which entails that mainstream social concepts or ideologies

allow ordinary people to form demonstrative, hegemonic or controlling social representations; second, emancipated social representation, which entails the emancipation of the dominating consensus system by the subgroup in the social representation dominated by mainstream social concepts or ideologies; third, polemic representation, which entails that the representation systems constructed by antagonist groups amid social changes produce conflicts. Generally speaking, the social representation theory provides an explanation in terms of social psychological orientation for the discussion of the formation of social or group consensus. Since Moscovici put forward the social representation theory in 1961, more and more social psychologists have begun to show interest in this theory and studied the representation of people in various themes, including health, disease, city, children, gender inequality, social class and intelligence.

3. Application of the social representation theory and its significance for the study of the social mentality

The social representation theory is widely applied in different fields because of its focus on the "social nature" as well as its concerns about realistic social problems, such as in the cases of: the study of French communists, Catholics and liberalists' different social representations of psychoanalysis; the social representation study of the French society regarding health and disease; the social representation study of UK-based Chinese people regarding health and disease; the comparison of white and black people's social representation of AIDS; the study on the social representation of human rights; the study on the social representation of European integration; and the study on the social representation of life quality under the Chinese cultural background (Guan 2009).

The paradigm of social representation can be used as a reference for the study of social mentality in several aspects:

(1) It tends to look for the foundation of the production of the psychological mechanism of people amid social cultural history. The social representation theory uses the concept of "base coupling" in scientific history as a reference to discuss the deep core mechanism of people's social representations. The core mechanism in this concept refers to the social thinking and social behaviors of people in regards to the realistic problem rooted in their culture, and what it discusses is the inter-depending relation between the apparent content of the social representation and its deeper structure, as well as between social form and social consensus (Guan 2009). For example, the social representations of people from different societies (white Americans, black Americans, black Africans and Chinese) of modern AIDS are formed on the basis of different historical cultures. One of the important characteristics of the social representation theory is its ability to probe into the social background on which people's psychological mechanisms are built. In this sense, the social representation theory is worth being used in the study of social mentality.

(2) It emphasizes communication, as well as the mutual construction of society and individuals. The social representation theory emphasizes the function of

the influence of the common framework constructed by communication and symbol interaction systems in attitude changes and behavioral intervention. The formation of social representation can be divided into 6 processes: an unfamiliar incident is encountered; the unfamiliar incident is coped with; a representation is formed via the anchoring and concretization method; after the social representation for the new object has taken shape, its symbol is formed via mass media and interpersonal communication; the strange phenomenon is transformed into consensus via constant communication using the new concept; and finally the common knowledge representation brings the social identity of the group (Guan 2009). Here, the social representation theory puts more emphasis on the interaction between individuals and society. During the course of social representation an individual obtains internalized knowledge and also communicates with others. It is important: it is a course during which the social fact is being constantly constructed. Such dynamic mechanism under which the individual and society construct each other is consistent with the social mentality in which the society and individual construct each other bi-directionally. Therefore, its awareness of problems, research perspectives and approaches can be used in the study of social mentality.

4   Comparison of Three Kinds of Paradigms and Their Significance for the Study of Social Mentality

We have found through comparison of the above-mentioned theories that the three theories are different and focus on different aspects in terms of problem posing, research approach and theoretical content. The study on "saying-is-believing" shared reality theory, stemming from the exploration of individual cognition in vague situations, uses the classical psychological experimental method for research, and theoretically focuses on the course of individual cognition and begins to introduce realistic social concerns (such as the issue of trust, religious belief, economic and cultural factors, etc.) as variables. Problem awareness in the intersubjective consensus theory, stemming from the re-examination of cross-cultural psychological studies, also uses a typical experimental method for research, and theoretically focuses on particular social groups or social cultural courses. The original study on the social representation theory stemmed from the way scientific thought or theory are accepted and represented and become common sense knowledge. Its research approaches varied and included such qualitative approaches as interview, questionnaire investigation and ethnography, as well as the typical psychological experiment. However, besides their difference, these three theories share a common concern in their theoretical construction—they all put emphasis on the mutual construction between the social environment and the individual's psychological course.

The shared reality theory argues that the individual produces two kinds of cognitive motivations in a vague environment, namely the motivation to seek accurate

information and the motivation to seek consistency with others. Here, the cognitive consistency shared with others constitutes, in the individual's eye, the "real" environment, thus engendering another cognitive motivation to seek accuracy. The disclosure of people's cognitive course by the shared reality theory has in fact discussed the mutual construction course of the social environment and individual psychology. In the "saying-is-believing" shared reality theoretical study, the audience's attitude initially exists as a social environment, whereas the individual's attitudes and tendencies change along with the changes in the audience's attitude, and the individual's judgment made according to his/her understanding of the audience's attitude is retained and regarded as true to the objective environment in subsequent responses. The audience we imagine or understand here is the result produced by individuals' construction of the social environment.

The intersubjective consensus theory is an extension of the shared reality theory and as thus is under the influence of its core thought. Namely in terms of interaction, the individual build the ideas of others are constructed into a "reality" via attitude judgment and behavioral reflection. The intersubjective consensus theory affirms that "my perception of the point of view (attitude or values) of others" can predict personal attitude and behavioral reflection. This kind of "my perception of the point of view of others" represents the individual's understanding and processing of the objective social environment (including group culture, values or the attitudes of other members of the group).

The social representation theory sufficiently expounds on the mutual construction between social environment and individuals. The social representation process can be divided into two levels: first, at the individual level, the individual transforms the social fact or unfamiliar theory into private knowledge familiar to the individual via the anchoring and concretization mechanism; second, at the interpersonal or group level, different individuals share and spread their own familiar knowledge among individuals or within the community through symbolized expression. In this sense, social representation is a better reference for the study of social mentality. The formation mechanism of social mentality is also divided into two processes: individuals form social values and emotional tones through their social involvement and social correlations from the bottom up, thus gathering and becoming the shared reality of social mentality; when social mentality takes shape, it acts on individuals by way of such mechanisms as social influence and emotional contagion from the top down, thus influencing personal values through the mechanisms of self-adjustment and attribution to expectations (see Fig. 1).

In short, whether in the formation course of social mentality or after its formation, there is interaction between individuals and their social environment. However, how can we discuss the mutual construction of the individual and his/her environment in terms of research approach? The above-mentioned three "consensus" theories of socio-psychology provide a theoretical foundation and reference for the method in our operation.
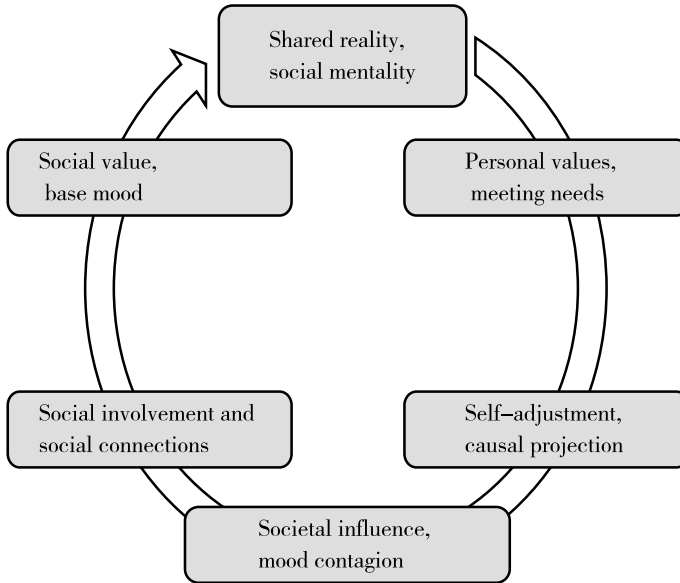
Fig. 1 The internal dynamics of social mentality

References

Chinese-Language Sources

Guan, J. (2009). The origin and development of social representation theory—Interpretation of social representations: Explorations in social psychology of Serge Moscovici. *Sociological Research, 4,* 228–242.

Guan, J., & Yue, G. A. (2007). The theory of the social representations and its development. *Journal of Nanjing Normal University (Social Science),* (5), 92–98.

Moscovici, S. (2011). *Social representations.* (J. Guan, et al., Trans.). Beijing: China Renmin University Press.

Wu, Y. (2011). The process of the construction of group stigma consciousness: A qualitative research about "being discriminated" of rural migrant children. *Youth Studies, 4,* 16–28.

Yang, Y. Y. (2006). Psychic relation between individual and macro-society: Definition of social mentality. *Sociological Studies, 4,* 117–131.

English-Language Sources

Echterhoff, G., Higgins, E. T., & Groll, S. (2005). Audience-tuning effects on memory: The role of shared reality. *Journal of Personality and Social Psychology, 89,* 257–276.

Echterhoff, G., Higgins, T., Levine, J. M. (2009). Shared reality: Experiencing commonality with others' inner states about the world. *Psychological Science*, *4*(5), 496–521.

Higgins, E. T. (1992). Achieving "shared reality" in the communication game: A social action that creation meaning. *Journal of Language and Social Psychology, 11,* 107–131.

Higgins, E. T., Echterhoff, G., Crespillo, R., & Kopietz, R. (2007). Effects of communication on social knowledge: Sharing reality with individual vs. group audiences. *Japanese Psychological Research, 49,* 89–99.

Huntsinger, J. R., & Sinclair, S. (2010). When it feels right, go with it: Affective regulation of Affiliative social tuning. *Social Cognition*, *28*(3), 290–305.

Kashima, Y., Kashima, E. S., Bain, P., Lyons, A., Tindale, R. S., Robins, C., et al. (2010). Communication and essentialism: Grounding the shared reality of a social category. S*ocial Cognition*, *28*(3), 306–328.

Kopietz, R., Hellmann, J. H., Higgins, E. T., & Echterhoff, G. (2010). Shared-reality effects on memory: Communicating to fulfill epistemic needs. *Social Cognition*, *28*(3), 353–378.

Ledgerwood, A., & Liviatan, I. (2010). The price of a shared vision: Group identity goals and the social creation of value. *Social Cognition*, *28*(3), 401–421.

Magee, W. M., & Hardin, C. D. (2010). In defense of religion: Shared reality moderates the unconscious threat of evolution". *Social Cognition*, *28*(3), 379–400.

Mannetti, L., Levine, J. M., & Pierro, A. (2010). Group reaction to defection: The impact of shared reality. *Social Cognition, 3,* 447–464.

Moscovici, S. (1988). Notes towards a description of social representations. *European Journal of Social Psychology, 18*(3), 211–250.

Moscovici, S., & Vignaux, G. (2000). The concept of themata. In S. Moscovici (Ed.), *Social representations: Explorations in social psychology*. Cambridge: Polity Press.

Pinel, E. C., Long, A. E., & Crimin, L. A. (2010). I-sharing and a classic conformity paradigm. *Social Cognition*, *28*(3), 277–289.

Wan, C., & Chiu, C. Y. (2009). An intersubjective consensus approach to culture: The role of intersubjective norms versus cultural self in cultural processes. In R. S. Wyer, C. Y. Chiu, Y. Y. Hong (Eds.), *Understanding culture: Theory, research, and application*. New York, London: Psychology Press.

Wan, C., Chiu, C., Tam, K., Lee, V. S., Lau, I. Y., & Peng, S. (2007). Perceived cultural importance and actual self-importance of values in cultural identification. *Journal of Personality and Social Psychology, 92,* 337–354.

Wan, C., Tam, K. P., Chiu, C. Y. (2010). Intersubjective cultural representations predicting behaviour: The case of political culture and voting. *Asia Journal of Social Psychology*, *13,* 260–273.

Formation Mechanism and Psychological Effect of Social Mentality

Yiyin Yang

As the most macroscopic and complicated social mental phenomenon, social mentality is surely quite complicated in its formation mechanism as well. As previously mentioned, in this book, we apply a perspective that is different from that of the "individual in the group" and the "group in the individual"—namely, the perspective of the mutual construction between "individual and group". This perspective will help us to uncover the internal mechanism of such a macroscopic and complicated phenomenon, and able us to develop a theory to describe and explain more systematically the formation of social mentality and changes it undergoes.

1 Theoretical Framework of Dynamic Construction

Mutual construction is a dynamic process. First of all, as a process, social mentality is constructed by members of society, and this construction process includes many complicated and intermixed stages, such as formation, change, deposition and induction. Social mentality reflects the macroscopic social characteristics of individuals. It is the relations between individuals and the larger society and the product of their mutual construction, perceived by people through the endless, complicated and changeable mental facts it breeds. This dynamic process, i.e. formation, change, deposition and induction, is similar to that of the cultural mentality mechanism and as such can even be regarded as a part of culture. Second, as a driving force, social mentality is the continuous background and mental horizon of social behaviors of individuals and groups, as the preferred orientation for internalized social adaption on which individual survival depends, it potentially guides, induces, promotes, provides and restricts the mental activities of individuals. Third, as a representation system, social mentality is not at all completely inexpressible or non-recordable. It always manifests

Y. Yang (✉)
Beijing, China

itself and is perceived via the behaviors and languages of individuals and groups. Moreover, such representation is often closely connected with social structure and reflected among different groups and categories, expressed as tacit knowledge shared by certain groups and categories, or in other words, stereotypes and ideas.

It is thus clear that the construction process of social mentality is a mental process, which is closest to the cultural mental construction process. We can be much enlightened from the Dynamic Constructivist Model (DCM) of culture proposed by cultural psychologist Kang Yingyi et al. on the basis of study of bicultural individuals.

When it comes to cultural DCM, first of all, culture is defined as the networks of shared knowledge among group members. Here, knowledge refers to the beliefs, values and lay theories shared within a cultural group. As a tradition of knowledge, culture has the following characteristics: it is shared by members; it is externalized in implements, signs, customs and even social institutions; it is the basis of communication among members within the group; it is handed down from generation to generation; and it keeps changing along with new social order. Second, different cultural groups share different knowledge systems. Third, initiating different knowledge networks can result in different behavioral responses. Fourth, members of the same culture share the same knowledge system. However, just as other features of knowledge, shared knowledge is also characterized by availability, accessibility and applicability, and to extract and prime knowledge requires evoking specific context. Thus the appearance of cultural icons, which are of typical significance, can activate corresponding behavioral responses. Fifth, the different characteristics of individuals, being boundary conditions and moderator variables, can moderate the process of culture acting on individual behaviors (Hong 2009).

Similar to cultural DCM, the social mentality DCM defines social mentality as a dispersive social mood state. It is composed of social emotion keynotes, social consensuses and social values, which are shared among society members, reflected in representations such as catchwords, fashions and ideas, and serves as the background and basis for mutual comparison, communication and cooperation among society members. Second, as different social mental groups have different social mentalities, they can also be hierarchical in some aspects. Third, via mutual identification, communication and contagion among society members, social mentality can be transmitted and form its influence. Fourth, the perception, participation and transmission of social mentality also influence the accessibility and applicability of shared reality. Fifth, serving as boundary conditions and moderator variables, the different characteristics of individuals can moderate the process of social mentality acting on individual behaviors, among which the degree at which individual values and social values coincide, as well as individual susceptibility, are of particular importance.

In comparison, there are some similarities between the social mentality DCM and that of culture, and both have also some characteristics of their own, as shown in the Table 1.

In comparison we can see that the DCMs of both culture and social mentality reflect variability, dynamic property and multi-channel property. However, the former is also characterized by the coexistence of multi-culture and long-time alternation (such as intergenerational inheritance), while the latter features the potential

Table 1 Comparison of the two models

	Cultural DCM	Social mentality DCM
Definition of culture/mentality	Knowledge network shared 1. Shared 2. Reflected in implements, signs, customs, ideas and institutions 3. Basis for communication among cultural members 4. Handed down from generation to generation 5. Changes slowly and enduring	Dispersive social mood state 1. Social emotions keynotes, social consensus and social values 2. Shared 3. Reflected in catchwords, fashions and ideas, potential/vague influence for a long/short time 4. Transversely diffused and transmitted 5. Changes quickly
Subculture	Different cultural groups share different knowledge systems	Different social mental groups have different social mentalities which can also be hierarchical
Priming effect/convergence effect	Priming different knowledge networks can result in different behavioral responses (priming effect)	Transmits the influence of social mentality through identification, communication and contagion (convergence effect)
Characteristics shared	Availability, accessibility and applicability	Perception, accessibility and applicability to shared reality
Boundary conditions and moderator variables	Individual traits	Degree of agreement between individual values and social values, and individual susceptibility
Contribution of individuals	Inheritance and innovation	Participation and transmission

directional and emotional nature of value orientation. From the perspective of cultural comparison and categorization, social mentality is the product of certain cultural conditions and features certain cultural characteristics, such as optimism, enthusiasm, and the pursuit of achievements. However, from the perspective of social mentality, cultural mentality is also a part of social mentality. Their relationship should be mutually constructive and justified.

2 Interpretation Levels and Upward-Downward Models of Social Mentality

The relationship between social mentality and individual mental states and behaviors can be understood from the models of its two layers (upper and lower) and their directional relation. They validate and interact with each other. They are also two important and basic interpretation levels of social psychology (Doise 2011). According to Doise, the level of analysis is also the level of interpretation. Different levels of analysis provide unique interpretations of social psychology. The existing levels of analysis and levels of interpretation can be divided in many ways, among which there are many complicated or simple four-level and six-level analysis frameworks. Among them, four-level analysis frameworks are quite common: (1) intra-individual process, interpreting how individuals organize social experience; (2) inter-personal (interpersonal or intra-context) process, interpreting the dynamic mechanism of the interpersonal process; (3) social position/social status (group-self and inter-group), interpreting the contextual interaction process; (4) individual and society process, interpreting how the ideology and belief of universalism trigger different or discriminative mental representations and behaviors (Doise 2011). Doise specially emphasized that, "these four levels of analysis are closely overlapped, so the articulation of levels of analysis itself should be regarded as a research subject of social psychology" (Doise 2011).

2.1 Upward, Downward and Interactive Models

The upward model refers to the mood states that disperse among the whole society or some groups of the society and which are converged from social mentality by individuals from the bottom up. Data from surveys on social attitudes is usually used in the description of social mentality. This data is generally the mean value of scale scores or the cumulative percentage for the surveyed group. This allows us to speculate on the degree to which the representation of specific social mentalities among social groups is shared. If most society members share the characteristics of a certain social mentality, we can assume that such social mentality is easily perceived and recognized by people.

We assume that the mechanism for individuals to integrate into society comprises four channels: namely (1) attitude, (2) emotion; (3) personality; (4) nationality. Individual integration and convergence forms a shared mental reality that, in the end, surpasses individuals and becomes an organic component of real society. On a deeper level, the integration of individuals is also a the integration and interaction process among individual values and social values (cultural values), which profoundly guides and orients the development of the individual's social attitude, affection, personality and nationality towards (1) social consensus, (2) emotional keynote of overall society,
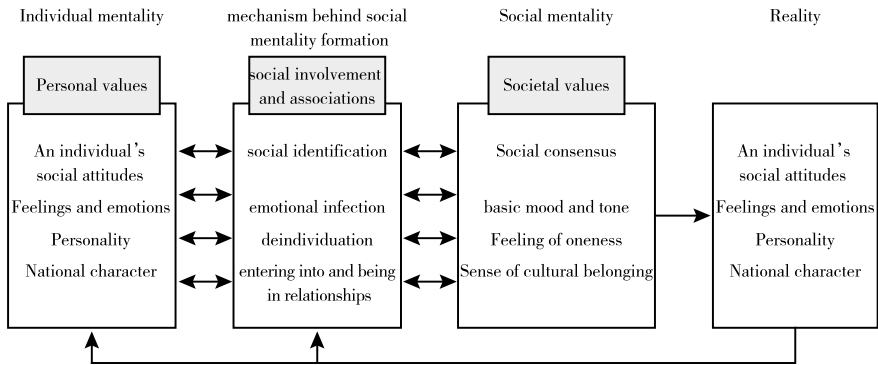
Fig. 1 Deriving the formation mechanism of social mentality from the structure of group mentality

(3) sense of integration and sense of belonging to society, and (4) sense of integration of cultural characters and mutual strengthening and adjustment (see Fig. 1).

Here, we emphasize discussing the formation mechanism of social mentality—social involvement and social relevance. As shown in Fig. 1, we operationalize the relation between individual and society into four paths or channels.

1. **Social identity**

Social identity is the individual mental process of affiliating oneself with a category or group. Studies have found that when an individual establishes a mental contact with one category, identification with this category is formed. There is hereinafter an active distinctiveness between the individual and other people outside the category or other categories, which results in the concept of "we". The category identified by such an individual is termed in-group and other categories are termed out-groups. Such mental process is called the "self-categorization process".

The identity process resulting from self-categorization usually causes two mental effects. The first is the prototyping of membership. When an individual has established mental contact with a group via self-categorization, often he believes he possesses the presumably typical characteristics of in-group members and believes that other in-group members also possess these characteristics. In many cases, people tend to believe that they are representative of the in-group. This phenomenon is termed self-stereotyping. In terms of the social compound subject, when multiple subjects "compound" into a "new subject", the relationship among members is restructured. Therefore, the mental effect of prototyping is, on the one hand, to improve the sense of mastership and, on the other hand, to cause a superiority complex against other members. The second can also be interpreted as in-group preference (namely the effect of "liking ourselves") and improvement of group self-esteem. After forming "we awareness", people start to blindly appreciate in-group members. The logic is that "those who are of us are likable". Group members usually cannot see the shortcomings and mistakes of the members of their own group. And even if they do see them, they will try as much as possible to defend them and attribute them to external

factors, forming a group-serving attribution bias. On the contrary, attribution bias can be formed in out-groups as well, and under opposite circumstances, in-group members would usually attribute the shortcomings and failures of out-groups to internal factors.

The social identity process establishes the mental contact between the individuals and the group (or category) and forms the sense of integration and "we awareness", which share the similar social mentality. And people establish the distinction in and out the group with such mentality. For example, the mentality of hatred against the rich and officials is usually generated along people's vague category identification to the corresponding "wage-earning class", "low-income groups", "vulnerable groups", "ordinary people", "people with neither power nor status" and "lower class". We will expatiate on the research in this field in a specialized chapter.

2. **Emotional contagion**

An emotion is an important part of the individual mental process that greatly affects individual attitudes and behaviors. Studies have constantly proved that emotions can be transmitted and spread among individuals and thus generate a collection of emotions shared by members of an organization or group. These are known as group emotions (Barsade and Gibson 1998; Brief and Weiss 2002).

Emotional contagion refers to a process during which an individual or a group affects the emotions and behaviors of other individuals or groups by intentional or unintentional emotional states, attitudes and behaviors. This is because individuals can automatically and continuously imitate the expressions, voices and postures of others during interaction. Therefore emotions are transmitted and copied through emotional contagion and then become a state that disperses in some context or period of time.

Barsade and Gibson have also brought forward the concept of emotional heat, which implies that society members bring their own emotions or feelings to the group or society, and via communication, incubation and transmission among different society members, these emotions and feelings finally form social emotions that surpass their own emotional state and are re-shared by society members (Yang 2012). At this moment, the emotions of society members as individuals, such as great joy, excitement, boldness and generosity, a shared bitter hatred of the enemy, common consciousness, boundless forces, etc., are corrected, depersonalized and intensified. Such social emotional states tolerate and dissolve individual emotions as well as restructure individual emotions and closely connect individuals with the whole society.

The mental mechanism involved in emotional contagion is relatively complicated, and includes the imitation-feedback mechanism, the association-learning mechanism, the language adjustment and association mechanism, the cognitive mechanism, and the direct induction mechanism, etc. (Yang 2012).

3. **Deindividualization and depersonalization**

Deindividualization implies that the self-orientation function and sense of responsibility of individuals is lost or weakened when influenced by group pressure or

group consciousness, which causes uncontrollable behaviors that would absolutely not occur during lone individual acts. Deindividualization is mainly the obfuscation of responsibility caused by concealed identity. Under the circumstance of non-identification, individuals are less pressured by external constraints, evaluation and normalization, and their own sense of responsibility weakens. Deindividualization is commonly seen in group behaviors.

Depersonalization implies the formation of a "greater self" or "group mind" when an individual integrates a social group and shares a common awareness with it, causing the disappearance of individual differences. This is a mental product of social identity, especially of self-categorization. Depersonalization is consistent between individuals and the group or collective, which do not necessarily cause responsibility diffusion and, on the contrary, may strengthen the sense of responsibility of the group and better achieve group goals.

Deindividualization and depersonalization are interlaced in some cases. However, the difference between them remains noticeable in terms of mechanism.

4. Demarcating 'us' from 'them' and group member indispensability

"Demarcating 'us' from 'them'" is a process specific to the traditional Chinese society, in which individuals form an awareness of "us" during social communications, of which kinship is the blueprint accord to the principle of "being close to those who we should be close to and giving respect those who are respectable". This process either maintains or interrupts the relationship of the innate kinship system according to "differential patterns" or establishes fictive kinship through communications in non-kinship, and includes other people within the mental boundary of ego, thus leading to mutual communication and toleration between "I" and "we" via the concept of "us" and achieving an integral whole made of the "lesser self" and "greater self". The opposite process is the exclusion of others outside the boundary of ego and the distinction of "us" from "outsiders".

The "demarcating 'us' from 'them'" process possesses strong ethical and moral overtones. In traditional society, it played an important role in resource distribution, relationship maintenance between family members and relatives, and the maintenance of ethical order. However, the characteristics of the concept of "relationally demarcated we" (namely "our own people") don't apply to the connotation of the concept of "we" in modern contractual society. First of all, "us" included within the boundary of ego are hierarchized in the differential pattern of superiors and inferiors, whereas their relationship with the individual isn't equal or homogeneous. Therefore, intimacy among individuals surely varies. Second, what kinds of people are included within the boundary of "us" depends on the choices of the individual himself. There may be as few as only himself, and as many as to include family members, neighbors, friends, kindred, townsmen and colleagues, and even countrymen and the whole of mankind. Though an individual may sublimate from the "lesser self" to the "greater self" from family and state regulation to world peace through self-cultivation, once the social cultural situation changes or if the individual isn't morally cultivated enough, the scope given to "us" by the individual decreases and can't guarantee cooperation with others. Third, "us" who are actively included within

the boundary of ego instead of under the necessary condition for the formation of common feelings, consensus or common interests with the individual, are "passively included" instead. Therefore, who is categorized as "us" is not based on consensus. Such concept of "we" is mainly applied in the distinction with "them" in responsibility, trust and emotional intimacy, and its main function isn't to form a common sense of integration.

Through the channel of demarcating 'us' from 'them', an individual connects himself with the people and the feelings of a same circle in a differential pattern, forming an "awareness of our own people" and setting the circle he selected in opposition or distinction to other circles. Not all people within the same circle are homogeneous or necessarily possess common interests, goals and feelings. This is the difference between demarcating 'us' from 'them' and the categorized mechanism of social identity. It is a social connection mechanism with ample Chinese characteristics.

What is known as group member indispensability implies that the function of each member in a social structure is irreplaceable. It is neither a category group formed by homogeneity nor the tolerance of one member for the other members considering himself as the core of a group (in other words it is not a group aggregated through "demarcating 'us' from 'them'"); instead it is a community formed by members who provide necessary and unique contributions in order to achieve a common goal. All members are unique and indispensable to the community; therefore, all members are surely interdependent and organically combined. When all members are indispensable regardless of how much they contributed, the equality of members is assured. The result of such constitution mechanism of "we" is a state of "harmony in diversity and unity in diversity". It is like the relationship between each piece of a puzzle and the whole picture: the picture cannot be completed if any single piece is missing. Therefore, this mechanism is formed by a sense of an individually unique and indispensable "we", the basic characteristics of which are:

(1) **Harmony in diversity and unity in diversity**

"Harmony" is an important value in Chinese culture. "All creatures live together without interfering with each other; the sun and the moon are running after each other, and the four seasons alternate without violating each other" (*Doctrine of the Mean*). "Harmony" is not to impose consistency; rather it should be understood as "harmony in diversity". "Consistency" is merely relative to "diversity", while "harmony" may include "diversity", and this is where the difference between "harmony" and "consistency" lies. As Fei Xiaotong argued, the meaning of "harmony" lies in the following affirmation "We should respect the culture of our own nation, cultivate and develop our own culture; at the same time, we should respect the culture of other nations. Only in this way can the outstanding cultures of different nations and states tolerate and learn from each other, thus helping to create a colorful, multicultural world." Diversity is the basic condition for "harmony", without which there would be no need for the pursuit of "harmony", let alone "harmony itself". In "diversity"

is manifested personality and particularity, while in "harmony" is manifested the complementary relation between "diversified" subjects rather than consistent ones.

(2) Emphasis on communication and equal consultation

All-round communication is the necessary premise for the existence of the concept of individually unique and indispensable "we". In order to achieve the goal of harmony in diversity rather than a state of disunity, various subjects have to sufficiently and effectively consult and communicate with each other.

Openness and consultation are the basis for the organic integration of every society member. This is a full expression of the concept of equality in an individually unique and indispensable "we" organization. Only when the identities of the participants during consultation are equal is this organization consultative in nature; otherwise, it takes on features such as dispatching, bargaining, counter-measuring, competition or subordination. Consultation can ensure that all members are allowed to speak out freely and participate while giving them a sense of responsibility and a sense of achievement.

Equality manifests itself in the de-bureaucratized structural design of organizations, and even more important is the sense of equality of each group member, their self-esteem in interactions, and their mutual respect. In a social group, gender, age, seniority, title, post, grade, experience, income, education background, language, region, nationality, physical qualifications and customs are not indexes for man-to-man unequal discrimination. Everyone should respect each other, learn from each other and help each other, as well as become joint members forming a society.

(3) Construction of consensus and internalization of ideas

Communication and consultation result in the formation of consensus. Consensus is the product of compromises surpassing the idea or preferences of individuals, specific groups or categories, and forming a common "lower limit" or "upper limit". The formation of a consensus and integration of different value orientations in a universal consensus by a society provides the mental condition for social cooperation.

(4) Mutual support and respect

A flatted social structure has no solidified leader-member relation, fades the strata relation and shortens power distance. Society members should take the whole society as the object of identification rather than emphasize self-identification, group identification, department identification and category identification. Only through the concept of the "greater we" can members regard the responsibilities of the whole organization as their own responsibilities.

Chinese traditional culture is not a culture that emphasizes contractual rights, but it emphasizes the relation between the whole and the individual. Integrative thinking provides certain conditions for the formation of the concept of an unique and indispensable "we".

How social mentality affects individual psychology

Self–adjustment	Influence from society	Facing the same reality
Value analysis and choice		Public opinion
Explanation and causal attribution	Feeling pressure	Basic mood and tone among the public
Emulation	Getting swept up	
Expectation	Being infected	Popular and mainstream

Individual mentality	How social mentality is developed	Social mentality
Societal values	Social involvement and social connections	Social values
An individual's social attitudes	Social identification	Social consensus
Feelings and emotions	Emotional infection	basic mood and tone
Personality	Deindividuation	Feeling of oneness
National character	embeddedness/entering into and being in relationships	Sense of cultural belonging

Individual psychology

Fig. 2 Different levels of social mentality and their dynamic relationship

2.2   *Downward Model and Interactive Model*

When a social mentality forms gradually, it wholly affects the social mentality of individuals and groups in a top-down manner. This phenomenon is known as the downward model. Since it has the power of integrity, such social mentality has relatively great influence on individual mental states and behaviors, as pointed out by social psychologist William McDougall early in 1920:

> The society as a whole always features clear characteristics, which are not from the indi-
> viduals that form this society. These characteristics make the society as a whole affects
> individuals in a way that is quite different from the way in which society and individuals
> interact. Furthermore, each individual that becomes a member of a group will show some
> latent or potential characteristics or reaction modes that he will not show outside the group.
> Therefore, only when we regard individuals as the elements for the life of the whole can we
> discover the potential of these individuals. In other words, the society as a whole also has
> its own peculiarity, and it is a real-life whole, which determines the essence and mode of
> action of the individuals that compose it to a large extent; society as a whole is an organic
> whole. Society has its mental activities, but these mental activities are not the simple sum
> of the mental activities of the independent units that compose society. (Quoted from Doise
> 2011: 3)

This is illustrated in the following diagram (Fig. 2).
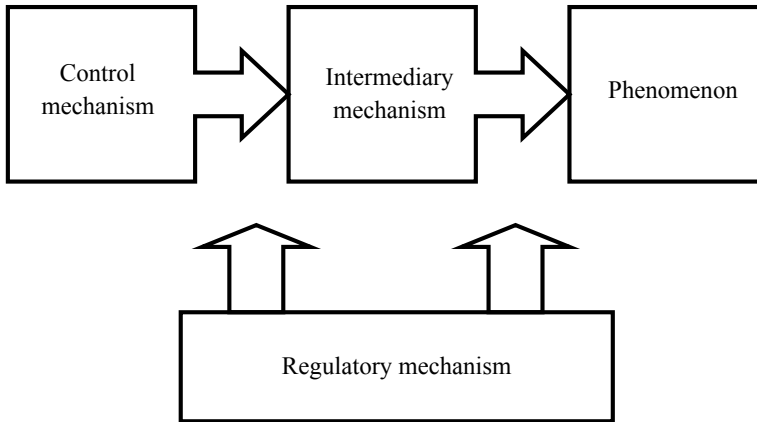
Fig. 3 Models of casual mechanism

The interaction between individual and social levels constructs the mental activities of the whole society—i.e., social mentality, and thus the mental activities of individuals are also interpreted socially.

3 Mechanism and Effect of Social Mentality

3.1 Mechanism of Social Mentality

The mechanistic causal model is usually used to systematize the relations between the variables of the mental mechanism, allowing us to interpret the control mechanism, intermediary mechanism and regulatory mechanism of a phenomenon. The control mechanism is the causal variable responsible for a given phenomenon. What we call the intermediary mechanism is the intermediary between antecedent variables and outcome variables. When the relationship between antecedent variables and outcome variables is established through an intermediary variable, the latter becomes a necessary element. The antecedent variable directly leads to the intermediary variable, and the intermediary variable in turn leads to the outcome variable. In the case of different causes caused by the control mechanism, the regulatory mechanism is required to determine when and under what conditions a given antecedent variable produces what kind of effect. The regulatory mechanism can regulate the relationship between the control mechanism and the intermediary mechanism as well as the relationship between the intermediary mechanism and the phenomenon. For the concrete process, please refer to the Fig. 3.

In previous studies, a number of different social mentality mechanisms have been identified. For example, the state of "mental harmony" can become the intermediary

mechanism for social comparison, core self-evaluation and life satisfaction (Zhang 2012). As the sum of self-harmony, interpersonal harmony, social harmony and harmony between man and nature, "mental harmony" reflects the essential nature of traditional Chinese mentality for the formation of social mentality in China. Elements like social comparison affect life satisfaction on the basis of mental harmony levels. The intermediary mechanism may be constituted of thinking models, values or self-constructs. Regulatory variables may consist of mental variables, such as expectations, social identity, self-esteem, or achievement motivation. Meanwhile, regulatory variables are usually demographic variables, such as gender, income, socioeconomic status, education, living conditions, or consumer preference. These regulatory mechanisms regulate and change the relationship between the control mechanism and the intermediary mechanism along with regulatory variables.

Reviewing existing studies, we discover that the relatively important variables affecting social mentality include:

1. **Social comparison**

Social psychologist Festinger proposed the concept of social comparison in 1950. It implies that when people are in an uncertain environment, they compare themselves with others in order to confirm and improve themselves, which leads to a better understanding of their own characteristics. For example, upward comparisons increase one's power to change oneself, namely, to emulate those better, while downward comparisons grant self-satisfaction and confidence.

The phenomenon of social comparison includes different components such as cognition, emotion, ability and behavior. It is thus clear that social comparisons are ubiquitous. In the era which saw the advent of social media, people have more opportunities for social comparison. When social structures rapidly change, the structural characteristics of social strata become obvious and gaps between strata increase, leading people to try and locate and compare themselves, in order to beget a sense of belonging in terms of their identities, standardize personal emotions and attitudes, and form joint behavioral responses and attitudes with the group to which they belong.

Relative deprivation is also a product of social comparison. This term refers to the feeling of deprivation resulting from the disadvantageous comparison of one's own situation with various standards or references. Such feeling may cause negative moods, which manifest themselves through feelings of unfairness such as anger, hatred or dissatisfaction (Zhou and Long 2010). Robert King Merton believes that when an individual compares his own situation with others in the reference group and finds himself at a disadvantage, he feels deprived. Such deprivation is due to comparison with a given variable rather than with absolute or eternal standards, and therefore it is relative. This variable may be other people, other groups or one's own past. Sometimes, even when the situation of a given group improves, if this improvement does not match that of other reference groups, deprivation subsists. Relative deprivation influences the attitudes and behaviors of individuals or group and causes various sequences, including repressed feelings and feelings of inferiority, causing collective action.

2. **Attribution**

Attribution allows the deduction, attribution and interpretation of the reasons behind the behaviors of people or the occurrence of events. Attribution is driven by the motivation to explore the causal association between events, namely, the "why" of anything. Attribution is the interpretation of the significance of one's own behaviors, others' behaviors and of the occurrences of social events or phenomena. In daily life, such exploration usually stops when people find an interpretation considered reasonable, especially when they feel that this interpretation is conform to social norms or daily experiences. Therefore, attribution is different from scientific exploration in that it is a simple exploration and interpretation process.

American psychologist Heider (1958) considered that all people have the need to understand, predict and control their surroundings. In order to meet such need, people interpret the reasons for behaviors and occurrences on the basis of various clues. Only after understanding these can they interpret this world. People always interpret behaviors according to both reasons and outcomes, and the interpretation method is very important in the making of subsequent behavioral decision.

The general attribution process may feature a special bias effect. For example, the actor-observer bias refers to an observer's attribution of the party's success or failure to external factors, whereas the same party attributes success to internal factors in case of success, attributing success to one's own abilities and efforts and failure to external factors. Different interests can also result in an attribution bias. People are usually not considerate of those who have different interests, making attributions and usually overstating the effect of given factors, which is known as the self-serving bias.

When wealth gaps widen, people from different social economic classes may also face such attribution bias for the acquisition of wealth, which affects the relationship between the rich and the poor in other aspects.

3. **Value**

Value is defined as "an explicit or implicit view on 'what is worthy'; it is an individual or group characteristic that affects choices of action, mean and end" (Kluckhohn, 1951). In his study of 116,000 tested work values from 40 countries and regions, Hofstede (1980) determined four potential dimensionalities of values: power distance, uncertainty avoidance, individualism and collectivism, and masculinity or femininity. Schwartz and Bilsky (1987) found that values are related to ten motivational fields, which exist in any culture because they stem from three universal human needs: biological needs, social communication, and group survival and welfare.

4. **Group communication**

Group communication refers to the process of plural, interactive and interdependent exchanges of information between individuals in the group in order to reach its specific objective based on the individuals' own purposes. Information communication is an important condition for the formation of group psychology. No group cognition in terms of group objectives, the cohesive force of group members, or the formation of

formal or informal organizations within the group, can be achieved without the communication and exchange of information. In the mass media era, there are extensive, rapidly-updated technological channels for inter-personal information communication. This communication ranges from texts to images, plane to multi-dimensional, and from official to popular, and greatly affects the formation of social mentality. It is also the basic precondition for the formation of shared reality.

5. **Mental expectation**

Psychology finds that the mental process of "imagination" features a "forward-looking cognitive" function. When one's imagination of the future is accompanied with causal judgment or probability judgment, it becomes an expectation. As the future is uncertain, one's sense of stability depends on expectations, and these expectations for the future can directly affect mental states and behavioral choices.

Some investigations have found that, the how satisfied residents say they feel about their lives is positively correlated with their expectations for the future. That is to say, those who are more positive about the future are also more satisfied with their present condition. Positive expectations for the future can mitigate feelings of dissatisfaction and give people reasons to be hopeful about the future, thereby improve their assessment about the present.

Realizing expectation can bring people happiness; the opposite frustrates and depresses, for expectations are causal judgments made according to existing life experiences. "We are expected to reap what we have sown." If one's expectation is not realized, his experience is challenged and his sense of security lost, increasing the uncertainty of the future. This causes anxiousness and uneasiness. It is thus clear that positive expectations for the future can help people live through unfavorable present situations, as well as more happily accept and enjoy their present lives and work hard for the future.

3.2   Effect of Social Mentality

The formation process of social mentality has various social mental effects. There are several typical effects, which are briefly summarized below:

1. **Convergence effect**

Convergence effect refers to the gradual formation of a social consensus on a given social attitude of viewpoint via various media communication and exchanges, forming a collective power that surpasses individual social attitudes or viewpoints. In other words, the convergence of the parts is greater than their simple sum. The process of convergence can be accumulative (time-sequence) or aggregative (simultaneous), or a mixture of both. When a significant social event occurs, people converge both in

space and in social attitude, thus forming a common voice or a strong request leading to a relatively consistent collective action.

2.   **Majority effect and minority effect**

The majority effect, also called conformity, refers to the phenomenon of an individual doubting, giving up or changing his own attitude, judgment and behavior because of the effect of the majority of a group (real or imagined pressure), thus submitting to the direction most consistent with that of the majority of the group. Seen from the angle of the social identity theory, the individual becomes minority in terms of judgment and opinion in a group situation, and thus this phenomenon also be referred to as the "minority effect". From this angle, conformity is behavior meant to remain consistent with others, but the underlying motivation is the safeguard of and the identification with the group, rather than self-doubt caused by pressure.

Seen from either angle, conformity phenomena are quite common in daily life. Conformity appears convenient (other people's choices must make sense), safe (no punishment if everyone does it) and empowering (many hands provide great strength). It is a significant mechanism for the communication and formation of social mentality as well as a common mental phenomenon.

3.   **Group polarization effect**

Group polarization refers to the phenomenon in which a collection of individuals is likely to be either more adventurous or more conservative when making decisions than would be true of decision-making by individuals. This is especially true when some members of the group have been deliberately provoked or when a majority are risk seekers; in those cases their attitudes or the decisions they make tend to be riskier or even reckless. Under some circumstances, if the more risk-averse members of the group become the majority, their collective decision also become show more caution. Under other circumstances yet, groups shift in the risk-seeking direction more easily than do individuals.

Positively, group polarization promotes the unification of group opinions, strengthen group cohesion and form relatively uniform behaviors among members. Negatively, it can lead to poor judgments or increasing the chances of reckless decisions. This occurs more easily within a group that has a strong group consciousness.

Affected by certain social attitudes and mental sets, people usually treat things and events from specific angles or viewpoints that, once determined, can quite easily provide more arguments along a same direction to intensify and prove their own correctness. As a result, group opinions become more radical and more extreme, as well as quite at odds with the original ideas of everybody in the group.

Furthermore, "saying-is-believing" is an existing effect of interpersonal communication. When society members hear what other people believe, they adjust their

own standpoint in order to conform to the mainstream (Echterhoff and Higgins 2005). Those who hold different views often keep silent.

4. **Group-reference effect**

The group-reference effect is contrary to the self-reference effect. It is a kind of influence on individual mental states formed by selecting information from the group the individual belongs to as reference for self-positioning in the cognition process. Many studies show that, in vague circumstances, people naturally select those with the same characteristics as themselves for comparison, and these characteristics include age, gender, educational background, income, consumption level, experience, nation/culture, values, etc. (Zhang and Zhang 2011; Li and Zhang 2013).

5. **Pygmalion effect**

"Expectation" is the motivation formed on the basis of anticipation and pointing to this anticipation. When people expect or look forward to a future event, various behaviors are triggered. This is called the "self-fulfilling prophecy" by social psychologists. In 1968, social psychologist Rosenthal carried out an experiment on the language capacity and inferential capacity of primary school students. He did not select the subjects according to performance; instead he selected randomly from all the students and told the teachers that these students were "diamonds in the rough", who could quickly improve within several months. In fact, these subjects included students with both high marks and low marks. Except for these words to the teachers, researchers did not intervene otherwise. When it came to the end of the term, they had another test on all students, finding out that those randomly selected and labeled as "diamonds in the rough" got much higher marks than others. This phenomenon is known as the Pygmalion effect according to a European legend. Pygmalion, a prince, fell in love with a statue of a beautiful girl. He often looked at the statue affectionately. After a long time, the statue became alive and the girl stepped down from the base and fell into the arm of the prince.

How does the Pygmalion effect occur? Psychologists find that expectations can induce self-motivation or motivate via autosuggestion or hetero-suggestion. They play a certain role in motivating and mobilizing potential abilities. When the primary school students were labeled, teachers had higher expectations for them and unknowingly encouraged or helped them by praising them in public or smiling to them. When they made mistakes or got low marks, teachers still believed in their potential and thought that their low marks were just temporary, not attributing them to congenital stupidity. Teachers became tolerant of their mistakes and always kept their confidence in them.

If the majority of the society members were confident in their future, they would surely have a positive attitude, put their mental power to work, remain vigorous, overcome various difficulties and advance bravely to realize their expectations.

As previously mentioned, the formation mechanism of social mentality is relatively complex, yet relatively few academic achievements have been made. Although there has been an accumulation of empirical studies, theoretical discussions are far

from enough. This is exactly the academic difficulty we expect to overcome through research.

References

Chinese-Language Sources

Doise, W. (2011). *Levels of explanation in social psychology* (M. Zhao, & B. Z. Liu, Trans.). Beijing: China Renmin University Press.

Li, H. & Zhang, H. (2013) Social identity prominence: A review of studies from self-reference effect to group reference effect. *Journal of Xihua University (Philosophy & Social Sciences)*, *32*(2), 52–59.

Yang, Y. (2012). *Difference comparison of group identification capability and its relations with cognitive style and subjective well-being under eastern and western cultures*. Doctoral Dissertation of School of Psychology, Beijing Normal University.

Zhang, Y. (2012). *Research on the psychological harmony intermediary mechanism of college teachers' professional well-being*. Ph.D. thesis, Beijing Normal University.

Zhang, H. Z., & Zhang, P. Y. (2011). Group-reference effect, a special self-reference effect. *Journal of Ningbo University (Educational Science Edition)*, *33*(2), 39–43.

Zhou, H., & Long, L. R. (2010). Referent selection in justice studies. *Advances in Psychological Science, 18*(6), 948–954.

English-Language Sources

Barsäde, S. G., & Gibson, D. E. (1998). Group emotion: A view from top and bottom.

Brief, A. D., & Weiss, H. M. (2002). Organizational behaivior: Affect in the workplace. *Annual Review of Psychology*, *53*, 279–307.

