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Title    A Study on Psychological Characteristics

Predicting Socio-political Tendency:

A Trans-generational and Cross Cultural Study

PhD Student    Yingjuan Liu

# A STUDY ON PSYCHOLOGICAL CHARACTERISTICS PREDICTING SOCIO-POLITICAL TENDENCY:

## A TRANS-GENERATIONAL AND CROSS CULTURAL STUDY

by

YINGJUAN LIU

A thesis submitted to the University of Bedfordshire, in fulfilment of the requirements for the degree of Doctor of Philosophy

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A Study on Psychological Characteristics Predicting Socio-political Tendency: A Trans-generational and Cross Cultural Study

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# A Study on Psychological Characteristics Predicting Socio-political Tendency:

## A Trans-generational and Cross-cultural Study

## Yingjuan Liu

## ABSTRACT

This study examines how ten psychological characteristics (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism) predict individuals' political attitudes in the context of different cultural backgrounds, in different eras in China, and different Chinese family circumstances. Moreover, the study considers whether there is a potential effect of gender on these characteristics and political attitudes. It includes four sub-studies: a pilot study (aimed at testing the reliability and validity of translated Chinese measures); a trans-generational study; a cross-cultural study; and a study comparing Chinese single children and non-single children. The results show that the reliability and validity of translated Chinese measures were sound. Moreover, empathy and authoritarianism were shown to be predictors for democracy in both young Europeans and young local British samples; while an egalitarian sex role was a significant and important predictor for democracy amongst young Chinese, older Chinese, single child and non-single child groups. Furthermore, both European and local British groups showed higher degrees of empathy, perspective-taking, openness, and democracy compared with the young Chinese generation; while, the young Chinese group showed a higher degree of normative identity style, interpersonal trust, suggestibility, and authoritarianism. Compared with the older Chinese generation, the young Chinese young generation scored higher on empathy, egalitarian sex role, openness, and democracy. In addition, female participants consistently scored higher on egalitarian sex role than their male counterparts in any sub-studies. In particular, young Chinese women tended to be loyal supporters of egalitarianism and democracy. The interpretations of results were made within the cultural context and changes in Chinese policy

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# LIST OF CONTENTS

# List of Table

# List of Figures

# Chapter 1 The Development of Democracy and its Related Cultural Background

## 1.1    Political systems

This chapter describes different kinds of political systems and the development of democracy. It then presents cultural factors that can have an impact on political systems.

The term 'democracy' derives from the classical Greek word demokratia, which means 'rule by the people'. The reforms by the Athenian leader Cleisthenes in 508-507 BC introduced democracy to the city-state by providing a constitution, whereby political decisions could be made by the people (Phillips, 2012). The government officers were randomly selected by eligible Athenian citizens. However, at the time, "eligible citizens" meant males over 20 years old who were either from the nobility or experienced in military training. Women, slaves, non-landowners, and males under 20 years old were not allowed to participate in the selection process. Consequently, only one tenth or even fewer Athenian citizens had the right to vote (Kidner et al., 2007).

One could say that democracy was established based on inequality, as power was only held by a few people (mature nobility and military males over 20 years old). However, each of these eligible citizens had the right to vote to establish the law, make war, and freely express their opinions in plenary session. As every eligible

citizen participated in making decisions for the country, this kind of democracy has been called direct democracy (or pure democracy) by political researchers, meaning that those selected could directly participate in and vote for any decisions on behalf of the population (Foote & Wynne, 1995; Liu & Ornelas, 2014). Direct democracy works better in small communities, as every voter is involved in political activities. At a later stage, direct democracy was transformed into representative democracy in the Roman Republic; the essence of this political system was to give power to a few citizens' groups, including important officials, the wealthy and nobility, who represented other citizens in order to make every decision on their behalf (Hirst, 2009; Liu & Ornelas, 2014).

In the Middle Ages, England pushed democracy closer to modern democracy by introducing the political system of parliament (Bryan, 2010). The first representative national assembly in England was Simon de Montfort's Parliament in 1265, which restricted the power of kings. In what is known as the Glorious Revolution of 1688, parliamentarians actually established the power of parliament over the monarchy. Meetings of Parliament were held regularly over the years; civil authority for making decisions and laws expanded, whilst the monarch's power declined (Bryan, 2010). However, although democracy was being improved, women were always excluded from democratic and political activities. It was not until the late 19th century, with the development of feminism, that women's participation in political activities began to become apparent. In 1893, New Zealand became the first country in the world to grant women the right to vote and thus participate in political decision-making – the

only way a country could truly be defined as democratic, as it involved the whole population (Dahl, 1989).

Liberal democracy operates under the same principles as classical democracy. It is representative and it is actually a realistic political system, which is effective in a well-populated country; its features are free elections and competition in politics. This means that there should be more than one political party. Generally, it aims to protect the rights of citizens' private property, citizens' equal social status, and citizens' freedom of expression, speech, assembly, and religion and it first emerged in America and Western countries. Its intention is to allow people to live equally and freely; it encourages women to participate in political activities, thereby enhancing women's social and political status. Dahl (2005) stipulated, however, that no modern state could be regarded as being fully democratic as none of them fulfils all the criteria; they are usually not inclusive enough.

Apart from the democratic political system, there are other political systems: a republic political system, monarchy, communist political system, and dictatorship regime. The main characteristic of a republic political system is that the government mostly respondsto the vote of citizens to support a leader; citizens can vote outthe leader. It differs from a more representative, republican democracy in which a defined and regular election system allows the public to vote periodically for a president/leader and members of parliament (Dennis, 1988). Monarchy has been widespread in many European countries since mediaeval times, as well as in Asia. In these countries, the monarch is the head of the country and they have the power to

make decisions and run the political system until they either abdicate or die (Hagen, 2000).

A communist country is built on the ideology of Marx and Lenin. The most prominent trait of a communist country is that a single party or a group of people often dominates the state (Alesina & Fuchs-Schündeln, 2007). The government takes and then redistributes resources to others. An authoritarian political system is the most common political system in communist countries. Communist regime often include the words "worker" or "socialist" in their name (Perlmutter & LeoGrande, 1982). Though dictatorship is another form of authoritarian government, this differs from an ideological communist government. In a dictatorship system, a ruling individual has control of decision-making and policy for a country. Dictators, who are not restricted by the law, rule with the help of their appointed civil servants. A dictator is often the only candidate in an election (Almond, 1956). One of the most common dictatorship types is a military dictatorship, in which a military organisation governs and runs the political system (Almond, 1956).

When considering democratic development and its comparison with other political systems, one can conclude that nowadays democracy generally relies on 'the power of people'; specifically, the idea that people are equal from birth regardless of their gender and wealth. They have responsibilities and obligations towards their society, they have equal rights to vote and run for office, and they have the right to share the production of society equally (Foote & Wynne, 1995). In democratic countries, the majority of citizens make political decisions, and political institutions do not

threaten these citizens when they make them. Democracy today mostly means liberal democracy.

However, democracy takes various forms in different countries, according to different regimes, including presidential democracy, parliamentarian democracy, etc. (Dahl, 1989). Nevertheless, whatever form of democracy one country has, the prerequisite of democracy is political tolerance, which refers to a willingness to permit the expression of ideas or interests one opposes (John James, & Marcus George, 1982). Furthermore, political tolerance arises out of the idea of procedural fairness, which means that all citizens have the right to speak, to publish, or run for office. A fully tolerant regime applies such norms equally to all. In fact, different political regimes require different levels of political tolerance.

Of all of them, liberal democracy has the highest level of political tolerance. The core of this type of democracy is individual autonomy, which means citizens should be free from the grip of traditional dogma and authority; it focuses on the development of human capacities (John James, & Marcus George, 1982). This ambitiousrequirement is based on both moral and pragmatic grounds. The former refers to the recognition of equal rights for all citizens; and the latter refers to offering "a free market of ideas" to discover a truth (John James, & Marcus George, 1982). However, traditional and religious dogmas, which are related to political intolerance, usually go against free expression of ideas and restrict the search for truth. We can see that high political tolerance is crucial for liberal democracy, as one of the aims of real democracy is to protect the right to speak and the willingness to listen to small and unpopular groups (Eisenberg, Eggum & Di Giunta, 2010).

Democracy is also characterised by the public having the ability to debate any public issue of common concern before making a final appropriate decision (Roberts-Miller, 2005). That is to say, the more the public tolerates various points of view, the more democratic it can be. In this sense, the ingroup/outgroup attitude can reflect the attitude to democracy, because ingroup members regard outgroup members as being dissimilar (Eisenberg, Eggum & Di Giunta, 2010). In an authoritarian regime, it is consistently the case that tolerance is not widely practised in political activities, particularly when dealing with extremist ideas and groups. Indeed, in authoritarian systems, decision-making is always carried outby the elite class, and citizens have a limited capacity to govern the country (John James, & Marcus George, 1982).

## 1.2    Cultural aspects

As a political system, democracy is influenced by both the country's history and its cultural background (Wang, 1999; Wei-ming, 1991). Culture is defined as different aspects of living, including values, beliefs, moral standards, linguistic expression, patterns of thinking and behaviour, and styles of communication, which help form a unique life, and profoundly differentiate it from other styles of living (Wang, 1999). In other words, cultural backgrounds which oftenthat derive from history include national community, social obligations and public moral rules, which are seen to be vital elements of political attitudes. In fact, culture always links to its history. For example, China, one of the longest continuous civilisations in human history, has experienced more than 20 dynasties over the past 5000 years, all of whose

constitutions were imperial. In 1911, 'the revolution of 1911' ended the Qing dynasty and its 2000 years of Chinese imperial rule, taking China into a new era. In the same year, the Republic of China, which was the first democratic republic country in Asia, was developed (Wei-ming, 1991).

Geopolitics concerns the study of international political variables based on geographical factors and it is arguably the chief political factorin both Chinese history and culture (Wei-ming, 1991). It suggests that the emergence of a new political system is a progress of evolution that is based on cultural background and related links to its history; also, in turn, this culture can instil in citizens a certain national-public opinion or political attitude, which is difficult to change. This is in accordance with the conclusion that culturally specific symbols, which are configured by historical charters, form the nation; and social norms determine some political attitudes by adherence to the cultural context, meaning they are difficult to manipulate (Liu, Sibley, & Huang, 2014). In their cross-cultural study on New Zealand and Taiwan, Liu, Sibley, & Huang, (2014) reported that manipulating the salience of historical events could somewhat enhance the levels of social identification, but not the levels of support for biculturalism and independence in both countries. Their study illustrates that individuals' surroundings, and not their knowledge, can largely impact on their political attitudes and behaviour by constructing accepted and public political arrangements. Generally speaking, political tolerance differs in democratic and authoritarian countries, and cultural differences can result in different levels of political tolerance.

Nowadays, with the development of technology and widespread use of the internet, democracy has also come into the information age (Kim & Han, 2005). As a significant symbol of modernisation, information communication technology increases people's participation in the making of policy in democratic nations. In particular, the internet provides an 'informational-super highway' for long distance verbal communication. For example, e-mail, e-messaging, e-reporting, and internet interviews can stimulate the interactions between citizens and politicians (Kampen & Snijkers, 2003). In fact, information communication technology can benefit both representative and direct democracy; for the former, it provides opportunities to monitor representatives through databases shown on many websites; for direct democracy, the logistics of large numbers of referenda can potentially be solved by means of information communication technology (Kampen & Snijkers, 2003). Thus, to a large extent, advanced technology remedies the limitations of representative democracy and direct democracy (Anttiroiko, 2003).