Echterhoff, G., Higgins, E. T., & Groll, S. (2005). Audience-tuning effects on memory: The role of shared reality. *Journal of Personality and Social Psychology, 89,* 257–276.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hong, Y. (2009). A dynamic constructivist approach to culture: Moving from describing culture to explaining culture. In R. Wyer, C-Y. Chiu, & Y. Hong (Eds.), *Understanding culture: Theory, research and application* (pp. 3–23). New York: Psychology Press.

Kluckhohn, C. K. M. (1951). Value and value orientation in the theory of action: An exploration in definition and classification. In T. Parsons & E. A. Shils (Eds.), *Toward a general theory of action*. Cambridge, MA: Harvard University Press.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology, 53*(3), 550.

Structure and Measurement Indicator System of Social Mentality

Junxiu Wang

1   Analytical Level of Social Mentality

The study of social mentality endeavors to study both individuals and society, and so it is impossible to avoid a core socio-psychological problem, i.e., "what is 'society' in socio-psychological terms?" This problem was proposed in both the social representation theory and the social identity theory (Moscovici 2011; Hogg and Abrams 2011). They put forward that it is not enough to only take the presence of others as "society"; mainstream social psychology should study the social phenomena that keeps society running and pushes key operation processes (Moscovici 2011).

Sociologist Turner (2009) proposed that social reality can be divided into three levels. The first is the micro social reality, which refers to face-to-face interpersonal interaction. The second is the meso-social reality, which includes two basic structures, i.e., social organizations and units, and categorical units. Social units are subdivided into three basic types, i.e., organization, community, and group, while the categorical units refer to social distinctions, such as age, gender, class, and race. The third is the macroscopic social reality, which is composed of the institutional field, stratification system, country, and national system. The institutional field refers to the social institution of structure existing in society, including economy, politics, blood lineage, religion, law, science, medical science, education, etc., used to adapt to internal and external environment emergencies.

The stratification system, centered on the unequal distribution of resources among a population, is composed of different hierarchies for the sharing of resources. A country is a geopolitical unit composed of institutional domains and a stratification system. The relations between countries are generally based on the interaction between key institutional domains (such as economy and politics) as well as the internal connections among social institutional domains. Embedding occurs in the three

J. Wang (✉)
Beijing, China
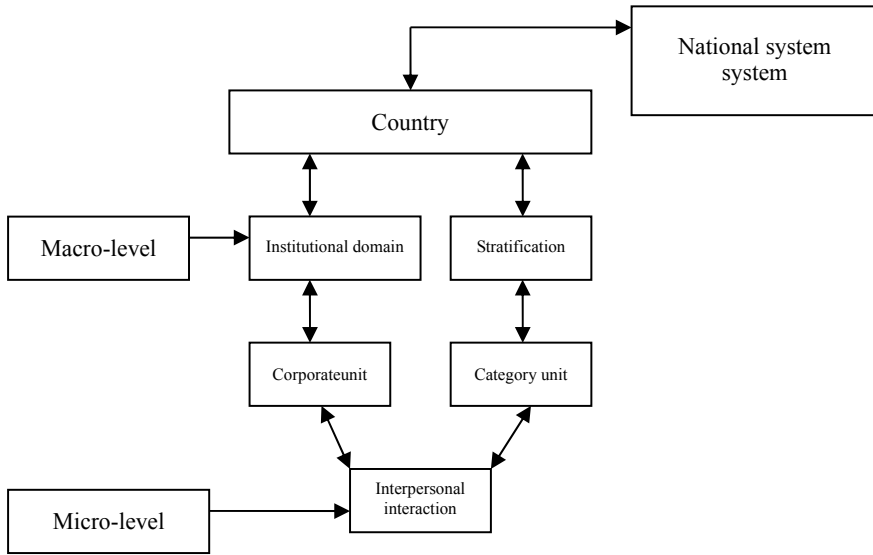
Fig. 1 Levels of social structure

levels of social reality. Interpersonal interactions are embedded into social units and categorical units, and these units are embedded into the country and national system. In such embedded relations, the larger societal structure can limit the smaller societal structure. In turn, meso social units and categorical units are established via interpersonal interactions; macroscopic institutional domains are composed of social unit networks; and the stratification system is composed of categorical unit sets. Finally, social structure is a manifestation of culture.

We can use Fig. 1 to illustrate Jonathan H. Turner's idea.

We can use Turner's three levels of social reality to analyze the social problems of different levels. Meanwhile, when comparing Turner's three analytical levels, we can find that they are very consistent with social psychologist Willem Doise's four levels of analysis in traditional experimental social psychology (2011).

Doise's first level of analysis is the intra-personal level. The study of this level focuses on individual cognition, how social environments are evaluated by individual consciousness, and behaviors in specific social environments, which do not involve interaction between individuals and social environments. The cognitive dissonance theory of Festinger, for example, belongs to this level. The second analysis level is the inter-personal but intra-situational level, which focuses on interpersonal processes occurring in specific situations, giving no consideration to social position beyond specific situations. Kelley's attribution theory belongs to this level. The third analysis level is the social position level, or the intra-group level. Different social positions impact specific circumstances. Festinger's social comparison theory belongs to this level. The fourth analysis level is the ideological level or inter-group level, which

focuses on the beliefs, representation system, values, and norms of society members. Milgram's study of the obedience to authority belongs to this level.

Therefore, we can see that Turner's micro interpersonal interaction level corresponds to Doise's second level, i.e., interindividual and situational level; mesoscopic social organization level corresponds to Doise's third level, i.e., social position level; Turner's macro-level basically corresponds to Doise's third level, i.e., ideological level. But for sociologists, the intra-individual level is not a social issue and thus it is basically not in the scope of their consideration.

The study of social mentality, as analyzed by Turner, faces a society that contains three or even more levels (such as inter-country, inter-society), and the research results to be absorbed should also incorporate Doise's four levels of analysis in social mentality. More importantly, in terms of research method, the combination of different levels of analysis proposed by Doise should be used. Only in this way can we delve into the manifestation of macroscopic social mentality.

2 Core Elements of Social Mentality

The French historian Jacques Le Goff thought that the term mentality referred to common beliefs of individuals and others in a group. Durkheim introduced the concept of "collective representation" in the *Elementary Forms of the Religious Life*, which focuses on collective mentalities and thus belongs to social reality (Xu 2010). But Peter (2001) argue that modern sociologists and anthropologists prefer to use concepts like "thinking mode", "belief system", or "cognitive image".

The history of mentality concerns real ideas and attitudes of people in a certain era in the face of birth, aging, illness, and death, as well as transformations and differences in these concepts in different eras, cultures or regions. Social mentality is the outlook on the world of people in an era, or their imagination of the world. Social mentality has its own internal motivation, which is sui generis and can be called group subconsciousness, similar to the social fact of Durkheim. Social mentality is independent from individual mental phenomena. Individual mental phenomena cannot be explained as mentality, and their sum is also not equal to social mentality. Social mentality refers to a group phenomenon and group mind of a social group instead of being the sum of the individual minds it involves. It is a phenomenon completely different from the individual mind. Social mentality has certain compelling forces, and its group force can be felt by individuals or not; individuals may consciously or unconsciously obey it. The history of mentality studies society, social groups or classes. Although its objects of study are people, it discusses their common mentality in a same period and under the influence of a same culture (Yu 1996).

New Social Sciences Dictionary, edited by Ru Xin, borrows the psychological intension defined by French Annales School Jacques Le Goff and defines this concept from the perspective of social and cultural mentalities, approaching social mentality as a "generic social mentality term and a certain era's culture psychology, as well as their concepts and reflections. Mentality forms the value-belief-action system of

a certain society, and this system often accumulates in certain culture in a form of which the group is unaware and which constitutes the basic level of such culture" (Ru 1988).

After clarifying the concepts of social mentality in relevant literatures, Ma (2008a, b) thought that social mentality was mainly used in the following aspects: first, as a non-academic concept, in which, social mentality basically refers to "popular will", "public opinion", "popular feelings", etc.; second, in philosophy, which is often equal to the social psychology of historical materialism; third, in regard to real experiences, which often describe different forms of social mentality, specifically including various social groups and different social strata's recognitions, feelings, evaluations, etc., of social phenomena.

Ma (2008a, b) affirmed "social mentality, associated with certain social running states or major social change processes, is the summation of feelings, emotions, social cognitions, behavioral intentions and value orientations that widely exists in social groups. It belongs to the dynamic component of social mental state." He thought that "(1) the social conditions that cause or produce social mentality are special; that is to say, they are social change processes with special historical significance causing the change of social mentality, rather than the ordinary material living conditions or social lifestyle of a group (such condition often determines the relatively stable component of social mental state). (2) The content of social mentality, different from the content of the general social mental state, is mainly the mental activity content directly reflecting the state of current social operations or social changes, which have strong emotional colors. Relatively speaking, the connotation of the social mental state is much more extensive than that of social mentality. (3) Social mentality is timely, dynamic, and direct, which is "superficial", and its psychological level content can be easily perceived and recognized."

Yang (2006) thought that: "social mentality is a macroscopic social mood that diffuses throughout the whole society or social groups/categories; it is the summation of emotional tones, social consensuses, and social values of society as a whole. Social mentality is expressed through fashion, popularity, public opinions and the social feelings of society members, their confidence in the future, their social motivation, social emotions, etc. It interacts with mainstream ideologies and causes obscure, potential and emotional impacts on social actors through mechanisms such as social identification and emotional contagion. It emanates from the homogeneity of social individual mentality but it is not equal to the simple sum of individual mentalities; instead, it is a mental phenomenon that is newly generated and has its own traits and functions, which reflects the most macroscopic psychological relation formed by mutual construction between individuals and society."

Although people have different understandings of social mentality, we can still find the core elements among these different understandings. In the different understandings of social mentality and social mental state, people highlight the internal link between social mentality and social change, and emphasize that the core content of social mentality include social cognitions, social values, and social emotions, the core elements of which are social consensuses, social dominant emotions, and social core values.

The social representation theory affirms that the social representation structure can be divided into a central system and a peripheral system. Among them, the central system is the core of social representation, which is directly related to and determined by historical, social and ideological conditions, and is strongly marked by the standard system it involves. It forms the basic component of social representations shared by the group and determines the homogeneity of social groups, which is stable, consistent, unchangeable, and insensitive to its immediate environment. The peripheral system depends on individual experiences and history integrated to circumstances and individual characteristics, and supports the heterogeneity of social groups, which is flexible and sometimes contradictory, and is very sensitive to its immediate environment. It reflects the reality of social groups (Liu and Guan 2010).

The social representation theory is very instructive and helps us to understand the structure of social mentality. The core element of social mentality should be a system that commonly exists in certain social groups, is relatively stable, and has certain temporal brands and cultural characteristics. Social consensuses, dominant emotions, and core values should be the core elements of social mentality. The social representation theory regards social consensuses as the formation process of a social representation. People form various representations through individual experiences and interpersonal interactions, as well as under the influence of media. This process can also produce consensual thoughts and consensual representations, which then impact every individual in the society. "Social consensuses are constantly created in our society, especially via the popularization of scientific and technological knowledge. The content of social consensuses, i.e., symbol images, comes from and is based on science. Symbol images are rooted in the mind judgments, shapes public language and behavior, and can be constantly improved. During this process, symbol mapping supplements the storage component of social representations. If there is no such storage, a society will feature neither communication nor connection nor a defining reality" (Moscovici 2011). Moscovici pointed out that the formation of social consensus is done in three stages. "The first stage is a scientific stage expounded in detail in a theory from scientific disciplines (such as economics and biology). The second stage is the 'representational' stage that is spread in society and which images, concepts, and vocabulary are reshaped and adapted. The third stage is the ideological stage, in which representations are used and logically reconstructed by a political party, a school of thought, or a national institution, and finally intensified by the product created by the whole society in the name of science. Therefore, each ideology has two elements: one stems from the underlying content and the other emanates from the upper form that gives a scientific atmosphere to social consensuses" (Moscovici 2011).

Social integration, social harmony, social growth, and social progress are the general objectives and directions of the study of social mentality, but they cannot evade the fundamental question of "how is a society socialized?" In comparison with individual thinking in traditional psychology, the study of studies of social mentality studies of social mentality focuses more on group thinking, especially social thinking. It is not only concerned about unreasonable social thinking mechanisms, but also about the formation of social reasonable thinking and the conclusion of

social consensuses. Such society is a "thinking society" in line with the concept of Moscovici.

Developmental psychology regards the development of thinking as an important symbol of individual growth, whereas the study of social mentality considers the social thinking capacity and reflection capacity as a symbol of social growth and maturity. A healthy society should have a thinking mentality. Similarly, social emotions are diversified. With the occurrence of social events, groups or explicit social emotions change. Emotional studies prefer to categorize social emotions into positive emotions and passive emotions, but in a mature and healthy society, dominant emotions are positive. As Turner said, "emotions are the regulator of human behavior, and their operation needs to be well maintained in various situations so as to make people accumulate active experiences and avoid passive experiences" (Turner 2007).

This involves two problems. One is the regulation effect of social emotions. Positive social emotions are conducive to regulating social mentality. Another is the signalization of emotions. Social emotions are the indicators and barometers of the running status of society, and more importantly, they feature a dynamic mechanism, i.e., "emotions are the 'glue' binding people together and generating commitments to large-scale social and cultural structures" (Turner 2007). They are core elements in the avoidance of "social alienation" and the realization of "social integration". Such social cultural aspects contain social core values. This is a progressive process from social cognition to social attitude and then to social values during which the formed social values affect social cognition, social attitudes, and produce corresponding social emotions. Therefore, certain social consensuses, dominant social emotions, and social core values are formed during certain social period. The system composed by these core elements of social mentality determines social behaviors and individual behaviors to some extent in said period.

The peripheral elements of social mentality center on and impact the core elements of social mentality. Many concepts in psychological and socio-psychological disciplines belong to such peripheral elements.

3 Structure and Indicator System of Social Mentality

3.1 Structure and Measure

Ma Guanghai pointed out that the conceptualization process of "social mentality" has not been finished, because there is no consensus on the aspects necessary to the measuring of social mentality. He proposed that we could measure the social mentality by taking social emotions, social cognitions, social values, and social behavioral intentions as basic dimensions. He thought that these aspects highly correlate with social behaviors, and are the most important psychological elements determining social behaviors. They are of great significance to discuss social mentality issues

from the perspective of practices, and are conductive to the prediction and control of social behaviors. Therefore, they can be taken as measurement indicators of social mentality. He also thought that the important task in the study of social mentality is to figure out the issues that positively or negatively affect the emotions of society members. To measure social emotions, the concepts should be further operationalized according to the specific social conditions that cause the social emotion response. Social cognition emphasizes the relatively consistent cognition or understanding of given social phenomena by a group or people in society; it affirms that the consensual social cognition of society members is the cognitive basis for the formation of social mentality, which is very important for other aspects of social mentality, especially its emotional aspect. When a value is widely accepted by society members, it becomes a social value; social values are implied in a social structure and system, which are of great significance for the maintenance of the existing social structure and at any moment reflect the economic, social, and political structures and developmental situations that objectively exist. Social behavioral intentions are the embryonic stage of group behaviors, which is affected by social emotions, social cognitions, and social values. These components of social mentality jointly contribute to social behavioral intention (Ma 2008a, b).

Yang (2006) affirms that social mentality is composed of social emotional tones, social consensuses, and social values, and its psychological level is also composed of social emotional tones, social consensuses, and social values outside in, as shown in Fig. 1. Social values refer to "a set of values implied in the social structure and system", and the possession of such set of values maintains the existing social structure. Such asocial system includes socialization, social control, social norms, and social rewards and punishments. It brings external pressure on people through norms, values, punishments, etc., as well as a submissive pressure on people through the internalization of social values" (see chapter "Theoretical Framework for Studying Social Mentality").

Chen (2006) argue that even though individuals may constitute a society or a group, social mentality is not the simple sum of their mentalities. He proposed that there are two channels that allow individual mentalities to transform into social mentality, i.e., convergence and integration. He thought that social mentality could converge on the basis of a shared mentality between individuals, and that social mentality was the overall distribution pattern converged and integrated by the mentality of these individuals. Integrated social mentality is also a shared mentality applicable to many individuals, formed under certain conditions due to the interactions between individual mentalities and their mutual effect. Social mentality is the overall, unified, fully integrated and combined form of the mentality of individuals. Chen Wuqing thought that sampling and surveying were suitable for the study of converged social mentality, while representation analysis was more suitable for the study of integrated social mentality. Media analysis, questionnaire surveys, public opinion polls, depth interviews, focus group discussions, discourse analysis, and even laboratory experiments can all be widely used for the study of social representation (Liu 2006).

From current studies we can see that, in addition to traditional socio-psychological methods such as sampling surveys, literature analysis, personal interview, and psy-

chological measurement, the study of social mentality also uses social representation methods, such as analysis of social mentality according to catchwords and euphemisms. As studies on social mentality deepen, we need to explore new methods for the study and measurement of social mentality and its structure.

3.2 Indicator System

More and more studies are being conducted on social mentality and the issues they approach are constantly deepening. Researchers of different disciplinary backgrounds also join this study group, making the objects of study more extensive and more diversified. Among them, studies on the social mentality of low-income groups, college student groups, peasant groups, and laid-off worker groups occupy a large proportion. There are some studies focusing on social mentality issues related to the construction of a harmonious society and social transformation. Moreover, some scholars also explore the concept of social mentality and other mental mechanism issues. However, as researchers of social mentality have different understandings of the connotation of social mentality and are restricted by their respective disciplines, research contents of social mentality also vary. So far, we haven't pinpointed an indicator system of social mentality that is directly usable.

Investigating the social mentality of Guiyang citizens, Zheng et al. (2002) defined social mentality as a socio-psychological reactionary state that is direct and ubiquitous in social groups and that has certain commonality. It is caused by the development and changes of economic relations, political systems, and the whole social environment in people's social life. In terms of content, their investigation include: (1) feelings towards social life, individual and family life, including: national status, cultural life, economic development status, legal basis, authenticity of news reports, gap between the rich and the poor, quality of consumer goods, general mood of society, state of public security, income-earning opportunities; living standards, family income, economic status, social status, per capita living space, quality of expensive consumer goods, household savings, political status; financial difficulties, bad housing conditions and environment, unharmonious family, boring life; (2) important issues which citizens are concerned about: anti-corruption, environmental protection, control of commodity prices, strengthening of public security, regulation of the general mood of society, etc.; (3) psychological expectations in terms of state politics, economy, and overall developmental prospects of society; (4) social needs: the pursuit of security, happiness, and life quality.

In the 2001 investigation of the social mentality of urban and rural residents in Inner Mongolia, the report of Guo (2003) included the following content: (1) residents' satisfaction with society, economy, politics and other various elements; (2) their satisfaction with current social phenomena; (3) their evaluation of reforms; (4) their opinions on social hot spots; (5) their expectations for social development and personal life in the next five years.

When investigating the social mentality of rural migrant workers in cities, Wang (2009) divided research content into three parts, i.e., personal cognition, social stratum cognition, and social cognition. Personal cognition mainly included five aspects, i.e., faith identity, legal identity, policy identity, moral identity, and future identity; social stratum cognition mainly focused on rural migrant workers' feelings toward social pressure on their social stratum, social security, social equality, etc.; social cognition included their identification with science and concepts like "knowledge changes fate", "education contributes to life", patriotism, democracy, honesty, thriftiness, entrepreneurism, competitive consciousness, the importance of gift-giving or relations in the handling of various matters, moneyed world, destiny, etc.

Throughin-depth interviews, the observation method, and the document analysis method, Li (2005) studied the relations between the social mentality of Shanxi people and economic development, and summarized typical characteristics: (1) rational and peaceful; (2) unwillingness to lag behind and desire to change the status quo; (3) conservative and non-innovative; (4) passive, reactive, and even indifferent in terms of social participation; (5) imbalanced in mind caused by the gap between the rich and the poor; (6) helpless. This is in fact a study related to national character.

From the preliminary studies of social mentality mentioned above we find that the study of social mentality mainly reflects the following aspects: (1) social mentality, caused by the need for satisfaction, including the content related to the satisfaction of basic needs, the participation of the public in public affairs and political activities; (2) social emotions, including universal social anxiety, which mainly involves risk feelings, social equality, etc.; (3) social behavioral intentions, including coping strategies in the face of problems and setbacks, consumer behavior tendencies, etc. (Wang 2005). Existing social mentality investigations and studies generally focus on the attitudes and opinions of the public toward social issues. Few of them reflect ubiquitous social consensuses and collective consciousness, let alone deep levels of mental content that act as the opinions of the public.

To systematically describe, analyze, and reveal social mentality, we should explore the structure of the conceptual connotation of social mentality, trying to explain phenomena by learning from the classification method of psychology on cognition, feeling, and will, according to existing social mentality studies; meanwhile, we should study social mentality on the basis of four aspects, i.e., social cognitions, social emotions, social values, and social behavioral intentions. This paper tries to point out the indicator system of social mentality, in which level-1 indicators include social cognitions, social emotions, social values, and social behavioral intentions. See Fig. 2 for details.

We briefly analyze the following four level-1 indicators:

1. Social cognition
   Social cognition refers to the satisfaction of individual needs of society members.Its specific indicators mainly include:

   (1) **Social sense of security**, meaning safety or risk perceived, felt, and evaluated by individuals or society members in terms of their environment;
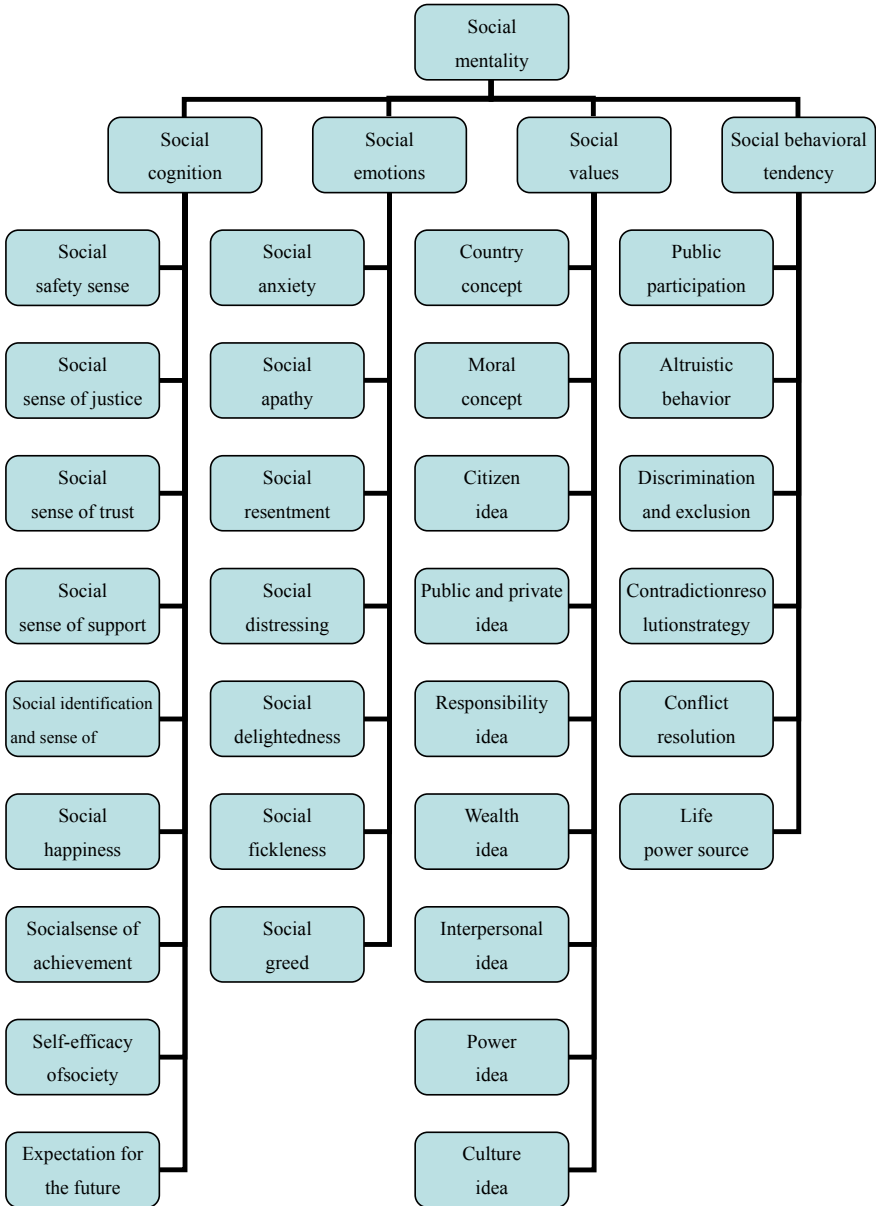
Fig. 2 Indicator system of social mentality

(2) **Social sense of justice**, meaning the fairness, impartiality and justice perceived and felt by individuals in society, organizations, and groups;

(3) **Social sense of trust**, meaning the trust felt and recognized by individuals in terms of the society, interpersonal relationships, and organizations;

(4) **Perceived social support**, meaning the spiritual, psychological, and behavioral help, encouragements, and other forms of support perceived by individuals from others, family, groups, organizations, and society;

(5) **Social identification and sense of belonging**, meaning the individuals' identification with, acceptance of, rejection of, or self-categorization in society, organizations, groups, or others, or identification with an organization or a group;

(6) **Social happiness**, meaning the feelings of happiness and misfortune of society members;

(7) **Social sense of achievement**, including the feeling of self-value and self-realization of society members in society and their identification with overall social development;

(8) **Sense of self-efficacy of society members**, meaning the relations with society perceived by individuals, which reflect how individuals look upon the impact of their efforts on society;

(9) **Expectation for the future**, meaning the judgment of future by individuals, which reflects the confidence of society members.

2. Social emotions

Psychology divides individual emotions into categories such as pleasure, anger, sorrow, joy, love, hate, and desire, in which corresponding social emotions can be classified in a similar way. Next-level social emotion indicators include: social anxiety, social apathy, social resentment, social pain, social pleasure, social fickleness, social greed, etc.:

(1) **Social anxiety**, meaning different levels of emotions such as ubiquitous anxiety, worries, fears, scares, and terrors in society caused by social events;

(2) **Social apathy,** meaning social emotions such as indifference to and ignorance of some social phenomena;

(3) **Social resentment**, meaning different levels of anger caused by dissatisfaction, hostility, resentment, hatred, etc.;

(4) **Social pain**, meaning social negative emotions caused by negative factors such as the pressure of life, unemployment, family unhappiness, disasters, and accidents;

(5) **Social pleasure**, meaning the reflection of the degree of overall happiness of society members;

(6) **Social fickleness**, meaning social non-rational states stemming from varied and complex reasons;

(7) **Social greed**, meaning the emotional expression of social excess demand.

3. Social values

   Values refer to a person's cognition of what is valuable, desirable, and meaningful. Social values refer to social confirmation on some aspects reflected in society. As the content of values is endless, we only select here basic ideas with more obvious social values, which include how society members treat country, ethics, citizens, public or private, responsibility, wealth, interpersonal relationships, power, and culture. Therefore, we subdivide social values into indicators such as state concept, moral concept, citizen concept, public and private sense, responsibility concept, wealth concept, interpersonal concept, power concept and cultural concept.

4. Socio-behavioral intentions

   Behavioral intentions are ready conditions of behavior rather than behavior itself, and it can affect a person's attitude. Socio-behavioral intentions are selected individual behavioral intentions more closely related to other people and social relations. Behavioral intention indicators mainly include:

   (1) **Public participation behavioral tendency**, an important indicator that reflects the relation between individuals and society, which studies citizens' participation in public affairs, and is very important for social development and progress;

   (2) **Altruistic behavioral tendency**, meaning the altruist tendencies of society members toward society members and society, which is the basis of helping others, beneficence, voluntary actions, etc.;

   (3) **Discriminatory and repulsive behavior tendency,** meaning the negative attitudes of society members toward some other members or social groups manifested through intolerant, non-acceptance, and even offensive speech and actions;

   (4) **Contradiction resolution strategy**, meaning the action strategy adopted by society members when they encounter contradictions;

   (5) **Conflict response strategy,** meaning the coping strategy first adopted in the occurrence of conflict between social individuals or groups;

   (6) **Power source of life**, meaning the significance or insignificance felt by social individuals, their willingness or unwillingness to contribute or strive for themselves, family, organizations, and society.

   According to different targets, these secondary indicators can be made into corresponding quantization tables or subjects after being conceptualized and operationalized. In existing socio-psychological studies, some secondary indicator concepts have been deeply studied, and thus we can use related measurement tools; however, for other secondary indicators, we need to prepare corresponding questionnaires or quantization tables according to the issues studied.

References

Chinese-Language Sources

Chen, W. Q. (2006). Convergence and integration: Two individual transcendence ways of social mentality. *Journal of Social Psychology, 1*.

Doise, W. (2011). Levels of explanation in social psychology. (M. Zhao, & B. Z. Liu, Trans.). Beijing: China Renmin University Press.

Guo, Y. F. (2003). Survey and analysis of the basic social mentality of urban and rural residents in Inner Mongolia. *Statistics and Information Forum, 18*(3), 49–54.

Hogg, M. A., & Abrams, D. (2011). *Social identifications: A social psychology of intergroup relations and group processes* (M. H. Gao, Trans.). Beijing: China Renmin University Press Co., Ltd.

Li, R. R. (2005). Social mentality of Shanxi people and economic development of Shanxi. *Productivity Research, 3,* 125–127.

Liu, L. (2006). Social formation and social mentality: Review of psychological relation between individual and macroscopic social construction: Definition of social mentality concept by Yang Yiyin. *Journal of Social Psychology,* 1.

Liu, L., & Guan, J. (2010). Chapter IX: Social representation. In Y. Li & L. Liu (Eds.), *Social cognition: To know self and other*s. Beijing: Beijing Normal University Publishing House.

Ma, G. H. (2008a). A simple analysis on social mentality under the background of large gap between rich and poor. *Dongyue Forum, 29*(5), 111–117.

Ma, G. H. (2008b). On social mentality: Concept distinction and its operationalization. *Social Sciences, 10*, 66–73.

Moscovici, S. (2011). *Social representations*. (J. Guan, et al., Trans.). Beijing: China Renmin University Press.

Peter, B. (2001). *History and social theory* (Y. Peng, & Z. Yupeng, Trans.). Shanghai: Shanghai Century Publishing (Group) Co. Ltd.

Ru, X. (Ed.). (1988). *A new dictionary of the social sciences*. Chongqing: Chongqing Publishing House.

Turner, J. H. (2007). *Sociology of emotions*. (J. Sun & J. Wen, Trans.). Shanghai: Shanghai People's Publishing House.

Turner, J. H. (2009). *Human emotions: A sociological theory* (J. Sun & J. Wen, Trans.). Beijing: The Oriental Press.

Wang, J. X. (2005). Report on current social mentality of China. In *Society of China analysis and forecast*. Beijing: Social Sciences Academic Press.

Wang, Y. Y. (2009). Analysis of current social mentality of migrants workers: Questionnaire surveys based on the city of Z. *Market Modernization*, (10), 379–380.

Xu, B. (2010). Cultural psychology: Interdisciplinary exploration. In *Chinese social psychological review* (Vol. 5). Beijing: Social Sciences Academic Press (China).

Yang, Y. Y. (2006). Psychic relation between individual and macro-society: Definition of social mentality. *Sociological Studies, 4,* 117–131.

Yu, A. B. (1996). Historical development and research approach of cultural psychology: Concurrent discussion on its relations with psychohistory. *Indigenous Psychological Research*, *6*.

Zheng, L., & Xu, Y. F. (2002). Analysis of social mentality surveys on Guiyang citizens. *Guizhou Statistics, 011,* 24–31.

Risk Perception and Sense of Security and Their Measurements

Junxiu Wang

1 Research Review of Risk Perception and Security

Risk is an object studied by many disciplines in social sciences but also in natural sciences. The universality of these disciplinary studies forms the diversity of the concept of risk. Different disciplines and researchers define risk from their own perspective. Therefore, the concept of risk is still disputed, and there is no recognized definition. In social sciences, the concept of risk is also entangled with "danger", "disaster", "safety/non-safety", "uncertainty", etc.

Risk research can roughly be divided into risk analysis, risk assessment, risk decision, etc. Psychological risk research is divided into two levels, i.e., objective and the subjective studies. Risk perception belongs to the latter (Xie 1998).

1.1 Sociological and Psychological Study of Risk Perception

1. **Topics**

Studies on risk perception generally fall into sociological risk studies, psychometric paradigm studies, and sociological and cultural studies.

Rohrmann and Renn (2007) argue that risk perception refers to people's judgments and assessments on risk that is affecting or likely to affect them (or their facilities or environment). In their opinions, experience and belief should be taken into consideration in the study of risk perception. Due to the disciplinary characteristics of natural sciences and social sciences, there must be great differences or even conflicts in risk perception. Studies in different disciplines are certainly lim-

J. Wang (✉)
Beijing, China
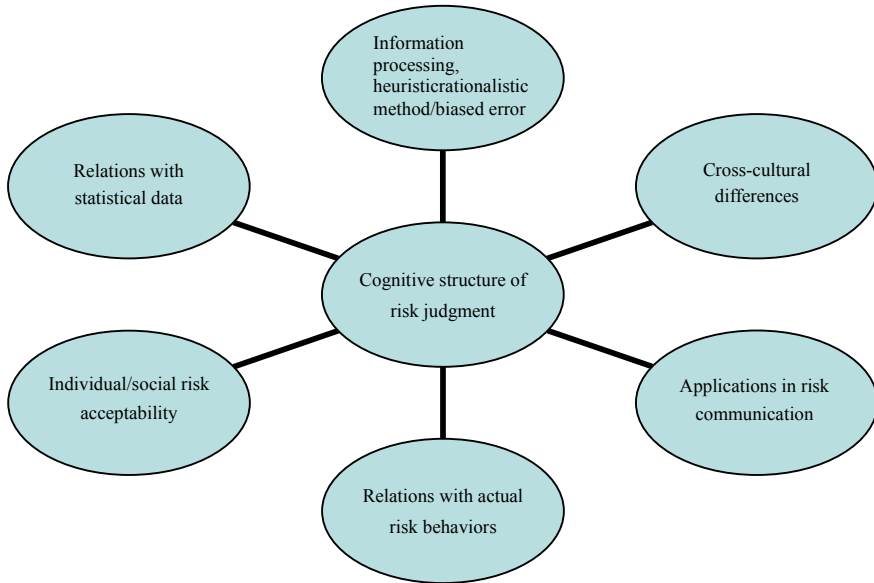
Fig. 1 Different risk perception topics. *Source* Rohrmann and Renn (2007). The shape of the graphic has been slightly modified

ited by their own disciplinary characteristics. Besides, researchers believe that risk perception encompasses complex discussion topics, as shown in Fig. 1.

Rohrmann and Renn (2007) argue that "perceived risk" often brought up by people actually refers to the judgments and assessments on the scale and level of more specific risks as well as the acceptance to these risks.

Rohrmann and Renn (2007) also argue that study of risk perception can be divided in three dimensions, namely: danger (risk source), risk judgment, and characteristics of respondents (Fig. 2).

With regard to the first dimension—risk source, they put forward three descriptive strategies, i.e., theme, affected types, and consequences. Such classification is shown in Fig. 3.

The second dimension is risk judgment. They proposed some significant factors for judging risk, such as risk level, qualitative features, and relation between risk and benefit as well as between individual and risk, and acceptance, as shown in Fig. 4.

Both sociological and psychological studies pay much attention to culture, but the difference lies in that the cultural school of sociology only admits to the existence of risk culture but not risk society. However, positivist studies regard culture as an influence. Rosa (2007) believed that there are two mutual-competitive hypotheses in risk perception research: first, as a single species, human beings select a common perceptive cognitive structure, and thus the basic risk perception is almost the same in every culture; second, human perception is profoundly related to cultural significance, thus the difference in different cultures. Besides, it has been found through
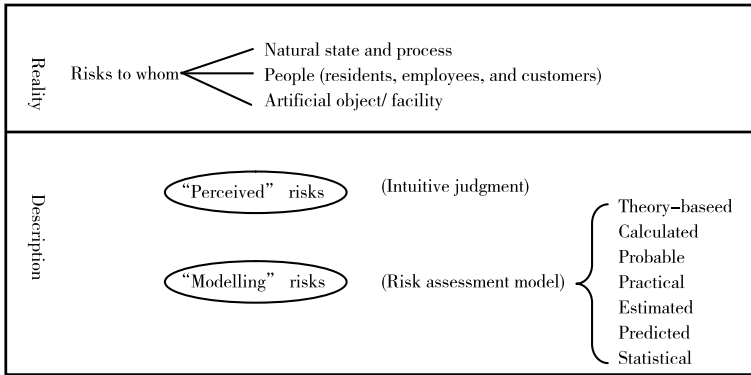
Fig. 2 Perceived "genuine" and modelling risk. *Source* Rohrmann and Renn (2007)
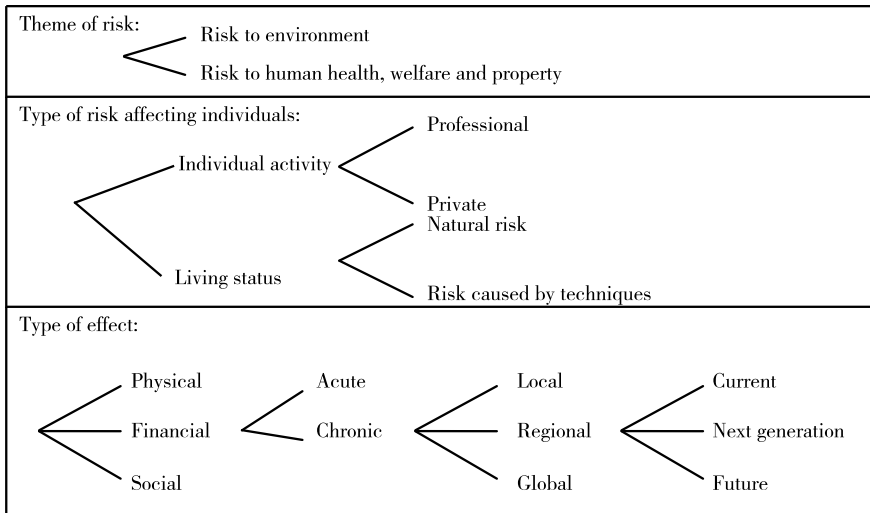
Fig. 3 Risk source classification. *Source* Rohrmann and Renn (2007)

cross-cultural studies that American culture is similar to Japanese culture in terms of risk perception schematism.

2. **Psychometric paradigm-based study of risk perception**

The theoretical structure of the psychometric paradigm affirms that risk is defined subjectively, which is influenced by various factors such as psychology, society, institutions, and culture. It is thought that as long as research tools are reasonably designed, the factors that decide risk perception and their internal connections can be quantified (Slovic 2005).

Starr measured risk perception by comparing acceptable risk and benefit thereby trying to answer a most typical question in risk research—"how safe is safe enough?"

Risk Level
>Scale of risk: overall risk assessment
>Estimated annual mortality
>Probability of (an individual) suffering from calamity; reduced life expectancy
>Risk of health damage
>Potential avoidance of incidents or disasters
>Potential for disaster: death toll caused by a kind of disaster
Qualitative Features of Risk
>Degree of fear; fear association; horror
>Familiar/unfamiliar; affection of self-understanding; imagination of danger
>Observable/non-observable (consequences and results)
>Controllable/uncontrollable
>Scientifically known/unknown
> Immediate/delayed consequences
>Influence on future generations
Profit
>Personal profit provided by risk sources
>Attraction of risk activities
>Contribution of social returns to human demands
>Correlation with human demands
>Equilibrium between risk and profit
Relations between an individual and risk
>Voluntary/involuntary effects; individual effects on choices
>Concern extent; anxiety
>Degree of an individual being affected
> Risk reductionactivities taken part in byan individual; actions taken
>Suitable distance to dangerous facilities
Acceptance
>Degree of willingness to pay for (risk reduction)
>Suitable level of regulation
>Risk acceptance: individual perspective
>Social acceptance of a certain risk

Fig. 4 Correlated risk variables—risks judged by respondents. *Source* Rohrmann and Renn (2007)

He found that the acceptability of risk is roughly proportional to the third power of the benefits; the public seems willing to accept risks from voluntary activities roughly 1000 times more than it would tolerate risks providing similar benefits from involuntary activities; the acceptable level of risk is inversely related to the number of people exposed to that risk (Slovic 2005).

Slovic et al. found that the probability of risk estimated by people is moderately related to the actual accident rate. Risk estimations by different groups show a high degree of consistency. To disclose the difference, Slovic et al. designed a set of scale, asking subjects to estimate various risks, including annual accident rates, potential risks of natural disaster, controllable degree of particular incidents, and familiarity degree of some risks, etc. Through the analysis of these factors, he worked out two dimensions of risk perception—dread risk and unknown risk. The former is connected with degrees of catastrophe and uncontrollability, and the latter represents familiarity (Xie 1998).

Yu and Xie (2006) adopted a multidimensional psychometric paradigm to study the cognitive characteristics of the public towards 39 environmental risks in six dimensions, i.e., large or small influence, controllability or uncontrollability, familiarity or strangeness, short or long duration, high or low possibility, severe or light consequence, as shown in Table 1. In their analysis, they divided environmental risks into three categories—ecological environment, disease and disaster, and living environment. According to the results, in terms of the cognitive characteristics of these three environmental issues, risk perception for "disease and disaster" in most dimensions is significantly higher than the other two categories; that of "ecological environment" in many dimensions is evaluated as high risk; and that of "living environment" in most dimensions is at a lower level.

In the study by Xie and Xu (2002), subjects were asked one by one to assess the risk level of the 46 risk sources in each risk characteristic dimension. The risk level is divided into: the degree of influence caused by risk factors on people, the severity of the consequences caused by risk factors, and the probability of the consequences caused by risk factors. The dimensions of risk characteristic include: controllable or uncontrollable, known and familiar or new and strange, common and ordinary or disturbing and worrying, immediate or delayed, temporary or permanent, artificial or natural, and individual or social. The results show that the assessment of public or social risk is generally higher than that on personal risk; people's individual risk factor perception contains obvious low-risk factor groups. With respect to social risk factor perception, people's individual risk factor perception stands at an intermediate state. In terms high-risk sources, social and individual high-risk factors overlap each other and, with the exception of natural disasters, other factors are usually social problem closely related to personal life. They also found that factors such as personality, risk-taking tendency and perception on risk character affect each other and jointly exert an effect on the risk perception structure.

After that, they chose 28 risk sources graded highest among the 46 sources, and asked subjects to rank risk factors with level-10 measurement and comprehensively consider this gradation from three aspects, namely social life influence, severity of risk result, and likelihood of risk result. The results show that railway transportation is perceived to have the lowest degree of risk while high-risk sources include social morality corruption, overpopulation, economic crisis, war, civil unrest and nuclear war, as shown in Table 2.

Shi et al. (2003) used the method of stratified sampling to study risk perception characteristics and the psychological behaviors of 4,231 citizens in 17 cities during the 2003 SARS epidemic. According to the risk perception model of Slovic, they adopted two risk measurement indexes—familiarity and control—to study six categories of risk events, namely the cause of SARS, transmissibility and infectivity, recovery rate, preventive measures, the effect on body after recovery, and infectivity after recovery, using the Likert five-point scale for measurements. The results have shown that people's perception of the degree at which these could be controlled ranked, from high to low, as follows: preventive measure and result, infectivity after recovery, effect on body after recovery, transmission route and infectivity, recovery rate, and cause of SARS, as shown in Table 3. The public's risk perception of the

Table 1 Analytical results of environmental risk factors

1. Environmental and ecological		2. Diseases and disasters		3. Residential environment	
Pollution type	Risk index	Pollution type	Risk index	Pollution type	Risk index
Underground water pollution	809	Circulatory system diseases	850	Noises from boiler room	759
Wastewater effluent in rivers	767	Communicative diseases	837	Railroad transportation	701
Drinking water pollution	734	AIDS	807	Noises from renovation and construction	689
Pollution from used batteries	733	Bacteria and Microorganisms	735	Cooking fume pollution from commercial kitchens	596
Impact of lead on human health	728	SARS	719	Visual pollution	596
Pollution from chemical plants	713	Earthquakes	653	Second-hand smoking	524
Unsustainable exploitation of natural resources	691	Flooding	591	Roadside and inland water body garbage dumping	512
Decontaminating toxic wastes	688			GM foods	427
Land use for illegal purposes	687				
Threatening endangered species	676				
Ozone layer destruction	674				
Radiation from construction materials	646				
Medical wastes	613				
Airborne pollution	604				
Overfishing	585				
X-ray radiation	585				

Table 2 Average level of risk perception

	N	M	SD
Railroad transportation	836	4.93	2.50
Nuclear power station	835	5.07	2.63
Family disintegration	839	5.38	2.53
Political and economic reform	833	5.52	2.34
Housing shortage	845	5.67	2.48
Drug use	843	5.71	2.54
Fires	842	5.79	2.38
Traffic accidents	843	5.79	2.38
Flooding	842	5.92	2.27
Electric power	837	5.92	2.37
Diseases	840	6.02	2.61
Inadequate healthcare infrastructure	842	6.06	2.21
Political interference	842	6.06	2.34
Low income	843	6.18	2.51
Counterfeit and inferior products	843	6.32	2.32
Earthquakes	843	6.32	2.71
Inflation	843	6.51	2.14
Crime	840	6.70	2.14
Energy crisis	838	6.76	2.15
Food shortage	838	6.89	2.51
Environmental pollution	844	6.95	2.10
Poor public safety conditions	843	6.96	2.02
Prevalence of perverse social norms	844	7.14	2.05
Overpopulation	843	7.25	2.28
Economic crisis	842	7.36	2.07
War	839	7.59	2.73
Domestic unrest	840	7.82	2.42
Nuclear warfare	842	7.82	3.08

SARS epidemic in early May was at the right upper end of risk factor space; that is to say, it tended to be at the end of complete familiarity and complete control. But the cause of SARS was distributed amid the incontrollable and strange quadrant; that is to say, "People feel that the cause of SARS is the most dangerous. Effect on body after recovery and the infectivity are distributed amid the strange and controllable quadrant; that is to say, although people feel unfamiliar with these two risk events, they feel that these problems are controllable. Other events (infectivity, preventive result and recovery rate) are distributed amid the controllable and familiar quadrant"; that is to say, people feel that they are more familiar with these three types of problem

Table 3 Risk perception among the public

Risk incidents	Degree of familiarity		Degree of control	
	M	SD	M	SD
Causes of SARS	2.95	1.065	2.74	0.885
Infection mechanism and contagiousness	3.73	0.821	3.13	0.797
Recovery rate	3.21	0.834	3.13	0.736
Prevention measures and effectiveness	3.54	0.798	3.38	0.732
Health effects post-recovery	2.65	0.983	3.23	0.920
Likelihood of infection after recovery	2.76	1.036	3.28	0.978
Overall view about SARS	3.35	0.750	3.36	0.766

Note The larger the number the greater familiarity or control a subject has with or over the topic, and the lower their risk awareness level
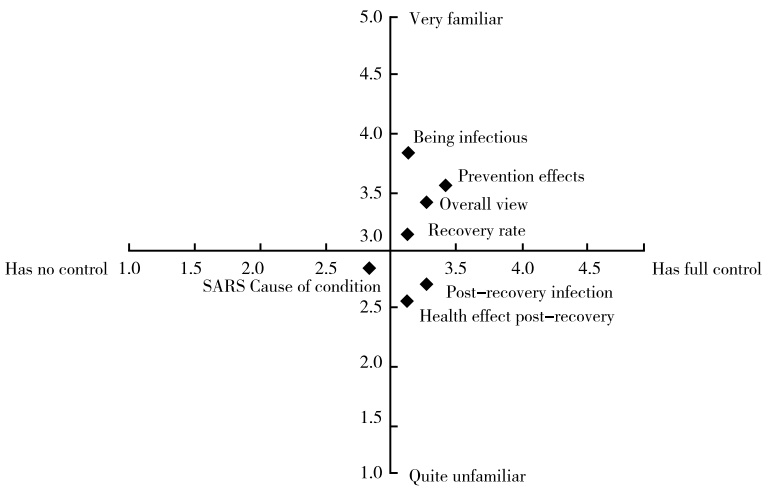
Fig. 5 Mapping risk perception of diseases among the public

and that they can control the problems. Therefore, the corresponding risk level is low, as shown in Fig. 5.

Wang (2011) collected and classified common and representative risk sources in daily life, selected the following 69 risk sources, and divided them into two categories including seven types (as shown in Fig. 6):

(1) **Natural disasters**: thunder, landslide, earthquake, flood, and typhoon;
(2) **Accidents**: fire, toxic gas leakage, nuclear leakage, traffic accident, mining accident, gas explosion, cancer, AIDS, infectious diseases, and wild dog bite;
(3) **Social risks**: criminal damage, terrorist attack, riot, social unrest, living and working pressure, economic crisis, declining stock-market, war, nuclear
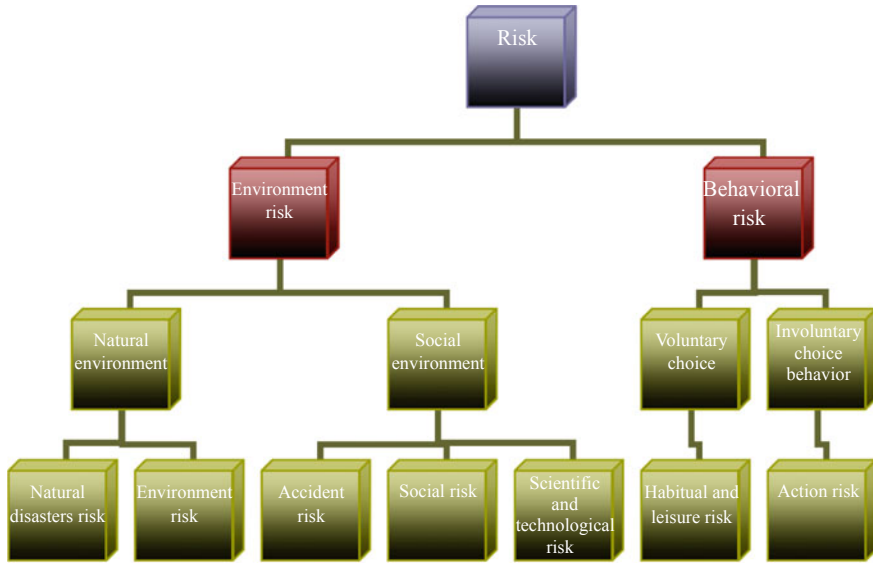
Fig. 6 Risk source classification

weapon, network hacker attack, illegal photographing, unhealthy food, shooting incident, and bomb;

(4) **Scientific and technological risks**: electric shock (by electric appliance), X-ray, formaldehyde, firecracker, antibiotic, chemical fertilizer, pesticide, food preservatives, vaccination, explosives, genetically modified food, high-tension power lines, automobile exhaust, and residual pesticide in vegetable;

(5) **Environmental risks**: ozone depletion, river, lake and sea pollution, air pollution, and waste management plant;

(6) **Action risks**: taking a plane/train/car/lift, taking medicine/traditional Chinese medicine, driving, sailing, cycling, taking surgery/blood transfusion, aloft working, walking across the street, mobile phone radiation;

(7) **Habitual and leisure risks**: gambling, bungee jumping, mountaineering, riding rollercoasters (in amusement parks), swimming, taking drugs, smoking, and infidelity;

A questionnaire survey was conducted from November 2009 to January 2010 on 600 college students and 600 citizens from Beijing, Nanjing, Chongqing and Xiamen, obtaining 1,144 valid results. In the survey, respondents were asked to assess 69 risk sources listed in the questionnaire in accordance with their own experience. Risk assessment was ranged on seven levels, from "extremely high risk" to "very high risk", "high risk", "medium risk", "slight risk", "little risk", and "absolutely safe". Table 4 shows the average score for the risk assessment of the top ten risk sources in the survey.

Table 4 Top ten risk sources

	Number of samples	Average	Standard deviation	Type of risk
Nuclear leakage	1,139	5.23	2.224	Accidents
Toxic gas leakage	1,141	5.11	1.808	Accidents
War	1,143	5.06	2.213	Social risk
Gas explosion	1,139	5	1.915	Accidents
Nuclear weapon	1,138	4.94	2.247	Social risk
Infectious disease transmission	1,139	4.9	1.475	Accidents
Terrorist attack	1,141	4.78	2.022	Social risk
Earthquake	1,138	4.76	1.725	Natural disasters
Cancer	1,139	4.76	1.975	Accidents
Traffic accident	1,140	4.74	1.482	Accidents

The averages of the top ten risk sources range from 4.74 to 5.23, fluctuating at a "high risk" level. The two most dangerous risk sources are nuclear leakage and toxic gas leakage. Among the ten risk sources, only earthquakes belong to natural disaster, while other risk sources belong to accidents and social risks. Generally speaking, these risks are highly lethal. Except for cancer and traffic accidents that may affect only an individual at a single time, other risks are massively destructive. These risks are unpredictable and uncontrollable for common people, and make common people completely passive.

1.2 Studies of Security

With the development of science and technology and the occurrence of social changes, risks perceived by the public are increasing, and insecurities are no longer limited to the domain of public safety. The insecurity of the public is also affected by society, politics, economy, ecology, individual rights, and information. Meanwhile, study of security is no longer limited to its original scope and understanding and studying security from a macroscopic perspective has become inevitable. When "unsafe" and "risk" become the core features of modern society, security becomes a problem that everyone has to face. Since insecurity is absolute while security is relative, society can only provide limited security to satisfy the requirements of the public, which makes the problem of security a subjective one in a qualified objective social situation; namely it is an issue of "how safe is safe enough" as proposed by Douglas (1992). Today, study of safety and security should not only pay attention to mental health and social security, but also care about the primary demands of people,

and focus on policy-making for socio-economic development and social security so as to avoid and relieve risks and reduce insecurity and anxiety.

1. **Individual safety**

Except for behaviorism, in the three major schools of psychology, both the psychoanalytic theory and the humanistic psychology theory attach great importance to the concept of security. The psychoanalytic theory emphasizes the role of early experiences in the formation of security, regarding the sense as a measurement index of mental health. In Alfred Adler's opinion, children who have physical defects and congenital deficiencies may develop an inferior relation with their environment, and such inferiority may be characterized by cowardice and insecurity (Gao 1982). Horney, K. thought that in modern civilized society, feelings such as estrangement, hostility, resentment, fear and loss of confidence prevail among people. If these feelings are gathered up, insecure feelings such as isolation and helplessness will generate and make people think that they are living in a potentially hostile world filled with risks, thus leading to the formation of basic anxiety, or even causing neurological disorders (Gao et al. 1987). Horney considered that children must seek for safety in their environment as they are small and weak and incapable, and this basic security need is the main driving force for personality development. People are born with a primary motivation to seek safety and avoid fear and threat. Fear caused by unsafety leads to anxiety. For a child, basic anxiety comes from parental attitudes towards the child in a family context. Basic anxiety also urges an individual to seek a safe way of life (Gao 1982, 1987). Humanistic psychology also regards safety as a basic human need, and security as a personality trait which is an important factor determining mental health.

In their review of the study of security, Cameron W. and McCormick T. pointed out that the concepts of security and insecurity were first used by Thomas W. and Adler. Adler used it to express inferiority caused by inadequacy, while Thomas treated security as an individual's hope to express basic security needs. Cameron W. and McCormick T. thus understood the concept of security: (1) The pursuit of security is the basic driving force of human beings, and security is a goal; (2) Insecurity may be emotional reaction to sudden external threats, usually referring to threats caused by crisis not leading to daily terror, such as traffic accidents, fire, war, earthquakes, pests, etc. Therefore in this case, it is also known as temporary insecurity. (3) Insecurity may come from relatively constant external threats, putting greater emphasis on the environment rather than individual responses, often referring to the insecurity caused by socio-economic factors, such as unemployment, low income, social change, etc. (4) Insecurity may stem from competition and inferiority. In social competition, this feeling may arise from comparison with other people. Some researchers believe that such insecurity arises more easily from social risks rather than physical risks. If there is no social security, there is no personal security. Howe E. thought that security could be obtained by reducing expectations to the level of being hardly ever disappointed. (5) Insecurity may come from internal threats and, in this case, is regarded as the internal personal characteristics mainly determined by early growth experiences independent of external conditions. Plant James argue that both security

and insecurity are psychological states established in the early life of an individual, so breast-feeding and embrace are important for the formation of security, whereas insecurity is hardly curable by medicine. (6) Security may be a faith, especially with the function of a religious faith. (7) Insecurity may not be conducive to the healthy development of personality. It is thought that insecurity may lead to mental illness and may be the sign of personality disorders and neurosis. (8) Insecurity may be regarded as particular behaviors, specifically as the cause of pathological behaviors or particular attitudes. For example, insecurity leads to anti-social behaviors, excessive fantasies, dictatorship, etc.

Obviously, the above types of security are not independent but mutually inclusive, and they can be simply divided into the two categories of internal insecurity and external insecurity. The former refers to insecurity in relation to individual characteristics (in terms of personality), meaning that it is early experiences that make people feel insecure rather than danger or risk in their surrounding environment-. The latter refers to insecurity caused by external factors. Some are temporary environment changes, while others are relatively lasting social environment pressure or interpersonal pressure.

Giddens also made a distinction between these two types of security, and he referred to internal security as *noumenon* security. *Noumenon* security corresponds to security from the psychological point of view of personal characteristics. Giddens' thought mainly comes from that of Erickson, another representative psychoanalyst. Giddens absorbed Erickson's views and came to the conclusion that basic trust is the foundation of *noumenon* security. He believed that *noumenon* security in the pre-modern society mainly stemmed from four types of trust: affinity, geography, religion, and tradition. However, these factors have lost their original significances in modern society. Consequently, *noumenon* insecurity levels in the modern society are higher than in the vast majority of pre-modern social environments (Giddens 1998, 2000).

Giddens distinguished two typical types of security—security as individual psychological characteristics and security as social mentality. At the same time, he also regarded security not only as an influence from early experience in childhood, but also as the result of social environment influence. Moreover, in the modern social environment, the distrust people feel may be the cause of their insecurity and long-time insecurity may cause *noumenon* insecurity. This is to say, insecurity is not a sensation towards the external environment but is internalized as individual insecurity.

2. **Social security**

Vail (1999) claimed that modern society has entered "insecure times", and insecurity has penetrated into people's living structure and become the template for daily experiences, expectations, and dreams. This insecurity does not only harm individual lives, but also disrupts individual self-worth and self-esteem, resulting in intolerable fear, anxiety, hopelessness, and inability.

But such a statement raises a question on whether our modern days are "insecure times" or a "time of insecurity"? That is because the most puzzling issue in security research is the relation between the secure state and security, namely the relation

between safety and security. In English, security has the meanings of safety and security. In order to distinguish the two, Howard (1999) used the feelings of insecurity to represent insecurity and used feeling safe and being secure to distinguish security and secure state. He asked: why is it that in a same society, some people are racked with anxiety for a long time and see threats and risks everywhere, while other people hardly think about these things and have much confidence even when they are in danger? Is there is a correlation between the secure state and security? Is it a positive correlation or a negative correlation? He used relative insecurity to illustrate this problem, thinking that there is no absolute insecurity, and that the level of insecurity is based on certain times and places. In addition, an increasing secure state may boost people's expectations, making them become more vulnerable.

From the perspective of social change, although many dangers of the pre-modern society have been reduced in the modern society, we may wonder why the security of modern people has lowered. For Giddens even though people no longer face pre-modern dangers, they are still facing modern reflective threats and dangers, namely risks. In other words, safety is to danger what security is to risk.

In fact, Vail's concept of "insecure times" is put forward from the perspective of the risk society, which places more emphasis on security or "feeling safe". In his opinion, the term "insecurity" can be used interchangeably with that of risk, anxiety, uncertainty, and other synonyms (Vail 1999). Risk implies danger, or threats to people's livelihood, which is uncertain and a probability but can be calculated. He thought that security/insecurity could be defined in essentially three ways. First, security is a sense or state of wellbeing or safety while insecurity is a sense or state of precariousness and fear. Second, security is the self-assurance and confidence of being able to achieve one's goals, of being able to "secure" a favorable outcome; insecurity is a feeling of hopelessness, a sense of self-constriction and a belief in the futility of advancement. It is also a sense of powerlessness, an inability to realize one's goals or protect one's interests as well as a heightened awareness of vulnerability to events and forces over which an individual has no control. Third, security is a condition for stability and permanency, as well as individual's continuous expectation for reliable surroundings and relationships; insecurity is a feeling of uncertainty about other people's activities or intentions, or the unknown.

Vail held that security and insecurity can be described from the following aspects, and each aspect is like two extremities of a spectrum: (1) Personal security/insecurity, health, sufficient food and accommodation, physical safety in one's home, workplace, community; (2) Economic security/insecurity, which may involve financial security, job security, protection of individual property rights or land use patterns, or investment in human capital; (3) Social security/insecurity, such as minimum protection (or lack thereof) offered by the state to individuals; (4) Political security/insecurity, including assurance of the public order and prevention of threats to the legitimacy or stability of polity and national security; (5) Environmental security/insecurity, i.e. the way in which social actors interact with their natural environment. Such definitions of security symbolize a turn in the study of security (insecurity), where its focus has switched from personal life and property safety of social order to the more broadly field of human beings' basic needs. But we should see that if security is

measured by using the above points, the degree of security/insecurity is relative. It is difficult to determine what state fosters absolute security or insecurity. Zender (2000) mentioned that in discussions on security, the most prominent feature is the lack of clear implications. In other words, security becomes an ideal or a target to aim for, yet is difficult to define. Nevertheless, the most effective definition of security is via its opposite, namely insecurity. Or we can say that security "is not about something good happening, but about something bad not happening". It is also for this reason that Giddens (2000) defined safety as a situation in which a series of particular dangers have been eliminated or reduced to the minimum. However, this minimum level is also difficult to be defined. We still need to judge it with the help of subjective feelings of safety, which are closely related to the individual's perception of risk.

1.3   Risk Perception and Security Measurement Methods

Studies of social mentality pays more attention to social security than on individual security; nonetheless study of social security cannot be regarded as isolated content. With the development of the risk society theory of sociology, both security and risk have become inseparable.

Past studies on risk perception mainly adopted the psychometric paradigm. Their problems included an oversimplification of the description of risk source resulting in the difficulty for respondents to give their assessments, and the neglected situationality of risk. Assessment is not easily provided as risk sources are many and each of them can be associated with nearly 20 characteristics. Besides, in terms of assessment accuracy, a 0–100 scale and the ordinary five-point scale show no great difference. The social and cultural factors that affect risk perception should be especially incorporated into the scope of research.

Rohrmann et al. (2007) put forward the structure of the factors that affect risk perception and summarize the factors' four levels (as shown in Fig. 7), namely cultural background, social-political environment, cognitive-emotive factors and common heuristic method. The first level includes the collective or individual heuristic methods used in the formation of risk judgment by a group or an individual. Some studies show that the possibility and controllability of the sense of fear and ruin will affect people's risk perception. The second level is the cognitive and emotive factors that directly or indirectly affect the perception process by attaching specific weight to the common heuristic method. The third is the social and political structures of individual and group actions. The fourth is the cultural factors that control and decide the majority of low-level influences.

Future study of risk perception should adopt more comprehensive approaches, which should be more macroscopic and combined with theoretical research results and methods in terms of risk transmission, risk culture and risk society.

Group influence   Personal statement

Cultural background

Cultural system   Political, social, and   Personal identity and
View of world

economic culture   sense of meaning

Social–political systems

Social value and Personal value andtrustinterest

Economic   Cognitive–emotive factors   Social –
and   economic
political   Factor reference knowledge   status
structures   Personal
              belief
              Stigma
              Emotion

              Information processing heuristic method

                                                        Media

                                                        influence

Organiz   Group   Individual
ational   heuristic   Risk   consensus
restriction   method   percep
                           tion

Fig. 7 Four background levels of risk perception. *Source* Rohrmann and Renn (2007)

References

Chinese-Language Sources

Gao, J. F. (1982). *The history of modern western psychology.* Beijing: People's Education Press.

Gao, J. F. (1987). *The new development of western psychology*. Beijing: People's Education Press.

Giddens, A. (1998). *The constitution of society.* (K. Li, &M. Li, Trans.). Beijing: SDX Joint Publishing Company.

Giddens, A. (2000). *The consequences of modernity.* (H. Tian, Trans.). Nanjing: Yilin Press.

Rosa, U. (2007). Cognitive structure of risk. In B. Rohrmann & O. Renn (Eds.), *Cross-cultural risk perception.* (Y. D. Zhao, & R. B. Zhang, Trans.). Beijing: Beijing Publishing.

Shi, K., Fan, H. X., Jia, J. M., Li, W. D., Song, Z. L., Gao, J., Chen, X. F., Lu, J. F., & Hu, W. P. (2003). The risk perceptions of SARS and socio-psychological behaviors of urban people in China. *Acta Psychologica Sinica, 35*(4), 546–554.

Slovic. (2005). Risk perception: Thinking about psychometric paradigm. In *Social theories of risk*. In K. Sheldon & C. Dominic (Eds.). (Y. L. Xu, et al., Trans.). Beijing: Beijing Publishing.

Wang, J. X. (2011). *Analysis of public's risk source*. In J. Wang & Y. Yang (Ed.), *Annual Report on Social Mentality of China (2011)*. Beijing: Social Sciences Academic Press.

Xie, X. F. (1998). Psychological science, risk perception in general social situation. *Psychological Science, 21*(4), 315–318.

Xie, X. F., & Xu, L. C. (2002). Surveys on public risk perception. *Psychological Science, 25*(6), 723–724.

Yu, Q. Y., & Xie, X. F. (2006). Characteristics of environmental risk perception. *Psychological Science, 29*(2), 362–365.

English-Language Sources

Douglas, M. (1992). *Risk and blame: Essays in cultural theory*. London: Routledge.

Howard, A. (1999). Insecurity: Philosophy and psychology. In J. Vail, J. Wheelock & M. Hill (Eds.), *Insecure times: Living with insecurity in contemporary society*. New York: Routledge.

Vail, J. (1999). Insecure times: Conceptualising insecurity and security. In J. Vail, J. Wheelock, & M. Hill (Eds.), *Insecure times: Living with insecurity in contemporary society*. New York: Routledge.

Zender, L. (2000). The pursuit of security. In T. Hope & R. Sparks (Eds.), *Crime, risk and insecurity*. New York: Routledge.

Conceptualizing and Measuring Group Emotion

Manqi Chen

The concept of group emotions is relative to that of individual emotions. According to studies, even if a given event's occurrence has nothing to do with an individual, the individual still manifests an emotional reaction (e.g., Cialdini et al. 1976). At the core of group relative deprivation theory, anger and hate are considered as the conceptualization of group emotions in the early stage of its formation (Smith and Kessler 2004).

Studies of individual emotions has accumulated a lot of theories, evidences and experiences. Studies of group emotion draws heavily on the aforementioned research results. For example, the theoretical framework of group emotions is based on the existing systematic theory for individual emotions, and its measurement method applies self-report, which is the methodology used in terms of individual emotions. Therefore, study of group emotions shows many traces of the research results for individual emotion in terms of concept definition, measurement and theoretical framework. On the one hand, such migration promotes the rapid development of group emotion research, but on the other hand it also makes it difficult to distinguish group emotions from individual ones.

This article first defines the concept of group emotions, then briefly introduces the existing theoretical models for group emotions and mainly reviews the current relevant measurement methods. On this basis, it analyzes the issues of these existing measurement methods and the possible development trends in the future.

M. Chen (✉)
Beijing, China

1   Definition of Group Emotions

Although Smith (1993) put forward his theoretical framework for group emotions very early in time, the concept only gradually began to be used later (Doosje et al. 1998; Smith 1999). Smith first used the concept of "social emotion" on which basis he defined prejudices as "a social emotion experienced with respect to one's social identity as a group member and aiming at an out-group target" (Smith 1993). In another book, he (1999) repeated this point of view, but uses "group emotion" to replace "social emotion." Later on, Smith and his colleagues revised the concept again, calling it "intergroup emotions" (Mackie et al. 2000).

As different researchers use different terms depending their own research perspectives, terms such as group emotions, social emotion and intergroup emotion are widely used and co-exist in literature. Therefore, this article intends to adopt the unified term of "group emotions" and review the content of its different aspects.

Researchers have different opinions on the definition of group emotions. Parkinson et al. (2005) argue that there are subjects and objects in emotions. Individual emotions and group emotions are different in terms of subject. The subjects of emotions are individuals who experience emotions by appraising events according to their own existing targets. For individual emotions, the subjects are the individuals or their appraisal of their environment. For group emotions, the subjects are group members who experience emotions after appraising group events or environment that activate their social identities. The objectivity of emotions lies in the difference between the inductive stimuli of emotions. The existing divergence in defining the concept of group emotions is mainly reflected in the difference of emotional objectivity, namely the difference in stimuli for inducing group emotions.

The first concept of group emotions emphasizes that there is an out-group relative to the in-group working as a group emotion-inducing source. In Smith's opinion, so-called group emotions are emotional experiences felt by individuals and directed at a specific group or society members (Smith 1993). Smith et al. (2007) thought that group emotions and individual emotions have stable differences. They proposed and verified four conceptual criteria of group emotions. These four criteria are: there are differences between group emotions and individual emotions; group emotions depend on the degree to which individuals identify with the group; group emotions are socially shared within the group; group emotions activate and manage intragroup and intergroup attitudes and behaviors.

Smith and other researchers didn't emphasize the importance of different criteria in independently verifying the presence of group emotions, but stressed the fact that, given that the above four criteria are all met, the existence of group emotions can often be definitely inferred. Some specific circumstances do not need to meet the above four criteria. Group emotions referred to in this definition often derive from the appraisal of the intergroup relation between the in-group and the out-group, which emphasizes that an out-group is the object or target of group emotions. Thus, this definition generally sets the out-group in the perspective of group emotion experiences.

The second concept stresses that group emotions are induced as group membership is activated, but doesn't pay attention to whether the target of emotions is in-group or out-group. There are essential differences between this definition and the definition put forward by Smith et al. Researchers arguing on this definition neither emphasize the objectivity of group emotions like Smith, nor stress the in-group or out-group target of emotions. On the contrary, they stress subjectivity and focus on the emotional reaction of individuals to group interests (Yzerbyt et al. 2003; Gordijn et al. 2006; Van Zomeren et al. 2011). For example, Iyer and Leach (2008) defined group emotions as emotions felt by individual subjects after categorizing themselves as group members. Hareli and Parkinson (2008) argue that social emotions are emotional states felt by people when they appraise their social concerns. These social concerns refer to certain factors of social importance to which people pay attention, such as status, power, and dependence. These factors restrict people's status in different social entities such as social norms, crowds, teams or organizations. Social appraisal is the implicit and explicit understanding of these objects or events and social concerns; it is an important source that induces or forms social emotions, and an essential feature of social emotions. Kuppens (2011, 2012a) argue that group emotions are emotional experiences that occur when group members make group appraisal of circumstances while centering on group interests. If we categorize group emotions into out-group and in-group emotions, then group emotions defined by Smith et al. belong to out-group emotions, i.e., essentially intergroup emotions, which can be regarded as a subtype of group emotions. By this definition, it is often not necessary to set an out-group. It is required however to set a specific event and then to manipulate the significance of social identity by changing the perspective on group memberships.

The third concept holds that the subject of group emotions lies in the activation of individual group memberships whereas the object of group emotions lies in other in-group members. This definition regards the formation of group emotions as the summation of individual emotions. According to this definition, and seen from a top-down perspective, group emotions can be understood as emotions experienced by individuals within a group and move down to individuals from the group level. This definition mainly concentrates on how group emotions affect individual emotional experiences and behaviors, as well as how group emotions affect group behaviors through the reactions of homogeneous individuals. Under certain conditions, group emotions can restrain the reaction of the group while under other conditions it can exaggerate the group's reaction. If seen from a bottom-up perspective, group emotions can be regarded affective team composition. Affective team composition refers to how the emotions of individual group members combine to create group-level emotions, and how group emotions may be seen as the summation of its parts, how the combination of individual group members' emotions goes beyond membership itself and thereby affect the development of group emotions. By this definition, the content of group emotions are very broad, and may include states of mind, acute emotions, dispositional affects, etc. (Barsade and Gibson 1998). It is often not necessary to set a specific scenario or an out-group, nor conduct measurements of social identity salience, but only needs to confirm individual group memberships.

2   Theoretical Models of Group Emotions

Different definitions of group emotions generate different formation mechanisms, thus form different theoretical frameworks. There are mainly three theoretical frameworks: the intergroup emotion theory (IET), the group appraisal model, and the emotional pollution model.

2.1   Intergroup Emotion Theory (IET)

IET is the earliest and most widely known group emotion model. It was put forward based on the social identity theory, emotion appraisal theory, and self-categorization theory. IET researchers believed that the formation mechanism of group emotions lies in the identity of individuals within a group, thus leading to emotional experiences toward in-group members. When social identity is salient, the appraisal of conditions or scenarios related to social identity mainly focuses on social concerns rather than individual concerns. Therefore, different appraisal models result in different emotional reactions. Ray et al. (2008) further believed that controlling individuals' identity within the group by social categorization would lead to different group emotions.

   The advantage of IET is that it regards cognitive appraisal as the prerequisite for emotional experience. The matching of various types of emotional experiences and in-group relations goes beyond the pairing between positive and negative emotions in traditional emotion research. In terms of its shortcomings, on the one hand, it does not allow for a distinction of the relation between in-group identity and degrees of social support (Parkinson et al. 2005; Van Zomeren et al. 2004); and on the other hand, when social identity is salient, individuals may appraise group events as individuals or group members, and thus making it impossible to assess whether their cognitive appraisal is based on individual or group level. This may lead to the blending of individual appraisals and group appraisals, and thus individuals may experience both individual emotions and group emotions at the same time.

2.2   Group Appraisal Model

Although the group appraisal plays an important role in the production of group emotions or even is the source of group emotion (either from the point of individual emotions or group emotions), existing studies have neither systematically discussed and analyzed group appraisals and group emotions, nor regarded them as the core of their theoretical model. This does not match with the core position of appraisal in the production of individual emotions. Although IET considers the role of cognitive appraisal, IET researchers have not specified whether cognitive appraisal is based on

individual or group appraisal, and thus group emotions referred to in their theoretical model are perhaps not group emotions in the true sense. In addition, group emotions defined by IET further emphasize the emotional object (out-group), laying particular stress on intergroup emotions. Therefore, cognitive appraisal may be just appraisal based on intergroup relations, which narrows the scope of cognitive appraisal.

Based on the above considerations, Kuppens (2011) believed that the cognitive appraisal method narrows the theoretical property of group emotions. IET researchers systematically discussed the central role of group appraisal in terms of group emotions and believed that the salience of social identity shapes group emotions by way of group appraisal. Their research concluded that, without changing in-group and out-group emotional objects, changing the salience of a particular social identity affects group emotions. Moreover, the salience of social identity affects subsequent group emotions with group appraisal of intergroup scenario as the mediating variable. In addition, the importance of the group to individuals affects group appraisal instead of individual appraisal. Yzerbyt and Kuppens (2013) believed that in the process from group appraisal to group emotions, social communication and social sharing both play important roles that help improve group cohesiveness and homogeneity. This makes it easier for individual members to assume the groups perspective when making appraisal, thereby enhancing group appraisal and strengthening group emotions. Group interaction and communication also promotes the emergence of group emotions.

2.3 Emotional Pollution Model

What is known as emotional pollution refers to the process in which emotions or moods surrounding us affect our own emotional states. Emotional pollution, conscious or not, is the relatively automatic and unconscious tendency to simulate and synchronize with other emotions conveyed in words, gestures, and movements, thereby resulting in emotional convergence (Hsee et al. 1990).

Emotional pollution can induce group emotions without any conscious conversion. Emotional contagion happens without a particular scenario and appears in the absence of explicit emotional measurement conditions. In some cases, group emotion states are changed as others intend. Intentional emotions often come from influential or high-status leaders and members of influential groups. Influential leaders are capable of inducing, adjusting and changing group emotions, thereby consciously adjusting the behavior of group members. The process of emotional pollution implies that if group members are composed of individuals sensitive to emotional pollution, then these group members will in time converge to a given emotional point, resulting in a homogeneous group. In other words, unless certain conditions are hindered, a work group will present similar group emotions over time.

3   Measurement of Group Emotions

There are different definitions of group emotions, as well as different theoretical models for the formation mechanism of group emotions, thus resulting in different measurement. The most important and fundamental problem in the measurement of group emotions is how to separate individual emotions from group emotions. Individual pleasant experiences are very similar with the pleasant experiences of a group in terms of senses. Events influencing the group will affect group members in an individual manner, thus further blurring the difference between individual and group emotions.

Therefore, how do researchers determine individual or group emotions? In order to solve this problem, different groups apply different emotion measurement methods. The main methods currently applied include: one, the activation of individual group memberships and group identities, thereby achieving the goal of measuring group emotions; two, the manipulation of the categories and the salience of social identity to distinguish individual emotions from group emotions; three, the controlling of the salience of social identity and measurement of group appraisal, thereby analyzing and finding relatively pure group emotions; four, the measurement of individual emotions within a group, regarding the average emotional state of group members as group emotions. However, with any one of these measurement methods, researchers are all to operationalize and define the group on the basis of group emotions they have defined. Researchers attempt to prove the measured emotions are indeed the result of individual considerations of group concerns and group appraisals from the perspective of the group.

Existing measurement of group emotions basically follows the process of activating group membership or controlling the salience of social identity, then measuring group identity and group emotions. Different measurement methods stress different mediating variables from the perspective of their own definitions and theories, and focus on analyzing different variables. Social identity derives from the intergroup emotion theory, and group appraisal is based on the group appraisal model, while the theoretical basis of average individual emotions is the emotional pollution model.

Current studies of group emotions fall short in a number of areas. First, existing group emotion measurement focuses on ensuring that the emotions measured are truly group emotions instead of on the measurement method of group emotions. Researchers generally measure mediating variables rather than control them, and then use statistical analysis of mediating variables to ensure the effectiveness of the measurement. However, the pure statistical analysis of mediating variables is weak, not powerful enough for measuring group emotions. Second, the measurement of group emotions is still done according to the traditional method of Likert-type oral report. Although this method is easy and simple to use in research, it only measures anticipated emotions and cannot measure real-time emotions. In other words, participants usually make oral reports by anticipating what type of emotions they may experience in a given scenario and to what degree these emotions would be aroused. Third, the existing measurement of group emotions usually requires partic-

ipants to report their degree of emotional experience in an explicit way, which may cause measurement errors. Fourth, the measurement research methods and means for group emotions are relatively simple, and do not allow for the mutual verification of different research methods and means.

References

English-Language Sources

Barsäde, S. G., & Gibson, D. E. (1998). Group emotion: A view from top and bottom.

Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory. *Journal of Personality and Social Psychology*, *34,* 366–375.

Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilty by association: When one's group has a negative history. *Journal of Personality and Social Psychology, 75*(4), 872–886.

Gordijn, E. H., Yzerbyt, V., Wigboldus, D., & Dumont, M. (2006). Emotional reactions to harmful intergroup behavior. *European Journal of Social Psychology, 36*(1), 15–30.

Hareli, S., & Parkinson, B. (2008). What's social about social emotions? *Journal for the Theory of Social Behaviour, 38*(2), 131–156.

Hsee, C. K., Hatfield, E., Carlson, J. G., & Chemtob, C. (1990). The effect of power on susceptibility to emotional contagion. *Cognition & Emotion, 4*(4), 327–340.

Iyer, A., & Leach, C. W. (2008). Emotion in inter-group relations. *European Review of Social Psychology, 19,* 86–125.

Kuppens, T. (2011). *Feeling like a group membe*r. Doctoral Dissertation of Université catholique de Louvain.

Kuppens, T., & Yzerbyt, V. Y. (2012). Group-based emotions: The impact of social identity on appraisals, emotions, and behaviors. *Basic and Applied Social Psychology, 34*(1), 20–33.

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology, 79*(4), 602–616.

Parkinson, B., Fischer, A. H., & Manstead, A. S. R. (2005). *Emotion in social relations. Cultural, group, and interpersonal processes*. New York: Psychology Press.

Ray, D. G., Mackie, D. M., Rydell, R. J., & Smith, E. R. (2008). Changing categorization of self can change emotions about outgroups. *Journal of Experimental Social Psychology, 44*(4), 1210–1213.

Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.

Smith, E. R. (1999). Affective and cognitive implications of a group becoming a part of the self: New models of prejudice and of the self-concept. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 183–196). Malden MA: Blackwell.

Smith, H. J., & Kessler, T. (2004). Group-based emotions and intergroup behavior: The case of relative deprivation. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions*. Cambridge: Cambridge University Press.

Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, *93*(3), 431–446.

Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology, 87*(5), 649–664.

Van Zomeren, M., Spears, R., & Leach, C. W. (2011). Exploring psychological mechanisms of collective action: Does relevance of group identity influence how people cope with collective disadvantage? *British Journal of Social Psychology, 47*(2), 353–372.

Yzerbyt, V., & Kuppens, T. (2013). From group-based appraisals to group-based emotions: The role of communication and social sharing. *Changing Emotions*.

Yzerbyt, V., Dumont, M., Wigboldus, D., & Gordijn, E. (2003). I feel for us: The impact of categorization and identification on emotions and action tendencies. *British Journal of Social Psychology, 42*(4), 533–549.

Conceptualizing and Measuring Sense of Social Trust

Shijie Jing

Social trust plays a crucial role in the social life of human beings. It is not only an effective channel for individuals to reduce their psychological complexity and get their own security, but also an effective social integrated force maintaining social order and promoting social cooperation, harmony and stability. Since China's economic society has entered its comprehensive transition phase, the interpersonal trust model built on the basis of familiarity and interpersonal relationships is facing unprecedented challenges. The trust structure of the whole society tends to dissociation and disintegration. Meanwhile, a new type of trust structure based on the spirit of the new social life has yet to be fully established. These two problems intertwine as society undergoes a "confidence crisis". Under this circumstance, in the face of both history and reality, it is urgent to comprehensively and thoroughly analyze the existing studies on social trust, deepen our cognition of the nature of the sense of social trust, and provide a frame of reference to resolve social contradictions and problems caused by the confidence crisis in order to reflect the practical value of our research.

1 Concept and Classification of Social Trust

1.1 Definition of Trust from the Multidisciplinary Perspective

As early as 100 odd years ago, Simmel, the famous German sociologist, raised in his monograph *The Philosophy of Money* the following question: "How can society be possible?" He regarded trust as "one of the most important comprehensive powers of society." He affirmed, "Without generalized interpersonal trust, society would be

S. Jing (✉)
Beijing, China

a mess" (Simmel 2002). In the modern sense, study of social trust started with the systematic and scientific studies on interpersonal trust by social psychologists in the 1950s. Subsequently, scholars of sociology, political science, economics and other disciplines have been involved in and formed the corpus of study of social trust.

1. **Trust as a personality trait or belief**

American psychologist Deutsch (1958) adopted the famous Prisoner's Dilemma experiment, a precedent to modern research, to study trust. He defined trust as a human response to a situation, affirming that interpersonal trust is affected by different situations. Subsequently, social psychologists adopted experiments and scales to conduct in-depth and multi-angle studies on the occurrence mechanism of trust, including cognition, personality, attitude, motivation, interpersonal, etc., and defined trust as a relatively stable personality trait or belief formed gradually via learning in society. Trust is "a generalized expectancy held by an individual that the word, promise, oral or written statement of another individual or group can be relied upon". Namely, trust is "reliance in other people's words and deeds" (Rotter 1967), "the mutual confidence that no party to an exchange will exploit the other's vulnerability" (Sabel 1993), "the belief that forms one part of personal traits and owned by an individual", or that "ordinary people are sincere and kind, and they also trust in other people" (Wrightsman 1992); trust is a moral character "which is rooted in our hearts, not demands" (Peyrefitte 2005). Although modern concerns about trust stem in the studies on psychology, the micro perspective based on individual interpersonal interactions and individual personality traits makes it difficult to deepen our understanding of trust.

2. **Trust as an expectation and attitude**

With the advent of the risk society, the urgent social problem of the confidence crisis had yet to be addressed as it drew the attention of western sociologists. Since the 1970s, trust problems have been a hot topic in sociology. Luhmann, the neofunctionalist sociologist, noted that trust is the manifestation of expectations for someone, as well as the basic fact of social life. "Every day, we regard trust as the self-evident 'nature' of humanity and the world" (Luhmann 2005: 1), which is a strategy to deal with uncertainty, a social mechanism to simplify complexity. Giddens (2000) regarded trust as an optimistic attitude towards a living environment or future situation for which the individual only possesses incomplete information or is facing uncertain results, and "the extended foundation of time-space that is associated with modernity". Barber (1983), in his book *The Logic and Limits of Trust*, defined trust as "the expectation of the persistence and fulfillment of natural and moral orders", which assures a trustee's willingness to fulfill his or her fiduciary duties. Henceforth, trust has been believed to belong to the macro-social field, highlighting the influences of social structure, institutional change and other factors on trust and their urgent needs for trust. The concept of social trust has grown from there.

3. **Trust as a social culture**

Trust can also be interpreted as a culture established on the basis of custom, tradition and religion and then explained different countries' social development based on it. Polish sociologist Sztompka (2005), regarded trust as a kind of cultural rule, "a gamble on other people's possible actions in the future". Fukuyama (2001) is a typical cultural theorist advocating that trust is the expectation that arises within a community of regular, honest, and cooperative individuals, whose behavior is based on common norms also shared by other members of that community, making spontaneous social interaction, group cohesion and political participation possible. Almont and Verba (1963) believed that trust is an important part of political culture, which significantly impacts the growth of democracy. British sociologist Putnam (2001) pointed out that trust is a "moral resource", the characteristic of social structure on which depends an individual, and the core component of ethics, ensuring independent economic development and good government performances. "Trust is an indispensable component of social capital" and "the key factor for the functioning of democracy".

4. **Trust as a rational choice**

The concept of trust as based on the economic assumption that we are "rational men" is regarded as the result of people's rational choices. Limited by access to information and the ability to compute it, trust allows people to avoid risks and reduce the cost of interaction; morally, it is therefore necessary for public economic exchanges. In his book *Foundations of Social Theory*, Coleman, representative of the rational school, pointed out that all successful cooperation is built on interest-based trust investments and the assurance of benefit (Liu and Zhai 2007). Arrow (1972) indicated that trust is the lubricant of economic exchanges and the most effective mechanism controlling contracts, whereas it is itself an implicit contract and scarce and unique merchandise. Gambetta (1988) pointed out that "trust is the assumption that the probability that a person with whom we are in contact will perform an action that is beneficial or at least not detrimental is high enough for us to consider engaging in some form of cooperation with him". "Trust is a very attractive concept. It implies autonomy and the advantage of self-organization, abandoning the strong supervision of a third party." Actually, trust is "social capital", which can reduce the cost of supervision and punishment. Therefore, trust might result from a calculated emotional lack, whereas both sides are rational "economic men".

1.2 Types of Social Trust

Studies on social trust emphasize the exploration of constitutional dimensions, which is an important method to analyze the nature of social trust. Luhmann and Giddens tended to regard social trust as the result of the impact of psychology as well as that of the social system on social relations in the interactive frame. Their classification of

social trust is a dichotomy. Luhmann indicated that in addition to interpersonal trust built upon acquaintance and emotional connection between people, interpersonal trust is most suited for this highly differentiated, modern society. It consists in a complicated and simplified mechanism, in which money, truth, power and other media of generalization play the role of carriers. Following in Luhmann's steps, Giddens further intertwined the concept of social trust with that of risk, believing that the dislodging that results from the separation of time-space in modern society transforms the mode according to which community members mutually interact from "present" to "absent". As risk becomes an unavoidable fact, trust becomes a way to prevent and resolve risk. Trust relationships in modern society are based on a "disembodied" environment, which is mainly reflected in two aspects: one is established on the basis of a pure interpersonal relationship, the other on the abstract system mainly reflected in the trust of various symbolic signs and expert systems. Piotr Sztompka believed that the concept of trust could be divided into social trust and interpersonal trust. Moreover, social trust can be further categorized, as in trust in certain social roles, trust in certain social groups, trust in institutions or organizations, trust in technical systems and trust in the social order.

Zucker and Barber have representatively argued over the trichotomy of the classification of social trust. From the perspective of the trust generation mechanism, Zucker (1986) distinguished three types of trust: the first is reputation, which is based on the understanding of the past behaviors and reputations of other people; the second is social similarity, and can be a credibility factor in terms of family background, race and values because similar social backgrounds usually imply shared specific behaviors, bringing people to understand each other, reach consensuses or engage in economic exchanges more easily; the third is social rules and regulations, such as trust generated by the guarantee of professional qualifications, bureaucratic organizations, agencies and various regulations, which Zucker calls "trust in legal institutions". Barber (1983) regarded social trust as an expectation acquired and decided through social interaction, referring to its specific content to classify trust: "The most general expectation is the confidence in the adherence to and the fulfillment of natural and moral social orders. The second expectation is the confidence in the belief that those whom we have interpersonal relationships and social system role contacts with can perform competently. The third expectation is that the belief in the ability of those whom we are in contact with to thoroughly carry the responsibilities and obligations they have been entrusted with, in other words to protect other people's benefit at the expense of their own benefit when necessary." Barber's conceptual system includes generalized trust toward people, trust in skill (qualified for interpersonal relationships and social system roles), and trust in the thorough commitment of entrusted responsibilities and obligations. Such an analysis is very insightful.

From a relatively wider perspective, Lewis and Weigert (1985) regarded trust as a socio-psychological concept peculiarly held by a collective unit rather than an individual, and classified trust focusing on cognition (rational) and emotion (irrational). They argue that trust is a mix of daily emotional concerns and rational considerations. They attached great importance to two kinds of trust, namely affective trust (high

component) and cognitive trust (high component). Relations in the primary group are dominated by affective trust, while relations in the secondary group are primarily based on the cognitive-rational component of trust. With population growth and the differentiation of social structures, more and more social relations are based on cognitive trust rather than affective trust.

Whether the early dichotomy or the subsequent trichotomy, or even the two main types of trust put forward by Lewis and Weigert, basic logics are hidden behind these classification standards: as human society gradually changes from a "traditional" society to a "modern" society, interpersonal relationships also gradually change from identity relationships to contractual relationships; and social trust also changes from being a paradigm based on emotions and acquaintance, to a paradigm based on rationality and contract.

2 Studies of Social Trust

2.1 Overseas Studies

1. **Theories and studies**

Studies of interpersonal trust originated in North America along the guidelines of individualist ideas and methodologies in social psychology. Scholars proposed different concepts of interpersonal trust on the basis of their ideas and emphases. Through review and integration, Rousseau et al. (1998) defined trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviors of another". From this definition arise two problems. First, interpersonal trust mainly refers to trust in another individual or group, disregarding trust in an event or system. Trust is in nature regarded as a psychological state, an expectation, an attitude and an individual behavioral tendency rather than an actual action, which separates the internal process and the external action. Second, trust should be established on the basis of interpersonal interactions over a particular social and cultural background, whereas social psychologists separate trust from social cultural situations and study only in terms of personality traits, abilities and beliefs. In this approach, study of interpersonal trust mainly focuses on the formation mechanism and factors of influence. The main theoretical models are as follows:

(1) **Individual characteristic theory**

Studies of interpersonal trust beginning in the 1950s regarded trust as a stable psychological trait or belief of an object. From this point of view, the establishment of a trust relationship mainly depends on whether the trusting and trustee have personality traits that can be trusted by the opposite party. In terms of the trusting, research mainly examined his/her common and general beliefs and attitudes toward other community members, such as views on human nature, credibility, etc., particularly

treating his/her trust in other people as a stable feature of his/her personality, measuring and studying trust from the perspective of individual differences. Studying from the perspective of the trustee is another important aspect of the individual characteristic theory. Johnson-George and Swap (1982) measured interpersonal trust in intimate relationships from four aspects: the trustee's property, reliability, exchanged privacy, and physical security. Mayer et al. (1995) indicated that three aspects (ability, benevolence and integrity) could be used to examine whether the trustee is to be trusted or not. Mishra (1987) proposed that the trustee should bear the following personality traits: integrity, ability, kindness, honesty, behavioral consistency, loyalty, and motivation. This orientation attempts to analyze the characteristics of the two sides of trust on a deeper level, but ignores other significant characteristics such as the situational factor of trust establishment and the dependence of social interaction.