As mentioned before, representative democracy is exercised by representatives and legislatures given decisive authority by citizens, while direct democracy refers to citizens exercising their political rights for themselves (Liu & Ornelas, 2014). Representative democracy is argued to be a less trustworthy form of government, but direct democracy cannot force people to participate; thus, the quality of citizen engagement poses a problem for the government (Anttiroiko, 2003). E-democracy is essentially a kind of direct democracy; it facilitates communication and interaction between government and citizens through all forms of technological mediation (Liu & Ornelas, 2014). In fact, the popularisation of the internet can boost democracy in less democratic countries (e.g. Asian countries). A survey (Yun & Chang, 2010)

aimed at testing how the environment influences the younger generation's political participation in the 2008 Candlelight Protests of Korea showed that new media was revolutionising the political socialisation patterns of youth. That is, the internet had become an important tool through which the young people collected political information and represented channels which they used to organise and mobilise. Moreover, regarding the use of the internet on political issues, it showed that the extent of young people's socio-political interests was higher than the older generation's. Another notable fact was that female students showed more aggressive involvement than male students which could be explained by the differences in internet usage patterns between male and female students, with young females displaying more relationship- and objective-oriented behaviours than young males (Yun & Chang, 2010).

This chapter has shown how political systems have developed over the ages and how they can be influenced by cultural factors. The next chapter discusses the different behaviours that can have an impact on political systems.

# Chapter 2 Personality and Socio-political Behaviour

This chapter explores different personalities and their impact on socio-political behaviour. It also discusses psychosocial characteristics that can influence political tendencies and behaviour.

## 2.1    Personality

Personality refers to long-lasting, stable beliefs, moods, and behaviours that differentiate the self from other human beings (Murray, 1938). It is a combination of emotional, attitudinal, and behavioural response patterns of an individual, which makes an individual similar to, or different from, others. How individuals react and behave throughout their lifespan is affected somewhat by their personality types (Mahoney, 2011). In this sense, personality is closely related to human behaviours; to some extent, it can be seen as the cause of different behaviours. According to Jung's theory (Jung, 2014), there are four functions of personality: sensation, which means perception by sense organs; intuition, which implies information perceived in an unconscious way; thinking, which is related to intellectual cognition and logical conclusions; feeling, which is seen as a function of subjective estimation. Out of these four functions, sensation and intuition are defined as having non-rational and judging functions, as they naturally reflect all humans, though they are diverse

individually. However, thinking and feeling are seen as rational and perceiving functions (Jung, 2014).

There are many personality theories and types. For instance, type A and type B personalities have been suggested. Type A people are characterised as impatient, achievement-oriented, and more likely to have personality disorders. From a clinical-psychological perspective, they are at risk of coronary heart disease. A type B person is thought to be easy-going and relaxed (Caplan & Jones, 1975). Apart from type A and type B people, Robins, John, Caspi, Moffitt, & Stouthamer-Loeber (1996) looked at ego-resiliency, and they proposed three types of personality: resilient, overcontroller and undercontroller. For resilients, a high ego-resiliency and moderate level of ego are the main characteristics; these individuals are always high on extraversion, openness, agreeableness, conscientiousness, and low on neuroticism. Therefore, they tend to be able to adjust well. Overcontrollers tend to be shy, inhibited, and have low ego-resiliency; they are also always high on neuroticism and agreeableness, but they have low extraversion. For those who are undercontrollers, low ego-resiliency and low ego-control are more prominent characteristics. They are less agreeable and conscientious (John, Caspi, Moffitt, & Stouthamer-Loeber, 1996). Based on this theory, research (Xie, Chen, Lei, Xing, & Zhang, 2016) was conducted within the Chinese population. The results showed how four important characteristics, namely resilience, withdrawal, undercontroling and ordinary relate to Chinese prosocial behaviour. They suggested that a withdrawn personality is a salient characteristic of Chinese adolescents; moreover, Chinese students were higher on social learning, conformity and compliance, perhaps owing to the

encouragement from their families and teachers. Resilient people tend to have more prosocial behaviour and low aggression, while both undercontrollers and withdrawn people have less prosocial behaviour, but high aggression (Xie, Chen, Lei, Xing, & Zhang, 2016). Jung (2014) proposed two main types of personality: extravert and introvert, both of which are related to personal attitudes, and reflect cognitive functions. An extravert is outward turning, which implies that such a person's mind and behaviour can be easily impacted upon by the outside 'world' and other people's views. To some extent, this personality is similar to the psychological trait 'suggestibility' which is discussed in the following section. On the other hand, an introvert is inward turning, which means that they can be easily influenced by an internal world of ideas and reflection, which means they would pay more attention to their own feelings (Jung, 2014).

How does personality make one person different from another and make their behaviour different? There are some hypotheses and studies, most of which focus on genetic factors and environment. Early research strongly emphasised the importance of the influences arising from growing and living in certain surroundings. For example, Holmes' (1993) attachment theory focused more on direct social experience with parents. He proposed the idea of children's attachment, which referred to how close their relationships with carers or parents were. It was then suggested that attachment plays a vital role in forming children's personalities. In his model, the primary carer's behaviour towards children can make them have their own 'working models', making them respond to the same situation in three possible

ways: positive and loved, unloved and rejected, or angry and confused. Based on this, they would have secure, avoidant, or resistant personality traits.

However, dissimilar to Holmes's theory, Thomas & Chess (1977) proposed that inherited biology is important for children's future personality. They classified children into three categories: the easy child, the difficult child, and slow-to-warm-up child. The easy child has regular eating and sleeping patterns and responds positively to new things; they adapt to change quickly, can accept frustration with little fuss, but are in a good mood most of the time. In contrast to the easy child, the difficult child shows irregular eating and sleeping patterns, and has a negative response to new situations; they are slow to adapt to change, exhibit loud refusal, and sometimes aggressive behaviour. Similar to the difficult child, the slow-to-warm-up child shows negative responses of mild intensity to new surroundings, but they can accept it slowly with repeated exposure (Thomas & Chess, 1977).

Rothbart (2007) emphasised that temperament, together with experience, grows a personality, which means he admitted that both genetic factors and environment influence personality. From a genetic perspective, genes can directly generate individual differences in emotional, attentional, and motor reactivity, which make individuals have various responses (latency, intensity, and recovery responses) to the same thing, and self-regulation processes (e.g. effortful control). From an environmental perspective, environment develops children's cognition about self, others, the social world, values, attitudes, and coping strategies (Rothbart, 2007). This is similar to the suggestion that inherited biology in nature and family experience work together to support the development of ego and superego; parental

socialisation produces variations in anxiety, and may in turn, lead to different personalities in children (Ewen, 2014).

In terms of explaining how genetic factors influence people's behaviour, in recent years, more and more research has emphasised the importance of genes in investigating the link between biological factors and an individual's social behaviour, which might have previously been ignored by some political scientists. Some research has been carried out based on developmental behavioural genetics to explore how the environment influences and regulates hereditary effects, so as to explain human behaviour from a genetic perspective. In fact, some studies could be used as evidence to show how and why genetic factors influence people's political tendencies.

According to Rhee & Waldman (2002), quantitative genetics and molecular genetics highlight two main research methods for discovering the link between genes and behaviour. A good example of a quantitative genetic study is a monozygotic and dizygotic twin study, which is used by many behavioural psychologists. The monozygotic twin shares 100% genome, while the dizygotic twin has an average of 50% of genes in common; so, if they are brought up in the same environment, and the behavioural similarities of the monozygotic twins are higher than those of the dizygotic twins, that means the genetic factor plays an important role. If the opposite occurs, a shared environment plays a more significant role.

A study carried out by Alford, Funk & Hibbing (2005) used a similar Wilson-Patterson Attitude Inventory to test how behavioural genetics were different between monozygotic twins and dizygotic twins in the United States. Their results finally

showed that genetics play a key role in forming political attitudes and ideologies, but a less significant role in forming party identification. They supported the statement that gene did not work solely on human' behaviours; instead, it could impact on the degree to which humans respond to particular environmental conditions. This conditioning influence of genetics is used to explain people's complex social behaviour, as it is not dependent on one single gene, but on numerous genes. Also, due to the different order and different manner in which genes express themselves and interact with other genes, it could impact on human behaviour in different ways, although the same set of genes is observed (Alford, Funk & Hibbing, 2005). In terms of parents and offspring, it showed that if both parents had more similar political identifications, their offspring would be more likely to share the same political identifications, regardless of family arrangement and parental socialisation, but mainly due to genetics (Alford, Funk & Hibbing, 2005). Indeed, in their study, they admitted that human reactions or behaviour in a certain situation depended on how a certain set of genes responded to this situation, which more or less implied that gene-surrounding interaction might be a way of understanding human behavioural expression.

More recently, a new and breakthrough theory called 'socio-genomics' emerged in genetic-political studies which indicates how social science and natural science might work together to flesh out gene coding related to political attitudes and behaviours (Carmen, 2007). From Carmen's viewpoint, behaviour should be widely defined in a way that includes personality as well as ideology, both of which are related to genes. However, his twins study revealed that about half of the different personality traits

and political attitudes could be attributed to genetic diversity. Human behaviours are regarded as the counterparts of different gene expressions. In this sense, political actions may result from political attitudes which are defined by a kind of gene expression. Carmen (2007) also strongly agreed with complex traits being the products of numerous genes acting together, which was quite similar to the findings of Alford, Funk and Hibbing's (2005) research.

To prove this 'socio-genomics' theory in the psychological-political field, Hatemi et al. (2014) studied over 12,000 twin pairs in two countries. On the one hand, they compared Australian samples with Swedish samples, all of whom were measured by a molecular genetics method, known as genome wide association analyses (GWAS), which filtrates the related single nucleotide polymorphism (SNPs) to individual traits and behaviours from the sequence variation within the scope of the human genome. On the other hand, they compared the monozygotic twin pairs with the dizygotic twin pairs in each of the two countries; all pairs were reared together and shared the same family environment. From their cross-cultural comparison, they suggested that genetic expression always matched a certain psychological tendency (personality), and it would interact with people's surroundings growing-up to define people's political ideology. These twin studies, similar to previous findings, proved that genetic factors have a significant effect on forming political ideology, no matter how ideology is measured or the population sampled. Based on the above analysis, human behaviour is decided by genetic factors, and influenced by one's surroundings. Bearing this in mind, when we are talking about people's social behaviour and political tendencies, they cannot always be separated from their

historical and cultural backgrounds, which are influenced by different political institutions and experiences.

With all of this in mind, one can conclude that an individual's personality can be influenced by both genetic and environmental factors, probably leading to varying political behaviours. Based on the previous theories, one of the aims of this study is to examine individual differences in authoritarian and democratic systems.