(2) **Interpersonal relationship theory**

Interpersonal trust is a socio-psychological phenomenon involving two or more people. Research focuses on the relationship between the people. Lewis and Weigert (1985) are the representative figures of this theory. They contend that trust is an interpersonal attitude jointly decided via rational calculations and emotional factors within the interpersonal relationship and hereinafter proposed that cognitive trust and affective trust were the two important types of trust. Subsequent researchers either followed Lewis and Weigert (McAllister 1995) or proposed new types of trust on the basis of their own perspectives. For example, Clark and Mills (1979) proposed three types: cognitive trust, affective trust and identity trust. Tyler and Degoey (1995) divided the concept of interpersonal trust into instrumental trust and relational trust.

(3) **Binary interaction theory**

Simpson (2007) put forward the "binary interaction theory" after integrating the "personality characteristic theory" and the "interpersonal relationship theory". He then considered interpersonal trust from many aspects. According to Simpson's theory, individual personality traits as well as the initial trust and security perceived by an opposite individual will affect the latter's decision to enter a trust relationship with the former individual. The conversion of the individual's motives will affect both sides' willingness to make favorable decisions for the opposite side in the interactive situation. Positive decisions on the part of both sides will stimulate the individual's positive expectations of the opposite's side for positive attribution, emotional experience and future interaction, which will in turn affect his/her perceived feelings of the other in terms of trust and security. The factors that impact the development of trust include individual differences and conventional factors. Conventional factors mainly refer to initial trust, motivation conversion, attribution, emotion, expectation, and perceived trust. Variables in terms of individual differences include attachment orientation, self-esteem, self-difference, and interactions with conventional variables.

(4) **Rational choice theory**

In the hypothesis of the rational economic man, trust is regarded as the result of rational choices, as well as the prerequisite for operational organizations and economic transactions. The theory states that both sides of the interactive relationship

engage in prudent and trustworthy behaviors on the basis of risk assessment. A mutually beneficial trust relationship deepens on the basis of both sides' trustful behaviors, which gradually increases their confidence in their mutual credibility, and makes them willing to take greater risks. Every positive action increases credibility perceived by the opposite side. As interactions go on, the influence of later positive information will gradually reduce. Therefore, according to the rational choice model, the development process of trust forms a classic S-curve (Kramer 1999). The rational choice theory assumes that both sides in the relationship share similar expectations for the development of the trust relationship and that people are completely rational. However, some studies have shown that it is actually not the case (Murnighan et al. 2004; Grimes 2003).

(5) **Motivation attribution model**

On the basis of the reflection of the selected models, Weber et al. (2005) proposed a motivation attribution model of trust with two basic theoretical points: (1) Each side in the potential trust relationship may perceive their interactions in different ways; (2) Each side's attributions to the opposite side's behavior are self-interested and largely influenced by their emotional dependence. The individuals in economic interactions of society may look at the potential trust situation from their unique perspectives (Malhotra 2004). The trusting, namely the side that trust their partners first in the trust game, is foremost concerned about risk associated with trust, while the trustee (the trusted side), while determining how much should be paid back to the trusting, makes decisions on the basis of his own benefits. Both sides in the trust game perceive their interactions from different perspectives. When the risks are relatively low, the trusting is more likely to trust their partners, but that possibility does not depend on the trustee's benefits from trust; similarly, when the benefits of the trustee are considerable, he is more likely to give more in return to the trusting, independently of the risk faced by the trusting.

2. **Progress in study of social trust**

Trust is the basis of all social activities of human beings. It has been compared to the "sunshine", the "dew", or a "chicken soup". In traditional society featuring closed environment and illiquidity, people deal with daily social life as they depend on the special trust that contact experience produces. Social changes accompanied by industrialization complicated and further divided society; meanwhile, people became more interdependent. On the one hand, this enhanced liquidity and diversity, expanding life choices; on the other hand, increasing complexity also enhances individual vulnerability. Over such historical background, sociology, politics, economics and other disciplines have successively initiated studies on trust, regarding it as the functional mechanism for simplifying society and an effective method to mitigate risks.

(1) **Functional analysis of social trust**

Existing studies show that social trust can make people healthier, happier and more amicable, as well as help them form significant connections with others and

strengthen social cohesion. It is not only a matter of national economic performance and development pattern; it is also closely related to national democratic politics.

(a) **Trust contributes to the sense of ontological security**

In his theory of life development, Erik Erikson considered the "basic trust" that forms through the interaction between toddlers and caregivers as the prerequisite and foundation for the later construction of trust relationships with others and society. Based on this, Giddens (2000) linked the subject and object with practice from the perspective of structuralization and proposed the concept of "ontological security", which they defined as "the confidence of the majority of people in the continuity of self-identity and the constancy of social and physical environments where they act"; it is the core of the individual mental structure and, together with existential anxiety, constitutes the tension system of the individual mental structure. The stability of the ontological security system is the premise for the normal and orderly lives of individuals. In order to maintain such stability, individuals establish protection mechanisms during their growth, which Giddens referred to as "protective containments". Among these, the most important is "trust". The data of the World Values Survey and the US General Social Survey (GSS) show that trust evaluations highly correlate with one's degree of satisfaction in life, and that distrust is the most powerful driver of anxiety and insecurity. Groups and classes that are poorer, unemployed, discriminated or rejected by society show less trust in others, and thus their mental health is also poor.

(b) **Trust is conducive to the maintaining of social order**

Social order is a common condition for the existence and development of individuals and society, while trust is one of the main tools to establish social order and the strength that promotes social integration. Trust contributes to social order through controlling people's behaviors to a certain extent, as "showing one's credibility, and his acceptance and call of trust is conducive to strengthening and popularizing social relations"; therefore "the elements of social control stem from the trust relationship" (Zheng 2001). Instituting social order with force and violence is a clear objective and function of the state apparatus, whereas the legitimacy of such ruling is fundamentally based on the people's trust in their rulers. In addition to top-down social order, trust among society members promotes reciprocity and cooperation and forms social intermediary organizations among citizens. These organizations have clear boundaries protecting anonymity, involve frequent games between members, and avoid confused conflicts. Within these boundaries there are mutually dependent two-way relations and obligations. Such a trustful order is the cornerstone of a free and prosperous society.

(c) **Social trust ensures economic prosperity**

The relationship between trust and economic behaviors has been of concern for a long time. Smith and Weber have systematically discussed this issue. In the mid and late 20th century, study of trust was carried out from the perspective of social capital. "Trust is a lubricant for socio-economic constructions and operations. Most backward global economic development stems from the lack of mutual trust" (Arrow

1972). A higher level of trust not only helps to accumulate physical capital and promote innovation, but also to improve the return of human capital. Francis Fukuyama systematically analyzed the relationship between degree of social trust and the scale of the economy of a given society. He found that while different societies had their own unique culture including traditions, habits, and customs, social trust was the way and form through which culture affected economy, thus determining the scale, organization model, trading scope and form of a given social economic entity, as well as the scale and intensity of indirect productive activities for profit-seeking. The prosperity and ability of a country depend on a single and permeable cultural characteristic, i.e. the degree of trust inherent in society. In a society with a high degree of trust, firms are relatively large and usually have a long history, while in the opposite case there are mostly small-scale family firms whose operations are often difficult to sustain more than three generations.

(d) **Social trust promotes political participation**

The democratic political life is closely related to trust. Almond and Verba argued that the stability of the democratic structure must match that of its corresponding political culture. Trust is an important part of political culture, and has a significant impact on the development of democratic politics. "Social trust facilitates political cooperation among citizens in democratic nations, and without it there would be no democratic politics" (Almond and Verba 1989). British sociologist Robert Putnam regarded trust as an integral part of social capital. The greater trust in a community, the greater the likelihood of cooperation; as citizen networks become more extensive and participation more intensive, citizens are more likely to cooperate for the common good. In northern Italian cities boasting good social capital, people are keen to participate in mass organizations and public affairs; trust and cooperation permeate society, which leads to better government performances than regions with poorer social capital in terms of stability, budgeting, law reform, social services, industrial and agricultural reforms, and other areas. Inglehart (2004) found that the level of trust among the general public is closely related to society's level of democracy, with the correlation coefficient of 0.50.

(2) **Factors that affect social trust**

Social trust in the organic social system is affected by many factors, which fall on three levels: microscopic, mesoscopic and macroscopic.

(a) **Microscopic factors**

The subjective and objective characteristics of individuals are the microcosmic factors influencing their social trust. Uslaner (2006) argued that the more optimistic a person is, the greater his degree of generalized trust is. That is because generalized trust stems from optimistic values, which are a mixture of values learned from childhood and from subsequently accepted concepts. The stronger a sense of control a person has, the more that person feels that he is able to control his environment, and the higher his level of social trust is. The level of social trust of residents will also increase with an increase in happiness, leading them to hold positive attitudes towards

strangers. In comparison with objective indicators, subjective factors, such as expectations for the future, a sense of control over one's own future, and anti-authoritarian values, have the greatest effect on trust (Uslaner 2006).

The objective characteristics of residents include educational background, income level, religious beliefs, age and gender. The World Values Survey shows that people with higher levels of education show a high level of interpersonal trust and are more likely to believe that most people can be trusted. The impact of education on trust is not a simple linear relationship: higher education has a greater effect on trust than secondary education and, likewise, secondary education is more important than primary education (Uslaner 2006). Tocqueville (1945) argued that religious beliefs are the basis of "self-interest properly understood", leading people to attach less importance to their material lives and more to helping others, thus increasing social trust levels among believers. Putnam believed that trust was hierarchical in terms of social and economic status, so people with higher social status would demonstrate a stronger sense of trust (Smith 1997). Age is also an important demographical variable affecting trust. The trust of young people in others is lower than that of the elderly. An increase in age increases social trust levels among residents, because both their social status and social experience increase with age (Uslaner 2006). Race also has a strong influence on trust. Both for generalized trust and particularized trust, race has always been one of the strongest determinants and has the greatest impact on life experience (Uslaner 2006). Many surveys in the United States have shown that African-Americans are more distrustful and more likely to be particularized trustees. They are usually young, lowly educated, insecure, lonely, and lack social support. The sense of trust among Asians is also weaker than that among white people. Older and highly educated white people have a higher sense of security for themselves and their neighbors, and a higher level of generalized trust in others and society. Some factors in personal life, such as divorcing or remarrying, seeing one's parents divorce, being victim of a crime, and employment status have no effect on any type of trust. Among objective indicators, race, age and education opportunities are the most important predictive factors (Uslaner 2006).

(b) **Mesoscopic factors**

The mesoscopic factors that affect social trust are mainly the subjective evaluation of residents' communities and the objective characteristics of residents. The more similar a community is in terms of language, race and income, the higher the level of social trust is. Brehm and Rahn (1997) pointed out that higher income disparity reduces social trust and safety levels in residential communities. The security of residential communities and the residents' sense of security are two important predictors of trust. Alesina and Ferrara (2002) found that residents of communities with greater ethnic or income differences had lower levels of social trust, whereas residents whose current community is located in the same state as their birthplace have higher levels of social trust. But residents' different nationalities and the time they have resided in their current community have no significant influence on social trust levels. Delhey and Newton (2003) found that residents' satisfaction with neigh-

borhood relationships had a significant but not steadily positive effect on their levels of social trust.

(c) **Macroscopic factors**

The macroscopic factors of social trust are mainly that of the overall situation of the society in which individuals live, including their subjective views on society. In general, people from affluent societies show higher levels of trust, whereas people from poor societies show lower levels. According to the analysis of Axelrod (1984) based on game theory, cooperative behavior is a rational strategy in an environment in which people can confidently determine that most people in this environment will return, as confirmed by the World Values Survey (Inglehart 2004). At the same time, in comparison with poorer societies, social trust in more affluent societies also further reflects the influence of relevant cultural traditions; Protestant societies and Confucian societies show higher levels of interpersonal relationships than historically Roman Catholic or Islamic societies, where differences in trust persist notwithstanding economic disparities (Inglehart 2004).

The degree of social equality also has a great impact on trust. In countries and U.S. states with larger income gaps, mutual trust levels among the public are lower. The World Values Survey shows that Portugal has the lowest level of trust, and only 10% of its people believe that others can be trusted; while Sweden has the highest level of trust, where 66% of people believe that others are trustworthy. The "General Social Survey" for the United States shows a fourfold difference in trust among U.S. states, with North Dakota's level of trust similar to that of Sweden with 67% of people feeling others are trustworthy, while only 17% of people in Mississippi have such a feeling, which shows that low levels of trust are associated with higher degrees of inequality (Wilkinson and Pickett 2010). Eric Uslaner clearly stated that inequality affects trust, and not the other way around; that "trust cannot flourish in an unequal world," and that income inequality is "the primary killer of trust"; with the increase in degrees of inequality, people become more indifferent, less interactive, and have to resort to self-defense, and thus trust is reduced (Uslaner 2006). As Tocqueville put it, "people are less resonant with those not in the same class as them, and material differences lead to divisions in society" (Wilkinson and Pickett 2010).

Trust in the government plays an important role in fostering trust in one's fellow citizens (Brehm and Rahn 1997; Uslaner 2006). Brehm and Rahn (1997) argued that trust in the government can lead to generalized trust, because the government provides a social security network for the poor and serves as a buffer and a neutral arbiter against group confrontation, ensuring that everyone is treated fairly. Putnam et al. (1993) also pointed out, "large, hierarchical, irresponsible and centralized bureaucratic governance seems to undermine interpersonal trust" (Inglehart 2004). Based on three surveys in 41 countries in the 1981–1997 World Values Survey, Zak and Knack (2001) found that property right index, contract performance ability, corruption index, and investor rights closely related to the quality of government and legal systems, all improve the residents' social trust levels.

Scholars hold different views on whether social participation can increase trust. Putnam (1993, 2000), and Brehm and Rahn (1997) found that people who join citizen

groups have a greater sense of trust than those who stay at home. Trust and social connections form a "virtuous circle": people with a sense of trust join various groups and their social life in turn strengthens their sense of trust (Uslaner 2006). Brehm and Rahn even believed that trust resulting from citizen participation is more easily produced than that leading to citizen participation. However, Eric Uslaner, referring to the "social census" data, found that the relationship between citizens live and trust is more like a "virtuous arrow" rather than a "virtuous circle", that is to say that people do not have a greater sense of trust when they join a citizen group (Uslaner 2006). Very few types of citizen participation have a guiding role in the promotion of trust, i.e. group participation in the business community, cultural group participation, children group participation, contributions to charity and participation in religious ceremonies.

(3) **Studies on the status of social trust**

As countries differ culturally, economically and socially, they also differ in terms of social trust. As a large social survey in the world, the World Values Survey showed that Denmark, the Netherlands, Canada and the United States had the highest levels of social trust; Japan, Ireland and the U.K. had moderate levels of social trust; and Spain, West Germany, France, Belgium and Italy had the lowest levels of social trust (see Table 1). The third European Values Survey also found that Denmark, Sweden, Finland, and the Netherlands had a high degree of trust, while Romania, Latvia, Malta, Greece, Poland, among others, all of which experienced social unrest and transformation after the fall of Communism, had the lowest degrees of trust.

Ronald Inglehart pointed out that socio-cultural differences are an even more important factor. Among 18 societies with trust levels over 35%, 13 are Protestant majority, three Confucian majority, one Hindu majority, and only one (Ireland) Catholic majority; and among the 10 societies with the lowest trust levels, there are eight historically Catholic societies, one Islamic society, and one historically Orthodox society. Almost all societies that historically belonged to Protestantism demonstrated higher levels of social trust than Catholic societies. Japanese scholar Fukuyama also views trust from a cultural prospective and links trust with economic prosperity. He believes that religion, tradition and customs generate trust. The high levels of trust between people, especially between strangers, as well as spontaneous social interaction based on this premise, create developed social intermediary organizations, improving the ability of society to participate in competition and national welfare. In some parts of China, France, and Italy, family ties are stronger than other types of social relations, which cause a general distrust of outsiders and leads to the relative weakness and low quantity of intermediate mass organizations between government and individuals, hindering corporate institutional and in-depth development. Both Edward Banfield's study of Montelgrano (a small town in southern Italy) and Putnam's comparative study of southern and northern Italy show that trust with family at its core creates disunity amid people. However, in Germany, Japan, and the United States, people have a stronger sense of spontaneous association, and there are numerous communities. Therefore, these societies enjoy networks with numerous

Table 1 Levels of social trust by country

	1981(%)	1990(%)	1981(%)	1990(%)	1981(%)	1990(%)	1981(%)	1990(%)	1981(%)	1990(%)	1981(%)	1990(%)
	Denmark		Netherlands		Canada		U.S.		Japan		Ireland	
Trust	53	58	45	54	49	53	42	51	42	42	44	47
	UK		West Germany		Spain		Italy		Belgium		France	
Trust	43	44	32	38	35	43	27	35	29	34	25	23

Data source [France] Matthew Dugans. (2006). *Comparative Sociology: Selected Collection by Mattei Dogan.* Translated by Li Jie et al. Beijing: Social Sciences Academic Press, p. 194

branches and abundant social capital, potentially reducing transaction costs as well as promoting the maintenance of social order and the development of economy.

2.2 Studies of Social Trust Among Chinese

The level of social trust in China has attracted wide attention. In the following section, the main aspects of social trust in China have been sorted out.

1. **Current state**

(1) **Overall social trust**

In his analysis of traditional Chinese society, Weber put forward that "widespread mistrust exists between Chinese people". This statement was cited and extended by Fukuyama, who pointed out that China is a low-trust society, a society lacking generalized trust. However, Inglehart's "World Values Survey" (1990) found that as high as 60% Chinese people believed that the majority of people were trustworthy, thus ranking fourth in the survey, second only to Sweden, Norway and Finland. This was not only a higher score than most of the Third World countries, but also higher than that of most Western developed countries, including the United States. In 1996, Inglehart conducted the "World Value Survey" again, finding that more than 50% of the Chinese people still believed that the majority of people were trustworthy.

In recent years, China entered a period of social transformation. The "presence" and "face-to-face" commitment which served as the foundation of traditional social trust and the supervision and restriction system are failing, and the institutional commitment of abstract systems has not yet been established. Therefore there has been an upsurge in the occurrence of events related to serious social dishonesty, such as "entrapment", telephone fraud, "Peng Ci" (fraudulent claims for compensation) and even "swindling acquaintances", which seriously affect people's feelings of trust and their behaviors. This being said, what is the present state of social trust among Chinese people? Du et al. (2011) found on the basis of surveys carried out in Beijing, Shanghai and Guangzhou that overall there is a low level of social trust in China. Study done by Zhu (2011) showed that more than 70% of urban respondents believed that society lacked generalized trust; 70% of respondents also believed that China was currently undergoing a serious confidence crisis. 35% of respondents rated the overall level of social trust "relatively low" or "very low"; 54.9% rated it "general"; and only 10% rated it "very high" and "relatively high". Some scholars supported Inglehart's findings in his two World Values Surveys, affirming that China was, in general, a country with a high level of trust (Hu 2011).

(2) **Individual social trust patterns**

Many studies have shown that relationship assume primacy in the Chinese society, and how closely or distantly people are related to one another determines how much trust they are likely to have in others. Therefore, a "differential" trust pattern forms

between people. Scholars working in China have assessed the trust of different trust objects to explore the current individual social trust pattern. Li and Liang (2002) and Hu and Li (2006) found that urban residents trust their family members, relatives and close friends most, followed by colleagues, leaders, neighbors and friends who have close relationships with them. In the same study, the most unreliable people were found to include Internet friends, manufacturers, and other strangers. Tong Zhifeng's study of rural residents (2006) also supported this conclusion. Wang and Liu (2002) and Wang and Zhou (2009) found that Chinese people put most of their trust in their family members, followed by friends and then acquaintances, and finally strangers for whom they have the lowest level of trust. It can be seen that both in urban and rural areas the current basic trust pattern of the Chinese people is still self-centered and based on blood relationship. At the core of interpersonal trust derived from interpersonal relationships is the emotional recognition of both sides based on their evaluation of cognitive elements such as moral quality, willingness and behavior of the trusted side (Yang and Peng 1999). In addition to interpersonal trust, Zhu (2011) found that people's trust in the government is the most important link in the social trust chain, i.e. the highest degree of trust. The abstract system with symbols established by experts has not been established, in which the trust is put in, and the situation of consumer trust is worrying. Du et al. (2011) argued that industries/departments with a governmental background such as government agencies, public media, public institutions, or departments are highly trusted, or "moderately trusted", while the commercial sector is given the lowest amount of trust, or "basically not trusted".

2. **Constitutional dimension of social trust among Chinese people**

The construction of trust category is mostly based on the "binary construction" paradigm; that is, trust is placed on a single, bipolar dimension, thus differentiating two different "ideal types". In the research of Weber and Luhmann or Giddens, the common internal presupposition is that the two types of trust are completely different and mutually exclusive, almost incompatible. As most studies on the constitutive dimensions of public trust in China are based on the "binary construction" paradigm, Lu (2009), Chen et al. (2011), and Chen (2012), withholding the concept of the binary construction of social trust, defined social trust according to the dichotomy between particularized trust and generalized trust, and conducted study of the relationship between social trust and community participation. Some scholars have also divided social trust into interpersonal trust and institutional trust according to a dichotomy based on Luhmann and Giddens (Du et al. 2011; Zhu 2011). Some scholars propose their own point of view through questioning, targeting and verifying the "dichotomy" paradigm of social trust. Through the subjective evaluation of the degree of trust of different trust objects, Li and Liang (2002), Tang and Fu (2008), Zhang (2009), Hu and Li (2006) proposed the three-dimensional structure of social trust. Wang and Liu (2002) and Wang and Zhou (2009) then developed the four-dimensional structure of social trust which includes social trust, acquaintance trust, relative trust and friend trust as its main categories.

3. **Construction mechanism of social trust**

Chinese people strengthen emotional (or obligational) connections and use the relationship network to build "human feeling" trust, so as to trust others or to be trusted. For example, Qiao (1982) concluded that contemporary Chinese people use six methods to establish and maintain relationships, i.e. inheritance, identification, drawing, digging, cottoning up, and expanding; via interviews in Beijing, Yang (1994) found that people mainly use three ways to develop relationships, i.e. treat, sending gifts, and favor-doing. Zheng et al. (1997) put forward the "infiltration model" in the study of the relationship between Taiwanese enterprises. The establishment of inter-firm relationships is often achieved on the basis of the transition from an objective relationship to a subjective relationship, from initial interpersonal trust to business trust, and then to deeply interpersonal trust.

Obviously, most of the studies mentioned above focus on interpersonal trust. They pay less attention to institutional trust. At present, the rapid changes in Chinese society have had a strong impact on the original interpersonal trust model. In response to these changes, many researchers have begun to explore institutional trust issues, but the results have shown that even when a society becomes more complex, diversified and mobile, people still rely mainly on trust-building methods based on communication experiences and personal characteristics, and rarely on a system-based approach. Whitley (1991) pointed out that Chinese family business owners often strive to develop personal relationships with key affiliates and business partners so as to build mutual trust. Peng (1999) examined trust relationships in the context of doctor–patient relationships and economic cooperation, and found that ways such as using relationship networks, standing treat or giving gifts, as well as emotional methods such as mutual respect and exchanging thoughts and feelings, are mechanisms commonly used by Chinese people to establish and strengthen trust. This shows that institutionalized trust in China is different from that in western countries. It exists in relationship networks and coexists with interpersonal trust in a mutually reinforcing way, rather than a mutually exclusive way.

4. **Causes and effects of social trust**

As a kind of social construction, social trust is affected by many factors, including personal factors, community factors and social factors. Personal factors mainly refer to the objective background and personality traits of the individuals themselves. Some studies have shown that elders tend to have higher levels of social trust (Hu and Li 2006; Li et al. 2008). Social status, such as measured by education and income levels, plays a significant role in social trust: the higher the social status, the higher the social trust (Wang and Liu 2002; Li et al. 2008). Marriage significantly reduces social trust levels among residents (Li et al. 2008). However, social trust levels diverge in terms of gender. Hu and Li (2006) found that social trust among men, especially generalized trust, is higher than that among women; although the study of Li et al. (2008) demonstrated that women are more likely to trust individuals with whom they have a direct or indirect relationship. Where relationship networks are involved, social trust levels are higher. The communal influence theory puts forward

that objective characteristics of the community and individual subjective views of the community are the two main factors affecting social trust levels. Li et al. (2008) found that time of residence and help from neighbors can raise social trust levels.

Trust is considered to relate to social factors such as culture, communication, property rights, community participation, and economic development. Community participation is a social factor closely related to the social trust of residents. In the theory of social capital, of which Putnam is the representative figure, community participation networks are key mechanisms promoting citizen cooperation, and even more the core characteristic of social trust, forming an important framework for the cultivation of social trust. As Chinese society is formed of closed networks consisting of family relationships or quasi-kinship relationships and generalized social trust established among strangers, the mechanism influencing social interaction on different planes of trust has become an important problem. Participation in the activities of social groups has an impact on generalized trust. The more communities one participate in, and the more frequently he is involved in communal activities, the higher level of trust one has in the people whom one engages in uncertain communication or has a weak relationship with, although this has no impact on particularized trust (Hu and Li 2006; Hu 2006; Tang and Fu 2008). Another view is that the relationship between participation in associations and generalized trust among members is very weak (Chen 2012). There is another moderating variable between participation in associations and the strengthening of generalized trust. People may participate in community activities because of prior relationships rather than establish mutual trust after their participation. When there is no expansion of differential relationships, outsiders cannot be included as "one of us". Therefore, social participation cannot increase generalized trust levels.

Marketization has an even greater impact on social trust. The more marketized a region is, the higher the likelihood of a high evaluation in terms of trust levels is, because a commercially developed society is often a credit society. For China, the high levels of marketization often mean less regulation and more free competition, which are conducive to the establishment of social trust. Transportation facilities and urbanization also have significant explanatory power for trust. Developed transportation is an important condition for people to engage in repeated exchanges. Developed transportation means more convenient communication between people, which reduces transaction costs between people and thus increases communication. This also increases the volume of information shared among people and improves their mutual trust (Zhang and Ke 2002).

Trust can bring many benefits to society. It can promote economic prosperity and growth, improve governance, prevent corruption, improve the quality of education, and promote individual health, social security, and social welfare (Chen 2012). Our analysis of trust functions in China focuses on political participation and economic development. Studies on the effect of social trust on grass-root governance show that generalized trust is conducive to the formation of democratic concepts and values among urban residents, and thus promotes participation in conventional political activities (Liang 2011; Lu 2009). Particularized trust is not conducive to improving the ongoing construction of urban communities (Lu 2009). From the perspective of

its operation mechanism, generalized trust has a positive effect on the governance and performance of community resident committees as it also positively influences the quality of elections, while particularized trust has a negative impact, hinders the establishment of residential committees and negatively affects the quality of elections (Chen et al. 2011). Zhang and Ke (2002) confirmed the effect of trust on regional economic performance. The more a region is trusted, the faster its economy grows. Trust does not only affect economic growth, but also affect the size, distribution and efficiency of enterprises, and promotes the development of private enterprises.

5. Changes and crisis in China's social trust models

In traditional Chinese society, family is at the core of trust, whereas blood and geography are considered radius of the trust model. On the latter, Chinese and foreign scholars have already reached a consensus. Weber called it particularized trust; Fukuyama called it distrust or low trust; Luhmann called it "interpersonal trust"; and Chinese scholars call it "ethical trust", "differential trust" and "relationship trust". This kind of trust is derived from affinity and familiarity with specific individuals. It is formed on the basis of personal relationships and acquired achievements. It has the perceptual characteristics of traditional trust based on "human feelings" as well as the rational calculation from acquired achievements (Yang and Peng 1999). Different people engage in different relationships and thus respect correspondingly different rules of behavior. Xue Tianshan pointed out that "Chinese people rely on human exchanges to build trust, as well as the 'courtesy demands reciprocity' concept to guarantee the normal operation of the trust relationship and restrain people's behavior in this relationship, so as to prevent dishonest behavior" (Xue 2008).

As a functional social mechanism embedded in the social system and the cultural and economic structures, social trust is constantly evolving in response to developments and changes in society. Western researchers think that a society that relies on inter-personal relationships to obtain trust is a more "traditional" society, and that as a society changes from being "traditional" to being "modern", people gradually start depending on contracts and equitable systems to obtain trust (Barber 1983; Giddens 2000; Luhmann 2005). With the continuous transformation of China's economy, social structure, mode of thinking and behavior, the market economy has gradually become the dominant mode of production in society; social mobility is also increasing, which make it possible for people to establish wider social contacts. Thus social order is becoming more complex and changeable. Trust stemming in familiarity can no longer accommodate uncertain, insecure and unpredictable events, and thus the social trust model should change accordingly.

At present, however, a grim reality cannot be ignored: the one-way development of China's economy causes its whole society to be dislodged in space and time, transforming it into a risk society, thus causing severe crisis in terms of social trust. The extent and scope of such a crisis is unprecedented, and its harm is extremely far-reaching. Zheng and Huang (2011) pointed out that the trust crisis in contemporary China mainly manifests itself in terms of the public's trust in its government, of the trust between market stakeholders, and of that among members of society. Meng and Wang (2010) argue that the trust crisis mainly manifests itself in the public's distrust

of public power as well as in the interpersonal distrust among people. Li (2006) put forward that the social trust crisis touches upon three categories, i.e. the commercial credit crisis, the interpersonal trust crisis, and the generalized trust crisis. The trust crisis is mainly caused by the failure of the relation constraint mechanism, the weakening of the moral constraint mechanism, and the lack of institutional constraint mechanism. As Zhai (2008) put it, the current trust crisis was a Chinese-style issue caused by today's one-sided economic development in China, which not only failed to establish a new trust mechanism, but also shook the roots of traditional trust. Many scholars have expressed their worries about the state of trust in China, and believe that rebuilding social trust is an important task in terms of further social construction in China (Zhai 2008; Zheng et al. 2011). Society itself can overcome the trust crisis only by making social trust "socialized", making currency and power comply with social requirements, reducing the economic monopoly of the state, increasing social participation in national economic policies, establishing new providing programme for public goods based on social participation, and conferring the right to express views and participate in politics to stakeholders in all social sectors.

3 Measuring Social Trust

As there are multiple criteria for the classification of trust, in this section we do not classify and introduce social trust measurement methods in accordance with any unified standard. Here, we mainly summarize and introduce the methods employed in prior studies on trust.

3.1 Measuring Interpersonal Trust

1. **Experimental paradigm**

In social psychology, interpersonal trust is often studied through the manipulation of real or false situations. The most commonly used method is the "trust game method". In this classic paradigm, trust is measured based on the mental state or tendency exhibited by an actor (trusting) willing to entrust his partner (trustee). In the "trust game" study, trusting's impact on the establishment and development of the trust relationship between two parties is indicated in the following aspects, i.e. benefits that the trusting is willing to give to the trustee, trustee's benefits gained from trust behaviors, trusting's intention to take risks, and the risk of trust behaviors.

2. **Measuring scale**

The measurement of interpersonal trust began with the Interpersonal Trust Scale (ITS) developed by Rotter in 1976. The scale consists of 25 items and 5 grades, with the total score being from 25 to 125 points. The higher the score is, the higher

the interpersonal trust is considered to be. This scale is mainly used to measure the reliability of other people's behavior and commitment (oral and written) in the eyes of those tested. This reliability includes two factors, namely: the trust in a companion or family member, and the trust in people with whom the tested engages in indirect relationships. The Trust Scale prepared by Rempel and Holmes (1986) mainly measures mutual trust of people in intimate relationships, and consists of a total of 18 items, which involves three dimensions, i.e. predictability, reliability and credibility.

3.2 Measuring Trust Objects

The focus on individual trust patterns nurtures researchers' interest in the trust of trusting people in different types of trustees. The more commonly used research paradigm lists different types of trust objects and let respondents grade them. This method of measurement is used by social science researchers and applied to various large-scale social surveys to study the characteristics of interpersonal trust.

3.3 Measuring Generalized Trust

Western scholars commonly agree to classify social trust according to the categories of generalized trust and particularized trust. The method employed above for the measurement of trust objects is also that employed for the measurement of particularized trust. For the measurement of generalized trust, western academic circles mostly use the following two indicators: one is the overall degree of trust, which is mainly measured by asking: "generally speaking, do you think most people can be trusted?" Another is the overall degree of distrust, which is mainly measured by asking: "In general, do you think it is better to be as careful as possible with other people?" This is also the most commonly used method to measure social trust for a single topic. The World Values Survey, the European Values Survey as well as other large international social surveys all used this method to measure generalized trust. In addition, multiple items can also be used to measure generalized trust.

3.4 Measurement of Institutional Trust

In addition to interpersonal trust in specific individuals, trust in abstract systems, government agencies, and industries/sectors are also an important component of social trust. In its main measurement method, trust objects that need to be known, such as government, police, hospitals, nongovernmental organizations and industries, are first listed, then respondents are asked to use an attitude scale to measure these items and assess their trust level in a range from "full trust" to "full distrust".

References

Chinese-Language Sources

Almond, G., & Verba, A. (1989). *The civic culture: Political attitudes and democracy in five nations* (D. J. Ma et al., Trans.). Hangzhou: Zhejiang People's Publishing House.

Chen, F. (2012). The path of social participation in the market society: Relationship trust or universal trust. *Society, 32*(2), 84–104.

Chen, J., Narisong, H., & Lu, C. L. (2011). Causal mechanism of social trust and grassroots community governance effect. *Society, 31*(6), 22–40.

Du, J. F., Rao, Y. S., & Yang, Y. Y. (2011). Analysis of urban residents' social trust status. *Democracy and Science, 4,* 67–71.

Fukuyama. (2001). *Trust: The social virtues and the creation of prosperity* (Z. H. Peng, Trans.). Haikou: Hainan Publishing House.

Giddens, A. (2000). *The consequences of modernity* (H. Tian, Trans.). Nanjing: Yilin Press.

Hu, R. (2006). Social capital and regional independent participation of rural residents in China. *Sociological Research, 2,* 61–85.

Hu, D. F. (2011). Research in trust and regional economic development: Quantitative analysis at provincial and municipal levels. *Pacific Journal, 19*(11), 50–57.

Hu, R., & Li, J. Y. (2006). Composition and influencing factors of urban residents' trust. *Society, 26*(6), 45–61.

Inglehart, R. (2004). Trust, happiness and democracy. In Warren (Ed.), *Democracy and trust* (H. Wu, Trans.). Beijing: Huaxia Publishing House.

Li, Z. (2006). Social transformation of China: An explanation of trust crisis and reestablishment of trust mechanism. *Journal of Xi'an University of Posts and Telecommunications, 11*(2), 104–106.

Li, W., & Liang, Y. (2002). Special trust and universal trust: The structure and characteristics of Chinese trust. *Sociological Studies*, (3), 11–22.

Li, T., Huang, C. C., He, X. Q., & Zhou, K. G. (2008). What affects people's social trust: Evidence from Guangdong Province. *Economic Research Journal, 1,* 137–152.

Liang, Y. (2011). Neighborhood (village) committee trust and residents' participation in social policies for communities. *Theoretical Investigation, 2,* 143–147.

Liu, J., & Zhai, X. W. (2007). Trust and social harmony: Access to a research logic. *Tianjin Social Sciences, 5,* 62–66.

Lu, C. L. (2009). Social trust and governance of urban communities in China. *Journal of Huazhong Normal University (Humanities and Social Sciences), 48*(3), 32–38.

Luhmann, N. (2005). *Trust: A mechanism for the reduction of social complexity* (T. P. Qu & J. Li, Trans.). Shanghai: Shanghai Century Publishing Group.

Meng, X. X., & Wang, W. (2010). The current status, influence and countermeasures of social trust crisis. *Research of Ideological and Political Work, 5,* 21–22.

Peng, S. Q. (1999). Creating social trust: Social relations and legal channels. *Sociological Studies, 2,* 53–66.

Peyrefitte, A. (2005). *Trust society: On the origins of development* (H. Qiu, Trans.). Beijing: The Commercial Press.

Putnam, R. D. (2001). *Making democracy work: Civic traditions in modern Italy* (L. Wang & H. Lai, Trans.). Nanchang: Jiangxi People's Publishing House.

Qiao, J. (1982). A rustic opinion on relations. *Special Issue of the Institute of Ethnology, Academia Sinica*, *Taipei, 10,* 345–360.

Simmel, G. (2002). *The philosophy of money* (C. Rongnv et al., Trans.). Beijing: Huaxia Publishing House.

Sztompka, P. (2005). *Trust: A kind of sociological theory* (S. Cheng, Trans.). Beijing: Zhonghua Book Company.

Tang, Y. C., & Fu, P. (2008). The mechanism of social trust in the transition period: Discussion on marketization, personal capital and social communication factors. *Zhengjiang Social Sciences, 11,* 59–118.

Tong, Z. (2006). The difference pattern of trust: An interpretation of interpersonal trust in rural society. *Gansu Theory Journal*, (5), 59–63.

Uslaner, E. (2006). *The moral foundations of trust* (D. M. Zhang, Trans.). Beijing: China Social Sciences Press.

Wang, S. G., & Liu, X. (2002). Foundation of trust: A rational explanation. *Sociological Studies, 3,* 23–39.

Wang, Y., & Zhou, X. (2009). The difference pattern of urban residents' trust. *Tianfu New Theory*, (2), 102–105.

Wilkinson, R., & Pickett, K. (2010). *The spirit level* (P. An, Trans.). Beijing: Xinhua Publishing House.

Xue, T. S. (2008). The logic of trust of the Chinese. *Studies in Ethics, 4,* 70–77.

Yang, C., & Peng, S. Q. (1999). Conceptualization of interpersonal trust of Chinese people: A viewpoint of interpersonal relationship. *Sociological Studies, 2,* 1–21.

Zhai, X. W. (2008). Trust and risk society: Western theories and Chinese issues. *Social Science Research, 4,* 123–128.

Zhang, Y. (2009). Interpersonal trust and social interaction of residents of different scales. *Sociological research*, (4), 113–132.

Zhang, W. Y., & Ke, R. Z. (2002). Trust and its explanation: A trans-provincial analysis of China. *Economic Research Journal, 10,* 59–70.

Zheng, Y. F. (2001). *On social trust*. Beijing: China Radio Film and TV Press.

Zheng, Y. N., & Huang, Y. J. (2011). Social trust crises of China. *Beijing Cultural Review, 2,* 18–23.

Zheng, B. S., Ren, J. G., Zhang, H. F., & Guo, J. Z. (1997). Dual relation of enterprise networking in Taiwan: Formation and efficiency. *Chinese Journal of Psychology, 39*(1), 75–92.

Zhu, H. (2011). State and characteristics of social trust during translational period: A empirical research. *Guizhou Social Sciences Magazine, 10,* 118–123.

English-Language Sources

Alesina, A., & Ferrara, L. (2002). Who trusts others. *Journal of Public Economics, 85*(2), 207–234.

Almont, G., & Verba, S. (1963). *Civic culture: Political attitudes and democracy in five nations*. Princeton: Princeton University Press.

Arrow, K. J. (1972). Gift and exchange. *Philosophy & Public Affairs, 1*(4), 343–362.

Axelrod, R. (1984). *The evolution of cooperation*. New York: Basic Books.

Barber, B. (1983). *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.

Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science, 41*(3), 999–1023.

Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology, 37*(1), 12–24.

Delhey, J., & Newton, K. (2003). Who trusts? The origins of social trust in seven nations. *European Societies, 5*(2), 93–137.

Deutsch, M. (1958). Trust and suspicion. *The Journal of Conflict Resolution, 2,* 265–279.

Gambetta, D. (1988). Can we trust trust? *Trust: Making and breaking cooperative relations* (pp. 213–237). Oxford, UK: Basil Blackwell.

Grimes, K. (2003). To trust is human. *New Scientist, 178,* 32–38.

Johnson-George, C. E., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology, 43*(6), 1306–1317.

Kramer, R. M. (1999). Trust and distrust in organization: Emerging perspectives, enduring questions. *Annual Review of Psychology, 50,* 60–98.

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces, 63*(4), 967–985.

Malhotra, D. (2004). Trust and reciprocity decisions: The differing perspectives of trustors and trusted parties. *Organizational Behavior and Human Decision Processes, 94*(2), 61–73.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709–734.

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal, 38*(1), 24–59.

Mishra, A. K. (1987). Organizational responses to crisis: The centrality of trust. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations* (pp. 261–287). Newbury Park, CA: Sage.

Murnighan, J. K., Malhotra, D., & Weber, J. M. (2004). Paradoxes of trust: Empirical and theoretical departures from a traditional modal. In R. M. Kramer & K. S. Cook (Eds.), *Trust and distrust in organizations: Emerging perspectives, enduring questions* (pp. 293–326). New York: Russell Sage Foundation.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Putnam, R. D., Leonardi, R., & Nanetti, R. (1993). *Making democracy work: Civic, traditions in modern Italy*. Princeton, NJ: Princeton University Press.

Rempel, J. K., & Holmes, J. G. (1986). How do I trust thee? *Psychology Today*, 28–34.

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality, 35*(4), 651–665.

Rousseau, M., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*(3), 393–404.

Sabel, C. F. (1993). Studied trust: Building new forms of cooperation in a volatile economy. *Human Relations, 46*(9), 1133–1170.

Simpson, J. A. (2007). Psychological foundations of trust. *Current Directions in Psychological Sciences, 16*(5), 264–268.

Smith, T. W. (1997). Factors relating to misanthropy in contemporary American society. *Social Science Research, 26*(2), 170–196.

Tocqueville, A. de. (1945). *Democracy in America* (Vol. 2) (H. Reeve, Trans.). New York: Alfred A. Knopf (Origin work published 1840).

Tyler, T., & Degoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology, 69*(3), 482–497.

Weber, J. M., Malhotra, D., & Murnighan, J. K. (2005). Normal acts of irrational trust, motivated attributions, and the process of trust development. *Research in Organizational Behavior, 26,* 75–101.

Whitley, R. D. (1991). The social construction of business systems in East Asia. *Organization Studies, 12*(1), 128.

Wrightsman, L. S. (1992). *Assumptions about human nature: Implications for researchers and practitioners*. Newbury Park, CA: Sage Publications.

Yang, M. (1994). *Gifts, favors and banquets: The art of social relationship in China*. Ithaca: Cornell University Press.

Zak, P., & Knack, S. (2001). Trust and economic growth. *Economic Journal, 111,* 295–321.

Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840–1920. In B. B. M. Staw & L. L. Cumniings (Eds.), *Research in organizational behavior* (Vol. 8, pp. 53–111). Greenwich, CT: JAI Press.

Conceptualizing and Measuring Sense of Social Fairness

Hui Chen, Yiyin Yang and Shuming Liu

"Fairness" is a social judgment at the core of human social life. It is an important basis to establish and maintain social order as well as an important value, ethical principle and belief in society. Therefore, ethics, sociology, economics, legal sciences and social psychology all pay high attention to fairness. Social psychology studies the issues on social fairness from a subjective perspective. From the perspective of social psychology, to feel and judge "fairness" is a subjective experience and internal process. Fairness has for standard a mental reality constructed and shared by society, and it is maintained and constructed on different individual, organizational and social levels. On the one hand, social institutions or social norms indulge people with a sense of fairness or unfairness, and in this relationship, fairness is a dependent variable; on the other hand, the experience of fairness or unfairness may lead to the formation of important social attitudes or consequences, and in this regard, fairness is an independent variable. Social psychology studies social fairness mainly from these two aspects.

Among relevant studies on social mentality, the issue that is of most concern is social fairness. Terms like equality, fairness and justice are not strictly exclusive in daily life; they are usually distinguished according to conventional habits or linguistic environments. Therefore, we must first define the concept of fairness, and on this basis, we will discuss the mental mechanism at work behind the sense of social fairness as is of concern for social psychology. At last, we will discuss the measurement of the sense of fairness.

H. Chen (✉) · Y. Yang (✉) · S. Liu
Beijing, China

1 Defining Fairness

Fairness is also an important concept in ethics, politics and sociology. The Chinese word "公平" (*gongping*, fairness) is composed of "公" (*gong*, justice) and "平" (*ping*, equality); therefore, fairness is based on equality, but is not equal to equality. It is a special equality, which refers to social commonality and proper values. As has been said by Xuncius (Chinese philosopher born in c. 313 BC): "Fairness is the norm according to which government affairs should be handled" (*Kingship*). Fairness is not equal to justice either. It is a distribution behavior of the appeal for morality and kindness, and therefore encompasses both equality and justice. As a legitimate homogeny recognized by the social moral system, fairness is legitimate equality; meanwhile, as a distribution behavior of the appeal for morality and kindness, fairness is distributive fairness. The relationship between fairness, equality and justice is as shown in Fig. 1.

Fairness is highly related to equality and justice. Equality is the basic value of human society, but the equality mankind pursues is legitimate. Therefore, human appeal for equality is in fact the appeal for fairness. Similarly, human appeal for justice in distribution is in fact the appeal for fairness, so as to realize "the constant will to allow everyone to gain what they deserve" and establish harmonious interpersonal relationship.

1.1 Fairness and Equality

Fairness is undoubtedly a kind of equality, but not all equalities are fair. Only legitimate equality is fair, whereas illegitimate equality is unfair. Therefore, the key factor to judge what kind of equality is fair and what is unfair is whether it reflects the principle of distribution according to contribution.

First of all, complete equality in terms of basic rights supported by proportional equality in terms of non-basic rights is a fair situation. The reason for this is that, as members of a society, everybody makes equal basic contributions to the establishment of said society. Therefore, society should guarantee that everybody is able to equally acquire and enjoy basic rights. Thus complete equality of basic rights reflects the principle of distribution according to contribution, and therefore is fair. Non-basic contributions are different: proportional equality consists in the distribution of non-

Equality		Justice	
Illegitimate equality	Legitimate equality	Distributive fairness	Development justice
	Fairness		

Fig. 1 Relationship between equality, fairness and justice

basic rights according to non-basic contributions; the proportional equality of non-basic contributions also reflects the spirit of distribution according to contribution, and therefore it is also fair.