Firstly, regarding authoritarian features, Greenstein (1965) pointed out that when compared to democracy, authoritarianism was a negative political system. However, the authoritarian personality was strongly influenced by childhood experience. Greenstein (1965) explained how authoritarian characteristics could be impacted by phenomenology and dynamics factors. Taking the phenomenology of authoritarianism as a starting point, it can be measured in a person by assessing their authoritarian aggression; namely, does someone always bow to those above him hierarchically but kick those below him? Political relevance could promote such a person to think in power terms. Conventionalism is another trait of this character, because this kind of person needs to accept the world in a highly structured modality, and likes to adhere to a set of values that are conventional (Greenstein, 1965). When it comes to dynamics, two formulations have been identified. One is ego-defensive, which defends against impulses and conscience to retain inner equilibrium. The other one is the cognitive theory of authoritarianism, which is based on learning general conceptions within one's culture or subculture. Both of these two formulations have their roots in cognitive social learning (Greenstein, 1965).

Regarding the individual differences in support of democratic values, it is suggested that people benefit from being exposed to dissimilar views. This would encourage them to think more carefully about their interpersonal relationships in terms of being able to be more tolerant of conflicting views (Mutz, 2002). However, before accepting different political views, education and political tolerance seem to be prerequisites. Tolerance levels depend not only on the diversity of people's contacts, but also openness to experience. Mutz (2012) mentioned that tolerance involves people's awareness in the sense that they would be able to recognise and explain why and how others' views differ from their own. However, it has also been mentioned in some other studies that when people are in contact with different individuals holding conflicting viewpoints, they require certain skills or abilities that refer to their foundational knowledge and willingness to understand others' viewpoints, which in turn result in tolerance (Vogt, 1997).

It seems that it is a challenge to face different political views, even though some research shows that when individuals have non-like political views, they promote greater awareness of rationales for both their own viewpoints and another's oppositional viewpoints (Eisenberg, Eggum & Di Giunta, 2010). But how these benefits can be placed in terms of the practice of human interaction was tested in a cross-cutting network held by Mutz (2002). In his research, he used a model including cognitive and affective aspects to illustrate how people define themselves in conflicting surroundings: individuals indeed had an awareness of rationales behind oppositional views or had an intimacy with cross-cutting association, both of which could lead to political tolerance. Based on this suggestion, political tolerance is a

positive cognitive process which happens automatically; when people are exposed to different views, they not only support their own opinions but have a strong awareness of the rationales of others' views which are quite different from their own opinions.

It is suggested that the link between personality characteristics and support for a political party can be mediated by individuals' other demographic variables, such as age, gender, and education. This means these factors might also influence individuals' psychological traits, thus influencing their political attitudes (Capara, Barbaranelli, & Zimbardo, 1999). For example, the knowledge of political voting, the method of political information acquisition and the pattern of group membership can vary based on age, gender, and educational level (Mondak & Halperin, 2008). This will be discussed in the next chapter. Bearing this in mind, apart from exploring how individual personality impacts on political attitudes, another aim of this study is to examine how age and gender impact on the link between personality and political tendencies.

In this chapter, previous research on personality, including empathy, flexibility, perspective, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism and their potential links with adherence to democratic values will be reviewed. According to their individual and social functions, the variables have been divided into two levels: the individual level and the social level. The individual level relates to empathy, flexibility, perspective-taking, openness and suggestibility; while the social level relates to the egalitarian sex role, normative identity style, interpersonal trust,

prosocial behaviour and authoritarianism. Based on previous relevant research, the genetic and environmental factors will also be considered to explain these psychosocial characteristics from different perspectives. With this goal, this chapter will explore how these characteristics are formed and developed, thus offering an insight into how they result in various social behaviours and political tendency.

## 2.2.  Empathy

The definition of empathy is an ability to comprehend and understand another's feelings and experiences by directly perceiving or imagining them, and it is the tendency to feel what others are feeling (Telle & Pfister, 2012). It is thought to be a response that stems from an understanding of another's emotional state or condition and is suggested to be a foundation for both sympathy and compassion, which can help people build healthy and positive social relationships (Beiley, Henry & Von Hippel, 2008). From an evolutionary standpoint, the need recognise others' attitudes and points of view increases during one's lifespan, from infancy to adulthood (Khanjani et al., 2015).

It is suggested that empathy relates to parental care, social attachment, and prosocial behaviour, and it facilitates social interactions, group activities, and teaching and learning (Telle & Pfister, 2012). Empathy is considered to be associated with morality and positive social behaviour, which influence the quality of one's social interaction (Eisenberg, Eggum & Di Giunta, 2010). More broadly, empathy

might have the function of enabling people to foresee patterns and problems in their current situation, allowing them to respond quickly and adjust to changed needs and demands. The ability to recognise the current situation, and the patterns of responding to the feelings of others seems to be essential to the development of empathy.

Some studies addressed the idea that empathy includes two major abilities: one is the ability to identify and respond to others' mental states, which is referred to as emotional empathy or affective empathy; the other is the ability to understand and seeanother's point of view, which is cognitive empathy (Beiley, Henry & Von Hippel, 2008; Khanjani et al., 2015). Emotional empathy is a subjective feeling resulting from emotional contagion; it can be defined as an appropriate automatic response to another's emotional state, and it happens unconsciously with the aim of sharing another's emotion. However, cognitive empathy is a conscious act of adopting another's perspective, in order to recognise and understand another's emotional state (Beiley, Henry & Von Hippel, 2008; Khanjani et al., 2015). This section will focus on the former type of empathy, as cognitive empathy is actually related to perspective-taking, which will be discussed later in this chapter.

There is an interrelationship between sympathy, empathy and altruism (Telle & Pfister, 2012). Sympathy refers to a feeling of care and concern for someone close, with the wish to see him or her better or happier. Altruism refers to concern for the benefits of others in a selfless way; from a social standpoint, altruism is defined as a sign of interactive and cooperative intentions. In other words, altruism helps people maintain and preserve rules relating to social standards that sustain and protect

others, so that it not only keeps people prosocial in society, but also makes their lives worth living. People with sympathy might always have a desire to reduce other people's distress and this is likely to result in altruistic behaviour. However, unlike empathy, sympathy need not include a common perspective or shared emotion. Therefore, sympathy might focus more on expression of feelings, while empathy mostly refers to an emotional skill which can be learned. Though there are some differences between them, they may all facilitate positive social interactions, such as prosocial behaviour (Eisenberg, Eggum & Di Giunta, 2010).

As to the causality of empathy leading to social behaviour, previous studies have proved that it might be decided by both genetic factors and environmental factors (Uzefovsky et al., 2014; Beiley, Henry & Von Hippel, 2008). Firstly, empathy and its related behaviours can be analysed from a genetic perspective. Dopamine is an important neurotransmitter, which can influence people's social behaviour. However, compared with emotional empathy, cognitive empathy is largely predominated by the dopaminergic system (Uzefovsky et al., 2014). From a biological standpoint (Skuse & Gallagher, 2009), it is reported that the release of the hormones oxytocin (OT) and arginine vasopression (AVP) is synchronised with social interactions. OT, AVP and dopamine contribute to an integrated system of social and communication skills. Moreover, OT and AVP can modulate dopaminergic activity, which underlie positive social interactions (Skuse & Gallagher, 2009). Dopaminergic genes, especially the Dopamine D4 receptor gene (DRD4) are particularly crucial elements in cognitive empathy, which will be explained in the perspective-taking section. In fact, both cognitive and emotional empathy come into play in every empathetic response, but they affect human behaviour differently. It has been mentioned in the

field of neuropsychology that anti-social personality disorder (ASPD) might be related to a lack of understanding and responses to others' emotional states (emotional empathy), while autism spectrum disorder (ASD) might be related to deficits in cognitive empathy (Uzefovsky et al., 2014). There is a gender difference as well, with females tending to score higher than males on most empathy scales. Moreover, ASD and ASPD, which relate to deficits in both empathy types, are more common in men (Lai, Lombardo & Baron-Cohen, 2014). However, there are some challenges to this statement, a few studies have addressed the observation that people with ASD also have empathy, but they have difficulties in knowing what other people think, and lack the social skills associated with observing and interpreting body language (Brewer & Murphy, 2016; Ludlow, Reniers & Vilas Sanz, 2016). In other words, ASD relates to a lack of social communication skills or ability to understand, describe, or express emotions.

Environmental factors involved in empathy mainly refer to parenting and parent-child relationships. Parenting might have a significant socialising influence on infants' early development of empathy; it is suggested that parental warmth is a vital element in promoting kids' empathy. This indicates that the more warmth the parents put into their relationship with their children, the more empathic the children tend to be (Zhou et al., 2002). Building a positive parent-child relationship in childhood could result in cultivating empathy in children. Firstly, during face-to-face play in infancy, imitation is a vital mechanism for engaging with and learning about the experience of empathy. Imitating or mirroring facial gestures begins early in infancy, and that might potentially enhance infants' ability to understand others' emotional status, internalising others' feelings and experiences, which happens

through the process of simulating others' emotions and actions (Hess & Bourgeois, 2010). In other words, parents could set good examples for their children in their interactions. Secondly, as one symbol of a good parent-child relationship, emotional synchrony shows a positive relationship with children's expressions of empathy. That might be because, during an interaction, if parents respond to their children's emotions, their children can understand that their feelings are being felt by their parents; in turn, this can provide children with an understanding of how their own motivated actions can influence others (Feldman, 2007). Moreover, parents' training on how to explain others' emotions to their children seems to be associated with their children's empathic development in the future. If parents take care to explain the causes and consequences of emotions to their children, the children have a greater tendency to understand others' emotions (Garner, 2003). In addition, children with different attachment types might have different levels of empathy. Securely attached children, who display behaviours relating to trusting, loving relationships with their parents, engage more in empathetic behaviours than insecurely attached children, who are not happy with their relationship with their parents (Lamb, 1980). In a later study, it was suggested that if shy children are brought up in a secure environment, they are able to respond empathically to others' negative emotions (e.g. anxiety), but it might be difficult for them to overcome their own distress (Mark, IJzendoorn & Bakermans-Kranenburg, 2002). Taken together, various ways of parenting, including imitation/mirroring, emotional synchronicity, explanations about emotion, and secure/insecure surroundings growing-up, can have a positive impact on the development of children's empathy.

Though empathy is important to build healthy and positive social relationships, there is still an age gap in terms of empathy. Some studies suggested that empathy in older people declines (Bailey, Henry, & Von Hippel, 2008; Grühn, Rebucal, Diehl, Lumley, & Labouvie-Vief, 2008; O'Brien, Konrath, Gruhn, & Hagen, 2012; Khanjani et al., 2015). In the study by Bailey, Henry, & Von Hippel (2008), it was reported that older adults had lower empathy than their younger counterparts, which may have resulted from their increased social problems, such as less engagement in social activities, less ability to understand others' mental states, and judging others' negative facial expressions. These social problems might be caused by the natural reduction of their mobility, inhibitory control, and health (Khanjani et al., 2015).

Similarly, Grühn, Rebucal, Diehl, Lumley, & Labouvie-Vief, (2008) emphasised that empathy was associated with positive well-being, such as life satisfaction and positive interactions with others. They used a 'one-week-self-report' about social action among 114 participants whose ages ranged from 10yrs to 87yrs. From their results, people with high self-reported empathy have more meaningful interactions and feel more positive in these interactions. In this sense, empathy might relate to people's actual social interactions. Moreover, older people tend to focus on emotionally close social relationships, which form their narrow social networks.

This is in accordance with a recent study of the Asian population (Khanjani et al., 2015) in which emotional empathy was higher in the older population, but there were deficits in some aspects of cognitive empathy. Similar to previous studies, Khanjani et al. (2015) suggested that apart from poor health, older people may have lower social satisfaction and higher social losses, such as retirement, mobility

constraints and widowhood, which might result in a sense of loneliness and social isolation. In other words, both negative physical and mental health of older people are affected by problems in their cognitive and social changes.

Another study, which involved 75000 American adults whose ages ranged from 18 to 90 yrs was carried out by O'Brien, Konrath, Gruhn, & Hagen, (2012). The results suggested that the changes in empathy are represented by an inverse-U-shaped-function across an adult's life span. They explained that empathy could be treated as a muscle; the more people use it, the bigger it gets. O'Brien, Konrath, Gruhn, & Hagen, (2012) proposed that empathy has generational differences; the people with higher empathy are the ones who were born in the period of the 'baby boomers', because they grew up during a time (1946-1964) of important social change when everyone needed to have a tendency towards caring for the feelings and perspectives of other groups. From this standpoint, empathy might be related to social change and cultural background.

Apart from age difference, there are also gender differences in empathy. Also, in O'Brien, Konrath, Gruhn, & Hagen's (2012) study, they found not only that middle-aged adults had the highest empathy, but also that women's empathy was higher than males'. Overall, the most empathetic population was women whose ages were between 50 and 60 years old. They explained that probably women had responsibility for and the role of taking care of children and family, which helped in training them to have a stronger sense of empathy.

Another study (Toussaint & Webb, 2005) on empathy and forgiveness was carried out among 127 community residents. The results showed that empathy, but not

forgiveness, differs across genders. The possible reason for this might be that women generally are more motivated to be empathic, as they are better at emotional empathy than men when judging one's social impact; that is to say, their empathetic motivation might be stronger, thus they showed a general high level of empathy (Huang & Su, 2014). This is in line with the assumption that females' high level of empathy derives from their more emotional motivations when they interact with the outside world; in other words, their strong empathy may contribute to their concern about inner space and intuition (Lennon & Eisenberg, 1987). Throughout one's life span, empathy does not remain stable although the gender differences in empathy remain unchanged over life span, meaning, women might have a higher level of empathy than men, no matter whether they are young or old (Toussaint & Webb, 2005).

Empathy is not only correlated with and contributary in prosocial behaviour and inhibition of aggression, but it can also impact on the quality of in/out group relationships. It is stated that people tend to unconsciously find similar things between themselves and in-group members, and automatically show positive bias towards their in-group members; but they do not tend to do so for out-group members; instead, they find out-groups dissimilar (Eisenberg, Eggum & Di Giunta, 2010). In theory, the more empathy one can have for an out-group, the more one can overcome biases, prejudice and discrimination against them (Finlay & Stephan, 2000); they also suggested that empathy for an out-group could be triggered by situational factors, such as concern about an out-group member's welfare. Moreover, Eisenberg, Eggum & Di Giunta (2010) proposed that perspective-taking towards an out-group and knowledge about stigmatised conditions may improve empathy.

Briefly, most studies stressed that people with more empathy have better performance in prosocial behaviour, and a better understanding of an out-group's perspective, which might help people to be more tolerant towards the views of the out-group and lay the foundations for democracy.


## 2.3    Flexibility


Psychological flexibility has been previously labelled under other terms, such as ego-resiliency, executive control, response modulation and self-regulation (Kashdan & Rottenberg, 2010). These characteristics can make an individual establish a connection with the present moment with complete consciousness and then, smoothly, modify their behaviour according to a chosen value (McCall, 2014). It is treated as one of the positive stimulating elements of human well-being, as it makes a major contribution to psychological health. For example, it makes people recognise and adapt to the outside world, correct their mind-set when their previous plan is not in accordance with the current situation, shift the balance between incompatible needs, desires and life domains, and be conscious, open, and focus on the actions that are not necessarily consistent with deeply held values (Kashdan and Rottenberg, 2010). These dynamic processes suggest that with regard to health benefits, people with psychological flexibility tend to switch their focus from one life domain or perspective to another. It has been proved that flexibility helps people keep bi-focal balance, such as study-enjoyment and work-family balance, which are seen as

widely related to well-being; inflexibility may give rise to psychological problems such as depression and anxiety (Bond, Hayes & Barnes-Homes, 2006).

In a review of psychological flexibility, Kashdan & Rottenberg (2010) mentioned three critical factors that might impact on the development of psychological flexibility and access to its benefits; these included executive functioning, default mental states, and personality configurations. Executive functioning is also known as cognitive control and supervisorial attention system, which refers to the ability to focus on one task aiming to accomplish it (Lee, 2013). Thus, it requires self-control and goal-directed behaviour, as well as self-regulation. From a neuropsychological viewpoint, prefrontal cortex, basal ganglia, anterior cingulate cortex, and posterior parietal cortex regions are necessary for carrying out these functions (Fuster, 2000). Executive functioning manages the cognitive process including working memory, reasoning, information processing speed and ability to inhibit behaviour. Robust executive functioning is required for modulating responses to the current situation, accordingly achieving the anticipated goal (Kashdan & Rottenberg, 2010).

In terms of how executive functioning forms flexible behaviour, it is proposed that executive functioning allows people to refocus and quickly shift their attention onto another task. This process includes awareness of the confronted situation, recognising the critical aspects of the situation, toleration of stress, receptive attitude to negative aspects, and being open-minded (Labouvie-Vief, 2003). Accepting negative emotions is particularly related to openness and leads to flexibility. This means that if a person cannot accept negative feelings, they are not

able to pay attention to relevant aspects of the context, and that can lead to narrowed decision-making (Kashdan & Rottenberg, 2010).

However, there is an age difference with regard to executive functioning. This is evident since young adults are notable for their quick movements, effectiveness at focusing on current tasks within a short time and controlling their thoughts and actions. Whereas, compared to their younger counterparts, older adults have more problems responding to uncertain situations, and always tend to have differing reactions when confronted with similar predicaments (Rodriguez-Aranda, Mittner, & Vasylenko, 2016). This reflects why older people might be more conservative, adopt cautious strategies, and prefer accuracy rather than displaying a fast response. Thus, one might conclude that ageing is negatively correlated with level of psychological flexibility probably leading to more cognitive and behavioural rigidity.

Default mental state is another factor relating to psychological flexibility. It refers to individuals' mind-sets or patterns obtained from practices, and how, when they are in the same context in the future, they can behave easily and quickly without conscious intentions (Dunning, Heath and Suls, 2004). One aspect of psychological flexibility is retaining a balance between investing effort into the current context and conserving psychological energy for the future, which could be achieved through stereotype and habits (Kashdan & Rottenberg, 2010). From this perspective, psychological flexibility can be promoted by thought and behaviour changes through memory. In fact, people always tend to rely on their heuristics to judge situations and make decisions accordingly. The whole process can be completed within seconds (Dunning, Heath and Suls, 2004). One effective way of enhancing

psychological flexibility is by finding ways to shape people's automatic thoughts and behaviour towards rational directions. In this way, they can automatically adapt to changeable, significant and meaningful social and political relationships (Kashdan & Rottenberg, 2010). However, Kashdan and Rottenberg (2010) suggested that information processing and behaviour patterns that are derived from heuristics might lead people to fail in terms of finding novel distinctions in the current context, which can reduce psychological flexibility.

Concerning personality configuration, we may include openness, curiosity, dogmatism, self-control, intellectual flexibility, and self-compassion as correlates of cognitive flexibility. Open-minded and curious people like automatically to search for new knowledge and be involved in new experiences. Their open minds towards both positive and negative feelings encourage them to face uncertain and unpredictable situations instead of avoiding them; also, they look for efficient or alternative ways or opportunities to solve the problems they face (Kashdan & Rottenberg, 2010). In contrast, people high in dogmatism (lack of openness to others' suggestions) tend to reject arguments, persuasive attempts, and alternatives, which might threaten their already-held beliefs (Martin, Staggers, & Anderson, 2011). Self-control is a stable trait, which can be related to conscientiousness (Klesse, Levav & Goukens, 2015). This is in line with executive functioning, which helps people shift their attention to current tasks and achieve their goals. People's self-control positively relates to psychological flexibility that results in psychological well-being, higher life satisfaction, curiosity, and perseverance (Klesse, Levav & Goukens, 2015). Intellectual flexibility refers to apprehensive abilities. Intellectually-inflexible people are inclined to pick out the information which they think is in accordance with their

thoughts but avoid contradictive information (Martin, Staggers, & Anderson, 2011). Self-compassion is positively related to adaptive ability, psychological function and well-being. As self-compassionate people are kind to themselves, they can comply and cope with both positive and negative experiences and treat them as integral parts of human life. Also, they would be aware and mindful of their painful feelings, which enables them to modify their emotions back to normal (Martin, Staggers, & Anderson, 2011).

Cognitive flexibility can predict political ideology and the degree of political tolerance, which includes general norms and perceived threats (Sullivan, Marcus, Feldman, & Piereson, 1981; Kuyper, 2013). Sullivan and colleagues showed that support for the general norms of democracy was the result of the degree to which individuals are open, flexible, and secure personally. 'The more openness and flexibility, the more tolerance' indicates that being open and flexible not only helps the person solve a problem in their own way, but also makes them accept others' differing views (Sullivan, Marcus, Feldman, & Piereson, 1981). This is similar to the finding from later research that showed a greater degree of need for certainty and rigidity predicting less cognitive flexibility (Sidanius, 1985; Kuyper, 2013).


## 2.4   Perspective-taking


Perspective-taking is a cognitive process of taking others' points of view. As mentioned previously, perspective-taking is related to cognitive empathy, which rests on the 'theory of mind' (Beiley, Henry & Von Hippel, 2008). That is, the ability

to understand that others see the world differently from us, and that they have different beliefs, intentions, desires, emotions, and so on (King, 2011). Theory of mind is innate, first appearing in humans at about four years of age, and having a developmental peak time at puberty (Artinger, Exadaktylos, Koppel, & Sääksvuori, 2014). It improves over time, and each individual can be trained in terms of extent and accuracy. Importantly, it enables us to posit the intentions of others and to explain and predict their actions (King, 2011).

It has been proved that even four-year-old children can evaluate the current context from others' viewpoints. For example, in an eye-tracking study, they need to take the speaker's perspective to think about the speaker's visual display through experimental language leading; and the results showed their capacity for perspective-taking (Höhle, Fritzsche, & Müller, 2016). In fact, eye-tracking includes two mechanisms, one is simple and known as level 1, which reflects one's understanding of what another person can perceive. This process relies on the perspective taker's visible sight to see which object is visible to another person. The other mechanism is more complex and known as level 2, which refers to changing one's mind orientation to adopt another person's point of view and imagine how the world looks in his/her eyes (Kessler, Cao, O'Shea, & Wang, 2014). Another example is 'language production', that is, e.g., a Chinese-English bilingual child can correctly speak Chinese to Chinese speakers and English to English speakers at an early age (Ryskin, Benjamin, Tullis, & Brown-Schmidt, 2015). Moreover, memory and executive functioning has a role to play in perspective-taking. It is notable that people who put in place mnemonic cues for their future cognitive state will find these will be easily recalled by the generated cues, which means that the more links

people build between the current situation and past experiences, the faster they recognise the same context in the future. To put it another way, a right and appropriate mnemonic cue could be made based on the memory of one's own past, a realisation of the current situation, and evaluation of the future (Tullis & Benjamin, 2014). Children with better executive functioning like to take another's perspective into consideration when speaking or listening. Adults with higher executive functioning and working memory always put themselves in other people's 'shoes' and are more likely to remember to perform a planned action at a specified point in the future (Ryskin, Benjamin, Tullis, & Brown-Schmidt, 2015).