Second, procedural equality is fair. The reason for this is that, generally speaking, the achievement of procedural equality shows that society provides individuals with the objective conditions for the same basic possibilities to acquire outcomes; whether individuals can acquire said outcomes and how much they can acquire depend on their different efforts, motivations and qualities. This means that, procedural equality also reflects the spirit of distribution according to contribution, and therefore procedural equality is fair. What is known as "procedural fairness", "procedural justice" and "procedural righteousness" in fact refers to procedural equality, and this, along with the equality in its narrow sense (which represents the equality of outcomes), is the sub-concept of equality in its broader sense. In daily life, people generally simplify and refer to "equality" particularly in its narrow sense; therefore in a real society, equality in correspondence with fairness doesn't usually refer to the broad sense of the term, which would also encompass procedural equality and outcome equality. Rather it usually refers to the narrow sense of the term, namely outcome equality.

1.2 Basic Principles of Fairness

The spiritual substance of fairness is the distribution of rights according to contribution; therefore, the following three basic principles can be summarized:

The first is the principle of complete equality in the distribution of basic rights. Basic human rights are elementary rights for survival and development and they incorporate the basic freedoms of mankind, such as the right to live, the right to political freedom, the right to unhindered migration, and the right to freedom of faith. Therefore, regardless of race, family background, gender, occupation and belief, everybody should enjoy these rights. In fact, it is specified in both the *International Covenant on Economic, Social and Cultural Rights* and the *International Covenant on Civil and Political Rights* that everyone should enjoy these various basic rights. The principle of complete equality in the distribution of basic rights not only reflects human dignity, but also reflects an acknowledgement of basic human rights.

The second is the principle of procedural equality in the distribution of non-basic rights. Non-basic human rights are relatively more sophisticated rights for mankind's survival and development. Therefore, it is not possible to distribute various non-basic rights completely equally, rather they should be distributed according to everyone's contributions. Procedural equality reflects the principle of distribution according to contribution.

The third is the principle of compensation in the distribution of non-basic rights. In a real society, the outcomes of procedural equality are not always completely reasonable and appropriate. Therefore, differences in wealth and income need to be limited to a certain range and those who have less should be given a certain indemnity. The reason for this is that wealthier individuals actually make more use of "soci-

ety" and "social cooperation" as common resources; therefore, they should provide indemnities for others. Rawls (1988) transformed the Lockean liberalism system, advocating a democratic and equal liberalist system and believing that procedural equality shouldn't be regarded as the only type of equality. As outcome inequality usually affects initial equality and in turn affects procedural equality, attention should be given not only to procedural equality, but also to outcome equality.

Discriminating the concepts of "equality", "justice" and "fairness" allows us establish the basis for the usage of the concept of fairness on such cognition: fairness encompasses both equality and justice, and what fairness recognizes is legitimate equality and distributive fairness. The exact meaning of the terms which are used by most people in daily life: distributive fairness, procedural fairness, reward-and-punishment fairness, and interactional fairness (interpersonal fairness and informational fairness), respectively points to legitimate equality or distributive fairness in different contexts.

2 Studies on the Sense of Fairness

2.1 Dimensions of the Sense of Fairness

The sense of fairness refers to people's feelings on fairness levels. Here, fairness is based on legitimate equality and distributive fairness. So far there are basically four different viewpoints regarding what is contained in the sense of fairness (Li et al. 2003): first is the two-factor theory, which divides the sense of fairness into "sense of distributive fairness" and "sense of procedural fairness"; second is the single-factor theory, which affirms that the aforementioned two senses of fairness are so closely related that there is no real evidence to truly distinguish one from the other; third is the three-factor theory, which sustains that the sense of fairness is composed of a "sense of distributive fairness", a "sense of procedural fairness" and a "sense of interactional fairness" (stressing social communication as an important characteristic of the sense of fairness and laying an emphasis on the factor of social mental state); and fourth is the four-factor theory, which states that the sense of fairness consists of a "sense of distributive fairness", a "sense of procedural fairness", a "sense of interpersonal fairness" and a "sense of informational fairness" (reflecting the importance of information communication in the formation of the sense of fairness). Both domestic and foreign researchers have basically reached a consensus on the basis of the above three-factor and four-factor theories and believe that the sense of fairness mainly stems from social activities characterized by distributive fairness, procedural fairness and interactional fairness (interpersonal fairness and informational fairness).

1. **Sense of distributive (outcome) fairness**

In the earlier studies on the sense of fairness, people focused on distributive fairness, namely the feeling of fairness with regard to the outcome of resource distribution.

Studies on (the sense of) fairness before 1975 mainly focused on this issue. Based on these earlier studies, American psychologist Adams put forward his own theory of fairness based on the exchange, dissonance and social comparison theories. He discussed the issue of fairness mainly from the perspective of the feelings of social individuals and their evaluations of distributive reasonability (Wang 2005a, b).

This theory mainly incorporates the following content: (1) people compare the efforts they make at work with their remuneration (output) and see a relative value. They do not only compare their own output/input ratio with that of other people, but also with their own previous output/input ratio. (2) If one's output/input ratio is lower than that of the comparison object one refers to, one feels it is unfair; this is also true if the ratio is higher than that of the comparison object. The former situation causes anger while the latter causes guilt. (3) The stronger sense of unfairness people have, the more dissatisfied they will be. (4) The more dissatisfied people are, the greater the possibility that they take actions or change their cognitions to restore equilibrium is, because people seek to restore fairness. In terms of behavior, people might change or adjust their output or input according to the comparison objects, or give up comparison; in terms of cognition, people might reevaluate input or output or select a new comparison object (Liu 2000).

2. Sense of procedural (process) fairness

Social psychologists Thibaut and Walker put forward another view: that induced by procedural fairness. Procedural fairness places greater emphasis on the feeling of fairness with regards to procedures and processes of resource distribution. They argue that the cognition of the fairness of a decision not only originates from the outcome of distribution, but that the process to reach this outcome is also very important. When people are faced with an unsatisfactory outcome, they can accept it if they believed the process has been fair. Based on Thibaut and Walker's study, Leventhal et al. applied procedural fairness to organizational situations and subsequently raised the theory of procedural fairness. They identify six criteria for procedural fairness: consistency, freedom from biases, accuracy, openness to revision, representativeness, and moral and ethical soundness. After much study it has been discovered that high procedural fairness can offset the influence of bad outcomes (Li et al. 2003).

3. Sense of interactional fairness

As the studies on procedural fairness proceeded to deeper explorations, scholars began to notice the treatment towards the employees in their interpersonal relationships during procedure implementation, and also paid attention to its influence on the mind and behavior of employees. Bies and Moag have begun to notice the influence of interpersonal interaction on the sense of fairness during the feedback and implementation of distributive outcome, and subsequently raised the concept of interactional fairness.

Their studies support the idea that interactional fairness also affects one's sense of outcome fairness. In later research, Greenberg divided interactional fairness in two aspects: one is "interpersonal fairness", which reflects whether the two sides interacting are polite during the implementation of procedure or the decision of outcomes,

and especially whether authorities or one's superior is giving consideration to the dignity of subordinates and respecting them; the other is "informational fairness", which mainly refers to whether due information has been given to the concerned party (parties), such as why a specific procedure or mode should be applied to the distribution of outcomes. Some other researchers believe that interpersonal fairness and informational fairness are the same as distributive fairness and procedural fairness, and that they consist in two independent dimensions (Li et al. 2003).

From the above three aspects we can precisely and systematically describe the basic dimensionalities of the sense of fairness and thus change the social reality and the mind of individuals, so as to better satisfy people's demands for fairness.

2.2 Formation Mechanism of the Sense of Fairness

There are mainly two kinds of theories about the mental formation mechanism of the sense of fairness: process theories and content theories. Process theories focus on the formation of the sense of fairness while content theories focus on its significance to people, namely explaining why people need fairness (Cropanzano et al. 2001).

1. **Process theories**

(1) **Social comparison**

Adams' classic theory of fairness was the first to explore the mental process leading to judgments on fairness, which pointed out that people's judgments on fairness stem in social comparison, namely the comparison between one's own output/input ratio with that of a referent (other people or one's own former self). If the specific value is equal, a sense of fairness is induced; otherwise a sense of unfairness arises. When people judge a situation unfair, they take various actions to induce change, such as reducing their own input, reducing the gains of the referent or changing the referent, so as to rebalance the outcome of the comparison. The greatest contribution of Adams' theory of fairness is that it has objectively described the subjective mental process of judgments on fairness; nonetheless it has also been much criticized.

(2) **Referent cognition**

In his referent cognition theory Folger (1989) pointed out that when an individual believes that there are multiple procedures to choose from, and that among them the procedure which is supposed to be chosen and incidentally would also produce better outcomes is not applied, he/she will feel the situation is unfair. In other words, the individual compares realistic distributive outcomes with possibly better distributive outcomes and blames the organization for not applying the distributive procedure that would have been favorable to him/her. Here, the term "referent" refers to the distributive procedure or the scheme realized by the individual, which may produce more favorable outcomes. Folger summarized three conditions that may maximize

resentment: high reference outcome, low possibility for improvement, and low persuasiveness.

In later studies, Folger (1998) revised his referent cognition theory and argue that people have to make three different judgments to determine whether a specific situation is fair. First, there must be unfavorable cases, for example that of another state-owned enterprise performing better and offering better treatment than the enterprise in which the individual is employed. Second, the individual must make a judgment regarding who should be responsible for the institution of fairness. If the responsible individual or entity could have taken different actions, but failed to implement them due to the limitations of objective circumstances, the individual faced with the unfavorable situation may not consider the situation unfair. Third, the individual needs to judge whether unfavorable behaviors have breached ethical principles.

(3) **Heuristic judgment**

Lind (2001) keenly noticed the shortcomings of previous studies, which stressed fairness factors yet relatively ignored the connection between these factors, and thus put forward the fairness heuristic theory aimed at connecting these various fairness factors. This theory affirms that people's judgments of fairness in daily life and work are not always rational and scientific; on the contrary, they are realistic, reasonable and heuristic. Heuristic judgments may not always be correct, but they can alleviate cognitive pressure and thus are more conform to people's real life. Therefore, when people need to make an overall judgment of fairness in regard to a complicated situation, they may be affected by preconceived feelings of fairness and use their own experience in feeling of fairness to heuristically help others have judgments on the sense of fairness, thus reducing cognitive complexity and increasing judgment efficiency (Long 2004).

It is not difficult to see that process theories have one thing in common: they are all inclined to explain the formation process of the sense of fairness from a cognitive angle, and stress especially the effect of various kinds of information (information gained, information input and information of distributive procedure). The behaviors of people in regard to fairness cannot be totally explained by process theories because these are unable to explain why people focus on fairness. This concerns the issue of power for related behaviors, and content theories have explained this issue.

2. **Content theories**

(1) **Instrumental model**

It is the basic viewpoint of the instrumental model that people focus on fairness not for immediate and short-term interests, but for long-term and enduring interests through control. Distributive outcomes stem from distributive procedures; therefore the best strategy to enduringly access favorable distributive outcomes is to ensure the fairness of the distributive procedure. The instrumental model thus affirms that people focus on fairness out of interest. What people truly focus on is procedural

fairness in view of long-term interests, for which they may even sacrifice individual temporary interests (Li et al. 2002).

(2) **Relational model**

Lind and Tyler proposed the relational model, affirming that people are social and that their social attributes determine their needs in terms of belonging and identity. Whether an individual is treated fairly in a group is an important factor for belonging and identity, and what's particularly important is how authority figures and other group members treat the individual, reflecting his status within the group and thus affecting his sense of belonging and identity with regards to the group. In an organization, the relationship between group and individual is implied either by the bias between distributive outcomes and procedure, or by the superior's respect and politeness towards the individual. In a word, the relational model affirms that people focus on fairness for the purpose of verifying their relationship and their status in regard to the group, so as to finally get a grasp of their own identity (Li et al. 2002).

(3) **Moral value model**

Researchers tend to conduct studies on the sense of organizational fairness via the instrumental model and relational model. The former stresses economic relations while the latter stresses social relations. However, they also have something in common: although focusing on different outcomes, they are both driven by personal gains. Folger (1998) put forward the moral value model to supplement the earlier two theories. Folger believed that people focus on fairness because most of them have basic respect for human dignity and values. Therefore, even if fairness can't bring obvious economic benefits to individuals, or if the objects involved by fairness are total strangers, we still focus on fairness issues. Under such circumstances, fairness is a kind of moral virtue that requires people to treat and interact with one another properly.

(4) **Multi-need model**

Cropanzano et al. (2001) believed that fairness stems out of some important human mental need. The difference between the models above is that each particularly stresses one of several kinds of needs. Fairness is closely related to long-term economic interests (instrumental model), to the status and respect individuals get from others (relational model), and to moral life (moral value model). Although people may argue on the relative importance of these needs, scholars generally believe that fairness is driven by multiple powers.

Therefore, in an attempt to integrate the previous three models, Cropanzano et al. proposed the multi-need model of organizational fairness. They believed that humans have at least four correlative mental needs: control, belonging, self-esteem and meaningfulness (as in life). These four needs are separately correspond to the above three theories of fairness: control corresponds to the instrumental model, belonging corresponds to the relational model, self-esteem corresponds to the relational model and meaningfulness corresponds to the moral value model. Unfairness may cause defensive cognition, negative influence and coping behaviors.

Since these four needs somewhat overlap, the influence of fairness can be direct as well as indirect. For example, fairness can guarantee long-term economic interests or influence self-esteem, which is direct influence; on the other hand, economic success can also improve self-esteem, which is an example of indirect influence. In other words, any need may be affected when other needs are threatened, and an unfair event may cause a ripple reaction, from one kind of need to another, which may result in bad outcomes (Li et al. 2002).

2.3   Influence Factors of Sense of Fairness

Out of the need for management practice, researchers in the field of organizational fairness have carried out relatively systematic studies on relevant factors of influence, which include the mentoring relationship, the organizational structure and the leadership model.

1. **Mentoring relationship**

Scandura studied the relationship between mentoring and organizational fairness. The results showed that employees mentored feel higher procedural fairness than those who weren't; and for those mentored, mentoring also obviously related to their sense of distributive fairness and procedural fairness.

2. **Organizational structure**

Schminke studied the relationship between organizational structure (centralization, normalization and scale) and organizational fairness. He found out that centralization had a negative effect on perceived procedural fairness and that the organizational scale also had a negative effect on perceived interactional fairness.

3. **Leadership model**

Further research has uncovered that organizational fairness perceived by employees forms through daily work experience. Such experience is rooted in concrete management behaviors of higher authorities serving as organizational management "agents". Therefore the leadership model of higher authorities becomes an important factor affecting organizational fairness perceived by subordinates. Studies by Vecchio and Scandura showed that perceived organizational fairness can effectively be predicted via leader-member exchanges (LMX). Pillai's research showed that transformational leadership and transactional leadership affect variables such as trust and satisfaction by way of intermediary agents of distributive fairness and procedural fairness.

Specifically, transformational leadership influences perceived procedural fairness, whereas transactional leadership influences perceived distributive fairness. De Cremer's research shows that, when higher authorities manifest consistent leader behavior, employees perceive high procedural fairness and interactional fairness; otherwise, employees would perceive low procedural fairness and interactional fairness.

Ehrhart explored the relationship between leadership model and team-level organizational citizenship behavior. His study shows that leadership models influence team-level organizational citizenship behavior by way of the intermediate function of procedural fairness (Zhou 2009).

4. **Basic belief**

Basic beliefs can affect people's fundamental judgments of things, including perceived fairness. Specifically, the term "basic beliefs" might refer to: implicit theory, conception of fairness, idea of fate, social dominance orientation and just motivation.

(1) **Implicit theory**

The term "implicit theory" refers to pure and implicit individual beliefs to explain and evaluate the daily social world. There are mainly two implicit theories about morality: one is the entity theory, which affirms that human characteristics are unchangeable; the other is the incremental theory, which affirms that human characteristics are changeable and related to the tendency to comprehend the social behavior of others according to situations, dynamic mental processes and emotional processes (Hong et al. 2004). In other words, people arguing in favor of the entity theory believe that their status and identity are unchangeable and that the treatment they receive is deserved, and therefore they may perceive weaker social fairness; on the other hand, it is just the opposite for those arguing in favor of the incremental theory.

(2) **Status-justifying belief**

Some researchers point out that individual beliefs regarding the reason behind the existence of status differences also affect the thinking of that if others' outcomes are worthy or unworthy. Some beliefs encourage the cognition that people should obtain the outcome they are supposed to obtain, such as the belief in a just world, the belief that status is based on quality, that status is penetrable and that success is based on hard work. Though these are different beliefs, each is positioned on individual causal relationships and requires people to be responsible for their outcomes. These beliefs form a world outlook where the unequal status relationship between individuals and the group in a society is regarded as just, fair, deserved and established on the basis of individual merits and achievements. Therefore, these beliefs are known as status-justifying beliefs.

When discussing the relationship between status-justifying belief and discrimination attribution, some researchers affirm its association to perceived fairness. For example, in comparison with professional women who don't quite acknowledge a belief in a just world, those who do are reported to be less dissatisfied with their occupational environment. The acknowledgement of SJBs by dominant group members is related to their relative superiority complex and deserved sense of entitlement. When these individuals are neglected because of low-status group members, they may feel this is against fairness and thus is unjust (Nelson 2009).

(3) **Ideas of fate**

China's cultural traditions lay emphasis on the control of deities and fate on man, deeply affecting Chinese people's opinion of people and things, and forming world and life outlooks peculiar to Chinese people. Some researchers (Chiu 2007) divide the idea of fate into three: dialectical fate, negotiable fate and conquerable fate. They discuss the characteristics and influence of Chinese people's idea of fate from the angle of the difference between Chinese and western cultures.

(4) **Social dominance orientation (SDO)**

Sidanius and Pratto defined social dominance orientation (SDO) as a general individual difference orientation that expresses the values of unequal relationships and class structure relationships in various social groups. It comprises at least three main influential factors: social experience, situational possibility and personality. Although some researchers described SDO as personality characteristics or personality, Duckitt argue that SDO is better defined as a kind of attitude towards thoughts expressing concrete group-based motivations and goals. Duckitt's cognition-motivation dual-process model put forward that SDO reflects group-based dominant and advantageous motivations and goals, which are gradually highlighted by the graphical cognition of social world like the competitive position; in turn, it is the combination (and possible interactional outcomes) of the characteristics of situational social structures (resource shortage and zero-sum competitive intergroup relationships) and stable differences in individual's personality (carelessness or low consistency).

SDO is part of the social dominance theory, which tries to explain how group-based inequalities are produced and how class-organized societies continue. This theory assumes that most forms of inequality (such as sexism and racism) within groups are in fact an expression of basic personality tendencies, namely SDO. It reflects individual degree of expectation in terms of in-group superiority and domination over out-groups. People with high SDO hope that the in-group can further dominate or be superior to out-groups; while on the contrary, those with low SDO hope the relationship between groups remains equal. SDO can also affect individual acceptance of different thoughts; individuals with high SDO prefer ideas that increase the differences between classes (Li and Guo 2008).

(5) **Mental expectation**

According to Folger's (1989) referent cognition theory, when an individual believes that there are multiple procedures to choose from, yet the one that would induce better outcomes and is supposed to be chosen is not applied, he/she will feel the situation unfair. This also indicates that people's mental expectations are somewhat related to their sense of fairness; high mental expectations are more likely to bring individuals to perceive greater unfairness when frustrated.

(6) **Social comparison**

The theory of fairness stresses that social comparisons are the foundation of fairness. Adams pointed out that people judge fairness through social comparisons. People compare their own output/input ratio with that of a referent (other people or their

own previous situation). If the specific value is equal, a sense of fairness is induced; otherwise unfairness is perceived. When people feel a situation unfair, they take various actions to change the unfair state, such as reducing their own input, reducing the gains of the referent, and changing referents, so as to rebalance comparative outcomes.

(7) **Attribution tendency**

Attribution refers to people's cognition and judgment of the causes for behaviors (others' and their own) and events. The pioneer of the attribution theory, F. Heider, divided the causes for people's behaviors into personal internal causes and external causes (or environmental causes) according to the sources of their behaviors. Internal causes include ability, effort, personality, quality, motivation, mood, attitude and mental state, etc.; external causes include task difficulty, fortune, and influence of others, etc.

People usually explain other people's behaviors according to the above two kinds of causes (Liu 1991). Cohen believes that attribution is an implicit assumption of fair judgment, which can affect fairness cognition and judgment. Whether employees attribute their problematic behavior to internal or to external causes determine their judgment of the fairness of the organizational disciplines. If punished employees attributed their mistakes to their own selves, they would perceive the organizational disciplines as fair; whereas if they attributed their mistakes to external causes, even a small mistake would be considered quite unfair under strict disciplines. The influence of attribution on perceived fairness depends on the attribution of responsibility. Cole Nina discussed the relationship between managers and employees under different organizational disciplines, and her study indicated that whether the employee attributes his own behaviors to internal or external causes has an obvious influence on perceived distributive fairness, procedural fairness, and interpersonal and informational fairness (Jiang 2009).

(8) **Social identification**

An important field in which the social identification theory is applied is collective behavior. This is especially true with regards to study of intergroup conflicts. An important contribution of this theory is that it revealed the effect of the social identification process on dissatisfaction caused by relative deprivation, making social identification an important intermediary variable. Smith et al. discovered that the collective sense of deprivation of group members grows even sharper when these members obviously identify with the group (Zhang and Zuo 2006). In the study of young urban-stranded migrant workers, Zhou (2004) also discovered that identity crisis, including systematic identification, interpersonal identification and lifestyle identification, can cause social consequences that may include relative deprivation, a passer-by mentality and vagrant trend.

(9) **Perceived discrimination**

Perceived discrimination refers to people's perception of the discrimination from which they suffer. To be specific, it refers to the level or frequency of discriminative

events people think they (or group members) suffer. Some researchers discovered that people who suffer from discrimination for long time are also likely to be sensitive to the signals in their environment that they may become the object of prejudice, discrimination or negative stereotyping; some other researchers discovered that the self-esteem and mood of group members in unfavorable situations decrease as their belief that they (or their groups) are the target of discrimination increases, thus affecting their psychological well-being (Nelson 2009).

2.4 Impact of Fairness

In terms of the impact of organizational fairness, studies have shown that organizational fairness is a very important explanatory variable effectively affecting the mind and behavior of employees (Li et al. 2003). Specifically, distributive fairness has more influence in situations with individuals as referents, for example salary satisfaction, performance evaluation, and behaviors like slacking in work and absenteeism; procedural fairness mainly affects situations related to organization, such as organizational citizenship behavior and organizational commitment; interactional fairness (interpersonal fairness and informational fairness) mainly predicts situations relevant to higher authorities, such as the relationship of subordinates with higher authorities as well as their trust and evaluation of higher authorities (Zhou et al. 2005).

Specifically, the minds and behaviors of employees, often studied in literature as particular affects, mainly include the following kinds (Li et al. 2003):

1. **Outcome satisfaction**. It mainly includes satisfaction with salary, improvements and performance evaluations. It is generally believed that distributive fairness has the strongest relationship with outcome satisfaction.
2. **Job satisfaction**. It refers to employees' overall satisfaction with their jobs. Some people think that its relationship between procedural fairness is stronger than that between distributive fairness and interactional fairness.
3. **Organizational commitment**. It mainly refers to affective commitment, namely the extent to which an employee identifies with his own organization and regards its organizational goal as his own. Both distributive fairness and procedural fairness can be powerful predictors.
4. **Trust**. Trust in decision-makers and in authorities has recently become a hot topic in organizational research. Researchers believe that the reason why trust is so important is that these people have considerable rights in salary and resource distribution. In initial research, trust was only aimed at authorities or third parties; later, researchers realized that trust involves any person that has a relationship of interdependence with specific individuals. Some research work unveiled that trust in authorities and decision-makers is closely related to procedural fairness.

5. **Evaluation of authority**. For example: the acceptance of higher authorities or managers. It is generally believed that it is more closely related to procedural fairness.
6. **Organizational citizenship behavior** (OCB for short). OCB refers to spontaneous behaviors with no clear return but that can help to improve organizational functions. OCB can be divided into OCB aimed at organizations and OCB aimed at individuals. Organ (1990) believed that OCB is to a great extent driven by fairness. Many studies have argue that OCB's relationship between procedural fairness is closer than that between distributive fairness.
7. **Withdrawal**. Behaviors and behavioral intentions such as absenteeism, suspension and negligence all belong to the category of work withdrawal. So far relevant studies are not quite consistent. Some affirm that distributive fairness has greater influence here, while others affirm that procedural fairness has the greater influence.
8. **Negative reactions**. This refers to thievery and other organizational retaliatory behaviors (ORB) on the part of employees. Relevant studies unveiled that ORB is almost equally related to distributive, procedural and interactional fairness.
9. **Performance**. The relationship between procedural fairness and performance may be the most argued issue.

2.5 Research Progress Related to the Sense of Fairness

In general, studies on fairness in China introduce foreign research achievements and apply foreign theories to analyze and solve practical problems; meanwhile there are little theoretical discussions. A major characteristic of Chinese studies on fairness is that they focus on the differences between Chinese and western cultures, and discuss Chinese people's view on fairness from a native Chinese point of view.

1. **Comparison of Chinese and western views on fairness**

Zhang (2006) pointed out that, the most essential difference between Chinese people's views on fairness and those of westerners is that the former are the criteria regulation of interpersonal relationships in place of a rational rule merely guiding profit distribution. First, Chinese people's sense of distributive fairness is linked with a specific relational background, which is manifest in the assertion of whether it (distributive fairness) has met other people's expectations for its role. Factors such as human feeling, relationship and face have a certain effect. Here, distributive fairness works in differential patterns and employs different standards for different objects in different social relationships. Second, Chinese people's sense of distributive fairness is restrained by general social regulations, and distributors should not only consider individual contributions but should also guarantee mental balance and harmonious relationships for each stakeholder. On the contrary, western society stresses personal rights and acknowledges personal interests; its fundamental social regulation is to guarantee that everyone's deserved interests are satisfied.

2. Factors that affect Chinese people's sense of distributive fairness

Researchers have discovered that factors affecting Chinese people's sense of distributive fairness include personal character, group cohesion, group generalization and nature of social interaction.

In terms of personal character, Chinese people prefer "suffering losses rather than profiting at other people's expense", but such preference is more obvious when individual modernity is relatively low. This is quite different from the ego-center bias in western studies (Zhu and Yang 1976). Beside, examinees of collectivism orientation prefer the equal distribution plan (Liu 1993).

In terms of group cohesion, Yang and Xu (1986) discovered in their studies that examinees' sense of unfairness regarding the distributive outcomes of their peers was obviously related to team spirit while not related to the examinees' actual contributions to the team. Experimental research by Pillutla and Farh indicated that group cohesion and personal character jointly affect perceived distributive fairness. The higher the group cohesion, the more people tend to equal distribution, but such influence is obvious only in low-traditional groups; high-traditional examinees tend to equal distribution regardless of group cohesion.

In terms of group generalization, Leung and Bond (1984) discovered through their studies that Chinese examinees prefer the law of average with friends, to the law of equality, whereas the situation is opposite for American examinees. Li (1993) also discovered that, Taiwan undergraduates showed obvious person-to-person differences in terms of fairness judgments. When facing the same negative behavior, examinees' evaluations would be much lower if the behavior in question was that of a relative. Zhang and Yang (1998) also discovered through their studies that Chinese people's judgments of fairness show differential characteristics depending on their closeness to the person concerned.

In terms of social interactions, research by Zhang (2000, 2001) indicated that individual behaviors and attitudes have a certain control over the distributor's decision when individual and distributor get along. Indeed Chinese people are quite sensitive to clues and information in interpersonal communication during distribution. The questionnaires and experimental studies of Leung et al. also raised similar results: interactional fairness can reduce Chinese people's ego-center bias in distribution.

3. Theoretical discussion on the sense of fairness

Chinese researchers have also discussed theoretical issues related to the sense of fairness. For example, only when input is combined with opportunity can there be outcomes. Opportunity should be incorporated as an important variable into the formula of fairness (Mi 1988). Different people may experiment differences in terms of situation, speed and strength when it comes to perceived fairness or unfairness, but the reaction processes are similar. Everybody experiences the following five stages: situational factor, fairness perception, attribution analysis, personalization and behavior tendency (Wu (1991). When two people are given unequal conditions, equal or widely different distributions potentially produce a sense of unfairness; only

a properly different distribution potentially produces a sense of fairness (Yu 1991; Qian and Tong 1994). The sense of fairness is not necessarily produced through personal experiences, as there also exist alternatives (sense of fairness produced by other people's sufferings). Such sense of fairness is related to interpersonal distance and is characterized by differential patterns (He 2007). Distributive fairness identified by Chinese people is in accordance with the performance principle, ability principle and reciprocity principle (Chen et al. 2007). The sense of organizational fairness of Chinese employees is a four-factor structure that consists of distributive fairness, procedural fairness, leadership fairness and informational fairness (Liu and Long 2003).

In summary, theories and empirical studies related to the sense of fairness have become relatively mature in the west and their content includes the dimensionalities, formation and influence factors of the sense of fairness. Western studies on the sense of fairness can be used as references; nevertheless it has also been discovered that these studies lay particular emphasis on the sense of organizational fairness and focus on distributive fairness in the corporate and judicial fields. Most Chinese studies on the sense of fairness also refer to western research models. Some researchers have discussed Chinese people's view on fairness from a native perspective, and focused on the cultural differences between China and the West. Both Chinese and western studies on the sense of fairness have gradually begun to emphasize the differences in individuals and the influence of cultures.

3 Discussion on Measuring the Sense of Fairness

3.1 Measurement Methods

1. **Questionnaires**

In many studies, the questionnaire method is employed to measure the sense of fairness. Researchers formulate their own questionnaires on the topic of fairness according to their comprehension of the authoritative scholars' theories. Their purpose is to study the examinees' feelings for the different dimensionalities of fairness. Measurement can be direct or indirect. Direct measurement is the measurement of the overall sense of fairness by one or two items. Indirect measurement implies that fairness can be expressed in different aspects, and thus information on fairness is obtained by measuring various fairness standards.

2. **Experiments**

Other than the questionnaire method, some researchers also employ the experimental method in their studies on the sense of fairness. Commonly used experiments include the "game experiment" and the "leaky bucket experiment".

(1) **Game experiment**

In experimental economics, game theory is usually employed to discuss fairness. Economists believe that fairness is more like a strategy people employ in social communication to comprehensively consider their own and others' interests. In this case, the principle of equality is rooted in focused investigation of typical game forms (Yu and Zhu 2010). This method was later introduced into fairness-related psychological studies. Commonly used forms are the ultimatum game, the dictator game, the public goods game and the gift exchange game (Wei 2006; Ruan and Huang 2005).

(2) **Leaky bucket experiment**

American economist Arthur Okun put forward the famous leaky bucket theory on the basis of tax transfer during which process taxes paid by the rich and transferred to the poor are subject to partial vanishing, without any trace of the missing money (Yan 2008). Amiel measured individual attitudes towards fairness preference using survey data of the leaky bucket experiment, and discovered that welfare functions based on the Gini coefficient provide more suitable forms than those based on changeless, absolute or relative fairness preference (Huang and Xu 2009).

(3) **Case analysis method**

Case analysis method discusses the cognition of specified objects and their feelings of fairness mainly via interview, observation and the collection of literature. In studies on the sense of fairness, the case analysis method is usually used to verify existing theoretical models, or prepare for discussions on new measurement dimensionalities.

3.2 Main Dimensionalities and Indexes for the Measurement of the Sense of Fairness

Main dimensionalities and indexes for the measurement of the sense of fairness are all formulated according to people's cognition of fairness, and mainly include their sense of distributive fairness, procedural fairness and interactional fairness.

1. **Sense of distributive fairness**

The sense of distributive fairness is mainly measured according to Adams' theory. Some comparisons are done within an organization, while others are done both within and between organizations.

2. **Sense of procedural fairness**

The sense of procedural fairness can generally be measured in three ways. The first emphasizes the effect of participation according to Thibaut and Walker's theories. It considers the existence of participation, the degree of participation and its influence on decision-making as the indexes for the measurement of the sense of procedural

fairness. The second way directly inquires the organization's performance in six aspects through the questionnaires according to the theory of Leventhal et al. The third way combines the above two ways. The questionnaire of sense of procedural fairness combines Thibaut and Walker's emphasis on participation and appeal in their early studies with Leventhal's emphasis on procedures. Colquitt employed this eclectic method (Li et al. 2003).

3. **Sense of interactional fairness**

The sense of interactional fairness includes both interpersonal fairness and informational fairness. Measurement of the former is mainly done according to the theories of Bies and Moag, where in the latter case it is mainly formulated according to Greenberg's conceptions.

Since studies on fairness and the sense of fairness involve the essential questions of human social life, and considering the long history of relevant studies with numerous theoretical schools and achievements involving social changes and cultural exchanges, there are still many questions worth discussing. These are also important reasons why the psychology of fairness was born. In particular, study of the sense of fairness not only involves many socio-psychological factors, but is also related to many factors in fields such as cultural psychology, economic psychology, cognitive psychology, organizational psychology and communicational psychology. Studying fairness from the angle of social mentality makes the sense of fairness not only an antecedent variable but also an outcome variable, or even an intermediate or moderator variable. Thus the sense of fairness not only serves as the internal readiness but also an important part of values; it not only describes current situations but also explains the reasons for correlated phenomena. Therefore, this field is an indispensable subject for study of studies of social mentality.

References

Chinese-Language Sources

Chen, X. J., Ma, H., & Shi, K. (2007). Impacts of performance, capability and position on viewpoints on organizational assignment equality. *Acta Psychologica Sinica, 39*(5), 901–908.

He, Z. (2007). Conception and demonstration of empathy equity. *Master's Thesis of Sichuan University*.

Huang, J. B., & Xu, J. N. (2009). Review of measurement and influencing factors of equity preference. *Seeker, 7,* 17–18.

Jiang, J. (2009). Effects of attributional style on organizational justice and attributional bias in justice judgment. *Master's Thesis of East China Normal University*.

Li, M. Z. (1993). The Chinese relationship limit between themselves and others based on the research results of justice judgment. *Indigenous Psychological Research in Chinese Societies, l,* 267–300.

Li, Q., & Guo, Y. Y. (2008). A review of studies of social dominance orientation. *Advances in Psychological Science, 16*(4), 644–650.

Li, Y., Long, L. R., & Liu, Y. (2002). Research progress on the formation mechanism of organizational. *Chinese Journal of Ergonomics, 8*(1), 38–41.

Liu, S. K. (1991). The history, current status and development trend of attribution theory. *Sociological Studies, 5,* 71–75.

Liu, L. (1993). Studies of individual-collective orientation and standard remuneration distribution relationship in cooperation behaviors. In Z. Zhang (Ed.), *A new exploration on student's moral development*. Beijing: Beijing Normal University Publishing House.

Liu, Z. Y. (2000). Fairness, fairness perception and fairness mechanism. *Society, 7,* 26–27.

Liu, Y., & Long, L. R., et al. (2003). Effects of organizational justice on organizational outcome variables. *Management World, 3,* 126–132.

Long, L. R. (2004). Review and comment on heuristic fairness theory. *Advances in Psychological Science*, *12*(2), 447–454.

Mi, X. X. (1988). Competition mechanism and fairness view. *Guang Ming Daily*.

Qian, S. M., & Tong, Y. S. (1994). *Fair distribution: Theory and strategy*. Shanghai: Shanghai Academy of Social Sciences Press.

Rawls, J. (1988). *A theory of justice*. Beijing: China Social Sciences Press.

Ruan, Q. S., & Huang, X. H. (2005). An overview of studies on western fairness preference theory. *Foreign Economics and Management, 27*(6), 10–16.

Wang, Y. B. (2005a). Organizational identification of state-owned enterprise employees during transformation period: A survey on the characteristics and reasons of organizational identification of current state-owned enterprise employees. *Tian Fu New Idea (Bimonthly), 2,* 77–84.

Wang, Y. B. (2005b). On operability definition of fairness concept. *Journal of Southwest University for Nationalities (Humanities and Social Sciences), 26*(10), 192–196.

Wei, G. X. (2006). A survey of game experiments and theoretical models on fairness preference. *The Journal of Quantitative and Technical Economics, 8,* 152–161.

Wu, L. L. (1991). New theoretic studies on fairness theory. *Behavioral Sciences, 3,* 15–18.

Yan, C. J. (2008). Complementation of difference: Combination of efficiency and fairness. *The Journal of Jiangsu Administration Institute*, *42*(6), 47–52.

Yang, C., & Xu, Z. C. (1986). Average pay and sense of unfairness. *Chinese Journal of Psychology, 28*(2), 61–71.

Yu, W. Z. (1991). Equity difference threshold and distributive justice. *Behavioral Sciences, 1,* 8–13.

Yu, J., & Zhu, L. Q. (2010). The development of children's fair behavior: Evidence from experimental game. *Advances in Psychological Science, 18*(7), 1182–1188.

Zhang, Z. X. (2006). Distribution justice of Chinese people. *Chinese Social Psychological Review, 3,* 157–190.

Zhang, Z. X., & Yang, C. F. (1998). Beyond distributive justice: The reasonableness norm in Chinese reward allocation. *Asian Journal of Social Psychology, 1*, 253–269.

Zhang, Y. R., & Zuo, B. (2006). Social identity theory and its development. *Advances in Psychological Science*, *14*(3), 475–480.

Zhou, M. B. (2004). Acculturation and identity of young migrant workers staying in cities. *Society, 5,* 4–11.

Zhou, H. (2009). The study on the mechanism of employee's perception of distributive justice. *Doctoral dissertation of Huazhong University of Science and Technology*.

Zhou, H., Long, L. R., & Wang, Y. (2005). Different outcome of distributive justice, procedural justice and interactional justice. *Acta Psychologica Sinica, 37*(5), 687–693.

Zhu, Z. R., & Yang, G. S. (1976). Influences of individual modernity and relative workload on reward distribution behaviors. *Archives of Ethnology Institute of Central Institute (Taiwan), 41,* 79–95.

English-Language Sources

Chiu, C. Y. (2007). How can Asian social psychology succeed globally? *Asian Journal of Social Psychology, 10*(1), 41–44.

Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior, 58*(2), 164–209.

Folger, R. (1998). Fairness as amoral virtue. In M. Schminke (Ed.), *Managerial ethics: Moral management of people and processes* (pp. 13–95). Mahwah, NJ: Erlbaum.

Folger, R. & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal, 32*, 115–130.

Hong, Y. Y., Coleman, J. et al. (2004). Predicting intergroup bias: The interactive effects of implicit theory and social identity. *Personality and Social Psychology Bulletin*, *30*(8), 1035–1047.

Leung, K., & Bond, M. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology*, *47*(4), 793–804.

Li, Y., Long, L., Liu, Y. (2003). Research progress on organizational justice. *Progress in Psychological Science, 11*(1), 78–84.

Lind, E. A. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. In: R. Cropanzano & J. Greenberg (Eds.), *Advances in organizational justice* (pp. 56–88).

Nelson, T. D. (2009). *Handbook of prejudice, stereotyping, and discrimination*. NY: Psychology Press.

Organ, D.W. (1990). The motivational basis of organizational citizenship behavior. *Research in Organizational Behavior, 12*(1), 43–72.

Zhang, Z. X. (2000). Sensing contextual cues in reward allocation: The effect of situational factors. *Paper presented at the 15th Annual Conference of the Society of Industrial and Organizational Psychology*, New Orleans, Louisiana, April 14–16.

Zhang, Z. X. (2001). The effect of frequency of social interaction and relationship closeness on reward allocation. *Journal of Psychology, 135*, 154–164.

Conceptualizing and Measuring Social Identity and Social Participation

Bing Wang

1 Significance of Studies on Social Identity and Social Participation

1.1 Significance of Studies on Social Identity

The relationship between individuals and groups/society has always been an important research subject in the fields of sociology and social psychology. The occurrence of social identity research initially promoted studies on this field in term of the concept. Studies on social identity not only help us better understand the deep interactive relations between individuals and groups/society but also provide a basis for the explanation of some social phenomena (such as social perception, attitude, attribution, prejudice, social impact, group cohesiveness, cooperative relationship, collective behavior and social mobility) (Augoustinos et al. 2006).

Social identity concerns the relationship between individuals and groups/society (self-group relationship). In the 1970s, British social psychologist Henri Tajfel initially proposed his classical definition for social identity, i.e. "people's knowledge of their belonging to certain social groups and the importance, in terms of emotions and values, attributed to their group membership" (Tajfel 1978). Generally, social identity is comprised of the processes of social categorization, identification and comparison, and is therefore simply referred to as the CIC process of social identity. Social categorization means that in a given social context, people often classify individuals in social categories based on different conditions (for example, man/woman, young/old, Chinese/foreigner, etc.). In different contexts, people follow different standards for social categorization. There is a social cognition process known as self-categorization, which also corresponds to social categorization: in different social contexts, individuals identify with one or more than one group via

B. Wang (✉)
Beijing, China

a social classification and categorization mechanism, and agree to be governed by its/their rules, behave accordingly, and regard the boundaries of their own group(s) as those separating those on the inside from those on the outside. Self-categorization is generally considered one of the basic conditions for the formation of collective behaviors. Social identification means that, on the basis of the self-categorization process and outcome, individuals believe they share general characteristics with other community members. Social identification is based on the individual acquiring of a sense of self-identity. Social comparison refers to the evaluation made by individuals on the advantages, disadvantages, social status and reputation of a given community in comparison with other ones. People often evaluate and compare the advantages, disadvantages, social statuses and reputations of each community, and strive to incorporate a superior one, thinking they share the good characteristics of the general membership of the superior community.

The significance of studies on social identity is self-evident. In social life, everyone is included in different groups/categories simultaneously and to different extents (even though they attribute different importance, in terms of emotion and value, to their groups) and is related in different ways to these groups/categories and their members. With different social identities, people make different degrees of effort to fulfill their commitments to, remain loyal to, and realize the objectives of their groups. Therefore, it is necessary for us to conduct study of the different types/levels of social identities.

1.2 Significance of Studies on Social Participation

Social participation refers to a process in which social members participate in, intervene with and get involved in the political, economic, social and cultural life of the state and common affairs of communities in any manner and thus affect social development. Some scholars (Zhang and Yao 2009) even further defined it as "a behavioral pattern in which participants realize self-value by way of social labor or social activities in the process of social interaction". According to these scholars, it comprises three core principles: first, social participation happens at the social level; second, social participation relates to others; third, social participation embodies the value of participants.

In a perfectly developed and stable civil society, the active participation of citizens in social affairs is of great significance. First, the social public is subjected to the management of affairs related to it, and so doing it is facilitating the development of the society instead of being taken as a tool or mean. Active and effective social participation can strengthen citizen's public awareness and improve self-consciousness and independent space in social life. Second, social participation helps to mobilize, organize, support and promote citizen action for the solving of their development-related issues. A self-governance mechanism thus forms with communities or other action-places as carrier, enabling members to manage the public affairs of their own communities or of a given scope of activity. Citizens may perform public interest functions

previously performed by governments by patronizing various non-government public welfare organizations, which restricts and supplements governmental mechanisms. For example, social participation plays an active role in education, poverty relief, protection of women and children, environment protection, re-employment of laid-off workers, population control, and many other aspects. Third, social participation gives full play to the role of channels by which citizens gain access to wider areas of macroscopic decision-making. Fourth, social participation also plays an important role in the promotion of the reform of government agencies, the transformation of governmental functions, and the formation of new ethics system adapted to the Chinese socialist market economy.

As China is transforming from a traditional society to a modern society, a modern civil society is also taking shape and growing. In such a context, various forms of social participation are also burgeoning in China. Therefore, it is necessary for us to focus on and research the current status and future developmental trends of social participation.

2 Studies on Social Identity and Social Participation

2.1 Studies on Social Identity

Actually, despite many studies of great significance on social identity, over the years the lack of relevant studies in the fields of sociology and social psychology has made itself felt. This may be related to the hyper-stability of the structure of the traditional Chinese society as well as its absence of social mobility. In some sense, such conditions result in less social identity issues because people are given no choices in terms of the group/category to which they belong, and have no possibility/chance to make any changes.

In recent years, Chinese society has witnessed dramatic changes. Different cultures and subjects proceeded to deep contacts, making modern self-identity issues more protuberant. Chinese society is experiencing this stage in the present. Correspondingly, the Chinese academia is also beginning to pay attention to studies on social identity, evidenced mainly by introductions to and comments on studies conducted by the western academia in regard to social identity and preliminary empirical studies on some classical social identity phenomena (such as national identity, organizational identity and particular group society identity) in the Chinese social life. This section preliminarily sorts out and introduces the main studies on Chinese social identity phenomena and their findings based on the corresponding relevant research data.

1. **Studies on national identity**

National identity refers to a social citizen's knowledge and acceptance of his/her identity as a member of the state. National identity is a complicated psychological

structural system and also an important indicator for national/social cohesion. It is generally considered that national identity changes as time and backgrounds change. National identity is also subject to many other factors of influence.

Many countries and regions all over the world have been actively engaged in the construction of a national identity for their citizens. For example, France has recently officially launched a series of "national identity" discussion activities with the purpose of promoting patriotic education among French citizens; it is hoped that the public's "national identity" will be improved by reviewing the values of "liberty, equality, and fraternity". In Hong Kong, China, the measurement of Hong Kong citizens' national identity levels is still ongoing. For example, as indicated in the investigation results published by the Public Opinion Program Group of the University of Hong Kong on June 17th 2008, the identity of Hongkongers as "Chinese" has been improving and ascended to a new peak since the return of Hong Kong in 1997. The research conducted in 2010 (13 years after Hong Kong returned to the motherland) showed that the sense of national identity of more and more Hong Kong citizens had further improved.

It is generally believed that citizen national identity is more easily formed and stimulated when some major events happen in a country (such as major international sports events, diplomatic incidents, tech events and serious natural disasters). Therefore, these events are also potential important chances (or "chance experiment") for study of national identity.

Hong Kong's return to Chinese rule in 1997 was a golden opportunity for studying social identity and national identity. As colonial rule that had lasted more than a century drew to an end, most Hong Kong teenagers, especially natives, saw themselves as Hong Kong citizens, and not so much as Chinese. Of course, a small number of them were the exception, who thought of themselves as "Chinese citizens" or "Chinese citizens before Hong Kong citizens".