The development of perspective-taking in youth may be, on the one hand, due to the formation of relevant brain regions during adolescence. On the other hand, it may be related to the environment in which a person learns how to comprehend others' points of view, in order to act in social settings more efficiently (Fett et al., 2014). Firstly, it is suggested that the neural basis of theory of mind resides in 'mirror neurons', which can be fired when we carry out a particular action, and also when we observe the same action in another. The neurons 'mirror' the actions of the other such that they become ours, or like ours. This enables us to interpret the actions and infer the beliefs, intents, desires, and emotions that motivate them. Mirroring neuron abnormalities may underlie certain cognitive disorders, in particular autism (Gallese, 1998). From a neuroscience perspective, the frontal lobe of the brain, including prefrontal, central and posterior regions, plays an important part in social cognition and perspective-taking (Falk, Spunt, & Lieberman, 2012). The prefrontal region, with a complex interconnected neuronal network, is particularly associated with personality and memory, evaluation and logical analysis (Owen et al.,

1999). Based on cognitive-neuronal knowledge, it can be inferred that various cognitive systems are involved in different perspective-taking tasks (Ryskin, Benjamin, Tullis, & Brown-Schmidt, 2015). From the genetic perspective, dopaminergic genes, especially the Dopamine D4 receptor gene (DRD4), are a particularly crucial element in the formation of cognitive empathy. In fact, although DRD4 seems to contribute to empathy, it is modulated by an internal factor (hormonal). DRD4 7R allel, as the second common variant on a 16 amino acid repeat region (48bp) in exon 3, is considered to be more sensitive to the effect of environment on prosocial behaviour (Uzefovsky et al., 2014). In Uzefovsky et al.'s study, it was found that in the female group, 7R allele carriers had a higher ability to recognise others' mental states, suggesting that they were higher in cognitive empathy. However, in the male group, 7R allele carriers tended to have less ability to recognise others' mental states.

Cultural difference, as a main factor that influences people's social functions, can influence people's perspective-taking (Wu & Keysar, 2007). Perspective-taking in an East-Asian context might be different from that in a Western context. People in the two regions have different cultural backgrounds and conceptualisations of self: Easterners have a more collectivistic and interdependent sense of self, whereas Westerners have a more individualistic and independent sense of self (Wang, Kenneth, Ku, & Galinsky, 2014). In fact, as human beings, the developmental trajectory of perspective-taking is the same across countries and cultures: by the age of 5, children can distinguish their points of views from others. After that age, because of long-time exposure to a specific environment and culture, the ability to understand the minds of others develops differently (Wellman, Cross and Watson,

2001). In other words, though having the ability to perspective-take is universal for humans, using this ability to interpret other's actions may be varied, and these differences may be due to people's contexts growing-up.

Research that was carried out amongst American and Chinese university students proved that Chinese students considered others' perspectives more effectively than their American counterparts, which indicated that Chinese students can effectively use their cognitive processes to interpret other's actions. This might be due to the Chinese collectivistic culture (Wu & Keysar, 2007). Another cross-cultural study conducted amongst European university students in the UK and Chinese university students in China by Kessler, Cao, O'Shea, & Wang (2014) indicated that, compared with the Western group, the Chinese could orient effectively and quickly to another's perspective, when the current context was different from their expectations. In fact, both studies suggest that people in collectivistic cultures are interdependent and their self-concepts rely on social relationships and obligations. They might think representation of others is more important than the representation of themselves. Therefore, when they evaluate an event relating to themselves, they tend to report the event from a third person perspective. Also, when they compare themselves with others, they would describe how 'I am (not) similar to them' (Wu & Keysar, 2007). However, people in an individualistic culture are more independent, and their self-concept is related to their own needs and goals. They focus on the representation of themselves. They tend to report an event from a first-person perspective. When they compare themselves with others, they are inclined to describe how 'they are (not) similar to me' (Wu & Keysar, 2007). An interesting finding showed that language can also influence people's evaluations differently. Cohen & Gunz (2002) found that a

second Chinese generation, who can speak both English and Chinese, tend to describe themselves from their own perspective when writing in English, but the description is related to another person's perspective when writing in Chinese. Taken together, due to their cultural background, the Chinese consider more other-oriented values and another person's standpoint, while Westerners are concerned more with egocentric values and individualism.

Apart from cultural differences, there are also differences across gender and age factors in perspective-taking. According to the longitudinal study of Van der Graaff et al. (2014), girls and boys have a different developmental trajectory, with girls having a steep increase in perspective-taking compared to boys. Also, teenage girls (13-18yrs) show a high and stable cognitive-empathic concern, though boys show a declining level of cognitive-empathic concern and perspective-taking during early adolescence, then bounce back to a higher level in mid-adolescence. That might be because of boys' increased testosterone at puberty, which leads to more ambitious behaviour, but less cognitive empathy (Kessler, Cao, O'Shea, & Wang, 2014). There is evidence to show that Western females are slower but stronger than Western males at orientation change, taking into account others' perspectives. And Chinese females are faster and more efficient in perspective-taking than their male counterparts (Kessler, Cao, O'Shea, & Wang, 2014).

Whether older people are more prejudiced than younger people is still a controversial issue. Older people's intergroup bias may cause difficulty for them in terms of seeing things 'in another's shoes'; the reasons are due to a decline in their cognition system, such as weakness of working memory, inhibitory function and

selective attention (Watanabe & Takamatsu, 2014), as well as slow information processing speeds, and problems in executive functions (Zhang, Fung, Stanley, Isaacowitz, & Ho, 2013). Labouvie-Vief (2003) used the reversed U shape to describe the development of cognitive-affective complexity, meaning it increased from adolescence to middle age but decreased in later life. However, some studies reported that older people had more emotional social interaction and satisfactory social relationships (Sullivan, Mikels, & Carstensen, 2010; Litwin, 2001), which is contrary to the viewpoint that older people are less efficient at perspective-taking. That is because, on the one hand, perspective-taking is one kind of wisdom-related cognitive process. When the perspective-taking relies on less cognitive ability but more life experience, older people would not perform worse than younger people. In other words, in such situations, older people present superior perspective-taking (Sullivan, Mikels, & Carstensen, 2010). On the other hand, since life satisfaction is positively linked to understanding another's thoughts and feelings, higher life satisfaction should predict higher perspective-taking (Litwin, 2001).

Based on these arguments, researchers proposed that older people's prejudice was changeable to some extent and perspective-taking intervention could reduce older people's explicit prejudices. This was true, especially for the older people who scored lower on agreeableness, empathy, and tolerance but higher on conformity (Álvarez Castillo, Equizábal, Cámara, & González, 2014). Moreover, older adults can take another's perspective as efficiently as younger adults do, if they are motivated to do so. For example, if older adults found a person was important and related to themselves, they might have a strong motivation to make more effort to take his/her perspective. In fact, older adults show a higher cognitive function in tasks such as

practical problem solving, social cognition, life planning and wisdom. Their age-related performance error in perspective-taking was attenuated when the task was consistent with emotionally meaningful goals (Zhang, Fung, Stanley, Isaacowitz, & Ho, 2013). Thus, one might conclude that older people are high in perspective-taking, perhaps owing to their richer life experiences coming from education, parenthood, provision of mentorship, and understanding of others during their life span. These experiences facilitate the development of wisdom, which includes knowledge about a situation, ontogenetic changes, and historicity of life development, life obligations, and life goals.

Perspective-taking which includes cognitive empathy is fundamental to social interaction and allows the ability to understand another's mental state, thereby allowing one to interpret and predict another's actions (Wu & Keysar, 2007). In other words, higher cognitive empathy supports successful social functioning and reduces interpersonal aggressiveness. Thus, it is an essential prerequisite for prosocial behaviour, such as social interactions, cooperation for common goals and engaging in altruistic behaviour (King, 2011). More broadly, cognitive empathy helps people anticipate the behaviour of another and mend their own decisions and actions accordingly. Therefore, people can communicate with others effectively, make accurate decisions and detect deception (Meiring, Subramoney, Thomas, Decety, & Fourie, 2014). Additionally, cognitive empathy facilitates cooperative and beneficial relationships. In fact, differences in levels of cognitive empathy among individuals play a role in the degree to which individuals engage in prosocial behaviour and antisocial behaviour (Khanjani et al., 2015). In this sense, cognitive empathy is widely accepted as a skill supporting long-term social commitment and

an essential prerequisite for higher social functioning. Based on these characteristics, it can be treated as a foundation for supporting political behaviour, for example democracy.

Perspective-taking can be deemed a social skill linked to building special social relationships with outgroups (Wang, Kenneth, Ku, & Galinsky, 2014). That is, a co-representation action, which is understood as having the tendency to share intentionality and communication, is characterised by successful social interactions arising from understanding another's perspective (Müller et al., 2011). Findings in neuroscience suggest that the Posterior Cingulated Cortex (PCC) is more activated during intergroup perspective tasks, while the Temporal Parietal Junction (TPJ) is more activated when involved in an out-group perspective task (Falk, Spunt, & Lieberman, 2012). However, people show more co-representation action for their intergroup members than for an out-group member. These cognitive biases and the subsequent incompatibility can be changed in different ways. For instance, asking someone to think about an out-group member's feelings or cultural differences can prepare the ground for change. Interestingly, these changes would take the form of a generalised attitude change towards the whole out-group (Müller et al., 2011). Intentions to suppress one's stereotypes can lead to avoiding out-group members rather than approaching them. However, increasing contact between different social groups with different cultural backgrounds can be effectively achieved through enhancing perspective-taking (Wang, Kenneth, Ku, & Galinsky, 2014). Perspective takers have more willingness to interact with out-group members that can result in an increase in their cognitive empathy. Bearing this in mind, taking the perspective of out-group members not only can improve positive attitude towards out-groups,

but also may reduce prejudice and discrimination towards out-group members (Shih, Wang, Trahan Bucher, & Stotzer, 2009). Therefore, one may assume that perspective-taking and cognitive empathy increase prosocial behaviour towards the members of out-groups. Based on these ideas, in-group/out-group perspective-taking can also be closely bound to political activities and adherence to democratic values, as it helps people understand others' thoughts through taking their stance. However, such thoughts might be different from those one is holding which may lead people to broadly accept different ideas and viewpoints.

## 2.5    Egalitarian sex role

Many theories, such as essentialism, social constructionism, evolutionary, and social scientific models try to explain how gender roles lead to different behaviours between men and women. Essentialists focus on the basic and stable sex differences in the human species and believe that a genetic factor plays an important role in sex-differentiated social behaviour (Dar-Nimrod & Heine, 2011). Social constructionists, in contrast, pay more attention to sex variation across social backgrounds, and think that men and women learn to display a set of sex-typed behaviours within particular social contexts, interactions and social expectations (Brickell, 2006). Evolutionary psychologists try to interpret men's aggressive and risk-taking behaviour as competitive subsistence. In this theoretical approach, women are choosier about mating and invest more in offspring than men. Thus, for men, competitions help them find a mate and control women's sexuality (Archer,

1996). Similar to the social construction theory, social scientific theories stress that instead of logical behaviour, gender difference is based on certain cultural and historical backgrounds. Societal understanding of men and women leads to gender inequality, regardless of biological difference, but based on their social functions (Wood & Eagly, 2002).

A gender equality attitude, which is closely related to egalitarian sex role, could be assessed in the context of three domains: capabilities, opportunities, and empowerment (Beer, 2009). Capabilities refer to health, education, nutrition, life expectancy, and maternal mortality; opportunities refer to land, credit, property, labour force participation, and employment rates; empowerment mostly reflects the degree of representation in deliberative bodies, which indicates the percentage of women in legislature (Beer, 2009). From these three domains, it could be inferred that gender equality is not only a women's problem, but is a wide social problem, which is not limited to domestic issues, but also needs to be discussed in terms of political issues. In fact, one of the previous studies has suggested criteria for defining an 'individual woman'; that is, she can make decisions about her education, family formation, fertility and labour market participation over her life cycle (Fortin, 2005). Since the 20th century, women in many countries have enhanced their domestic status; for example, a survey in America shows that more and more men support their wives' or partners' decisions to take contraception with the purpose of controlling women's fertility. Thus, women can shift their focus from childcare to work; also, most men (88% of 2526) strongly agree that a man should have the same responsibility as a woman for the children they have together (Brickell, 2006).

The level of the egalitarian sex role can be the result of different elements, such as occupational (economic) status, attitudes towards marriage, conservatism, educational attainment, parental family, and cultural background. It has been admitted that the women's labour force influences their sex role attitudes and, in turn, their sex role attitudes influence the women's labour force (Thornton, Alwin & Camburn, 1983). Anti-egalitarian views are strongly and negatively associated with women's employment rates and the gender pay gap. It has been suggested that women's labour participation can be treated as a symbol of high gender equality, and results in high democracy (Beer, 2009; Inglehart, Norris & Welzel, 2004; Fortin, 2005). While the pay gap can be a measure of the differences between the average wages of men and women, it is not only an indicator of the rates of wives' labour force participation, but also shows the capacity differences between wives and husbands in the workplace (Fortin, 2005). Women's occupational positions may decide their status in families. That is, women's high social status in the labour market influences their domestic roles, with the reduction of women's participation in the public sphere (Arber & Ginn, 1995). Moreover, women's life expectancy, a negative attitude towards divorce, and a positive attitude towards the sanctity of marriage in a traditionalist society might be seen as crucial components of traditional sex roles (Larsen & Long, 1988). Also, conservatism may be positively related to the traditional sex role. Men in rural areas who hold strong conservative beliefs on gender differences have a lower score on the women's rights subscale and women's independence subscale (Uji, Shono, Shikai, Hiramura, & Kitamura, 2006). However, this is also related to their educational level; especially for women, education can promote their willingness for an equal gender role. Education can enhance women's

wellbeing and give them greater power in household decisions, greater autonomy to determine the conditions of their lives, and greater opportunities to participate in community affairs and the labour market (Malhotra, Pande & Grown, 2003). In addition, parenting methods appear to have a profound impact on the sex role attitude towards children, and mothers' sex role attitudes considerably impact on their children (Thornton, Alwin & Camburn, 1983).

Cultural background should be taken into account when considering gender equality. Gender equality always goes with democracy, while gender inequality goes with un-democracy (Inglehart, Norris & Welzel, 2004). Social development is understood to underpin attitudinal change that is variously conditioned by institutional structure (agricultural or industrial societies) and the cultural legacy (the level of authoritarianism or the level of democratisation) (Rempala, Tolman, Okdie, & Ahn, 2014). On the one hand, it has been found that, in agricultural societies, the concept that women should be more compliant and nurturing prevails. Whereas, in industrial societies, compliance of either gender is not necessarily needed (Goodwin, 2003). That is to say, in a highly industrialised society, the sex role division at work or at home is emphasised. During the shift from agrarian to industrialised society, the reduced fertility rates and increasing rates of literacy and education levels brought women into the paid labour force. Furthermore, owing to the move from industrial to post-industrial societies, the fierce competition of capacity again enhanced gender equality in the public sphere and workplace, as the difference between gender is not as important as that between individuals. That is, people with great ability can always get a better position in the workplace, regardless of their gender, but depending on whether they are competent for the job (Clark, 2005). On the other

hand, instead of performance on gender equality behaviour (e.g. housework and child-care), gender inequality is also the result of cultural background (e.g. different religions between democratic and republican countries), and this influence is more profound. In fact, women's egalitarian attitudes are formed at an early age, as they are influenced by both cultural education and parental education (Fortin, 2005; Larsen & Long, 1988). It is shown that more egalitarian gender-role beliefs and increased sharing of family responsibilities between women and men are associated with more well-being in both individualistic and collectivistic cultures across both gender groups. In other words, cultural differences are larger for gender-role beliefs than for household-tasks and child-care behaviours (van de Vijver, 2007).

In a cross-cultural study (Suzuki, 1991) reported more than twenty years ago, it was revealed that due to the advanced industrial society and modern lifestyle, Japanese women supported the egalitarian sex role more than those in the 1970s. This difference might be explained by industrial advances and modern life style. Although Japanese and American participants were comparable in terms of education, occupation and societal duties, American women were more egalitarian in sex role attitudes than their Japanese counterparts. Moreover, most of the American women reported that they chose a particular person as a very important role model in their life, whilst Japanese women did not choose any broadly accepted role model (Suzuki, 1991). In the 20th century, in most industrialised countries, although it was still harder for women to have higher rank work positions, the gender gap between men and women became narrower. The participation of women in the paid labour force and political roles increased greatly and, in some countries, particularly in the United States, the rate of highly educated women became larger than the rate among men.

Additionally, the responsibilities for childcare and other domestic duties were balanced between couples (Wood & Eagly, 2002).

Moreover, economy and social modernisation are another two factors influencing gender equality, and they can impact on people's democratic values; a higher standard of living in a society requires the population to be more educated, which means, in a well-developed and modern democratic country, the education gap between males and females should be narrowed (Beer, 2009). In fact, a country's economy and social modernisation are associated with its history and cultural background. As mentioned before, the countries where agriculture dominates, the economy tends to have more traditional-social structures, which may result in low gender equality. However, gender equality is also associated with government expenditure; for example, if the government pays more attention (e.g. money and education) to childcare and parental leave, so as to give mothers more chance to shift their focus from family care to the workplace, gender equality would be enhanced significantly. Again, labour force participation is the most important element in gender equality.

Regarding the relationship between the egalitarian sex role and democracy, it is based on the historical phenomenon or cultural difference and economy (Beer, 2009; Fortin, 2005). Beer (2009) suggested that gender equality could result in democracy, as one aim of democracy was to reduce artificial and arbitrary barriers to power, and promote the interests of those not in power; this included improving women's explicit power in the political arena. Thus, those countries where more women are included in public life are more likely to be democratic. A high level of democratic

value is related to women's high rates of participation in political affairs (e.g. women's suffrage); in addition, participation is indicated by a higher ratio of women's life expectancy, lower women's fertility rates, both of which are indicators of their explicit responsibilities of motherhood, and high rates of women's labour force participation (Beer, 2009).

## 2.6    Normative identity style

Self-identity can be understood as an individual's subjective sense and experience of self-consistency, and self-continuity in the past, present and future. It has the function of helping people keep a balance between self and surrounding circumstances, as well as increasing personal integration (Yang & Guo, 2001). There are some theories to explain and classify identity style.

The identity style model is based on two elements. One is exploration, which means the individual tries to search for the right goals or values. The other is commitment, which refers to the individual's efforts to achieve their goals (Fras, 1968). Marcia (1966) proposed four identity styles: identity achievement, identity moratorium, identity foreclosure, and identity diffusion. Adolescentswith identity achievement always get personal goals after exploration and careful considerations. Also, they feel a deep involvement with the goals and are prepared to fight for them. Individuals with identity moratorium begin to consider their goals, but do not set them, and make no effort to reach them. Individuals with identity foreclosure are regarded as performers, which mean they try their best to achieve the goals their

family and friends have set up for them, without having their own viewpoints. Individuals with identity diffusion have neither searched for their goals nor made any effort to achieve them.

Berzonsky, Cieciuch, Duriez, & Soenens, (2011) focused on social cognitive processes by which identity is formed and proposed three types of identity styles. These three social, cognitive identity processing styles are as follow: informational, normative, and diffuse-avoidant. Individuals with an informational identity style tend to actively search out, evaluate, and use self-relevant information to solve identity-related conflicts and problems. These individuals are self-reflective, critical of their own self-views, would like to learn more new things about themselves, and have the willingness to adjust their identity styles according to others' feedback. Individuals with normative identity style put less emphasis on self-evaluation, but they automatically adopt and internalise the goals and expectations of significant others. Individuals with a diffuse-avoidant style procrastinate and try to defer facing identity-related conflicts and problems (Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005; Berzonsky, Cieciuch, Duriez, & Soenens, 2011). Regarding the three personalities, it is suggested that informational identity includes two processes, one being information-seeking, and the other one being self-reflection. Normative identity style individuals tend to protect themselves from potentially dissonant experiences and information. The diffuse-avoidant style is associated with a heightened emphasis on social identity, which indicates a reliance on immediate social reinforcements (Berzonsky & Sullivan, 1992).

Self-determination theory (Deci, Ryan, & Guay, 2013) focuses on causality orientation. Three personality orientations (autonomy, controlled, and impersonal) are identified in this theory. In autonomy orientation, individuals are aware of their personal standards and goals, and are inclined to be self-initiated, self-regulated and have free choice; thus, they behave in a manner that actively seeks out opportunities to help them achieve their values and goals. This personality is not only linked with higher levels of self-esteem, self-awareness, ego-development and personality integration, but also relates to other personality characteristics such as agreeableness and extraversion. Controlled personality orientation refers to individuals' behaviours and these are influenced mostly by external forces, such as social expectations, and pressure from family and friends. However, it also links to negative emotion, public self-consciousness, and low levels of agreeableness. Impersonal orientation individuals tend to be easily influenced by the factors that are out of their limited control; that is, they have the personality of external locus of control while believing they are lacking the ability to regulate their actions, which can bring them their desirable outcomes. Persons with such characteristics are easily depressed, experience social anxiety, shame, low self-esteem, low extraversion, and low conscientiousness.

Among these theories, there is close link between Berzonsky, Cieciuch, Duriez, & Soenens's (2011) three identity styles and three-causality orientations. An autonomous causality orientation could be regarded as informational identity style, with high levels of self-regulation, active searching, and processing relevant information. A controlled causality orientation can predict a normative identity style, which suggests that individuals obey the norms and 'orders' given by significant

others, and they always internalise those people's values, goals, and expectations as their own. In addition, impersonal orientation can be treated as diffuse-avoidant identity style, showing that individuals have a feeling of being unable to regulate their behaviour and the current situation, thus, they are likely to avoid thinking about and dealing with important relevant tasks (Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005).