Against that socio-historical background, a group of scholars in Hong Kong (Lam et al. 1998; Lam et al. 2003; Chiu and Kang 2003) conducted studies on the sense of regional and national identities among Hong Kong teenagers. Even though each research had its own specific objects and content, researchers still made some consistent findings therefrom: regardless of their identities as Hong Kong citizens or Chinese citizens, Hong Kong teenagers found pride in the identity they accepted by way of different social comparison strategies. Among them, teenagers accepting the identity of a Hong Kong citizen may have found pride in the comparison of Hong Kong's wealth and modernity with that of mainland China; while those who accepted the identity of a Chinese citizen may have found pride in the comparison of their cultural values with those of foreigners.

These results also indicate that, in order to improve people's acceptance of their community, work should be conducted on two aspects: first, the achievements and excellence of the community should be highlighted so that members feel proud of their membership; second, the objects of social comparison should be shifted so that members think their community is superior to other ones. For example, to improve the identity of Hong Kong teenagers as Chinese citizens, we could on the one hand highlight the outstanding achievements of Chinese people, and on the other hand shift

their objects of comparison to foreigners so that they engage in cultural comparisons with the people of other countries (Chiu et al. 2005).

In China, the 2008 Wenchuan earthquake in Sichuan, the 2008 Beijing Olympic Games, the success of the Shenzhou V manned spacecraft in 2003, and the Yushu earthquake in Qinghai in 2010 all belong to major state events. During these events, the national identity of the Chinese public was stimulated to its greatest extent and in different forms, especially during the Olympic Games held in Beijing in 2008, which was one of the grandest major sports and national events throughout the history of China and hailed as the "Chinese People's Hundred-Year Dream". Starting from the initial bidding and preparation, the Olympic Games were ardently publicized. In 2008, this publicity reached its peak. Potent national mobilization involved all citizens into this great sports event.

Many studies on the Beijing Olympic Games were conducted in this context, including the international "Influence of Olympic Games on the Social Psychology of the Citizens of Host Nations" program, cooperatively conducted by the "Social Psychology Research in Transition Period" Program Team of the Institute of Sociology of the China Academy of Social Science and the Norwegian University of Science and Technology. Indeed this was the most representative and fruitful study of that subject. During this research, surveys were made before and after the Beijing Olympic Games, which covered changes in terms of national identity in Beijing citizens before and after the games. This research dominantly focused on how the national identity of Chinese citizens (especially Beijing locals), residing in the center of it all, was controlled and influenced by the Olympic Games. In this research, the quota sampling method was adopted to pre-survey six communities and post-survey five communities in Beijing respectively covering 962 and 1042 persons, producing 2004 valid samples from permanent Beijing residents aged between 18 and 70 years old. Relying on questionnaire surveys, this research produced some interesting results regarding the national identity of Beijing citizens. Its major findings were:

(1) As a whole, the national identity of Beijing citizens during the Olympic Games was kept high.
(2) National identity may be composed of three dimensions, i.e. patriotism, world citizen consciousness, and citizen self-efficacy, which range from high to low level in respect of importance.
(3) After the Olympic Games, public national identity levels were significantly improved. Moreover, the three dimensions of national identity all reached higher levels than before the Olympic Games. Patriotism, world citizen consciousness, citizen self-efficacy and other aspects of national identity were also greatly improved with the Olympic Games.
(4) Some important contextual factors (including gender, age, education and employment) may also impact national identity. Interestingly, it has been found that women show stronger patriotic emotions than men; the older citizens are, the stronger their patriotic emotions are; the lower the degree of education is, the stronger patriotic emotions are; the emeritus and retired have the strongest patriotic emotions. Women show stronger world citizen consciousness than men; the

older the citizens are, the stronger their world citizen consciousness is; the higher
the degree of education degree, the stronger world citizen consciousness is as
a whole; the emeritus and retired have the strongest world citizen conscious-
ness. Women show equal citizen self-efficacy to men; young citizens below 40
manifests the strongest citizen self-efficacy; education can strengthen citizen
self-efficacy; students manifest the strongest citizen self-efficacy.

In general, the research found that the Olympic Games, as an important event, are
not only a special social context that stimulates the public national identity, but also
an important international competition guiding the public in the generation of a world
citizen consciousness. Meanwhile, this research has also brought us to clearly realize
that public national identity cannot be thoroughly changed (or reinforced) by one
single important sports event. Above all things, public national identity and world
citizen consciousness should be nurtured in daily social, economic and political life,
especially with the support of public participation, in order to improve self-efficacy
and form a sense of ownership.

2. Studies on organizational identity

Membership to an organization is an important status symbol for people. Therefore,
a large portion of studies on social identity focuses on organizational identity. Stud-
ies on organizational identity are mainly concentrated in the field of organizational
behavior. Compared with other fields of research, studies on this aspect are more
characterized by "qualification" in the area of psychology, i.e. researchers usually
conduct some exploratory studies on main dimensions as well as influential factors
and their influences on organizational behaviors related to organizational identity
using particular tools for measurement and large-scale sampling.

Additionally, studies on organizational identity are often intertwined with those
on organizational commitment and psychological contract. In these studies, people
generally regard organizational identity as an independent variable, whereas organi-
zational commitment and psychological contract are viewed as dependent variables,
and assume that the former determine the extent of the latters.

Studies on organizational identity mainly include two aspects: first, discussions
on the classical characteristics of the Chinese organizational identity from the per-
spective of Chinese society's unique form of social organization—the "unit system";
second, empirical studies on the organizational identity of people belonging to partic-
ular types of organizations (such as enterprises) or living through particular historical
stages (such as periods of social transition period).

Generally speaking, the "unit system" form of social organization of Chinese
society, in comparison with other societies, is bound to have shaped Chinese identity
in a distinctively characteristic and organizational manner.

The basic view of social identity theories is that membership and category of
a social group form an important part of an individual's conception of the self.
When one communicates with others, he/she belongs in fact to a group or a unit of
which he/she is representative, rather than simply being an independent individual.
Actually, all individuals share multiple concepts of the self. For every group or

personal relationship to which one is believed to belong, there is a corresponding social identity and personal identity.

Thus it's self-evident that everyone simultaneously meets the qualification for the membership of many communities. However, in the traditional "unit system" environment, Chinese people are, in most cases, more used to establishing their own and others' social identities in reference to a unit or an organization. When one joins a unit, he/she adapts his/her social behavior on the basis of the codes of conducts of this unit; his/her thinking mode and attitude are unconsciously influenced by the culture of this unit. As a bystander, when dealing with other individuals, he/she also sees other individuals with the stereotyped impressions of the unit he/she belongs to. Chinese people have special preferences for "units" because units are responsible for assigning jobs, arranging studies, protecting livelihood, organizing entertainment and activities, taking care of children, keeping files, and even checking birth quotas, making relevant arrangement for one's spouse, etc. More importantly, these units create a sense of belonging and safety, and feel like home for many. Therefore, in this traditional "unit system" environment, the social identity of Chinese people is mostly represented in terms of organizational (unit) identity, for which Chinese people have developed a great reliance.

Studies of Chinese people's organizational identity began recently. Most focus on employees of state-owned enterprises. The one by Wang Jun, Wang Yanbin, Liu Aiyu et al. is quite typical. Using questionnaire surveys conducted in several large and medium-scale state-owned enterprises in Hunan and Hubei, Wang et al. (2003) researched the self-identity and class status of state-owned enterprises workers and found that both in terms of comprehensive status and specific dimensions, these workers tended to identify at levels medium and below, which reflects these workers' generally low opinion of their status and relatively strong sense of deprivation. These findings are also in accord with the decline in the relative interests and the status of state-owned enterprise workers in the transformation period. Liu (2004) conducted an experimental study of internal identity differences in terms of the working class in the context of the institutional reform. In her opinion, most previous explanations of this hierarchical structure only focused on the objectivity of hierarchy, without mentioning any subjective attitude. Upon analyzing the data of the "Corporate Institutional Reform and Workers' Life" questionnaire filled by workers of four state-owned enterprises in Beijing, Shanghai and Shenyang, she found that individual class identity in the context of social transformation presented a multiple-identity pattern: the status and identity that general workers, the technical personnel and managers identified the working class differed from the objective class division. These differences in identity can be explained from the perspectives of status evaluation and expectation, differentiated positions, socialist culture construction, etc. Wang (2005a, b) also conducted an empirical study of the organizational identity of state-owned enterprise workers in the transformation period. On one hand, his research verified some assumptions of the organizational identity theory, and on another hand revealed some unique characteristics of Chinese enterprise workers in in terms of organizational identity, including strong reliance but poor initiative. It would seem that the organizational identity of workers is barely related to organiza-

tional citizenship behaviors; moreover, Wang further analyzed his research results from the perspective of the "unit system".

The aforementioned studies on organizational identity generally targeted specific corporate organizations (esp. state-owned enterprises). Studies on corporate organizational identity all stem from the focus on corporate cohesive force and culture as well as from the relation between organizational identity and performance improvement. Therefore, despite their huge amount, studies on the psychological mechanism of organizational identity still tend to be weak. In addition, the enterprise is just, in reality, one of many organization types, while the enterprise itself can also be classified into many types, which makes it difficult for research conclusions to be universal.

3. **Studies of the social identity of specific groups**

That problems related to social identity exist at all is due to the existence of different social groups/categories in society. This is also the reason for the existence of what has been termed here social classification and self-classification issues. Therefore, in studies of social identity, the study of the social identity of specific groups is of great importance.

The social identity theory emphasizes that people's identity and identity awareness become more prominent in the process of contacting outside groups. In this regard, a change of environment gives people more opportunities to contact outside groups. Therefore, a change of environment brings about a new identity, and this is a psychological process that everyone is susceptible to experience. For many people, the notion of social identity, which they radically fail to perceive or rarely perceive when they are among their own group, is re-evoked after moving to other regions/countries and starting interacting with other groups. Thus, studying social identity from the perspective of the floating population (migrants) is a very good research perspective.

Migration refers to the movement of individuals or groups across geographical borders. This is commonly referred to as the geographical mobility of the population. In general, there are two types of migration: external migration (i.e. migration across national borders), and internal migration (i.e. migration between different regions within a country). In China, the latter is also known as a floating population. Correspondingly, studies on migration mainly involve two aspects: one is the migration between urban and rural areas in developing countries, or internal migration; the second is the international migration movement from underdeveloped or developing countries to globally developed countries such as European countries and the United States, or external migration (Li 2007).

Since the mid-1980s, the Chinese migrant population and floating population, considering their rapid growth, have received more and more attention. In the real world, we can find very rich social mobility phenomena, either in terms of cross-border mobility (such as international migration) or cross-regional mobility (such as rural migrant workers). Although international migrants and rural migrant workers are different in many ways, they have some things in common when it comes to social mobility.

However, despite outbound migration trends in China, especially emigration from some parts of the southeastern coastal areas and the northeast to Europe and other countries, the number of outbound international migrants is still very small in comparison with the large number of rural migrants. Therefore, China pays more attention to the issue of internal rural-urban migration (Li 2007).

In fact, in the process of urbanization and modernization, population movement is an inevitable phenomenon. However, there are many social shielding systems (such as the household registration system, employment policies, social welfare, the social security system, etc.) working against the huge Chinese floating population, causing groups such as the external population and the temporary resident population to suffer from multi-dimensional social exclusion. These people become the "marginal people" outside the mainstream of society, increasingly "drifting", or even becoming "rootless" groups. Thus, in the study of the floating population, social identity and social integration have become major issues urgently needing to be explored.

In China, the size of rural migrant worker groups in cities started to increase in the late 1980s, sharply expanding after 1990 and reaching its climax in the mid-1990s. Such an influx of people to the city has caused new issues to appear both in urban and rural areas, which in turn forces migrant workers to face a change in their own role as well as to adapt to their new urban environment. In the article *Retrospection and Reflection on Studies on Rural Migrant Workers in Cities*, Zhou and Qin (2004) reviewed a large amount of study of the social identity of migrant workers. The study found that migrant workers began to identify with the society. Some, for example, participated in some collective activities organized by the local communities, established regular contacts with local people, and even joined local social organizations, etc. At the same time, their initial identity, in terms of their relation with their roots, or hometown, was also weakened (for example, they lost interest in farm work and began to disapprove rural habits and traditions). However, as rural workers leave the rural communities in which they grew up and with which they are familiar to integrate urban communities, they find it difficult to fully adapt to urban life and be accepted by urbanites, thus they belong to groups "trapped in between". Therefore, migrant workers, in terms of their own social identities, show an "involution" trend. In other words, they are neither identified with urban communities nor with rural communities. They are only identified with their own special social groups, and thus are likely to be reduced to the identity of "vagrant".

One interesting phenomenon is that, in the study of floating populations, most scholars pay more attention to immigrant groups at the bottom of society (such as rural migrant workers, landless farmers, and project migrants) but less to other migrants living above these groups (such as white-collar migrants and highly educated youth). Similarly, although some scholars have shown concern for the social identity of migrants, and have also preliminarily and indirectly explored the structure, status quo and influencing factors of the domestic migrant social identity, the objects of their studies remain principally domestic migrants at the bottom of society. They pay much attention to rural migrant workers in terms of social identity and urban adaptation, as well as to the new generation of rural migrant workers or young

migrant workers, yet few feel concerned about domestic migrants above that middle threshold.

Some scholars have begun to give this issue the necessary attention it deserves, some having even carried out exploratory studies on the social identity of white-collars and highly educated youths in urban floating populations. Their findings are different from those of studies concerning rural migrant workers. He found that, first, in general recently resettled rural migrants have a relatively weak sense of social identification. Second, he ranked the identification references in by strength, which are, in descending order: location, profession, culture, status and group membership. Some of this findings about how these identifications are expressed were quite interesting. There is strong tendency to identify with a particular location (for example, many would name Shanghai as the place where they want their children to end up or where they own property), and the tendency to identify themselves as "non-locals" is strong (the vast majority of rural migrants did not identify as "Shanghai people", whereas nearly half labeled themselves as "outsiders"); overall professional identity generally stood in the middle level (people were most satisfied with, from high to low respectively, "their relationship with colleagues", "their work autonomy", "their relationship with their boss/superior", "company labor conditions and facilities", "distance between the working place and the home address", "help for the future development", "social prestige of the career", and so on; it is most noteworthy that no indicator reached the highest "satisfactory" level). Cultural identity lagged behind (more than half of recently resettled rural migrants did not often invite local people home; they did not really celebrate local festivals nor treat local people in a local way; nor do they learn the local dialect). These people tend to be identified with the middle and lower levels of society, yet show a tendency to identify with the upper level (most people think of their social status as "middle" or "lower middle" class whereas few think that they belong to the "upper" or "upper middle" class). In addition, Lei Kaichun also analyzed the influence of institutional exclusion, social status and social memory on the social identity of new migrants.

In comparison with the old and new generations of rural migrant workers, highly educated young migrants possess relatively high human capital, and are more likely to enter a higher labor market. Moreover, their life experiences, values, lifestyles and behaviors are unique. The characteristics and patterns of their social identity are different from that of rural migrant workers old and young. Therefore, exploring the social identity and factors of influence affecting the highly-educated and young floating population is of great significance for us if we are to understand the living conditions and realistic needs of this group and promote their social integration.

In this context, Guo and Xing (2009) studied the social identity of the highly-educated and young floating population in Beijing, which is commonly known as the "Beijing drifters" (*beipiao*). In this study they have found that the social identity of this group is generally not high. They think of themselves more as "the others in the city" and lack a sense of belonging. This is reflected in their thinking and feelings. The majority does not think of themselves as members of the "Beijing community", and do not feel like Beijing is home. In terms of future plans, although half of Beijing drifters choose to continue to work and live in Beijing, a large proportion

is extremely careful with each step taken. In terms of communication with Beijing residents, although there are a relatively high proportion of Beijing drifters that do engage Beijing residents in their daily lives, the depth and breadth of these contacts are relatively limited: the closer the contacts to their personal space, the lower the willingness to contact with Beijing residents. Beijing drifters' perception of their differences from Beijing residents in terms of culture and living habits is greater than that of their differences in terms of socio-economic status. In addition, this research also found that the social identity of Beijing drifters is affected by their experiences in terms of participation in community activities, interaction with the public, degree of security in Beijing, discrimination, as well as other factors.

Other scholars have also studied the social identity of other specific groups besides these floating populations. Among them, Fang Wen's study (2005) on Protestant Christians is more typical.

Fang (2005) conducted a field study on a Protestant Christian group in Beijing for over three years. With social identity theory as conceptual framework, he analyzed the social identity process of Christians in detail. In addition, based on his specific research, he also attempted to unveil the social psychological process and mechanism rooted in the group symbolic boundaries of social life, hoping to further verify and supplement the social identity theory. On this basis, he further proposed that: (1) social boundaries exist between different social groups; (2) the construction of symbolic group boundaries is cognitively based on social categorization (also known as social classification); (3) on the basis of social categorization, the distinction between my group (also known as the in-group) and the other group (also known as the out-group) is strengthened by social comparison, thus producing in-group differentiation and out-group homogeneity; (4) in terms of social actions, my group continues to represent and reproduce its own group style as well as the social representation system via group memory to further reproduce symbolic group boundaries. In the study of the social identity of specific groups, Fang Wen is one of the few researchers who have sublimated specific research in favor of theory.

The study of the social identity of specific groups reflects the social concerns of Chinese scholars and social psychologists. However, due to the different theoretical backgrounds, research methods and tools used by different scholars, it is difficult to compare the results of these different studies, which brings difficulties in terms of further synthesizing studies. Future research should also expand their scope in terms of research groups. In addition, the study and comparison of one same group from the perspectives of social classification and self-classification respectively should also be considered.

2.2 Studies on Social Participation

Extensive social participation is one of the basic characteristics of a civil society. However, the basic feature of the traditional Chinese society, i.e. "strong country and weak society", basically eliminated all traces of a civil society. As it transitions from

a traditional society to a modern one, China's civil society is just now forming and developing.

In recent years, the occurrence of many major events has promoted the growth of the Chinese civil society, especially the 2008 Wenchuan earthquake, after which the civic consciousness of the Chinese people was forcefully awakened. The exploding volunteers, the spontaneous upsurge of donations from enterprises and citizens, the flooding of many non-governmental organizations to the disaster areas and their cooperation with the government in terms of rescue and post-disaster reconstruction, as well as the courage that news media and network media demonstrated in their actions to tap the truth and carry out supervision, all of these are supporting evidence. Therefore, some people think that 2008 marked the birth of China's civil society and was also the first year of voluntary action in China.

Next, we will analyze social participation in China from several aspects, including its general situation as well as community participation and Olympic participation.

1. General situation of social participation

In 2011, the Institute of Sociology of the Chinese Academy of Social Sciences and the Social Sciences Literature Publishing House jointly issued the *2012 Blue Paper—Analysis and Prediction on China's Social Situation* in 2012. The *Blue Paper* points out that the urbanization process should be accompanied by the enhancement of citizen modernity. The important component of citizen modernity is the extensive social participation of citizens, especially institutionalized and organized social participation, achieved through citizen participation in social organizations. However, the aforementioned survey shows that although China has merged in the fast lane in terms of urbanization pace, the increase of its urban population and the expansion of its cities have yet to bring about the development of the civil society.

Among urban respondents, only 4.5% participated in folk organizations (including volunteer organizations, owners' committees, environmental organizations, etc.). In rural areas, participation was even lower (1.7%). Data also show that social groups based on kinship and geography (such as clan associations and associations) are also shrinking as original rural social structures are breaking down. For example, in urban areas, only 1.6% and 4.5% of respondents said they participated in clan associations and natives associations respectively; in rural areas, the proportion was only 2.6% and 3.6% respectively. In addition, a mere 16.5% of urban respondents gave a positive answer when asked whether they intended to join a folk organization in the future.

At the same time, this survey also unveiled new features of current social participation in China. First of all, with the popularity of higher education, alumni associations developed on the basis of relationships between students have become the first choice of many respondents for social participation. Especially in cities, 22.2% of respondents affirmed attending alumni associations, and 29.8% of respondents also said that they would continue to participate in or intended to participate in these alumni associations in the future. In addition, various fellowship organizations (such as sports and entertainment groups, Internet groups) have also become important forms of social participation. 10.8% of urban respondents affirmed join-

ing fellowship organizations, and 17.8% of respondents said they would continue to participate in or intended to join fellowship organizations in the future.

As a result, we can draw basic conclusions on current social participation in China. First of all, the current level of social participation of Chinese citizens as a whole is not high. Second, among various forms of social participation, alumni associations and social organizations are the most popular forms of social participation (especially for urban residents).

2. **Studies of community participation**

Community participation refers to the actions of community members as well as to a process during which they participate in public community affairs and activities, affect the operation of community rights, and share the results of community building. Participating in community activities is an important way for community members to form a common code of conduct, lifestyle and awareness. Community participation helps to prolong human relationships and strengthen social networks, thus enhancing people's sense of social belonging and social identity.

In *Reconstructed Public Space: Community Public Participation and Study* (2004–2006), Yang Yiyin studied community participation among urban residents in Beijing. This is a relatively normative study of recent community participation involving type of community, type of community participation, and the characteristics of the participation of different types of community residents.

(1) **Division of community type**

First, on the basis of foundational facts about communities, this research categorizes Beijing communities in three types. These three types of community are the traditional Hutong community, the institutional compound community, and the new commercial-residential building community. Among these three types, the Hutong is a typical feature of the ancient capital of Beijing. After the founding of the new China in 1949, the family houses of government agencies spread around the capital, which together with the Hutong communities constituted the distinctive features of Beijing residence in the 1990s. After the 1990s, the city's high-grade commercial-residential buildings rose straight from the ground and emerged as a new form of housing.

(2) **Types of community participation (Table 1)**

Community participation can be divided in two dimensions on the basis of its nature: "individual-society" and "autonomy-obedience". Both dimensions can be used to define the nature and type of participation.

(3) **Community participation characteristics**

Social participation among community residents is embedded in the representations of their ideal community. Yang Yiyin's study found that the social representations of ideal communities for Beijing residents include three aspects, i.e. environment, concept, and participation. Further analysis has unveiled that there are no fundamental differences of the views and demands regarding environment between residents

Table 1 Types of community participation

	Individual-society dimension	
Autonomy-obedience	Voluntary social services	Personal interests
	Response/obedience	Mutual assistance within the relationship network

of different types of communities, but differences related to concept and participation are significant, which reflect the psychological state of different communities. Specifically, compared to commodity building residents, residents of bungalow communities and institutional building communities have more sense of hierarchy, and their community participation is also more reflected as passive involvement, i.e. relying on top-down administrative power to a certain extent. With the continuous marketization of property management, residents of commodity buildings are witnessing the gradual fade-out of the executive-led management philosophy, which is being replaced by management concepts characterized by the spirit of public contract and group right-protection awareness. Thus the identity of these residents is connotatively more about equal rights. These residents are also more active in terms of community participation.

3. **Studies of participation in the Olympic Games**

Before and after the 2008 Olympic Games in Beijing, the Studies of Social Mentality in Transition Period project team of the Institute of Sociology of the Chinese Academy of Social Sciences conducted studies on the participation of Beijing citizens in the games.

Two months before and after the Beijing Olympic Games, questionnaire surveys were adopted to investigate households of six and five communities in Beijing, in the manner of quota sampling. The investigation focused on the degree of public involvement and participation in the Olympic Games as well as the aspects that public was interested in. How great is the impact of media and social organizations? Have the Olympic Games improve public participation? The results of this study are listed below.

(1) **Participation types**

We can divide public participation in the context of the Olympic Games in three types: attention, communication and expression, and action. Here, "attention" is a one-way process of information acquisition, and refers to low involvement; "communication and expression" is a process of information and opinion exchanges, and refers to moderate involvement; and "action" is real participation, and refers to in-depth involvement.

(1) **Attention, or low involvement**

Based on the results of investigations before and after the Beijing Olympic Games, it has been found that respondents showed great interest in all aspects of the Beijing

Olympic Games. They paid most attention to "the number of medals won by Chinese delegations" and "the opening ceremony, award ceremonies, and closing ceremony".

They paid specific attention to three aspects: (1) matters relevant to the Olympic Games, including new technologies, cultural differences between China and foreign countries, Chinese cultural characteristics, public participation, foreign media evaluation, Chinese attitude towards foreigners, and environmental improvements during the Games; (2) competitions, including the number of medals won by Chinese delegations, the opening and closing ceremonies and awards ceremonies, the enterprising spirit of Chinese athletes, the competition process, breaking records, etc.; (3) interesting stardom stories, including anecdotes about athletes, referees and coaches from various countries, competition results of star athletes, etc.

The results show that what the public was most concerned with was the competition during the Olympics Games.

(2) **Communication and expression, or moderate involvement**

Research has found that participation degree in all activities after the Olympic Games has increased in comparison with before the Olympic Games, which means that the activities of the Olympic Games generally do tend to involve people more. In term of participation in the Olympic Games, investigations before and after have found that, in addition to no significant differences with what was being discussed by internet users, the degree of participation of respondents in the activities organized by the media such as calling hotlines, sending text messages and offering suggestions to relevant departments, has been significantly increased in comparison with that before the Olympic Games.

(3) **Volunteerism, or deep involvement**

Research has found that during the 2008 Beijing Olympic Games, many people with no volunteering experience offered their services to volunteer groups.

Before-and-after investigations compared and analyzed the participation frequency of individuals in other types of volunteer activities and found that their participation in Olympic volunteer activities positively correlated with their participation in other types of volunteer activities. That is to say, individuals who usually participated in various types of volunteer activities were more likely to become Olympic volunteers.

(2) **Channels focusing on the Olympic Games**

People can access information in four ways: traditional media (including television, newspapers and radio), interpersonal communication (including with family members, friends, colleagues or classmates, or on general social occasions), modern media (including outdoor advertisements or community bulletin boards, the Internet, text messages), and direct acquisitions (including participation in Olympic Games activities, watching competitions on-the-spot).

Analyses have found that traditional modes of transmission are dominant in the publicity and transmission processes of major social events, among which "traditional media" are dominant, though often supplemented by "interpersonal communication".

Before the Olympic Games, there was less participation through "modern media" and "presence on the scene". In addition, there are differences between the effects of various media.

Studies have also found that education and age have a certain impact on information acquisition. Generally speaking, residents with a low education make significantly lower effective use of various media than those with high education (especially with regard to modern modes of transmission, including the Internet, text messages, outdoor advertising and community bulletin boards). The frequency at which modern media is used is the lowest among residents with only primary and middle school education. High school graduates employ modern media at an intermediate frequency, whereas residents with junior college or higher education most frequently use modern media.

In addition, different age groups use communication media differently. Specifically, the frequency at which modern media is used decreases significantly as age increases. The frequency at which people over 50 years old employ interpersonal communication is lower than that of young people.

(3) Factors of public participation–community or unit organization

Studies have shown that public participation was the greatest in activities organized by communities and units. Around the time of the Olympic Games, people actively took part in Olympic-related activities organized by their communities and units. 63.57% of people were willing to participate in Olympic-related activities organized by their units, and 38.38% chose to "actively participate"; 69.77% of people were also willing to participate in Olympic-related activities organized by their communities, and 39.03% chose to "actively participate". This further shows that both units and communities have an important dynamic role in gathering people to participate in major national events.

(4) Motivation for the public to participate in the Olympic Games

What do the Olympic Games mean to Chinese people and what do people think of the Olympic values?

Studies have shown that what is considered most important about the Olympic Games is "witnessing important historical moments", which scored the highest in surveys, followed by the opportunity to "show foreigners the healthy and optimistic image of Chinese people", "witness Chinese athletes winning gold medals", "contribute to China's major events" and "enjoy high caliber sports events". In addition, some people thought the Beijing Olympic Games would allow them to "cheer up for Chinese athletes on the spot", "learn more about the culture of other countries" and "gain a very hard-won life experience".

In conclusion, the findings of the investigations yielded valuable research results. Through these studies, it has been found that the public manifested a relatively high motivation to participate in national major events. Under the influence of mass media, interpersonal communication as well as communities or units, more and more people will experience the process from the low attention, to communication and expression, then to final behavior participation.

In this process, the key issue is the requirement of a corresponding organizational form for public participation in order to enable people to translate attention, communication, and participation into action. Thus, healthy civil society organizations should be developed in the future in order to lead public focus on major social and national events as well as combine personal concerns with national concerns. Only in this way can we enhance social cohesion and foster the spirit of social cooperation. Actually, that is a valuable asset that the Beijing Olympic Games have left for us.

4. **Theoretical discussions on social participation with Chinese characteristics**

It is worth mentioning that studies on social participation include preliminary theoretical discussions on the current core characteristics of Chinese social participation.

In the process of studying the participation of Beijing citizens in the Olympic Games, the Studies of Social Mentality in the Transitional Period project team conducted theoretical discussions on the characteristics of Chinese social participation.

Referring extensively to literature, their research first states that, generally speaking, there are two forms of social participation: authoritative participation and civic participation. The former mainly refers to command-based participation, which is generally more common in traditional hierarchical or authoritarian societies, while civic participation is mainly founded on personal motivations or civic responsibilities and is common in a civil society or individualist society.

However, if we consider the current situation of social participation in contemporary China, we easily realize that the above two forms of participation are not at all suitable in the analysis of the social and political situations of contemporary China. Therefore, the research proposed a third form of social participation which it terms "government-driven/mobilized participation". Unlike the above two types, this form of participation is based on the interaction between government requirements and voluntary public involvement.

In the case of the Beijing Olympic Games, when Beijing prepared to bid for the 2008 Beijing Olympic Games and won the bidding, the government organized volunteer service and used the media to recruit volunteers. At the same time, the government also required various institutions to contribute to the success of the Olympic Games, treating relevant measures as political tasks. In this series of processes, the public's action was also actively mobilized. Thus, the participation of Beijing citizens in the Olympic Games has become a typical kind of "government-driven participation". This kind of participation is to large degree from the self-border scalability that the "lesser self" of Chinese people can be extended to the "greater self" in certain situations. Therefore, there remain differences between this concept and the connotation of public participation. This kind of relational, ethical, moral-based and authority-driven participation is rooted in the "guanxi" (relationship) mechanism that connects group relationships for Chinese people, not in the identification mechanism.

3 Measurements of Social Identity and Social Participation

3.1 Measurements of Social Identity

In sociology and social psychology, a variety of tools for the measurement and investigation of social identity have been developed. Some are more classical, general and generalized; there also are a number of measurements and investigative tools developed for specific groups and for specific research purposes. Both kinds of tools have their own characteristics and functions, which we will introduce subsequently.

1. **Classical measurements of social identity**

(1) **Twenty Statements Test (TST)**

In social psychology, the measuring technique of social identity that most frequently cited is the Twenty Statements Test (TST) developed by Kuhn and McPartland (1954). The basic assumptions of the test come from the "social ecology" perspective of Sarbin and Allen (1968) on social identity, which affirms that a person's behaviors are rooted in his/her identity and that his/her identity similarly stems from his/her situation in society. The technique used in this test is very simple: testees are required to give twenty different answers to the question: "Who am I?" The TST only measures "facts" and "subjective affirmations" towards facts, without taking the psychological interactions between people and their groups into consideration.

(2) **Classical measurements of ethnic identity**

In early studies on ethnic identity, the work of Mamie Clark and Kenneth Clark of the late 1930s and the 1940s was often mentioned. Their pioneering efforts have inspired studies in the following decades and influenced several generations of clinical scientists and theorists. The method adopted by Mamie Clark and Kenneth Clark was similar to projective tests used in contemporary psychological measurement. What is meant by "projective test" is the exploration of deeper psychological motivations of examined objects through their responses to stimulus materials.

2. **Specific measurements of social identity**

In specific studies on the sense of social identity, Chinese and foreign scholars have both developed their own questionnaires or measurement tools for the purpose of their own studies. These mainly involve the measurement of ethnic identity, of the recognition of immigrants and migrant workers, etc.

When it comes to measuring ethnic identity, researchers have conducted deep and systematic studies. Through theoretical reconstruction of the concept and structure of ethnic identity, researchers have compiled a number of scales in line with the relevant psychometric standards to measure ethnic identity, enriching studies on social identity. One of the widely used scales is the Multi-group Ethnic Identity Measure (MEIM) developed by Phinney (1992). This scale assesses the general sense of ethnic identity in a broad sense instead of being limited to the characteristics of

a particular ethnic group. Such a scale is more applicable to various ethnic groups. The initial scale included 14 subjects, which were used to measure ethnic identity on the basis of three aspects, namely belonging, ethnic identity achievement, and ethnic behavior. Belonging refers to one's positive attitude and sense of belonging to an ethnic group; ethnic identity achievement involves the exploration and confirmation of one's identity; and ethnic behavior refers to the activities related to the identities of ethnic members (Phinney 1992).

Roberts et al. (1999) revised the MEIM scale and simplified it, bringing it down to 12 subjects. Using adolescents as research objects, he analyzed ethnic identity on the basis of two dimensions, namely exploration and commitment. In his studies, he defines exploration as seeking information and experiences related to one's own ethnic group; whereas he defines commitment as attachment to the group and one's personal input. Based on that, Phinney et al. (2007) further simplified the MEIM into a 6-subject scale in their study of ethnic identity based on exploration and commitment as well.

These three versions of the ethnic identity scale are reliable and valid. In comparative studies on different racial and ethnic groups, the validity of measurements has also been confirmed (Avery et al. 2007; Gaines et al. 2010). At the same time, researchers have also used these scales to carry out a large number of empirical studies in which the basic psychological effects of ethnic identity has been revealed. For example, ethnic identity positively correlates to individual subjective well-being, coping capability, sense of control, self-esteem and optimism, yet negatively correlates to loneliness and depression. It also decreases the discrimination (Roberts et al. 1999; Lee 2003).

The MEIM scale is generally adopted to study the status of the identity of various ethnic groups in a broad sense. In specific studies on specific ethnic groups, researchers have carried out targeted analyses and developed specific scales in accordance with the characteristics of the studied ethnic groups and their cultural characteristics. For example, on the basis of the identity formation process, Helms and Parham (1990, 1996) developed the Black Racial Identity Attitude Scale (BRIAS) to measure African-Americans' attention to their membership to their own ethnic groups and their attitudes toward other ethnic groups. This scale includes 5 themes, namely pre-contact, post-contact, immersion, emergence and internalization, which occur during the formation of African-American people's identity. Correspondingly, Helms and Carter (1993) developed a White Racial Identity Attitude Scale (WRIAS) to measure white people's perception of their membership to their own ethnic groups and their attitudes towards other ethnic groups. This scale has 6 themes, namely contact, disintegration, reintegration, quasi-independent, immersion-emergence and autonomy, also occurring during the formation of the identity of white people.

In China, in a study of the ethnic identity of Tibetan college students, Wan and Wang (2004) formulated a questionnaire based on the formation process of identity. This questionnaire had the purpose to measure ethnic identity from three aspects, namely mainstream cultural identity, active ethnic identity, and negative ethnic identity. They have found a correlation between the ethnic identity of Tibetan students and their cultural adaptation strategies. Moreover, they have also unveiled that neg-

ative ethnic identities potentially lead to anomie, social independence and cultural separation.

In addition to ethnic identity, the identity of migration and rural migrant workers is also a hot topic in social identity research. Researchers have also developed corresponding measurement tools to specific research problems. For example, in the process of studying the social identity of floating populations, Guo (2011) compiled the *Questionnaire/Interview Outline on the Studies of Social Identity of Migrants in Beijing*. In the process of studying the social identity of new migrants in Shanghai, Lei compiled the *New Urban Immigrant Questionnaire*. The former questionnaire/interview outline, apart from an individual's basic background and family background, mainly refers to interviewees' social interaction with locals (Beijingers), their relationship with Beijing citizens, their experiences in terms of discrimination in their daily life and work, their participation in community activities, their acceptance of various titles, their "feeling of being home", mental state, etc. But Lei Kaichun's questionnaire relates mainly to the social status of respondents, including their contact with local people, the friends their frequently contact, their use of language, their familiarity with local customs, their helping behaviors, their choice of listeners, and their companions in spare time, etc.

We can see from the preceding discussions that in fact, the classical measurement methods for social identity and the identity of specific groups not only have their own characteristics and advantages, but also their own shortcomings and limitations. The first type of survey basically adopts the methods of free association and psychological projection. These methods are characterized by universal applicability (cross-crowd and cross-scene), and the problems they involve are more substantial. However, their shortcomings are that both the crowd and the questions involved are too general and lack pointedness. In the second type of survey, methodology basically consists of sociological and psychological questionnaire surveys, with the advantages that both the crowd and questions involved are relatively targeted. In this case, research questions are more specific. However, overly specific questions limit the scope of its application, which makes it difficult to conduct cross-crowd and cross-contextual inferences.

3.2 Measurements of Social Participation

In fact, classical measurements of social participation are rare. Most measurements of social participation are the corresponding measurement/survey projects compiled for respective studies. These projects are generally relatively specific and targeted, thus hardly generalizable.

In their subject study *Restudy of the Election Mentality and Participation Behavior of Beijing Voters* carried out by the Beijing Academy of Social Sciences, Lei and Gao (2007) explored and researched voters. Specifically, in measuring interaction levels between voters and deputies to the NPC, they designed two primary indicators: (1) Have voters met with the last deputies to the NPC of the electoral district

in the past three years? (2) Can voters recall the proposals or the practical work the last deputies to the NPC have made or done for the voters of the electoral district? When it comes to measurement, the motivations of voters can be classified in two types: (1) voters who "hope to elect the deputies who really represent popular will", defined as voters with positive motivations; (2) voters who "just perform a routine and exercise their own rights", "follow the crowd, do not think" or "have to vote", defined as voters with negative motivations. Based on these, researchers have come up with meaningful results. One of their most important conclusions is that the inter-action between deputies to the NPC and voters will significantly affect the positive motivation ratio of voters.

References

Chinese-Language Sources

Chiu, C., & Kang, Y. (2003). "I am a Hong Kong person": Implications of empirical research on Hong Kong's strategic development. *Journal of Hong Kong Social Sciences, 26*

Chiu, C., Wen, J., & Tan, J. (2005). The basic psychological course of social identity: A study of Hong Kong's return to China, *Sociological Research, 5*, 202–223.

Fang, W. (2005). How to form the symbolic boundary of groups? A case study of protestant Christian group in Beijing. *Sociological Research, 1,* 25–59.

Guo, X. (2011). *Wandering and rooting: Research on social identity of floating population*. Renmin University of China Press.

Guo, X., Xing, C. (2009). Analysis of the social identity status and influencing factors of the float-ing population of high-education youth—Taking Beijing as an example. *Zhongzhou Academic Journal, 6,*103–108.

Helms, J. E., & Parham, T. A. (1990). Black racial identity attitude scale (Form RIAS-B). In J. E. Helms (Ed.), *Black and white racial identity* (pp. 245–247). New York: Greenwood.

Lam, S.-F., Lau, I. Y.-M., Chiu, C.-Y., & Hong, Y.-Y. (1998). The identity and modernization concept of adolescents in Hong Kong. *Hong Kong Journal of Social Sciences*, 11.

Lam, S.-F., Lau, I. Y.-M., Chiu, C.-Y., & Hong, Y.-Y. (2003). Social identity of Hong Kong adoles-cents: Intergroup perception and orientation in political transition. *Hong Kong Journal of Social Sciences, 26*.

Lei, T., & Gao, Y. (2007). Analysis of electoral motivation and participatory behavior of positive voters: Follow-up survey of the 2006 general elections of the National People's Congress at the county level in Beijing [Presentation]. *Paper presented at the Seminar on "the Development Path of China's Democratic Politics: Elections and Negotiations"*. Shanghai.

Li, C. L. (2007). Urban and rural immigrants and social mobility. *Jiangsu Social Sciences, 2,* 88–94.

Liu, A. Y. (2004). Internal differentiation and identity difference of the working class in the process of institutional reform. *Journal of Fujian Party School*, 6, 21–26.

Wan, M. G., & Wang, Y. P. (2004). Ethnic identity of Tibetan undergraduates. *Acta Psychologica Sinica, 36*(1), 83–88.

Wang, Y. B. (2005a). Organizational identification of state-owned enterprise employees during transformation period: A survey on the characteristics and reasons of organizational identification of current state-owned enterprise employees. *Tian Fu New Idea (Bimonthly), 2,* 77–84.

Wang, Y. B. (2005b). On operability definition of fairness concept. *Journal of Southwest University for Nationalities (Humanities and Social Sciences), 26*(10), 192–196.

Wang, J., Hu, R., Su, C., & Ma, Z. (2003). Research on the self-identity of class status of workers in state-owned enterprises, *Theoretical Monthly, 5*.

Zhang, K. T., & Yao, Y. (2009). *Study on social activity and mental state of the elderly in urban/rural China*. Beijing: Chinese Society Press.

Zhou, C. M., & Qin, H. Z. (2004). Review and reflection of studies of farmer workers in cities. *Journal of Youjiang Teachers College for Nationalities Guangxi*, *17*(4), 1–5.

English-Language Sources

Augoustinos, M., Walker, I. & Donaghue, N. (2006). *Social cognition: An integrated introduction.* London: Sage Publications.

Avery, D. R., Tonidandel, S., Thomas, K. M., Johnson, C. D., & Mack, D. A. (2007). Assessing the Multigroup Ethnic Identity Measure for measurement equivalence across racial and ethnic groups. *Educational and Psychological Measurement, 67*(5), 877–888.

Gaines Jr., S. O., Bunce, D., Robertson, T., Wright, B., Goosens, Y., Heer, D., et al. (2010). Evaluating the psychometric properties of the Multigroup Ethic Identity Measure (MEIM) within the United Kingdom. *Identity: An International Journal of Theory and Research*, *10*(1), 1–19.

Helms, J. E., & Carter, R. T. (1993). Development of the white racial identity inventory. In J. E. Helms (Ed.), *Black and white racial identity: Theory, research, and practice* (pp. 67–80). Westport, CT: Greenwood Press.

Helms, J. E., & Parham, T. A. (1996). The racial identity attitude scale. In R. L. Jones (Ed.), *Handbook of tests and measures for Black populations* (Vol. 2, pp. 167–174). Hampton, VA: Gobb & Henry.

Kuhn, M. H., & McPartland, T. S. (1954). An empirical investigation of self-attitudes. *American Sociological Review*, *19*, 68–76.

Lee, R. M. (2003). Do ethnic identity and other-group orientation protect against discrimination for Asian Americans? *Journal of Counseling Psychology, 50*(2), 133–141.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*(2), 156–176.

Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271–281.

Roberts, R., Phinney, J., Masse, L., Chen, Y., Roberts, C., & Romero, A. (1999). The structure of ethnic identity in young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence*, *19*(3), 301–322.

Sarbin, T. R., & Allen, V. L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 1, pp. 488–568). Reading, MA: Addison-Wesley.

Tajfel, H. (1978). *Differentiation between social groups.* London: Academic Press.

Conceptualizing and Measuring the Sense of Social Support

Pengfei Diao

Studies of social support initially focused on social environmental factors influencing personal health, meaning to extend the discussion on individual mental disturbances to society and public topics. In order to explore the relationship between social support and personal physical and mental health, we should systematically define the concept of social support, analyze its operations and study its source structures and types comprehensively so as to measure its different influences on personal health and even on social integration. Scholars have been increasingly drawn to study of social support. In psychology, sociology, psychotherapy and social work, areas in which study of social support is conducted, the application field of social support has been expanded. The purpose of this article is to summarize the basic concept and development of study of social support. We will start the discussion by briefly introducing the definition of social support, then explain its source structure, relationship and structure, dimensionalities, mechanism of action, and at last introduce tools for its measurement.

1 Definition of Social Support

Different researchers have different understandings of social support. Some describe it as emotional love and respect (Cobb 1976). Others distinguish different types of support, such as emotional, practical and propositional (Kahn and Antonucci 1980). However, although these definitions encompass a number of relational sources and functional types, they fail to establish the consistent characteristics of social support. Many researchers criticize the lack of systematic definitions in previous study of social support (House et al. 1988) as well as the lack of consensus on the various kinds of definitions of social support (Dean and Lin 1977). Some of them even

P. Diao (✉)
Beijing, China

jokingly think that those who propose valid definitions of social support should be awarded with a big prize for their work in terms of concept construction of social sciences so as to highlight its variability and uncertainty (Gottlieb 1985).

In earlier studies, social support was seen as equal to perceived support. From his psychological perspective, Cobb (1976) believed that social support refers to three kinds of information influencing individual mental states. The first is emotional support, or letting individuals feel that they are cared and loved; the second is respect, or letting individuals feel that they are respected and are valuable; and the third is membership, letting individuals believe that they belong to some kind of mutually beneficial communication network, which further encompasses three pieces of information, namely what is the source of these relational networks, what kinds of goods and services they provide, and how they jointly resist risks. Such a definition of social support is grounded in psychology and affirms that what really matters is how individuals perceive influence, namely the effect of perceived support (rather than the influence of reality) on individuals.

In the early 1980s, the concept of social network analysis made its entry in study of social support, and many researchers in this field have used the concept and its related measurement method to analyze traditional social support issues. However, concepts like that of social network, social support, social connections and social contact were not clearly distinguished; most of them refer to several aspects of factors such as existence, quantity and contact frequency of social connections (House et al. 1988). Some researchers have mentioned that early attempts to introduce the social network analysis methodology into study of social support research confused, to a certain extent, the concept of social network with that of social support. Specifically, variables in the social network structure were used to measure social support (Lin et al. 1985; Lin and Ensel 1989). Researchers now realize that, conceptually and empirically, social network and social support are two different phenomena: social network specifically refers to the structural features of social connections while social support refers to the emotions and practical properties of social connections.

House et al. (1988) considered "social connections" as a general concept encompassing three sub-concepts, i.e. social integration, social network and connection content (the latter includes social support). Among these, social support specifically refers to the positive and potential effects of connection content in terms of healthcare or pressure relief. According to the above definition, House et al. made a clear distinction between the two concepts of network structure and social support. Substantially they defined social support with a focus on the positive functions of social connections, believing that social support was a kind of process related to social connections (House et al. 1988).

There are many other similar cases in which social support has been defined with a focus on functionality. For example, some believe that social support refers to interpersonal interactions, i.e. people helping one another (Antonucci and Knipscheer 1990). The advantage of defining social support as the positive function of connections is that it narrows the concept of social support, making it clearer. However, such functional definition does not give due consideration to the negative effect of social connections. Some researchers affirm that the effects of social support should

be considered from both positive and negative perspectives. We will further discuss this topic later.