Parenting is an important external factor that influences the process of forming adolescents' identity styles (Wang, Wiley, and Chiu, 2008). Authoritative parenting refers to strict monitoring; the main goal of this parenting is to control children, and make sure they are doing the 'right thing' at the 'right time'; in fact, authoritarian parents would like to participate in their children's everyday life. They also give their children love, affection, and feedback, but they always think they are guiding their children in the best way to success, thus their children need to obey their suggestions (Chen, Dong, & Zhou, 1997). However, democratic parenting refers to 'free parenting', which means democratic parents give the children psychological autonomy to express and develop their personalities freely; they regard their children as individuals who should have their own thoughts and be responsible for the results of their decisions (Chen, Dong, & Zhou, 1997). Children growing up in authoritarian families have more tendency to have a normative identity style, while children growing up in democratic families tend to form a personality related to informational identity style (Wang, Wiley, and Chiu, 2008). Moreover, there is a suggestion that most females present informational orientation, while most males show diffuse-avoidance, for the reason of females' earlier physical and cognitive

maturation (Dunkel & Decker, 2012). Nonetheless, this proposal needs to be proved in further studies.

Identity style can lead directly to, and influence, political attitudes (Pratto, Sidanius, Stallworth, & Malle, 1994). Normative identity style is a vital predictor for authoritarian-political orientation, with normative identity style individuals needing to follow the standard norms and social political affiliation; their political attitudes are positively related to conservatism that can lead to an undemocratic-political attitude (Pratto, Sidanius, Stallworth, & Malle, 1994; Dunkel & Decker, 2012). However, individuals with informational identity style are comparatively open, because they try to seek and accept any appropriate ways to solve the current problem; with this personality, these individuals' political attitudes would be more open, flexible, and non-rigid, thus undoubtedly leading to democratic values (Pratto, Sidanius, Stallworth, & Malle, 1994).

## 2.7   Interpersonal trust

Interpersonal trust is defined as the reliance on a person or a group, which refers to how confident individuals are with their external and internal worlds (Six, 2007). It is suggested that if individuals lack confidence in themselves, they rely on outside surroundings more, thus placing more trust in others; the degree to which a person depends on another person reflects the degree of his/her trust in relying on that person (Zand, 1972). Interpersonal trust is treated as a vital foundation of friendship, communication and competition, and it is more about life experience. Since it is a

personality trait that is formed in the process of interacting with others, it is a psychological cognitive process that includes evaluation, and decision-making accordingly (Colquitt, Scott & LePine, 2007). In fact, regardless of whether trust is placed in a person or a group, it can be a complex cognitive process that follows an interaction-recycle process of 'perception-conclusion-action-perception'. For instance, once a person (A) receives information about another person's (B) behaviour, A would assess B's behaviour, and come to a conclusion about it, based on which A's judgement is made and feedback as an action would be given to B. Then, this cycle is repeated, as B receives the new action from A; B would come to a conclusion about that, and give his/her action (Zand, 1972). According to Six (2007), there are at least three steps for building up interpersonal trust within an organisation: removal of distrust; creating positive relational signals or avoiding negative relational signals; and making policies to stimulate and enhance trust. Six & Hoogendoorn, (2010) emphasised that strong interpersonal trust could be related to dealing with troubles in a positive way, that is, avoiding negative relational signals requires a psychological attribution mechanism. Individuals indeed tend to build trustworthy relationships with the outside world, but when trust is in trouble, people tend to act in two areas: one area is emotional activity; the other one is cognitive activity. The former refers to negotiating and considering the reason for the trouble, and directly jumping to aconclusion (e.g. 'this person is not trustworthy'), thus these people would have feelings of betrayal or disappointment. Cognitive activity requires a psychological attribution mechanism, whereby people assess and attribute the trouble to something, then make decisions, in a way that trust can be restored.

There is a gender difference in interpersonal trust. It is suggested that men are more aggressive-oriented, which means men are more independent, while women are more relationally-oriented, which means women are concerned more about relationships and interpersonal connections at both emotional and physical levels (Maddux & Brewer, 2005). Though men have a tendency to describe themselves as separate from others, within a group they tend to pay more attention to whether they are included in a group. Once they feel they are involved in a group, they treat the group membership as part of their self, and their trust is stronger and firmer than that of women. In other words, women's trust is broader and superficial, while men's trust tends to be narrower and firmer (Maddux & Brewer, 2005). Conversely, recent research has suggested that women are less likely to lose trust and more likely to rebuilt trust in a transgressor than men. That is to say, women care more about maintaining relationships, which means they are more flexible on this issue while men may lose their trust quickly if they feel someone is untrustworthy and are less willing to collaborate with others again (Haselhuhn, Kennedy, Kray, Van Zant & Schweitzer, 2015). Haselhuhn et al. (2015) have explained how women's persistent trust may result from women's reviews of a relationship, which make them confront the actual trouble, and search for a creative way to collaborate with others again. This explanation is in line with Maddux and Brewer's (2005) suggestion that women have more relational investment. Also, in accordance with Six & Hoogendoorn's (2010) statement highlighting that women dislike emotional activity (which may lead them to jump to conclusions), they are prone to cognitive activity in interpersonal trust processes, which requires a more complex psychological effort. However, according to Riedl, Hubert & Kenning (2010), though women process more

information and show more comprehension than men, it does not mean that women have higher levels of interpersonal trust, as they encounter more uncertainty and risk. From a biological perspective, women have more brain areas activated in both trustable and un-trustable environments than men. In a trustworthy environment, women have more brain activity in the dorsal AII, thalamus, striatum and fusiform gyrus, while men have more brain activity only in the dorsal ACC and DLPFC. In an un-trustable environment, women have more brain activity in the ventral ACC, hippocampus, DLPFC, striatum, and insular cortex, while men only show more activation in the VMPFC, insular cortex, and ventral PCC (Riedl, Hubert & Kenning, 2010).

Moreover, interpersonal trust could be related to other psychological factors (e.g. altruism, prosocial attitude). Furthermore, it can be cultivated by better education and successful social communication (Wu, Lin, Hsu & Yeh, 2009). It may also be a reflection of people's income in society, since it is reported that those with a higher income in society focus more on social harmony, which can boost interpersonal trust (Knack & Zak, n.d; Yang, 2008). This is, in fact, in line with the suggestion that a stronger social economy can reinforce interpersonal trust, as trust is the basis of cooperation, and cooperation can result in transactions and investments (Yang, 2008). It could be inferred that in those countries which pay more attention to communication, education, people's welfare and social equality, interpersonal trust would be normally developed.

Interpersonal trust has a social function depending on different cultural backgrounds and types of economic development (Han & Choi, 2011). According to Han & Choi

(2011), trust encompasses different actions, and takes different forms within Western and Eastern cultures. They proposed that there were two main types of trust: one was interpersonal trust and the other one was institutional trust. The former is complex and includes both general and specific trust (general trust refers to building relationships with others in society, while specific trust is related to private, close, exclusive, discriminatory, and strong ties). Institutional trust refers to the trust placed in institutions, such as government and the police; it is a socio-cultural mechanism and social experience that enables civilised survival and makes society prosperous. In this sense, people who trust others are more likely to work voluntarily in civic organisations, which means interpersonal trust should be positively related to individuals' passion for participating in political activities.

However, interpersonal trust has different social purposes in different cultures: Western individualistic culture regards an individual as an independent person, while Eastern collectivistic culture regards the person as one within a web of multiple relationships with others (Han & Choi, 2011). People with an Eastern cultural background tend to maintain harmony and avoid confrontation in their interpersonal relationships. With this aim, they tend to be willing to develop several social psychological mechanisms that benefit each relationship, such as 'social tact' and 'social face'; thus, for them, trust is a matter of social property rather than a matter of individual property (Han & Choi, 2011; Wei, Su, Carrera, Lin, & Yi, 2013). A cross-cultural study between the Chinese population, and the European and American populations proved that Chinese people experienced more emotional suppression, which is positively related to their interpersonal harmony and social goals. In fact, Chinese people support stronger endorsement of emotional self-control. However,

this was not found in European and American participants (Wei, Su, Carrera, Lin, & Yi, 2013). One can assume that people in Eastern countries are concerned more with particular trust, because it can help them accumulate social capital, through which they achieve their political goals. In this sense, a higher level of interpersonal trust does not mean a strong willingness to participate in political activities (e.g. democracy).

Regarding the potential link between interpersonal trust and political behaviour, one might assume that the level of interpersonal trust depends on certain social and political-cultural contexts. This means individuals' interpersonal trust could be decided by their internalised cultural norms, values, and expectations (Sullivan & Transue, 1999). It has been suggested that trust comes mostly from cultural values and is a social 'product' (Zhong, 2014). People's political attitudes mostly refer to their satisfaction with the government (Grönlund & Ferrera, 2007), and their external political efficacy, which is defined as a wide feeling of political competence referring to people's abilities, skills and confidence in influencing politics and government decisions (Sullivan & Transue, 1999). Both of the two factors can positively impact on the trust people place in their government (Sullivan & Transue, 1999; Zhong, 2014).

From a political perspective, individuals' satisfaction with the government could be the result of democracy (Sullivan & Transue, 1999): firstly, political trust could be built on the fulfilment of citizens' normative expectations; also, citizens' life satisfaction can be measured by their attitudes towards political performance (Grönlund & Ferrera, 2007). Furthermore, political trust, which includes citizens'

evaluation of their government, has a profound impact on democracy, with higher evaluation showing stronger support for democracy (Grönlund & Ferrera, 2007). However, satisfaction and positive evaluation of the current political setting can be altered, owing to cultural change (Grönlund & Ferrera, 2007). For example, if a discrepancy emerges between these people's democratic expectations and government performance, people will be dissatisfied with the current political institutions and lose trust (Grönlund & Ferrera, 2007). In Western and North American countries, the suggestion that interpersonal trust is the foundation for carrying out any political activities seems to be more manifest, as its robust democratic regime puts more trust in citizens by endowing them with a vote in parliament and a vote for government decisions (Grönlund & Ferrera, 2007). In turn, citizens' voting contains strong trust that their supported government could do better for them, and also the hope that their supported government may stay in power longer (Manion, 2006). In China, similarly, if citizens believe that their leaders are trustworthy, they are proactive in some political activities (e.g. election for National People's Congress); also, more Chinese citizens have shown their trust in their local and central government (Manion, 2006). That might be due to the Chinese government's performance, economic growth rate, and public welfare system (Zhong, 2014).

Generally speaking, interpersonal trust may depend on the cultural context linked with political attitudes. In Western countries, it could be a vital foundation for democracy as, to a large extent, trust puts the government and citizens on an equal level; government is just the performer that can execute the citizens' desire, and trust is created and made stronger by both government and citizens. However, in

Eastern countries (China), though more citizens are involved in a greater number of political affairs, interpersonal trust is more complex in individuals' political attitudes, as it needs to be considered within a social collective context, the context of effective communication, and fewer democratic policies.

## 2.8    Openness to experience

Openness, as one of the Big-Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism), refers to the degree to which an individual finds alternative routes to overcoming goal-related obstacles (Goldberg, 1993). Conscientious individuals could be efficient, organised and have self-discipline; they tend to achieve their aims by following a plan. People with the extraversion trait tend to be outgoing and talkative; they usually experience positive emotions and seek stimulation in co-operation with others. Agreeableness encompasses friendliness and being prepared to trust and help others; people high in agreeableness usually have compassion and cooperative attitudes towards others. Neuroticism could be related to experiences of negative emotions and being sensitive; people high in neuroticism easily experience unpleasant emotions (McCrae & Sutin, 2009; Vassend & Skrondal, 2011).