Some researchers have defined social support from the perspective of social resources. Social support is regarded as a kind of resource possessed by individuals helping them solve problems in times of crisis. Lin Nan clearly defined social support as a component of social resources used by individuals to meet expressive or practical demands (Lin 1986).

The above summary only covers a few of the numerous definitions of social support. Some of them define social support as covering almost all aspects of social connections (Gottlieb 1983; Turner et al. 1983). Turner summarized and classified the many definitions of social support that different researchers have come up with, including social bonds, social network, meaningful social contacts, availability of confidants, and others' companionship. Turner (1999) pointed out that despite their different denominations, these kinds of social support all refer to stable social communication between people.

2 Sources and Structure of Social Support

2.1 Sources of Social Support–Support Structure

Different perspectives result in different levels of understanding. Nonetheless, in the case of social support, most early researchers paid attention to the limited close relationships of individuals. It has been discovered that spouses and family members are the key support providers protecting personal health (Weiss 1974). Here, we may use the term primary relation, which refers to the support providers with which individuals have the most contact and on which they are most likely to have an influence. After the measurement and analysis tools of social network made their entry in the field of social support, researchers started to focus on a more extensive range in terms of the source of support. Pearlin pointed out that there are three sources of social support: social networks, active contacts and intimate relationships (Pearlin 1985). The first source, social networks, was considered by Pearlin as the sum of all social connections of individuals. These social networks define the outermost boundaries of available support. The second source, active contacts, specifically refers to active social connections amid individuals. If social networks refer to all available sources of support, active contacts are the sources likely to be pursued by individuals. The third source is intimate relationships, which stresses degrees of relational intimacy in terms of emotion and trust. Similarly to Cooley's primary relation concept (1915), this refers to the most important, unpractical and continuous relations for individuals, such as spouses and very close friends. When it comes to this third source, people are usually able to obtain support without requesting it. Pearlin (1985) believed that these three different sources were not competitive and

not mutually exclusive, each of them imbedded in each other and explaining the source and characteristics of social support.

Some researchers think that the sources of social support should extend to whole communities in which individuals live. Lin and his colleagues classified the three levels of support sources, namely community relation, social network and intimate relationship, affirming that these three levels represented the outer layer, middle layer and inner layer of social connections, each of which have different influences on health (Lin et al. 1999). It is most important to consider that, theoretically, each level can independently provide individuals with social support; nevertheless the author also points out that support from inner layers is limited by the structure of outer layers (Lin 2001).

Similar divisions of support sources include Kapferer's three sections of individual networks (1973), namely extensional section, effective section and intimate section. Previous studies defended the view that the three sections are differently sized: the extensional section encompasses a great deal of individuals; the effective section encompasses about 10 people; and the intimate section encompasses about 3. Wellman discovered intimate bonds are usually limited to 3–6; important relational bonds to 5–15; whereas acquaintances and potential relationships may reach up to 1000 (Wellman and Gulia 1999). The above divisions of social support are not only significant in terms of clearly defining the concept. In actual studies, the differences between support provided by different sources and their effect should be clearly stated. Let us first try to understand the different kinds of social support that different relational bonds provide.

2.2   Types of Relational Bonds and Social Support

Different network structures and relational characteristics result in different types of social support. Two aspects need to be considered here. First, different types of support provided by different relationships in the network should be analyzed (such as in Wellman and Wortley 1989). Typical studies focus on the correlation between the strength of a relational bond and the type of support it provides (such as in Wellman and Wortley 1990; Lin 1982 1986), or between the mode and frequency of social communication and the type of support provided (such as in Wellman and Wortley 1990). Second, differences between types of support provided by different network structures should also be analyzed. In this section, we will discuss both aspects.

Researchers pointed out that different types of bonds provide different types of support, mentioning also that not all relational bonds actually provide support. In concrete analysis, some researchers aimed at the following major relational dimensionalities: strength, contact, interaction situation, kinship and personal characteristic. When comparing these relational characteristics and the types of support they provide, it can be found that most relations provide a specialized type of support. The link between relational characteristics and social support is closer than that between

personal characteristics and social support (Lin et al. 1986; Wellman and Wortley 1990; Wellman 1992). Only a few relational bonds can provide support such as emotional support and companionship. Familial bonds or intimate kinship are the core providers of emotional and practical support (Antonucci 1990; Walker et al. 1993; Wellman and Wortley 1990).

However, the characteristics of single relational bonds aren't the only factor to consider when analyzing the differences between different types of social support. The influence of network structures on the provisions of social support should not be neglected either (Gottlieb 1985). Researchers criticized the fact that previous social support studies only focused on support provided by single relational bonds in the network, defining social support as the existence, quantity and frequency of social connections, yet neglecting to involve the structural factors of social networks, such as the scale and density, (House et al. 1988). It has thus been pointed out that further analysis of the influence of the social network structure on the degree to which individuals apply social support is required (Hurlbert et al. 2000). If the influence of the social network structure on social support is great, then previous studies on social support that only focused on relational bonds might have ignored some significant issues (Turner and Marino 1994).

Social support researchers have gradually realized that giving consideration only to a single or to certain relational bonds isn't enough to understand the effect of social support, thus the influence of the overall characteristics of the networks on the social support they provide should be analyzed. First, Wellman et al. considered the overall structural characteristics of individual community networks, such as amplitude, density and availability, and discovered that amplitude (which encompasses scale and diversity) is most important in determining the existence of social support. Moreover, the larger the scale of a given individual network is, the more varied the types of support it can provide. Second, they discovered that spatial connections are also important in providing support. In this sense, closely connected kinship networks make individual needs clearer and provide support more effectively. Besides, researchers believe that the influence of the above three characteristics of individual community networks on support can't be reduced to the sum of the influence of relational bonds. This can be understood as follows: "Seen from the provision of social support, social networks exceed the sum of the relational bonds composing them." (Wellman and Gulia 1999).

3 Dimensions of Social Support

As stated in Sect. 1, Cobb and House et al. proceeded to research from the perspective of community mentality, and mainly focused on the effect of individual sense of support on health. Such research affirms that what matters to individuals isn't what support contends, but rather what support implies for individuals. In other words, what matters to individuals isn't the support they actually acquire, but the support they perceive. Later developments in research gradually included the concept of multi-

dimensional social support, which can roughly be divided into that of subjectively-perceived support, actually-acquired support and support structure (Sarason et al. 1990).

Barrera and Ainley (1983) held a similar opinion, affirming that the classifications of social support were multi-dimensional. In their analysis, social support was classified into three kinds: embeddedness, enacted support and perceived social support. The above classification, although it uses different denominations, basically pointing to the above three aspects of multi-dimensional social support, namely perceived support, actually-acquired support and support structure.

Distinguishing between these three aspects can help clarify the underlying analytic concept, and furthermore encourage a discussion on the inner connections of perceived support, actually-acquired support and support structure as well as a survey of the significance of different layers of support for individual health. First, we discuss the connection between support structure and process characteristic. Social support on the structural layer is closely connected with individual perceived support and actually-acquired support. Individual social networks are formed through the influence of structural constraints and personal selection. On the one hand, network structures and relational characteristics can influence the factors for individual perceived support and actually-acquired support; on the other hand, if an individual perceives that he/she lacks support or acquires less support than what he/she perceives in reality, he/she may adjust his/her existing social network, thus changing its structure and content.

Before distinguishing whether actually-acquired support and perceived support are of different significance to individuals, it should be first determined whether there is a correlation between the two. Generally, actually-acquired support and perceived support are not consistent. Two cases can be observed: one where support doesn't exist in reality but is believed to exist, and the other where it exists in reality but is not believed to exist. It has been discovered that the correlation between perceived support and actually-acquired support isn't remarkable (Mancini and Bliezner 1989). Still, among theoretical explanations of perceived support, there is no lack of influence of various factors including actually acquired support on perceived support. These influences mainly include that of earlier experiences from the perspective of psychology, the individual capacity factor, and the influence on the experience of actually acquired support.

There are two theoretical models giving specific explanations when it comes to the influence of earlier experiences on perceived support. The first is the cognitive theory model, which affirms that the cognitive structure of support developed in an individual's early years influences how he/she treats his/her surroundings; in other words, this model affirms that an individual's cognition of support is the accumulation of a series of cognitions. The second is the attachment model, which affirms that attachment formed in an individual's early years can influence the development of his perception of support in the future (Procidano and Smith 1997; Faber and Wasserman 2002), and that the degree to which adults with different types of attachment types perceive support varies a lot (Ognibene and Collins 1997). Both models lay emphasis on the effect of earlier support experiences on perceived support. Moreover, it has

been discovered through many empirical studies that individual factors and actually-acquired support have a combined effect on perceived support and that differences in an individual's capacity and personality can cause differences in how he/she perceives support (Sarason et al. 1990; Sarason et al. 1986).

Figure 1 captures how social support works as described in the foregoing analysis:

Many empirical studies on social support have led researchers to believe that social support is a multi-dimensional concept, whose different dimensions have different significance for individual health and behaviors (Dean and Lin 1977; House 1981). The discussion about social support in the previous section focused on the structural dimensionality of social support and its connection with the effect of support. In the next two sections, we will see that the analysis of the influence of social support on individual behaviors or health should consider the different effects of actually-acquired support and perceived support as well as the differences brought by pressure on the effect of support effect.

Are there any differences between actually-acquired support and perceived support in terms of their influence on health? It has been proved by empirical studies related to perceived support that actually-acquired support is closely related to health (Antonucci and Israel 1986; Sandler and Barrera 1984; Wethington and Kessler 1986). In comparing the significance of actually-acquired support and perceived support for individual health, many have discovered that perceived support is of greater significance for mental health than actually-acquired support, whereas actually-acquired support usually exerts its influence on individual health via perceived support (Sarason et al. 1990; Turner and Marino 1994; Thoits 1995; Wethington and Kessler 1986). Therefore Pearlin insisted on his idea that the influence of social support on individuals was exerted via "perceived support" (1989). In addition, researchers have made a distinction between the perceived adequacy and the perceived availability of perceived social support according to specific situations, and thus have discovered that adequacy is of greater significance than availability to mental health (Haines et al. 2002).
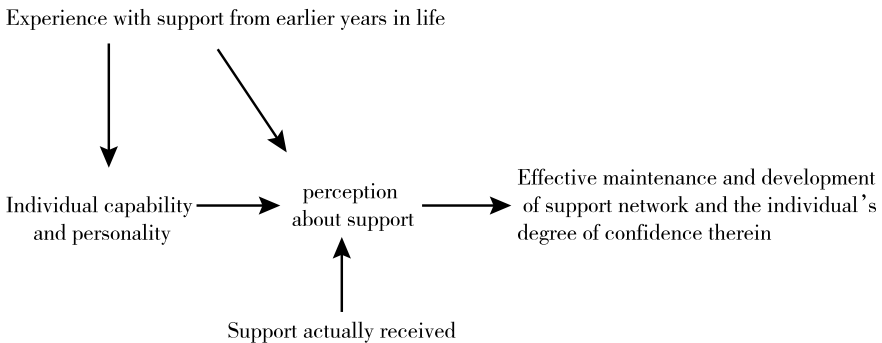

Fig. 1 Relationship among the different dimensions of social support

When exploring the effects of perceived support and actually-acquired support, researchers should also pay attention to different types of support. The differences between emotional support and practical support may reciprocally influence the action mechanism of perceived support or that of actually-acquired support. Quite a few researchers have pointed out that emotional support is of primary significance for health (Lin et al. 1985; Lin and Ensel 1989); while other researchers have discovered that practical support may also play a vital role in specific situations (Beggs et al. 1996; Haines and Hurlbert 1992; Wellman and Wortley 1990). Results from different studies are not completely consistent, and so far it hasn't been proved that emotional support is of greater significance than practical support for health (Troits 1995; Lin et al. 2000). As a matter of fact, a great number of social support studies remain unable to confirm the relational characteristics between different dimensionalities or between these dimensionalities and individual health. Moreover, the mechanism in which support plays its role is also limited by different environmental conditions. The next section will discuss the different action mechanisms of social support under the conditions with and without pressure on individual health.

4 Direct Effect and Buffer Effect

Many studies have pointed out to the significance of social support for mental health. However, the way in which social support helps mental health has been disputed on the basis of two aspects, namely the direct effect and buffer effect of social support. Earlier studies mostly affirm that social support plays its role indirectly as a protection mechanism; it can buffer pressure, and helps people cope with pressure (Pearlin 1989).

Studies on the mediation function of social support as a "buffer" have concentrated on analyzing the pressure given individuals faced and these given individuals' health. Many earlier studies have verified that social support is helpful in buffering individual pressure (Caplan 1974; Cassel 1976; Cobb 1976) and researchers have discovered the remarkable relationship between the acquisition of social support and frustration, proving that social support can reduce pressure (Dean and Lin 1977). Kaplan et al. even believed that social support only had positive health effects in the pressurized environment (Kaplan et al. 1977). There are few studies on the direct effect of social support on individual health during this period. Researchers who supported the buffer effect even believed that people were in fact always under different levels of pressure, which is always reduced by social support in a process beneficial to both body and mind, though this is sometimes hard to measure (Antonovsky 1979).

In subsequent studies, Turner and his colleagues discovered while analyzing young mothers under pressure that even controlled degrees of pressure do not dampen the obvious relationship of social support with mental health (Turner 1981; Turner and Noh 1983). At the same time, Turner and Noh discovered that the effect of social support on health changes along with changes in degrees of pressure, although it may also be under the influence of classes or other individual factors. Turner and

Noh further distinguished different classes, the result of which distinction showed that young lower-classes mothers see the effect of social support change along with the changes in degrees of pressure and perceived support has an obvious effect when under great pressure; whereas the effect of social support on middle-class mothers is not so influenced. Almost simultaneously, other researchers discovered the usual coexistence of the direct effect and the buffer effect of social support on health (Cohen and Wills 1985; House and Kahn 1985). It is not necessary to choose between one or the other; what does matter is that the specific support mechanisms coming into play here should be explored, as well as at what time and under what conditions they do so (House et al. 1988).

Thus, researchers assume that individuals can feel the buffer effect of social support more easily when under specific pressuring conditions or when answering questions related to pressure. The pressurized environment individuals face influences the action mechanism of support, and so may measurement tools. Some researchers have been able to further study the buffer effect of social support while measuring the availability of perceived support; on the contrary, its direct effect is most obviously when actually-acquired support is measured (Cohen and Wills 1985; Kessler and McLeod 1985). In terms of its effect, there are two aspects to social support (referring particularly to perceived support): it can serve as a resource to cope with pressure in specific times; and in general it has a direct effect on the development of individual social mentality. The two action mechanisms of social support each correspond to its short-term and long-term effect on individual health.

5 Measuring Social Support

In earlier community psychology-oriented social support studies, several specific support sources selected by researchers according to specific realities were the measurement tools most employed for simple measuring (Kessler and McLeod 1985). This method was used, for example, in studies on pregnant women who accept social support from relatives and friends, as well as in studies on the social support acquired by married men. However the range of application of these measuring tools was limited and they were not extensively applied. The subjects to be measured stemmed directly from the actual demands and restrictions of research. Therefore, there was little comprehensive and systematic evaluation of the reliability and validity of these measurement tools.

Since the 1980s, researchers have attempted to develop multi-dimensional and extensively applicable measurement tools for social support. These tools no longer aim at the specific psychological issues of specific groups, but are applicable to ordinary questionnaire survey interviewees. In this case, type measurement and role classification are basically the same despite the multi-angular definitions of social support. Classifications may vary from as few as a couple of types to as many as dozens of types, most of which follow the standards of individual demand categories. For example, the support system can be classified as such: (1) emotional support, (2)

help in completion of work, and (3) advice and material help; or as such: (1) consultation and advice, (2) companionship, (3) support for important affairs, (4) support for general affairs, (5) financial support and (6) emotional communication, etc. There are nonetheless different opinions on the classification of several types of support, such as that of "advice and companionship", which contains both a practical purpose and an emotional connection and therefore is in fact a mixed type of support. In general, researchers agree to roughly classify different types of support into the categories of emotional support, instrumental support and mixed support. These have been widely measured in trans-cultural studies (Hollinger and Haller 1990; Ruan et al. 1997; Lee et al. 2005). In terms of the classification of the different roles of different support sources, most of the measurement tools above encompass the following categories: family members, relatives, good friends, general friends, colleagues, neighbors, professionals, community organizations, governmental agencies, etc. In this discussion, we will refrain from exploring the subject in further details.

It should be noted that, besides the need for the integration and normalization of existing tools, the measurement of social support should also correspond to its theoretical development. On the one hand, researchers should develop on the theoretical architecture of social support by summarizing the results of empirical studies. For example, Lin et al. (2000) summarized the great achievements of study of social support and raised the analytical framework on the structure and process of social support. They believed that the structural characteristics of social support lay in the support networks while also affirming that perceived support and actually-acquired support are process characteristics. The process characteristics of social support can further be classified into three dichotomies: perceived support and actually-acquired support; support in times of crisis and support in ordinary times; and emotional support and practical support. On the other hand, we should also apply the issues raised during theoretical discussions to empirical studies. For example, issues like the introduction of a negative function index as a measurement tool for social support are to be further discussed in the future.

References

English-Language Sources

Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey-Bass.

Antonucci, T. C., & Israel, B. (1986). Veridicality of social support: A comparison of principal and network members' responses. *Journal of Consulting Clinical Psychology, 54,* 432–437.

Antonucci, T. C. & Knipscheer, K. C. P. M. (1990). Social network research: Review and perspectives. In K. C. P. M. Knipscheer &. C. Antonucci. (Eds.), *Social network research: Substantive issues and methodological questions* (pp. 161–173). Amsterdam: Swets & Zeitlinger.

Barrera, M., & Ainley, S. (1983). The structure of social support: A conceptual and empirical analysis. *Journal of Community Psychology, 2,* 133–141.

Beggs, J. J., Haines, V. A., & Hurlbert, J. S. (1996). Situational contingencies surrounding the receipt of informal support. *Social Forces, 75,* 201–222.

Caplan, G. (1974). *Support systems and community mental health*. New York: Behavioral Publication.

Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104,* 107–123.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*, 300–314.

Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310–357.

Cooley, C. H. (1915). *Social organization*. New York: Scribner.

Dean, A., & Lin, N. (1977). The stress buffering role of social support. *Journal of Nervous and Mental Disease, 165,* 403–413.

Faber, A. D., & Wasserman, S. (2002). Social support and social networks: Synthesis and review. *Social Networks and Health, 8,* 29–72.

Gottlieb, B. H. (1983). *Social support strategies*. Beverly Hills, CA: Sage.

Gottlieb, B. H. (1985). Social networks and social support: An overview of research, practice, and policy implications. *Health Education Quarterly, 12,* 5–22.

Haines, V. A. & Hurlbert, J S. (1992). Network range and health. *Journal of Health and Social Behavior, 33,* 254–266.

Haines, V. A., Beggs, J. J., & Hurlbert, J. S. (2002). Exploring the structural contexts of the support process. *Advances in Medical Sociology, 8,* 269–292.

Hollinger, F., & Haller, M. (1990). Kinship and social networks in modern societies: A cross-cultural comparison among seven nations. *European Sociological Review*, *6*, 103–124.

House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.

House, J. S. & Kahn, R. L. (1985). Measures and concepts of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 83–108). Orlando, Florida: Academic Press.

House, J. S., Umberson, D., & Landis, K. R. (1988). Structures and processes of social support. *Annual Review of Sociology, 14,* 293–318.

Hurlbert, J. S., Haines, V. A., & Beggs, J. J. (2000). Core networks and tie activation. *American Sociological Review, 65,* 598–618.

Kahn, R. L., & Antonucci, T. C. (1980). Convoys of over the life course: attachment, roles, and social support. In P. B. Baltes & O. G. Brim (Eds.), *Life-span development and behavior*. New York: Academic Press.

Kapferer, B. (1973). Social network and conjugal role in urban Zambia: Towards a reformulation of the bott hypothesis. In I. Boissevain & J. C. Mitchell (Eds.), *Network analysis: Studies in human interaction*. Den Haag: Mouton.

Kaplan, B. H., Cassel, J. C. & Gore, S. S. (1977). Social support and health. *Medical Care, 15,* 47–58.

Kessler, R. C., & McLeod, J. D. (1985). Social support and mental health in community surveys. In S. Cohen, & S. L. Syme (Eds.), *Social support and health* (pp. 219–240). Orlando, Florida: Academic Press.

Lee, R. P. L., Ruan, D., & Lai, G. (2005). Social structure and support networks in Beijing and Hong Kong. *Social Networks, 27,* 249–274.

Lin, N. (1986). Conceptualizing social support. In N. Lin, A. Dean, & W. M. Ensel (Eds.), *Social support, life events and depression* (pp. 17–30). Orlando: Academic Press.

Lin, N. (2001). *Social capital: A theory of social structure and action*. Cambridge, UK: Cambridge University Press.

Lin, N., & Ensel, W. M. (1989). Life stress and health: Stressors and resources. *American Sociological Review, 54,* 382–399.

Lin, N., Woelfel, M. W. & Light, S. C. (1985). The buffering effect of social support subsequent to an important life event. *Journal of Health and Social Behavior, 26,* 247–263.

Lin, N., Dean, A., & Ensel, W. M. (1986). *Social support, life events, and depression*. New York: Academic Press.

Lin, N., Ye, X., & Ensel, W. M. (1999). Social support and depressed mood: A structural analysis. *Journal of Health and Social Behavior, 40,* 344–359.

Lin, N., Ye, X., & Ensel, W. M. (2000). Revisiting social support: Integration of its dimensions. *Chinese Journal of Mental Health, 13*, 37–64.

Mancini, J. A. & Bliesner, R. R. (1989). Aging parents and adult children. *Journal of Marriage and the family, 51*, 275–290.

Pearlin, L. I. (1985). Social structure and social support processes. In S. Cohen & S. L. Syme (Eds.), *Social support and health*. Orlando, Florida: Academic Press.

Pearlin, L. I. (1989). The Sociological study of stress. *Journal of Health and Social Behavior, 30*, 241–256.

Procidano, M. E. & Smith, W. W. (1997). Assessing perceived social support: The importance of context. In G. R. Pierce, B. Lakey, I. Sarason, G., & B. R. Sarason (Eds.), *Sourcebook of social support and personality* (pp. 93–106).

Ruan, D., Freeman, L., Dai, X., Pan, Y., & Zhang, W. (1997). On the changing structure of social networks in urban China. *Social Networks, 19*, 75–89.

Sandler, I. N., & Barrera, M. (1984). Toward a multimethod approach to assessing the effects of social support. *American Journal of Community Psychology, 12, 37–52.*

Sarason, I. G., & Sarason, B. R. & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origin, and relational aspects. *Journal of Personality and Social Psychology, 50, 845–855.*

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). Traditional views of social support and their impact. In B. R. Sarason, I. Sarason, G., & G. R. Pierce. (Eds.), *Social support: An interactional view* (pp. 9–25). New York: Wiley.

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, 35,* 53–79.

Turner, R. J. (1981). Social support as a contingency in psychological well-being. *Journal of Health and Social Behavior, 22,* 357–367.

Turner, R. J. (1999). Social support and coping. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health* (pp. 198–210). Cambridge: Cambridge University Press.

Turner, R. J., & Marino, F. (1994). Social support and social structure: A descriptive epidemiology. *Journal of Health and Social Behavior, 35,* 193–212.

Turner, R. J. & Noh, S. (1983). Class and psychological vulnerability among women. *Journal of Health and Social Behavior, 23,* 2–15.

Turner, R. J., Frankel, B., & Levin, D. (1983). Social support: Conceptualization, measurement, and implications for mental health. *Research in Community and mental Health, 3,* 67–111.

Walker, M. E., Wasserman, S. & Wellman, B. (1993). Statistical models for social support networks.

Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.) *Doing unto others* (pp. 17–26). Englewood Cliffs, NJ: Prentice-Hall.

Wellman, B. (1992). Men in networks. In P. Nardi (Ed.), *Men's friendships*. Newberry Park, CA: Sage.

Wellman, B. & Gulia, M. (1999). The network basis of social support. In B. Wellman (Ed.), *Networks in the global village* (ch. 2). Boulder, C.O.: Westview Press.

Wellman, B., & Wortley, S. (1989). Brother's keepers: Situating kinship relations in broader networks of social support. *Sociological Perspective, 32,* 273–306.

Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology, 96,* 558–588.

Wethington, E. & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27,* 78–89.

Conceptualizing and Measuring the Psychology of Materialism Values

Yuan Li and Zhaoxia Li

In the course of over 30 years since the start of reform and opening-up, China has undergone spectacular economic growth, improvements in people's quality of life, and a substantial increase in consumption levels. Correspondingly, the values and lifestyles of Chinese people are also changing. "Materialism", "consumerism" and even "money-worship", which were regarded as capitalist values in the past, were brought to China along with its rapid economic development. In their daily lives, Chinese people often hear others say: "I would rather cry in a BMW than smile on a bicycle". Recent surveys show that 60% of female college students wanted to marry to a rich person's son (*Values Survey of Guangzhou Female Students* 2010). Moreover, Chinese media is full of high-end luxury advertisement for conspicuous consumption goods. These phenomena bring the following questions up: Why does materialism develop so rapidly in the contemporary Chinese environment? What kind of law does its formation and development follow? Does it bring happiness to the public? How can the public be guided to establish healthy and benign consumer outlooks and lifestyles?

Western countries have accumulated many studies in the field of materialism. In recent years, Chinese academic circles have also begun to study materialism (Zhang and Wang 2004; Li and Guo 2008; Li and Huang 2010). However, at present, Chinese scholars focus on reviewing and summarizing the findings of foreign studies; real empirical study of materialism is rare in China. This paper aims to explore the psychological causes of materialism and its inherent action mechanism and, on this basis, proposes a new direction for future empirical research. At the same time, it is hoped that this paper will provide some inspiration and guidance to the public so that it may correct its conception of consumption and establish healthy life patterns through materialism-related studies.

Y. Li (✉) · Z. Li
Beijing, China

1   Overview of Materialism-Related Studies

Materialism plays an important role in many aspects of daily life (Burroughs and Rindfleisch 2011). However, the exact definition of materialism is unclear. Different researchers have suggested different interpretations. For example, Belk (1985) defined materialism as a series of personality traits, which people demonstrate through their material possession; Richins and Dawson (1992) argued that materialism is a personal value that reflects the degree to which people value material possessions; Kasser and Ryan (1993) argue that materialism consists in people's concern for external motives such as wealth, success, social prestige and external image; Csikszentmihalyi and Rochberg-Halton (1978) regarded materialism as the orientation of external motivation, but at the same time mentioned that materialism could both serve as a tool to achieve the ultimate goal as well as be the ultimate goal itself; Chan and Prendergast (2007), thinking of wealth as a symbol of success occupying a central position in life, defined materialism as a set of attitudes, and believed that more wealth brings more happiness (Shrum et al. 2012).

In summary, this field of research is dominated by the materialistic doctrine of value, which is a line of thought followed by most of studies. Researchers regard materialism as an individual value that emphasizes the importance of material possessions, and point out that great materialists share the following characteristics: (1) they place material acquisition at the center of their lives; (2) they believe that material acquisition is the greatest source of happiness; and (3) they define individual success as the quantity and quality of material possessions (Richins and Dawson 1992).

Many studies show that although the pursuit of happiness through the acquisition of wealth is originally the goal of materialists, the result from such pursuit is most often the loss of happiness. In addition to materialism having a negative effect on various indicators of subjective well-being such as life satisfaction and happiness, the important features of great materialists also include psychological stress and insecurity (Burroughs and Rindfleisch 2002; Arndt et al. 2004), neglect of others, isolation from society, and so on. Many studies have explored the negative consequences of materialism at different levels.

At the individual level, materialism negatively correlates with life quality, life satisfaction, self-actualization, happiness, positive feelings, physical health; it positively correlates with negative emotions, social anxiety and substance abuse (Kasser 2002; Richins and Dawson 1992). Kasser and Ryan (1993) investigated the materialistic tendencies and the well-being of 316 college students and 140 adolescents. The results showed the negative correlation of materialism with self-actualization and vigor is as significant as its positive correlation with depression and anxiety. Some researchers have even argued that great materialists are characterized by psychological immaturity and psychopathology. They pointed out that the healthy growth of individuals should include a shift from a strong self-interest to a concern for social interests (Adler 1956), universalism, and a care for the world (Erikson 1959;

Loevinger 1976). In contrast, individuals who embrace materialistic values usually remain stuck in the lower stages of individual psychological development.

At the social level, studies have found that materialistic values not only undermine individual concerns for others, family and society, but also weaken individual focus on environment and ecology (Richins and Dawson 1992; Kasser 2002). The values relevant to great materialism reduce the time individuals spend with family members and their concerns for and involvement in social issues, as well as lead to fewer charitable acts (Roberts and Clement 2007). In order to achieve greater economic success and to accumulate more wealth, great materialists need to claim more natural resources, lest they fail to meet production and consumption levels. In social dilemmas, great materialists tend to claim more resources and show relatively high levels of greed (Kasser and Sheldon 2000). One study suggests that individual materialism levels positively correlate with the amount of land individuals require to meet their individual needs for transportation, food and shelter (Brown and Kasser 2005).

2 Psychological Determinants of Materialism

The discussion on the psychological causes of materialism is based on two basic assumptions, i.e. the scarcity hypothesis and the socialization hypothesis.

2.1 Psychological Causes of Materialism Based on Scarcity

In the field of humanistic psychology, it is believed that although everyone is eager for self-esteem, autonomy, and self-realization, what people pursue first are their most urgent needs. When individual needs for survival and security are not met or are threatened, individuals are less likely to focus on higher-level activities that promote individual growth and long-term well-being; instead, they focus on money, image and identity, because the supply of these elements is most closely related to basic security (Maslow 1954; Rogers 1961). Maslow pointed out that "when an individual's certain need is not met, his/her whole outlook on the future changes. For the chronically and extremely hungry man, utopia can be defined simply as a place where there is plenty of food. That man will tend to think that if he is guaranteed food for the rest of his life, he will be perfectly happy and will never want anything more" (Maslow 1954).

This logic also applies to the formation and development of materialistic values. Those whose basic needs were not satisfied in the past tend to think that wealth and material possessions bring joy and happiness. At this point, the sense of insecurity experienced by individuals forces them to use materialism as their strategy to compensate for their pain and anxiety (Kaser et al. 1995). The sources of scarcity are numerous. They mainly include economic poverty, emotional deprivation, and

anxiety over death, which respectively contribute to economic insecurity, emotional insecurity and existential insecurity.

1. **Economic insecurity**

When it comes to the study of the impact of economic insecurity on materialist pursuits, the values of materialism and post-materialism put forward by Inglehart are most influential. In Inglehart's conceptual system (2008), materialist values (including the pursuit of economic security and material security) emphasize the satisfaction of basic needs, while post-materialist values stress life quality, self-expression, and subjective well-being. A study analyzing survey data of six countries (the UK, Germany, Italy, Netherlands, Belgium and France) demonstrated that there is a significant difference in terms of values between the younger generation and the older generation. In the older generation, the values of "materialism" values are dominating. In the younger generation, those of "post-materialism" are significantly more important. This difference is significant: in the survey, scores for materialism values in people over the age of 65 were 12 times higher than those for post-materialism values; and in the case of people born after the Second World War (who were younger than 25-years old in 1970), scores for post-materialism values were slightly higher than those for materialistic values (Inglehart 2008). Inglehart et al. argued that as the older generation generally grew up in a period of economic scarcity and turbulence (such as the Great Depression, the First World War and the Second World War), their need for security was higher. In addition, they found that after the Second World War, although people's overall values remained stable, at specific times (such as during the mid-1970s, early 80s, and early 90s) people in European countries generally tended to materialistic values, because these periods of time correspond to relative economic depressions in Europe. The survey data support the following results: people growing up during times of economic crisis and people in low-income countries who also have to face economic insecurity are more inclined to materialistic values (Inglehart and Abramson 1994).

In different periods of times and in different geographical regions, other studies have also supported Inglehart's theory. Kasser et al. found that children who grew up in poor environments and thus could not see their survival and security needs fully satisfied often seek compensation through the pursuit of materialistic goals. In addition, when women experience economic insecurity, they tend to overvalue the materialistic features of their spouses (Kasser et al. 1995). Other studies have also confirmed that in countries where women lack educational opportunities and do not have the right to have children, women are more likely to seek husbands with great wealth and high status (Buss et al. 1990).

In short, materialism may be a consequence of the experience of poverty in the individual's early childhood. When people grow up in an economically deprived environment, such experiences are internalized as a subjective sense of economic insecurity. Even during adulthood, this sense remains in the mind of the individual, making him/her value success and wealth as well as the pursuit of material goals. The individual thus becomes a great materialist.

2. **Emotional insecurity**

Family is important for children to grow and develop. The rearing style of parents and family stability both play decisive roles in satisfying the emotional needs of children. Studies on parental rearing patterns have found that the less care parents give, the more children feel insecure about their own value. In the absence of adequate parental care, children are more sensitive to external materialistic information and seek appreciation from others as a way to make themselves feel good and gain self-worth through the pursuit of external goals (Kasser et al. 1995). Parents of children with materialistic values often demonstrate the following three characteristics: they are highly restricting and interfere in their child's affairs, thinking that their child cannot take care of himself/herself; when their child makes a mistake, they are more inclined to severely punish them; they always strictly follow their code of conduct and will not relax their rules for their child (Cohen and Cohen 1996). Adolescents with great materialistic values tend to think that their parents seldom listen to their ideas, acknowledge their feelings, or provide alternative solutions to their problems (Williams et al. 2000).

These studies also found that divorce is also related to the formation of individual materialistic values. A survey of 261 young adults by Rindfleisch and his colleagues (1997) found that children who had experienced the divorce of their parents tended to be greater materialists. They argued that when it came to materialism and the disintegration of family, the contributing factor is a lack of human resources (such as love and affection) caused by family breakdown rather than a lack of financial resources, causing children to experience the absence of warmth and care. Such emotional insecurity causes many children to turn to the pursuit of materialistic goals in order to fill this regret and obtain a sense of security.

In summary, children need the emotional support of parents during their growth so that their internal security needs may be met and their subjective well-being and life satisfaction may be improved. If parents ignore the emotional needs of their child or their child's emotional needs cannot be met due to a family breakdown or other factors, the child is likely to turn to the accumulation of external wealth and the pursue of materialistic goals, and then form materialistic values compensating for his/her insecurity.

3. **Existential insecurity**

The term existential insecurity refers to the anxiety that arises when people realize that they will inevitably die. In recent years, the terror management theory (TMT) has occupied an important position in the study of existential insecurity. TMT affirms that, in the history of human evolution, the terror brought by death has introduced a new adaptive issue in terms of human development. Death is subconsciously frightening. Only by successfully managing this terror can people alleviate their worries about dying and preserve their psychological stability (Greenberg et al. 2008; Liu et al. 2010).

Mortality salience, a term used in TMT, refers to the reminding and revealing of "mortality". Some studies have examined the relationship between materialism and consumer behaviors under the conditions of mortality salience. Researchers asked half of the subjects to imagine and write down the thoughts, feelings and idea of their own death arose so as to induce a sense of insecurity (mortality salience conditions). They then asked the other half to write down their thoughts and emotions when listening to music (control conditions), and then examined the differences between the two groups in terms of materialism levels. The results showed that subjects affected by mortality salience had higher economic expectations, were greedier, and expected to consume more resources in order to achieve their goals (Kasser and Sheldon 2000). Studies on consumer behavior have also found that mortality salience makes people further pursue brand-name consumer goods, to the point where people are more interested in high-end consumer goods, have higher evaluations of related advertisement, and also show stronger desires to buy (Mandel and Heine 1999). In other words, mortality salience causes great materialists to deal with their existential insecurity through a connection with brands (Rindfleisch et al. 2009).

2.2 Psychological Causes of Materialism Based on the Socialization Hypothesis

The socialization hypothesis affirms that an individual's personality and the basic structure of his/her values often form over long periods of time. Childhood, when an individual starts to become socialized, is often very important for the formation of the individual's personality and values, whereas these relatively do not change during adulthood.

When an individual is exposed daily to a variety of materialistic messages during childhood, his/her embrace of materialistic values is continuously strengthened (Chan and Prendergast 2007). For example, a large amount of media information about consumption and wealth potentially causes individuals to pay greater attention to economic achievements and to have a stronger propensity to consume (Rahtz et al. 1988; Kasser and Ryan 2001). If parents strongly value economic success, they will become role models during their children's childhood (Kasser et al. 1995).

In daily modern social life, people are exposed to numerous idealized images of successful character in media (especially advertising). Wealth and material comfort as portrayed by these successful images reach levels far above the average middle-class level; moreover it is also difficult for ordinary people to be as attractive in terms of appearances as most actors and models. This demonstrates that information communicated by the media distorts the true face of life. However, unconscious social comparisons bring people to think that their lives should be as those presented by media; their comparison objects are based on "imaginary" successful images presented by media. Eventually, stimulated by various advertisements, many people set unrealistic material goals for themselves, always wanting more, which results in

negative self-evaluations and dissatisfaction with life (Richins 1995). Experimental studies by Gulas and McKeage (2000) showed that male college students thought poorly of their own wealth, success (or appearance) and self-esteem after they were asked to watch advertisement containing idealized images of wealth and success (or appearance), regardless of gender in advertising. Further analysis revealed that this effect is adjusted by social comparative factors; that is, people who frequently engage in social comparisons are more susceptible to these images (Kasser and Ryan 1996).

Combining the scarcity hypothesis and the socialization hypothesis, the following pattern for the formation of materialism is noticeable: when people are in an environment where basic needs are relatively scarce (such as environments featuring poverty, low parental care and death anxiety), they experience economic insecurity, emotional insecurity, existential insecurity, etc. Insecurity brings unhappiness and dissatisfaction. When people's inner sides are imbalanced and external consumer culture constantly reinforces the idea that "security can be bought via the usage of resources", they are driven to pursue materialistic goals and regard materialism as a strategy to compensate their security needs, relieve themselves of pressure and reduce their suffering. It can be argued that the pursuit of materialistic values is both a manifestation of individual insecurity and a strategy for people to cope with anxiety via the satisfaction of security needs (Kasser 2002).

The problem with materialistic values, however, is that it is not an excellent coping strategy. Some coping strategies can only make people feel happy in the moment (such as self-segregation, denial and indulgence). By contrast, although materialistic values can be a long-term pursuit, they still bring a sustained and profound sense of insecurity. The negative correlation between materialism and subjective well-being suggests that this coping strategy is not effective in alleviating relevant issues, and on the opposite may even worsen these issues. In the following section, this issue will be further explained from the point of view of the satisfaction of basic psychological needs.

3 Materialism and Basic Psychological Needs

The self-determination theory is a motivational process theory proposed by American psychologists Deci and Ryan in the 1980s relating to human self-determination behaviors (Deci and Ryan 2000; Liu et al. 2003). According to this theory, individuals have self-developmental needs. These basic human psychological needs are composed of three elements: competence, relatedness and autonomy. These three types of needs are functionally the basis of individual growth, self-realization and sense of happiness, as well as indispensable elements for the healthy development of humans. To satisfy these basic needs, people set goals and take actions purposefully and strategically.

According to the self-determination theory, such goals can intrinsic or extrinsic. Intrinsic goals refer to goals that reflect the inner growth trends of individuals and play a positive role in personality integration, self-realization and inner happiness.
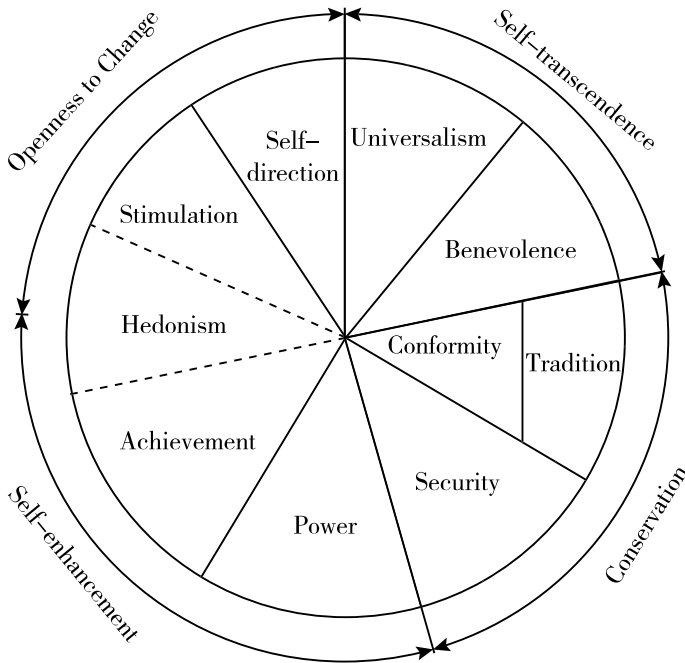
Schwartz's Theory of Basic Human Values Schwartz (1992)

Fig. 1 Schwartz's theory of basic human values

Intrinsic goals include self-acceptance, affiliation, community feeling and physical health. Extrinsic goals refer to individual dedication to obtaining external rewards or social recognition and deeply impressing others with his/her external values, such as material wealth, social power, status and reputation. The pursuit of such goals is closely related to external evaluation standards (Kasser and Ryan 1993, 1996).

The view that intrinsic goals are antagonistic to extrinsic goals is supported by many studies. The large-scale cross-cultural study carried by Schwartz et al. was meant to study how people psychologically organize important goals in their life. On the basis of empirical data, they put forward a circumplex model (see Fig. 1) of values and goals, which includes two vertical dimensions, i.e. self-enhancement versus self-transcendence, and conservation versus openness to change. This model is composed of 10 values based on these dimensions, i.e. power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, compliance and safety (Schwartz 1992, 1994).

Schwartz pointed out that in this "circumplex model", adjacent goals mutually coordinate with each other. The contents of these adjacent goals are mutually complementary and conflict with goals at the other end of the circumplex model. In other words, an emphasis on a set of values and goals means less focus on their opposite val-

ues. In Schwartz's circumplex model, universalism, benevolence and self-direction are concentrated at the same end and opposite to power and achievement goals.

Grouzet et al. (2005) surveyed over 1,800 people from 15 countries and arrived to a similar conclusion: the goal of financial success is opposite to community feeling, affiliation, self-acceptance and other goals. That is to say, focusing on wealth and personal possessions conflicts with the values of "improving the world through activities and creativity", "keeping satisfactory relations with families and friends", and "competence and independence".

Great materialists focus on extrinsic goals such as wealth, image and reputation, and hope to gain self-value through external rewards and praises. They regard external evaluations as the main measurement tool for themselves, which to a great extent impairs their intrinsic motivation to act and makes it difficult to satisfy their basic psychological needs. When these basic psychological needs are difficult to satisfy, great materialists tend to pursue extrinsic goals in hope of certain psychological compensation. That is to say, for materialists, there exists a vicious cycle which includes the pursuit of extrinsic goals and the satisfaction of basic psychological needs. In the next section, we will respectively explain the formation process and the mechanism behind this vicious cycle mainly from three aspects, i.e. competence, relatedness and autonomy.

3.1 Relations Between Materialism and the Need for Competence

The need for competence refers to the faith of an individual in the fact that his/her behaviors are up to par as well as to the belief in his/her competences in terms of related activities. This concept is similar to that of self-efficacy proposed by Bandura. Generally speaking, when people successfully realize a goal, their sense of competence improves accordingly. However, this is not the case for individuals who focus on wealth, reputation and other materialistic goals. The sense of self-value of these individuals depends on the evaluation and the extrinsic standards of others. As a result, their need for competence is often threatened, even when these individuals are successful. Furthermore, individuals holding on to highly materialistic values always think of their current status as out of balance with their expectations of the ideal status. In the long term, such imbalance eventually impairs their senses of self-value and competence (Kasser 2002). Great materialists often agree with the following descriptions of themselves: "sometimes I feel like I'm really useless", or "sometimes I feel I'm good for nothing". Some psychologists attribute these great materialists with the feature of "contingent self-esteem". When individual self-value relies on particular extrinsic standards or feedback, the contingent self-esteem occurs (Deci and Ryan 1995). (For example, the self-value of students is formed via their reliance on test scores, whereas professors evaluate themselves on the basis of the number of papers they publish yearly.) When individuals achieve their goals, their

senses of achievement and competence improve. However, such positive experiences exist only for a short time, and the sense of competence so-gained is vulnerable and unstable. New challenges and threats soon emerge, which can easily destruct the newly existing self-esteem. If no positive extrinsic feedback required by the contingent self-esteem is made to individuals, their self-evaluation will plummet.

Specifically, the following three aspects constitute the main characteristics of great materialists:

(1) Ever-present gaps. Generally speaking, it seems that all materialists have exaggerated ideals in terms of wealth and status. Such ideals are often difficult to realize, which results in long-term gaps between these ideals and reality.

(2) Overly idealistic. Materialists often have excessively inflated and unrealistic ideals in terms of wealth and material possessions. These ideals are so unrealistic that materialists always seem dissatisfied with their life quality when it is evaluated. These unrealistic ideals stem from the combined action of many factors such as individual values, the influence of surrounding people, and mass media. Among these, mass media plays an especially great role in the formation of individual materialistic ideals. Researchers who studied the relations between materialism, watching television and happiness found that highly materialistic individuals may spend more time watching television and thus enjoy a greater access to symbols of wealth and beauty. This makes them likely to inappropriately compare themselves with the images portrayed in TV programs, causing these individuals to become unsatisfied with their current lives (Rahtz et al. 1988; Sirgy et al. 1998).

(3) Constantly raised baselines for social comparison. Great materialists are never satisfied with their pursuit of a material life; despite the momentarily realization of some extrinsic ideals, they are quickly attracted to new external stimuli, causing them to further abandon the material conditions that are already theirs and set up new materialistic goals for themselves. Therefore, the gap between their new goals and their status quo causes more dissatisfaction.

Broadly speaking, great materialists are trapped in a vicious cycle: they set new materialistic goals for which there are no limits, and they are confronted with the gaps between these new ideals and reality. Thus, they are always unable to extricate themselves from tensed and anxious states. This cycle allows the sustenance of a materialistic way of life but causes a lower sense of competence, lower self-evaluation and greater dissatisfaction.

3.2 Relation Between Materialism and the Need for Connection

Individuals need to be loved; they need to be understood and supported by their surrounding environment or others, and also need to feel like they belong. Good interpersonal relations and group participation are the keys to psychological health,

as well as the two cornerstones of individual happiness (Maslow 1954; Greenberg and Mitchell 1983; Ryan and Deci 2000).

When individuals pay excessive attention to wealth, status, image, identity and other extrinsic goals, they tend to focus much less on interpersonal relations. This is supported by a series of studies related to the aspiration index: when individuals score higher on items such as "wealth and success", "social prestige", "external image" and other materialistic items, their scores for items such as "affiliation", "community feeling", etc., are usually lower (Kasser and Ryan 1993, 1996). For example, Kasser (2002) found in his studies that individuals who pay more attention to financial success, external image, fame, popularity and other extrinsic goals tended to report only short-term and contradictory relations, either with friends or loved ones, even after these individuals' aggressive tendencies had been overcome. In their study, Solberg, Dinner and Robinson (quoted from Kasser 2002) required three friends and family members for every subject, which they would ask to complete a survey on their relations with the subject; when individual materialists of the subject scored higher, the quality of the relations reported by important people related to them would be lower. Other studies also indicate that individuals with materialistic values are less empathetic (Sheldon and Kasser 2008), have more Machiavellian tendencies (McHoskey 1999), lack team spirit (Sheldon et al. 2001), and try hard to avoid intimate relationships even in dreams (Kasser and Kasser 2001). While pursuing materialistic goals and financial goals, these individuals generally feel "the absence of warm interpersonal relationships such as with friendly neighbors, with tolerant family members, and that offered by stable family life" (Lane 2000).

Why it is hard for people who embrace materialistic values to develop positive interpersonal relationships? There are two reasons. First, when individuals pay too much attention to extrinsic goals and pursue the rewards and approval of others, they tend to neglect the satisfaction of intrinsic psychological needs, pay less attention to intimate relationships and other intrinsic goals, as well as further lower their intrinsic motivation to act. In other words, when consumption, property, status and other needs become an individual's main targets, he/she is bound to spend quite a lot of time and energy running after wealth and success, which leads such individuals to become reluctant to understand other people's subjective experiences, feelings and desires.

Second, materialistic values impair the quality of interpersonal communication and reduce the ability of individuals to feel satisfied from intimacy and belonging. People who place too much emphasis on consumption and purchase, or financial gains and losses, and who dwell on the monetary value of materials also tend to treat humans as objects. In the mind of materialists, the nature of interpersonal relationships has changed. These individuals focus on the "exchanging relationship" and they "regard people as object". In the process of interpersonal communication, materialists usually give more considerations to the thought, "What can he/she do for me?" Instead of treating others as subjective "I-You", materialists often act self-servingly and see others as an object that can be utilized and manipulated, which is known as an "I-It" relationship. Schwartz (1992) used the concept of "instrumental friendship" to describe a principle of the consumerism society according to which "helpful friends are the friends I need".

In simple words, the pursuit of materialistic goals conflicts with that of positive interpersonal relationships. Materialists pay attention to wealth, image, fame and other extrinsic goals; they ignore intimate interpersonal relationships; and they rarely make "investments" in the interpersonal relationships and the groups they are in. These individuals realize their goals by treating others as object as well as controlling and manipulating their relationships with others, resulting in such low-quality interpersonal relationships further impairing interpersonal ties linking couples, friends, families and communities, so that they feel no intimacy nor belonging. When these individuals feel alienated and isolated in the absence of intimate interpersonal relationships, they tend to obtain satisfaction from wealth, success and the praises of others, to prove their value through external reward and approval, and to compensate for their lacks by further pursuing materialistic goals. That is to say, there is a vicious cycle between materialism and the satisfaction of relatedness need impairing subjective happiness and satisfaction toward life (Kasser 2002; Richins and Dawson 1992).

3.3 Relations Between Materialism and the Need for Autonomy

The need for autonomy refers to the need for self-determination, i.e. the individual need to be able to act at one's own will. The satisfaction of this need matters most. When the degree to which an individual's behaviors are self-determined is higher, he/she feels his/her dominance over his/her own acts, whereupon he/she gains a higher intrinsic motivation to act. A long-term study on the self-determination theory (Ryan 1995; Ryan and Deci 2000) has established that: individuals sometimes adjust their behaviors for autonomous reasons (such as individual interests and personal values) as well as sometimes for non-autonomous reasons controlling them (such as guilt, anxiety, external compelling and commitment for rewards). In comparison with people controlled by such non-autonomous reasons, individuals acting in line with autonomous reasons report a higher sense of happiness and better performances.

However, subscribers to the philosophy of materialism pay too much attention to their image and have stronger public self-consciousness while overlooking intrinsic motivation and individual autonomy to act. These individuals tend to lack autonomy (Sheldon and Flanagan 2001; Sheldon and Kasser 2008; Carver et al. 1996). Srivastava et al. (2001) reported similar results in the study of business college students and entrepreneurs. They found that materialistic goals positively correlate to the motivation to overcome self-doubt and emphasize social comparison (Ryan 1995). Another study was conducted in the form of a survey of the "weekend effect" on North American workers (Bernstein et al., 2005); it found that people are less happy on workdays but happier on off-work days. This to a great extent means that laborers lack autonomy at work. In other words, in the modern work environment, employees feel alienated and manipulated; they do not find freedom in their daily work and life.

When individuals have low autonomy in terms of their behaviors, they expect to improve their self-consciousness through the realization of extrinsic goals and achievements, and they pay more attention to reward and approval given by others, which finally further internalizes materialistic values. That is to say, materialistic values drive individuals to take actions that seldom satisfy their need for autonomy; if the individual need for autonomy is not met, individuals tend to further pursue extrinsic materialistic goals so as to improve their self-consciousness.

In conclusion, vicious cycles exist between materialistic values and the satisfaction of all three basic psychological needs. On the one hand, materialistic values prevent the satisfaction of the three basic psychological needs, i.e. individual competence, relatedness and autonomy; and on the other hand, when these basic psychological needs are not satisfied, individuals are more likely to tend to pursue extrinsic goals, such as wealth, fame and image, as they expect to prove their self-value, improve their self-consciousness, and gain psychological compensations through the realization of extrinsic goals, which finally leads them to further internalize materialistic values.

4 Section Measuring Materialism

Generally, studies on materialisms employ the questionnaire method. As researchers have put forward different concepts, the development of their measurement tools was also characterized in different ways. In general, the following four measurement tools are relatively representative.

4.1 Measurement of Materialism by Belk et al.

Belk et al. regarded materialism as a collection of personality traits, affirming that materialism is in fact composed of four, i.e. envy, non-generosity, possessiveness and preservation (Belk 1985; Ger and Belk 1996). On this basis, they developed a measurement tool. Researchers requested subjects to evaluate their level of self-acceptance based on survey questions. The questionnaire survey was conducted on a 5-point scale scoring basis.

In the study of Belk et al., it is reported that the materialism scale is mildly reliable (including total scale and each sub-scale). In addition, the factor load of each question is all at acceptable level, and their correlation with the existing scale also indicates that such a measurement tool is valid both in terms of its content and its construct. However, Richins and Dawson (1992) summarized 12 documents related to the reliability of this scale and concluded that it was low as a whole and unstable, with the alpha coefficient ranging from 0.09 to 0.81, averaging at 0.54.

4.2   Measurement of Materialism by Richins et al.

The material values scale developed by Richins and Dawson (material values scale, MVS) divides materialism into three dimensions: centrality, happiness, and success.

The MVS has been proved by a large number of studies to be of rather high internal consistency and reliability, with the average alpha coefficient of its overall scale reaching 0.85, and that of centrality, happiness and success sub-scales respectively reaching 0.73, 0.75, and 0.77. Therefore, the MVS has been widely applied and has become the most frequently used scale for measuring materialism in contemporary studies.

Richins and Dawson subsequently analyzed 49 independent databases collected from 44 documents and found that construct validity was absent in most studies, and only a small number of documents verified its construct validity but defective in some aspects. So they revised the MVS of 18 items, deleted items 6, 7 and 10, and came up with a new MVS composed of 15 items; their research indicated that the new MVS had much better dimensional properties than the previous version. In addition, in order to be even more practical scale, the new MVS can be simplified into a 9-item or a 3-item version also capable of effectively measuring materialism.

4.2.1   Measurement of Materialism by Kasser and Ryan

Kasser et al. explored materialism from the perspective of the balance and the competition between intrinsic goals and extrinsic goals. Materialistic behaviors are considered to be stimulated by extrinsic goals. Early on, studies argue that the core of the pursuit of materialists should be financial success (Kasser and Ryan 1993). Kasser and Ryan (1996) further extended on this idea in subsequent studies by pointing out that studies should not only be placed on the importance of financial success for individual values but also on the impact of social recognition and appealing appearances on individual values. This is because individual levels of materialism are measured by all three coefficients.

Kasser et al. developed an aspiration index scale measuring materialism on the basis of intrinsic and extrinsic motivations. Researchers requested subjects to evaluate the importance and possibility from two dimensions. The scoring was done on the basis of a 5-point scale. Intrinsic motivations included three sub-scales: self-acceptance, affiliation, and community feeling; extrinsic motivations also included three sub-scales: financial success, social recognition, and appealing appearances. Researchers found that in terms of the dimension of possibility, reliability was between 0.59 and 0.87, averaging at 0.76; in terms of the importance dimension, reliability was between 0.68 and 0.86, averaging at 0.76.

4.3 Measurement of Materialism and Post-materialism by Inglehart

Inglehart (2008) summarized the results of many surveys on world values and found that there were mainly two cultural dimensions. The first dimension is the "modernization" dimension between the "traditional authority" and the "secular-rational authority". The former highlights the importance to obey traditional authority whereas the latter highlights the authority of legal system and rationality. The second dimension is the "post-modernization" dimension between "survival" and "self-expression", which mainly covers the contrast between "materialistic values" and "post-materialistic values". The former (survival) is involved in the pursuit of materialistic values including financial safety and material safety, and focuses more on the satisfaction of basic needs such as material comfort and basic safety but less on the satisfaction of higher needs such as self-expression, sense of belonging and life quality; while the latter (self-expression) is involved in pursuit of post-materialistic values and focuses on life quality, personal freedom, aesthetic needs and subjective well-being, regardless of economic costs. It's worth noting that this scale is mainly applicable to cultural comparisons other than the measurement of individual materialism levels.

References

Chinese-Language Sources

Li, J., & Guo, Y. Y. (2008). Materialism and the related research. *Advances in Psychological Science, 16*(4), 637–643.

Li, P. J., & Huang, P. (2010). A discussion about the influence of "the Post-1980" materialism on their subjective happiness. *Commercial Times*, 8, 17–18.

Liu, H. Y., Yan, R. S., & Guo, D. J. (2003). New development of cognitive motivation theory: Self-determination theory. *Psychological Science*, 26(6), 1115–1116.

Liu, Y. N., Xu, Y., & Yu, S. K. (2010). Studies of terror management: New development, criticism and controversy. *Advances in Psychological Science*, 1, 97–105.

Zhang, H. X., & Wang, C. (2004). Empirical analysis of materialism attitude of Beijing adolescents. *Youth Studies*, 9, 1–5.

English-Language Sources

Adler, A. (1956). *What life should mean to you*. New York: Oneworld publication Ltd.

Arndt, J., Solomon, S., Kasser, T., & Sheldon, K. M. (2004). The urge to splurge: A terror management account of materialism and consumer behavior. *Journal of Consumer Psychology*.

Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research, 12*, 265–280.

Bernstein, J., Ryan, R. M., & Brown, K. W. (2005). Waiting for the weekend: Daily fluctuations in well being as a function of psychological need satisfaction. Unpublished Manuscript, Concordia University.

Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research, 74*, 349–368.

Burroughs, J. E., Rindfleisch, A. (2002). Materialism and well-being: A conflicting values perspective. *Journal of Consumer Research, 29*, 348–370.

Burroughs, J. E., & Rindfleisch, A. (2011). What welfare? On the definition and domain of consumer research and the foundational role of materialism. In D. G. Mick, S. Pettigrew, C. Pechmann, & J. L. Ozanne (Eds.), *Transformative consumer research for personal and collective well-being* (pp. 249–266). New York: Routledge.

Buss, D. M., et al. (1990). International preferences in selecting mates a study of 37 cultures. *Journal of Cross-Cultural Psychology, 21*(1), 5–47.

Carver, C. S., Lawrence, J. W., & Scheier, M. F. (1996). A control-process perspective on the origins of affect. In L. L. Martin & A. Tesser (Eds.), *Striving and feeling: Interactions among goals, affect, and self-regulation* (pp. 11–52).

Chan, K., & Prendergast, G. (2007). Materialism and social comparison among adolescents. *Social Behavior and Personality: An International Journal, 35*(2), 213–228.

Cohen, P., & Cohen, J. (1996). *Life values and adolescent mental health*. Mahwah, NJ: Lawrence Earlbaum.

Csikszentmihalyi, M., & Rochberg-Halton, E. (1978). Reflections on materialism. *University of Chicago Magazine, 70*, 6–15.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true selfesteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self determination of behavior. *Psychological Inquiry, 11*(4), 227–268.

Erikson, E. H. (1959). Identity and the life cycle: selected papers. *Psychological Issues, 1*(1), 5–165.

Ger, G., & Belk, R. (1996). Cross-cultural differences in materialism, *Journal of Economic Psychology, 17*(1), 55–77.

Greenberg, J. R., & Mitchell, S. A. (1983). *Object relations in psychoanalytic theory*. Cambridge, MA: Harvard University Press.

Greenberg, J., Solomon, S., & Arndt, J. (2008). *A basic but uniquely human motivation: Terror management* (pp. 32–55). New York: Handbook of motivation science.

Grouzet, F., Kasser, T., Ahuvia, A., Fernandez-Dols, J. M., Kim, Y., Lau, S., Ryan, R. M., et al. (2005). The structure of goal contents across fifteen cultures. *Journal of Personality and Social Psychology, 89*, 800–816.

Gulas, C. S., & Mckeage, K. (2000). Extending social comparison: An examination of the unintended consequences of idealized advertising imagery. *Journal of Advertising, 29*(2), 17–28.

Inglehart, R. F. (2008). Changing values among western publics from 1970–2006. *West European Politics, 31*(1–2), 130–146.

Inglehart, R., & Abramson, P. R. (1994). Economic security and value change. *American Political Science Review, 88*, 336–354.

Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: MIT Press.

Kasser, T., & Kasser, V. G. (2001). The dreams of people high and low in materialism. *Journal of Economic Psychology, 22*, 693–719.

Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*, 410–422.

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280–287.

Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. M. Sheldon (Eds.), *Life goals and well-being: Towards a positive psychology of human striving* (pp. 116–131). Goettingen, Germany: Hogrefe & Huber.

Kasser, T., & Sheldon, K. M. (2000). Of wealth and death: Materialism, mortality salience, and consumption behavior. *Psychological Science, 11,* 352–355.

Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology, 31,* 907–914.

Lane, R. E. (2000). *The loss of happiness in market democracies*. New Haven, CT: Yale University Press.

Loevinger, J. (1976). Origins of conscience. *Psychological Issues, 9*, 265–297.

Mandel, N., & Heine, S. J. (1999). Terror management and marketing: He who dies with the most toys wins. *Association for Consumer Research Proceedings, 26,* 527–532.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.

McHoskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination theory analysis. *Motivation and Emotion, 23,* 267–283.

Rahtz, D. R., Sirgy, M. J., & Meadow, H. L. (1988). Elderly life satisfaction and television viewership: An exploratory study. In M. J. Houston (Ed.), *Advances inconsumer research, 15* (pp. 141–145). Provo, UT: Association for Consumer Research.

Richins, M. L. (1995). Social comparison, advertising, and consumer discontent. *American Behavioral Scientist, 38,* 593–607.

Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research, 19*, 303–316.

Rindfleisch, A., Burroughs, J. E., &Denton, F. (1997). Family structure, materialism, and compulsive consumption. *Journal of Consumer Research, 23,* 312–325.

Rindfleisch, A., Burroughs, J. E., & Wong, N. (2009). The safety of objects: Materialism, existential insecurity, and brand connection. *Journal of Consumer Research, 36,* 1–16.

Roberts, J. A., & Clement, A. (2007). Materialism and satisfaction with over-all quality of life and eight life domains. *Social Indicators Research, 82*(1), 79–92.

Rogers, C. R. (1961). The process equation of psychotherapy. *American Journal of Psychotherapy, 15*(1), 27–45.

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality, 63,* 397–427.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68–78.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). New York: Academic Press.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues, 50*(4), 19–45.

Sheldon, K. M., & Flanagan, M. (2001). Extrinsic value orientation and dating violence. Unpublished Manuscript.

Sheldon, K. M., & Kasser, T. (2008). Psychological threat and extrinsic goal striving. *Motivation and Emotion, 32,* 37–45.

Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satifying about satisfing events? Testing 10 candidate psychological need? *Journal of Personality and Social Psychology, 80,* 325–339.

Shrum, L. J., et al. (2012). Reconceptualizing materialism as identity goal pursuits: Functions, processes, and consequences. *Journal of Business Research*. http://dx.doi.org/10.1016/j.jbusres.2012.08.010.

Sirgy, M. J., Lee, D., Kosenko, R., Meadow, H. L., Rahtz, D., Cicic, M., et al. (1998). Does television viewership play a role in perception of quality of life? *Journal of Advertising, 27,* 125–142.

Srivastava, A., Locke, E. A., & Bortol, K. M. (2001). Money and subjective well-being: It's not the money, it's the motives. *Journal of Personality and Social Psychology, 80,* 959–971.

Williams, G. C., Cox, E. M., Hedberg, V. A., & Deci, E. L. (2000). Extrinsic life goals and health risk behaviors in adolescents. *Journal of Applied Social Psychology, 30,* 1756–1771.

Belief in the Golden Mean as a Social Mentality Indicator

Chungfang Yang

1 Belief in the Golden Mean and Related Values as a Social Mentality Indicator

Social mentality has been studied from many angles and by numerous scholars. They have studied popular and novel phenomena, the novel questions that therefore emerged, as well as proposed novel solutions for our modern society. Here, the use of the word "novel" is justified because the above elements are different from, conflict with, contradict to, and even stand opposite to their original counterparts. Observations on social mentality can ultimately be attributed to values and to changes in the beliefs that support values. Therefore, beliefs/values and their changes should be a key subject in the study of social mentality.

Taking beliefs/values as the theoretical basis to study social mentality indexes, the author of this article engage a discussion on the following two aspects: first, how does on study modernization? And second, how does one measure people's beliefs/values? In the former case, Yang (1999) once proposed that modernization is a time-varying process: "past" (traditional) and "modern" (today) move ahead alternately. The present "modern" thus originated from the integration of the "past" (tradition) and of "external" (new) stimuli (contradictions, conflicts). However, the "modern" is also the "past" of the "future". Therefore, studies on localization and modernization are by no means contradictory or mutually exclusive; study of indigenous or traditional concepts lays the foundation for study of modernization and is indispensable for the study of social mentality in the process of modernization.

When discussing the value system of Chinese society, Yang (1994) once pointed out that values must be reflected through comparison and selection. Many past studies on social values merely arranged possible valuable items on a five-point scale (or six- or seven-point), wherefore subjects would be asked to express their preferences.

C. Yang (✉)
Beijing, China

Thus it is not truly their values that are being measured, but their preferences. Only when one must select from two or more choices are values reflected.

Based on these two discussions, the author applies the "ways of treating people and dealing with affairs" such as represented by the traditional way of thinking—the "golden mean"—as the tool for conducting research, and uses a forced choice test (alternative) to bring subjects to express their beliefs and values, which, in turn, can be used as tools to measure social value in social mentality. The purpose here is to answer the following questions: (1) Are traditional "golden mean" beliefs and values still universal guidelines for behavior in today's Chinese society? (2) Which beliefs/values remain unchanged? Which ones have weakened? (3) Are there any differences in socio-economic indicators, such as gender, age, educational status, occupation or position? What phenomena do they present? (4) Are there any differences between normal and abnormal adults?

2 The Golden Mean: The Belief and Related Value System

A beliefs/values system refers to opinions or evaluations directed on a target object (person, event or item). These opinions and evaluations reflect individuals' preferences, approval or concerns directed on the object, and usually have a self-contained structure supported by cultural connotations (such as worldviews) at higher levels, which is known as a cultural beliefs/values system.

The golden mean beliefs/values system is the essence of traditional Chinese culture, focusing on "ways of treating people and dealing with affairs" of individuals in their daily lives. It was developed out of "the doctrine of the mean", which represents the essence of traditional Chinese culture. This system was first proposed by Yang and Chiu (1997) as they carried out psychological study of "golden mean", the ancient and modern indigenous concept. Based on Chinese worldviews and value system as well as *The Doctrine of the Mean* itself, Yang and Chiu built a "practical golden mean thought system", regarding it as a meta (monitoring) cognitive group instructing the attitudes of people towards other people and when dealing with affairs. There are eight major sub-constructs in this system, each representing a social behavioral guideline: taking a wait-and-see approach, treasuring harmonious relations, holding two extreme perspectives, putting emphasis on overall interests, making sense, retreating to advance, focusing on consequences, and avoiding extremes. Based on this conceptualization, we have developed a "practical golden mean thought scale" which consists of sixteen declarative sentences based on beliefs that reflect these guidelines. For each behavioral guideline, there are two corresponding declarative sentences.

In order to reflect the true values of their subjects, Yang and Zhao formulated a declarative sentence with opposite values ("non-golden mean sentence") for each of the sixteen beliefs declarative sentences ("golden mean sentence"). Most of these "non-golden mean sentences" reflected modern beliefs/values of society influenced

by western values. Subjects were required to choose a declarative sentence that they felt inclined to agree with (either the "golden mean sentence" or the "non-golden mean question") and assess their agreement on a seven-point measuring scale.

3 Functions of the Belief in Golden Mean Beliefs as a Social Mentality Indicator

Although belief in the golden mean has a place in the modern Chinese consciousness, it is also well known that such belief and related values do not always have practical efficacy. When and under what circumstances are they efficacious? What are their roles? In his survey of studies done in the last 10 years on the golden mean Yang (2010) found that such belief and related values are most effective when people encounter conflicts and setbacks, in which case the belief and related values help to correct psychological and emotional imbalances (anger, sadness, fear, anxiety and depression, etc.). These psychological imbalances occur in many aspects of daily life, such as interpersonal conflicts, exhaustion from overwork, feeling of inferiority, resignation, and so forth. We can foresee that belief in the golden mean and related values can be used in the study of inertial thinking for its relieving or soothing of sadness and its adjustments on social mentality in times of great catastrophic events.

4 Conclusion: Theoretical Significance of Studies of Belief in the Golden Mean and Related Values

The golden mean is a set of (social practice) beliefs and values of "ways of treating people and dealing with affairs" which has been held on to by Chinese people since ancient times. It is of great significance to the study of indigenous psychology, as we can use it as a system for studies on Chinese people's social interaction to understand the things happening around Chinese people, as well as to explain why certain thoughts, emotions and behaviors are manifested in some people at certain times and certain places. In this way, the approach to the study of native Chinese psychology is recognized (Yang 2009a, b).

As for the study of modernization, the belief in the golden mean and related values have remained in the mind of Chinese people for a long time, which has led us to structure the way people integrate traditions and new lifestyles as the western cultural invasion is underway. Indeed the belief in the golden mean and related values can guide our understanding of the oppositions, contradictions, conflicts and imbalances that emerge in the process of modernization, as well as help us find solutions for the most consistent psychological need (the pursuit of harmony between man and nature) of the Chinese people.

As for the study of studies of social mentality studies of social mentality, the belief in the golden mean and related values system, as the values characteristic of Chinese cultural psychology, not only plays a directional function in terms of the selection and adjustment of the basic needs and satisfactions of the people, but also acts as an important variable explaining the needs and the sources of satisfaction of social mentality; meanwhile, it is also an important part of social values. In addition, the system is a fundamental element in the adjustment of social emotions and the guiding of corresponding social behavioral strategies.

References

Chinese-Language Sources

Yang, C. (1994). Are Chinese people are collectivistic? On the value system of Chinese culture. In G. Yang (Ed.), *The values of the Chinese* (pp. 321–434). Taipei: Guiguan Book Co, Ltd.

Yang, C. (1999). Are modernization and globalization antagonistic to localization? On localization of modernization research. *Sociological Studies, 1,* 57–72.

Yang, C. (2009a). Strategies for studying indigenous psychology. In G. Yang, G. Huang, & Z. Yang (Eds.), *Chinese indigenous psychology* (Vol. 1, pp. 81–110). Tiapei: Yuan-Liou Publishing Co., Ltd.

Yang, C. (2009b). A case of attempt to combine the Chinese traditional culture with the social science: The social psychological research of "zhongyong". *Journal of Renmin University of China, 3,* 53–56.

Yang, C. (2010). Initial progress of the "zhongyong" thinking system studies. *Indigenous Psychological Research, 34,* 3–96.

Yang, C., Chiu, C. (1997). A probe into the moderate practice thinking. In *The 4th Chinese Psychology and Behavior Interdisciplinary Symposium, Conference Papers*.

Bibliography

Chinese-Language Sources

Aristotle, (1992). *The complete works of Aristotle* (Vol. VIII). Beijing: China Renmin University Press.

Aristotle (1999). *The Nikomachean ethics*. Beijing: China Social Sciences Press.

Beck, U. (2004). *World risk society* (Y. Z. Wu & S. M. Sun, Trans.). Nanjing: Nanjing University Press.

Beck, U. (2004). *Risk society* (B. W. He, Trans.). Nanjing: Yilin Press.

Burke, P. (2001). *History and social theory* (P. Yao, et al., Trans.). Shanghai: Shanghai Century Publishing (Group) Co., Ltd.

Cheng, L., & Wang, X. D. (2002). On the state of mind's history and the research of chinese modern society. *Journal of Yunnan Normal University, 2,* 86–89.

Chiu, C., Wen, J., & Tan, J. B. (2005). Basic psychological processes of social identification: The case of Hong Kong's return to China. *Sociological Studies, 5,* 202–223.

Dai, X., & Li, Z. Y. (2011). Fair educational finance and equal education opportunity of rural migrant workers' children. *Journal of Xuzhou Normal University (Philosophy and Social Sciences Edition), 37*(2), 147–151.

Fan, X. Y. (2010). On just idea about social security of rural migrant workers. *Productivity Research*, 6, 38–40.

Fang, W. (2002). The development of European social psychology. *Acta Psychologica Sinica*, 34(6), 651–655.

Fang, W. (2002). Disciplinary institution quintessence, symbolic hegemony and social forgetting: Construction and reproduction of mainstream historical discourses in social psychology. *Sociological Research, 17*(5).

Fang, W. (2008). Group membership: An new approach to the social identity event. *Journal of China Agricultural University (Social Sciences Edition), 25*(1), 89–108.

Fang, W. (2012). Out of the identity dilemma of believers and citizens. *Cultural Review*, (1), 32–35.

Fang, P., Chen, M. Q., & Jiang, Y. (2006). Experimental paradigm of affective priming research. *Psychological Science*, 29(6), 1396–1399.

Gao, J. F. (1982). *The history of modern western psychology*. Beijing: People's Education Press.

Gao, J. F. (1987). *The new development of western psychology*. Beijing: People's Education Press.

Giddens, A. (1998). *The constitution of society* (K. Li, & M. Li, Trans.). Beijing: SDX Joint Publishing Company.

Giddens, A. (2000). *The consequences of modernity* (H. Tian, Trans.). Nanjing: Yilin Press.

Guo, X. H., & Xing, C. G. (2009). Analysis of social identity and influencing factors of highly educated migrant youths: A case study of Beijing. *Academic Journal of Zhongzhou, 6,* 103–108.

Guo, Y. Y., & Fu, J. B. (2011). Death reminder effects: concepts, measurements and evidence from multiple fields. *Psychological Exploration, 31*(2), 113–117.

Han, J. (2009). Research overview of social identity theory. *Journal of Shanxi Coal-Mining Administrators College, 1,* 55–57.

Han, J. Y., & Wang, J. M. (2008). Social security of rural migrant workers from the perspective of equality. *Social Sciences in Yunnan,* S1, 279–280.

He, S. H. (2009). "The struggle for recognition": Research in the social identity of the new-generation rural migrant workers [Presentation]. *The Fifth Youth Development Forum of China,* Beijing.

Institute of social China Academy of Social Science. (2011). *Society of China analysis and forecast (2012)*. Beijing: Social Sciences Academic Press.

Jiang, Y. Z., & Zhang, H. Z. (2009). Study on regional cultural psychology of social identity. *Journal of Chang'an University (Social Science Edition), 11*(4).

Jing, T. K. (2003). The development as justice. *Social Science Front, 6,* 215–223.

Li, Q., & Luo, J. J. (2007). Equality of opportunity and intergenerational equality: sociological analysis on education of children of peasant-workers. *Journal of Shenyang University, 19*(4), 82–85.

Li, W. (2009). Formation of social identity in transformation period. *Yangcheng Evening News*.

Li, Y. M., Xiao, Y., & Huang, X. C. (2007). Social identity: Analysis on a structural perspective. Shanghai: Shanghai People's Publishing House.

Li, Y. M. (2006). Rebuilding social identity in transformation period [Presentation]. *Paper presented at The Fourth Annual Academic Meeting of Shanghai Social Sciences*. Shanghai.

Lam, S.-F., Lau, I. Y.-M., Chiu, C.-Y., & Hong, Y.-Y. (1998). The identity and modernization concept of adolescents in Hong Kong. *Hong Kong Journal of Social Sciences*, 11.

Lam, S.-F., Lau, I. Y.-M. (2003). Dual identification with region and nation: A longitudinal analysis of adolescents in Hong Kong and Mainland China. *Hong Kong Journal of Social Sciences*, 26.

Liu, S. M. (1998). Discussion on tax equity. *Public Finance Research, 9,* 40–45.

Liu, Z. H. (2003). Of the senses of "li gong mie si" from Period of the Spring and Autumn to the Period of the Warring States and the conformity of society, In Z. Liu & Z. Rongming (Eds.),

Conceptions of the Public and the Private and China Society. Beijing: China Renmin University Press Co., Ltd.

Rousseau (1962). *Discourse on the origin and foundations on inequality among mankind*. Beijing: The Commercial Press.

Ma, Q., & Wu, Z. H. (2010). Further discussion on equity of compulsory education for the children of the mobile workers from perspective of bureaucratic economics. *Journal of Hebei Normal University (Educational Science Edition), 12*(7), 84–88.

Miao, Q. (2007). Changes of public participation awareness of new and old community residents. In D. Jianzhong (Ed.), *Report on the development of communities in the capital of China* (pp. 212–224). Beijing: Social Science Academic Press.

Leleu, P. (1994). *On equality*. Beijing: The Commercial Press.

Rao, Y. S. (2011). National identity of Beijing citizens during Olympics. In J. Wang & Y. Yang (Eds.), *2011 Blue Book of Social Mentality*. Beijing: Social Science Academic Press.

Rao, Y. S. (2011). *Public participation in major events: Taking 2008 Beijing Olympic Games as an example*. In J. Wang & Y. Yang (Eds.), *2011 Blue Book of Social Mentality*. Beijing: Social Science Academic Press.

Rennand, O., Rohrmann, B. (2007). Studies of cross-cultural risk perception: Status quo and challenges, In B.Rohrmann & O.Renn (Eds.), *Cross-cultural risk perception: A survey of empirical studies* (Y. D. Zhao, R. B. Zhang, et al., Trans.). Beijing: Beijing Publishing Press.

Sartori, G. (1993).*The theory of democracy revisited*. (K. L. Feng,et al, Trans.).Beijing: Orient Publishing.

Shi, C. S. (2010). Social identity from the perspective of social psychology. *New Hightets, 29*(1), 72–77.

Shi, K., Fan, H. X., Jia, J. M., Li, W. D., Song, Z. L., Gao, J., et al. (2003). The risk perceptions of SARS and socio-psychological behaviors of urban people in China. *Acta Psychologica Sinica, 35*(4), 546–554.

Slovic. (2005). Risk perception: Thinking about psychometric paradigm. In S. Krimsky & D. Colding (Eds.), *Social theories of risk* (Y. L. Xu, et al., Trans.). Beijing: Beijing Publishing.

Wang, B. (2007). Review of social identity. In *China year book of sociology 2002–2006*. Beijing: Social Sciences Academic Press.

Wang, C. G. (2001). Relations between social identity and urban-rural integration of the new generation of rural floating population. *Sociological Studies, 3*(1).

Wang, C. G. (2007). Review on social identity of rural migrant workers. In *China year book of sociology 2002–2006*. Beijing: Social Sciences Academic Press.

Wang, H. M. (2000). *Justice, equality, and humanity*. Beijing: Peking University Press.

Wang, J. X., Yang, Y. Y., & Chen, W. Q. (2008). Risk and confrontation: Security study of different groups. *Democracy and Science,* (6), 49–53.

Wang, J. X., & Yang, Y. Y. (2011). *Annual report on social mentality of China*. Beijing: Social Sciences Academic Press.

Wang, J. X., Zhang, P. S. & Wang, D. W. (2002). Studies of social security. *Journal of Social Psychology*, 2.

Wang, J. X. (2008). Review on social mentality. In *China year book of sociology 2002–2006*, Beijing: Social Sciences Academic Press.

Wang, J. X. (2011). *Analysis of public's risk source*. In J. Wang, Y. Yang (Ed.), *Annual report on social mentality of China*. Beijing: Social Sciences Academic Press.

Wang, J. X. (2011). *Contrastive analysis of surveys on Chinese residents' sense of security*. In J. Wang & Y. Yang (Eds.), *Annual report on social mentality of China*. Beijing: Social Sciences Academic Press.

Wang, L. L. (2011c). Reviews on theories, demonstration and policy studies of social participation of Chinese senior citizens. *Population and Development, 17*(3), 35–43.

Wang, W. Q., & Ju, T. X. (2011). Analysis of interaction of Chinese white-collars' social psychology and political participation. *Hebei Academic Journal, 31*(4), 134–137.

Wang, X. X., & Jiang, H. (2010). Investigation and assessment of the social equity of urban-rural social security: Based on survey of Shandong, Henan, Anhui, Chongqing provinces. *Population and Economics, 6*, 33–39.

Xia, X. L. (2011). Eight kinds of social mentality in current China. *People's Tribune, 8,* 48–50.

Xiao, Y. (2007). Review on community building. In *China year book of sociology 2002–2006.* Beijing: Social Sciences Academic Press.

Xie, X. F., & Xu, L. C. (2002). Surveys on public risk perception. *Psychological Science, 25*(6), 723–724.

Xie, X. F. (1998). Psychological science, risk perception in general social situation. *Psychological Science,* 21(4), 315–318.

Yang, C., & Chiu, C. (1997). Initial study of "zhongyong" thinking [Presentation]. *Paper presented at the fourth international academic seminar on psychology and behavior in Chinese society.* Taipei.

Yang, Y. Y. (2008). Relation and classification: Social psychology mechanism of the formation of the concept of "We" among Chinese people. *Social Sciences in China, 4,* 148–159.

Yang, Y. Y., & Zhang, S. G. (2008). Social representations of ideal community: Qualitative study on the concept of community by residents in Beijing. *Journal of China Agricultural University (Social Sciences Edition)*, *25*(1).

Yi, L. J. (2009). Discussion on construction of social justice and social security system for migrant workers. *Special Zone Economy*, *7*, 136–138.

Rosa, U. (2007). Cognitive structure of risk. In B. Rohrmann & O. Renn (Eds.), *Cross-cultural risk perception* (Y. D. Zhao & R. B. Zhang, Trans.). Beijing: Beijing Publishing.

Yu, Q. Y., & Xie, X. F. (2006). Characteristics of environmental risk perception. *Psychological Science, 29*(2), 362–365.

Yuan, Y. (2010). Education vouchers: Guiding migrant students' education towards fairness. *Journal of Anhui University of Science and Technology (Social Science), 12* (2), 73–75.

Zhang, H. Q. (2010). Cultivation of harmonious attitudes in the construction of a harmonious society. *Journal of Nanjing University of Technology (Social Science Edition)*, *9*(1), 71–75.

Zhang, S. J., & Liu, H. X. (2007). Reappearance and construction of national identity in Olympic Games in *China Sports Daily*. *Journal of Hebei Institute of Physical Education, 21*(1), 13–15.

Zhang, W. Y., & Lei, K. C. (2009). Structural equation model of the social identifications of the new urban immigrant. *Sociological Studies*, *4*, 61–87.

Zhang, Y. Z. (2010b). On compulsory education of migrant workers' children from the perspective of education fairness. *Journal of Tianjin Normal University (Elementary Education Edition), 11*(3), 14–17.

Zhao, P. F. (2007). Construction of social justice and social security system for migrant workers. *Journal of Shangqiu Teachers College, 23* (4), 72–74.

Zhao, Z. Y., & Kang, Y. Y. (2003). "I am a Hong Konger": Enlightenment of empirical results to strategic development of Hong Kong. *Hong Kong Journal of Social Sciences, 26.*

Zheng, Y. F., & Peng, S. Q. (2003). *Trust in Chinese society*. Beijing: China City Press.

Zhou, X. H. (2008). Identity theory: An analyzing method of sociology and psychology. *Journal of Social Sciences*, *4,* 46–53.

Zhu, H. (2009). Triple perspectives of trust, psychology and society and culture. *Journal of Social Sciences, 11,* 64–70.

English-Language Sources

Ahuvia, A., & Wong, N. (1993). Materialism, origins and implications for personal well-being. *European Advances in Consumer Research, 2,* 172–178.

Allport, F. H. (1924). *Social psychology*. Boston: Houghton-Mifflin.

Allport, G. W. (1968). The historical background of modern social psychology. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (pp. 1–80). Reading, MA: Addison-Wesley.

Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social cognitive theory. *Psychological Review, 109,* 619–645.

Antonucci, T. C. (1990). Social supports and social relationships. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social science (3rd Edition)*. San Diego, CA: Academic Press.

Augoustinos, M., Walker, I., & Donaghue, N. (2006). *Social cognition: An integrated introduction*. London: Sage Publications.

Cameron W. B., McCormick, T. C. (1954). Concepts of security and insecurity. *The American Journal of Sociology, 59*(6), 556–564.

Chiu, C. Y. (2007). How can Asian social psychology succeed globally? *Asian Journal of Social Psychology, 10*(1), 41–44.

Cohen, S., & Syme, S. L. (Eds.). (1985). *Social support and health*. Orlando, Florida: Academic Press.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.

Douglas, M. (1992). *Risk and blame: Essays in cultural theory*. London: Routledge.

Echterhoff, G. (2012). Shared reality theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. Tony Higgins. (Eds.), *Handbook of theories of social psychology* (pp. 180–199). Los Angeles: Sage Publications.

Ericson, E. H. (1963). *Childhood and society*. New York: W.W. Norton & Co.

Cohen, P., & Cohen, J. (1996). *Life values and adolescent mental health*. Mahwah, NJ: Erlbaum.

Folger, R. (1998). Fairness as amoral virtue. In M. Schminke (Ed.), *Managerial ethics: Moral management of people and processes* (pp. 13–95). Mahwah, NJ: Erlbaum.

Gordijn, E. H., Wigboldus, D., Hermsen, S., & Yzerbyt, V. (1999). Categorization and anger: The influence of negative outgroup behaviour. In D. Van Knippenberg, C. K. W. de Dreu, C. Martijn, & C. Rutte (Eds.), *Fundamentele sociale psychologie* (Vol. 13). Tilburg: Tilburg University Press.

Gottlieb, B. H. (Ed.). (1981). *Social networks and social support*. Beverly Hills, Calif.: Sage Publications.

Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: The interpersonal context* (Vol. 3, pp. 28–84). New York: Guilford Press.

Helms, J. E., & Carter, R. T. (1993). Development of the white racial identity inventory. In J. E. Helms (Ed.), *Black and white racial identity: Theory, research, and practice* (pp. 67–80). Westport, CT: Greenwood Press.

Helms, J. E., & Parham, T. A. (1990). Black racial identity attitude scale (Form RIAS-B). In J. E. Helms (Ed.), *Black and white racial identity* (pp. 245–247). New York: Greenwood.

Hogg, M. A., & Mullin, B. A. (1999). Joining groups to reduce uncertainty: subjective uncertainty reduction and group identification. In D. Abrams & M. A. Hogg (Eds.), *Social identification and social cognition*. Oxford, England: Blackwell.

Holmes, J.G., & Remple, J.K.(1989). Trust in close relationships. In C. Hendrick (Ed.), *Close relationships* (pp.187–220). Newbury Park: Sage.

Hong, Y. Y., Morris, M. W., Chiu, C.Y., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, *55*(7), 709–720.

House, J. S. (1987). Social support and social structure. *Sociological Forum, 2,*135–146.

Howard, A., *Insecurity: Philosophy and psychology.* In J. Vail, J. Wheelock, & M. Hill (Eds.), Insecure times: Living with insecurity in contemporary society, New York: Routledge.

Israel, B. A. & Rounds, K. A. (1987). Social networks and social Support. *Advanced Health Education Promotion* 2.

Kaplan, B. H., Cassel, J. C. & Gore, S.S. (1977). Social support and health. *Medical Care, 15,* 47–58.

Kernis, M. H., & Paradise, A. W. (2002). Distinguishing between secure and fragile forms of high self-esteem. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 339–360). Rochester, NY: University of Rochester Press.

Kuhn, M. H., & McPartland, T. S. (1954). An empirical investigation of self-attitudes. *American Sociological Review, 19,* 68–76.

Kuppens, T., & Yzerbyt, V. Y. (2012b). Are chronic group emotions really the same thing as group-based emotion? Manuscript submitted for publication.

Kuppens, T., Yzerbyt, V. Y., Dandache, S., Fishcher, A. H., & Schalk, J. (2012c). Social identity salience shapes group-based emotions through group-based appraisals. Manuscript submitted for publication.

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., et al. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*(1), 144–165.

Lee, R. M. (2003). Do ethnic identity and other-group orientation protect against discrimination for Asian Americans? *Journal of Counseling Psychology, 50*(2), 133–141.

Leung, K., & Bond, M. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology*, *47*(4), 793–804.

Lind, E. A. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. In Cropanzano R. & Greenberg, J. (Ed.) *Advances in organizational justice*, 56–88.

Mackie, D. M., Silver, L. A., & Smith, E. R. (2004). Intergroup emotions: Emotions as an intergroup phenomenon. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions* (pp. 227–245). Cambridge: Cambridge University Press.

McCallister, L. & Fischer, C. S. (1978). A procedure for surveying personal networks. *Sociological Methods and Research, 7,* 131–148.

McDougall, W. (1923). *Outline of psychology*. New York: Scribner.

Ognibene, T. C. & Collins, N. L. (1998). Adult attachment styles, perceived social support and coping strategies. *Journal of social and personal relationships, 15*.

Pearson, J. E. (1986). The definition and measurement of social support. *Journal of Counseling Development, 64*, 390–395.

Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271–281.

Procidano, M. E. & Smith, W. W. (1997). Assessing perceived social support: The importance of context. In G. R. Pierce, B. Lakey, I. Sarason, G., & B. R. Sarason (Eds.), *Sourcebook of social support and personality* (pp. 93–106).

Rokeach, M. (1973). *The nature of human values*. NY: Free Press.

Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). Interrelations of social support measures: Theoretical and practical implications. *Journal of Personality and Social Psychology, 52,* 813–832.

Sarason, I. G., & Sarason, B. R. (Eds.). (1985). *Social support: Theory, research and applications*. Boston: Martinus Nijhoff.

Sarbin, T. R., & Allen, V. L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 1, pp. 488–568). Reading, MA: Addison-Wesley.

Seger, C. R., Smith, E. R., & Mackie, D. M. (2009). Subtle activation of a social categorization triggers group-level emotions. *Journal of Experimental Social Psychology, 45*(3), 460–467.

Sherif, M. (1936). *The psychology of social norms*. New York: Harper & Row.

Sirgy, M. J. (1998). Materialism and quality of life. *Social Indicators Research, 43,* 227–260.

Tajfel, H. (1978). *Differentiation between social groups.* London: Academic Press.

Tardy, C. H. (1985). Social support measurement. *American Journal of Community Psychology, 13,* 187–202.

Totterdell, P., Kellett, S., Teuchmann, K., & Briner, R. B. (1998). Evidence of mood linkage in workgroups. *Journal of Personality and Social Psychology, 74,* 1504–1515.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Oxford: Basil Blackwell.

Turner, R. J. (1981). Social support as a contingency in psychological well-being. *Journal of Health and Social Behavior, 22,* 357–367.

Turner, R. J. (1983). Direct, indirect, and moderating effects of social support on psychological distress and associated conditions. In H. B. Kaplan, *Psychosocial Stress* (pp. 105–155). New York: Academic Press.

Vail, J. (1999). Insecure times: Conceptualising insecurity and security. In J. Vail, J. Wheelock, & M. Hill (Eds.), *Insecure times: Living with insecurity in contemporary society.* New York: Routledge.

Wellman, B. & Leighton, B. (1979). Networks, neighborhoods, and communities. *Urban Affairs Quarterly, 14,* 363–390.

Wellman, B. (1988). Structural analysis: From method and metaphor to theory and substance. In B. Wellman & S. D. Berkowitz (Eds.), *Social structures: A network approach.* New York: Cambridge University Press.

Wellman, B. (1981). Applying network analysis to the study of support. In B. H. Gottlieb (Ed.) *Social network and social support,* Beverly Hills, Calif.: Sage Publications.

Wellman, B., Carrington, P., & Hall, A. (1988). Networks as personal communities. In B. Wellman & S. D. Berkowitz. (Eds.) *Social structures: A network approach.* Cambridge: Cambridge University Press.

Yang, Y., Chen, M., Chen, W., Ying, X., Wang, B., Wang, J., et al. (2010). Effects of boundary-permeated self and patriotism on social participation in the Beijing Olympic Games. *Asian Journal of Social Psychology, 13*(2), 109–117.

Yzerbyt, V. Y., Kuppens, T., & Mathieu, B. (2010). When talking makes you feel like a group: Social interaction leads to group-based emotions. Manuscript submitted for publication.

Zender, L. (2000). The Pursuit of Security. In T. Hope & R. Sparks (Eds.), *Crime, Risk and Insecurity.* New York: Routledge.