Openness can be defined as a cognitive process that includes intellect and better management of new experiences, changes, and negative emotions during life transitions (Helson & Srivastava, 2001). Intellect can be regarded as an important facet of openness, and it can be formed after birth (Weisberg, DeYoung, & Hirsh,

2011). It is suggested that there could be a gender difference in openness, with men more open to ideas than women, as their behaviours commonly tend to explore 'explanations' rather than solely focusing on personal emotions, while women seem to be more open to feelings, as they are higher in emotionality (Costa, Terracciano, & McCrae, 2001). This gender difference in intellect and emotion may relate to gender role differences in pre-schooling, later education, and career trajectories. This implies that openness is changeable, with years spent on educating and strengthening one's basic tendencies to enhance openness (Chapman, Duberstein, Sörensen, & Lyness, 2007). Thus, in other words, after years of training, males have the chance to be more open to feelings, and females to ideas.

Openness to experience may be positively linked to creative and divergent thinking under challenging conditions (Chamorro-Premuzic & Reichenbacher, 2008), which means, in stressful situations, people high in openness show an attitude of tolerance and search for possible ways to solve current problems (McCrae & Sutin, 2009). Openness and curiosity may be relevant to flexible thinking, which stems from working on opposing tendencies such as tolerance of uncertainty and less need for closure (Kruglanski & Webster, 1996). Individuals lacking openness need cognitive closure to evaluate or judge a person or situation, increasing the reliance on stereotypes, conformity, and dogmatism, which may give rise to serious rigidity (Kruglanski & Webster, 1996).

There is another theory explaining how openness could be a cognitive working process. That is to say, when people are exposed to new surroundings, they like to automatically evaluate and judge the current context using their previous

experiences and tend to foresee what occurs consequently. If individuals are unwilling to seek information that fails to confirm or alter established views, they rely on prototypes and stereotypes, and are hostile towards out-groups, as they feel the situation is out of their control (Bargh & Ferguson, 2000). People who lack openness would not undertake difficult tasks, since such tasks can challenge the horizon of their competencies and knowledge, which are viewed as aversive, perhaps avoided by the people with an intolerance for uncertainty (Sorrentino, Hewitt, & Raso-Knott, 1992). Similarly, people with a low tolerance of uncertainty cannot effectively handle a situation brought about by unfamiliar surroundings, as they cannot find an effective way to solve the current problem in their 'fixed mind', which may make them uncomfortable; thus, being intolerant or having avoidance issues is a way to protect themselves (Duronto, Nishida, & Nakayama, 2005). After a long period of avoidance, this behavioural pattern could be influenced by traditional values and conformity interferes with skills development, progress, and growth; which may lead to some extreme reactions in some people, for instance, aggressive arguments with a person holding dissimilar ideas (Duronto, Nishida, & Nakayama, 2005). Openness can be measured by tolerance of uncertainty, self-determination, curiosity, and the seeking of new experiences, all of which are directly related to well-being, whereas, a heavy focus on conformity, obedience, security, and stability can be inversely related to well-being; as such people can become easily upset by new surroundings and become anxious (Bargh & Ferguson, 2000).

Within the Big Five personality model, openness has been proved to have a very close link with political attitudes and behaviour (Mondar & Halperin, 2008), as it can impact on individuals' tolerance of disliked groups, with more tolerance and more

willingness to extend political rights to disliked groups (Oskarsson and Widmalm, 2016), more support for liberalism (Gerber, Huber, Doherty, Dowling, & Ha, 2010), and a negative correlation with right-wing political ideology (van Hiel, Kossowska, & Mervielde, 2000). Similarly, Sullivan and Transue (1999) stressed that robust democracy should show more tolerance of others' efforts to participate in political events, and different political ideas, even unpopular views. From this viewpoint, the 'degree of democracy' can be gauged by the level of political openness. Moreover, recent research (Curtin, Stewart, & Duncan, 2010) admits that openness is a significant and indirect predictor of political activism through personal political salience, which means high openness results in high political behavioural salience, and thus leads to more participation in political activities. They continued by explaining that it might be because political openness may lead people to find personal meaning in political events and become encouraged to undertake further social activism.

Apart from tolerance, critical thinking is another vital factor that can be related to openness. Critical thinking in the political area might be defined as changing conventional knowledge and an orientation towards better learning by searching for social, historical and political roots (Benesch, 1993). Political-critical thinking can relate to democratic open-mindedness but beyond that, it might be closely bound with personality and educational background, while critical thinking can be an integrated skill in terms of both knowledge and openness (Kruglanski, and Boyatzi, 2012). A healthy democratic world needs not only citizens' participation, but also their critical thinking, position-taking and collaborative working to solve problems

and complicated issues. In addition, effective and active political participation requires critical thinking to read and understand different viewpoints (Gainer, 2012).

Some researchers have tried to find ways to develop critical thinking, and the important factors involved. Among these studies, most of them emphasise the vital role of education amongst adolescents and young people (Benesch, 1993; Taylor & Williams, 2008; Gainer, 2012; Yogev, 2013), as they thought schools were the best place to acquire critical thinking skills. For example, as Benesch (1993) mentioned, school is a place where young people can get different and conflicting experiences; it is the teacher's responsibility to help learners analyse the commonality, compare the differences and finally reach alternative types of resolution. Teaching students to use critical thinking to analyse and discuss the ways of supporting democracy is equally important as providing them with knowledge to understand the principles of democracy (Gainer, 2012). Some researchers have tried to analyse all possible links between critical thinking, psychological characteristics, democratic attitudes and political participation (e.g. Guyton, 1988; Jone, Smeets, & Smits, 2006); they regard critical thinking as a higher intellectual skill instead of acquired knowledge. From their theories, it is not hard to understand that some association exists between critical thinking and democratic attitude, as both of them require cognitive processes, which depend on various psychological characteristics (e.g. openness to experience). Generally, the degree of critical thinking ability can reflect the degree of openness, as both of them need to view an issue from various viewpoints.

If critical thinking is mainly influenced by education, there might be cultural differences. Western education focuses on classroom discussion that may generate a

democratic atmosphere for students and enrich an individual's democratic education (Taylor & Williams, 2008). That is to say, democratic education could be included in Western school education, which aims to cultivate students' critical thinking for the purposes of enhancing their openness (Yogev, 2013). Both Taylor and Yogev's assertion stressed the importance of school education in the formation of democratic attitudes; they admitted that though global media (e.g. TV, internet and smart phones) could impact on people's thinking unconsciously, teaching practices required more in-depth thinking. According to Taylor & Williams (2008), education for democracy could help young people form a social justice perspective, by which the critical reflexive capacity on social issues could be fostered, and this critical reflexive capacity might be expressed in many ways, such as through collective forms of power, privilege, oppression and difference. Yogev (2013) highlighted the knowledge of history and ethical dimensions, because they include history teaching practices, political-moral thinking and political history content; these three factors, together with personality, foster effective historical consciousness, which help people have their own autonomous thinking, reflective skills, and empathetic capabilities, which in turn impact on critical-political thinking.

However, in early research, Guyton (1988) emphasised that critical thinking is a cognitive process, a complex process based on certain knowledge. To explain his suggestion, Guyton (1988) proposed a three-stage model, where psychological characteristics (self-esteem, personal control and political efficacy) and democratic attitudes were gradually added in for the purposes of examining how they impact on each other, and how they mediate the relationship between critical thinking and political participation. It was outlined that critical thinking promotes both political

efficacy and democratic attitude. However, political efficacy, as a vital factor, could enhance democratic attitude; and when compared with democratic attitude, it had a much more positive influence on political participation.

Based on these analyses, openness to experience may be deeply influenced by critical thinking that is formed through school education; and openness can additionally be reflected by tolerance of dissimilar thinking. Notably, critical thinking and a high degree of tolerance are regarded as the basis of being liberal (Benesch, 1993; Gainer, 2012; Oskarsson and Widmalm, 2016). Thus, in this sense, openness is predicted to be positively related to democracy.

## 2.9    Suggestibility

Suggestibility is defined as a personality characteristic that can reflect the degree of influence on a person from their outside surroundings, and it might be regarded as a vital factor that can influence individuals' behaviour but has varying degrees of effect for different people according to their education, propaganda, and psychotherapy (Janis, 1954). Some researchers (Calicchia & Santostefano, 2004; Nicolas, Collins, Gounden, & Roediger, 2011) have proved that in the process of using suggestibility to make a decision, memory plays an important role, which can decide to what extent one is influenced by others.

Taking into consideration the impact of one's experiences and memory (especially long-term memory) on suggestibility, the age factor might play a role. Daneman,

Thannikkotu and Chen (2013) reported differences between older adults and younger adults, suggesting that older adults were able to correctly reject false information about an event and were less susceptible to a misleading suggestion than their younger counterparts. However, another suggestibility research study between young and old adults carried out by Polczyk et al. (2004) showed different results; they divided the process of suggestibility into two phases: one is "Yield", which points to the acceptance of suggestibility and the other one is "Shift", which refers to altering answers or behaviours after negative feedback. In other words, the former is related to mental change, and the latter is associated with behavioural change. Polczyk et al. (2004) suggested that older adults were more yielding to suggestibility than adolescents and young adults but were less willing to shift their answers. This may relate to the poor memory of older adults, which makes them yield rather than shift; besides, older adults have more self-confidence coming from their life experiences and this may help them to insist on their own thoughts (Polczyk et al., 2004). The finding that poor memory could be an important determinant of yielding to misleading information could be in line with the conclusion that suggestibility is negatively correlated with memory performance (Calicchia & Santostefano, 2004).

Suggestibility could be correlated with other factors, for example, self-esteem, acute neurotic anxiety, self-directedness, negative emotions and conformity. According to Janis (1954), people with low self-esteem, who may lack a sense of personal adequacy, usually fail to make decisions relying on their own norms and judgment. Peiffer and Trull (2000) showed that highly acquiescent people and people with low self-esteem were more influenced by suggestive questions and interpersonal

pressure. In contrast, the attitudes of acute neurotic and anxious people are rigid and inflexible in terms of their ability to change, as they lack trust, but have more defensive inhibition and emotional blocks; thus, they are inelastic in terms of being influenced by others (Peter, Bazijan & Piesbergen, 2011). Moreover, self-directed awareness is another factor that can impact on suggestibility (Scheier, Carver & Gibbons, 1979). People high in self-consciousness would be more self-focused and focus more attention on their 'internal world'. When they judge a situation using internal sources of information, they would be more impervious to the suggestions and influence of others. In contrast, people who lack a self-directed trait tend to rely on outside information to describe their internal states and might be misled by the outside world; thus, this can lead to a wide variety in suggestibility (Scheier, Carver & Gibbons, 1979). In addition, people with a negative mood tend to resist outside influences in a suggested situation (Peiffer & Trull, 2000). This might be because people with low-mood lack motivation to concentrate on and judge outside information. In addition, an early study proposed that suggestibility may be positively associated with conformity personality as well, because conformity personality makes people have the tendency to accept others' opinion without critical thinking (Wegrocki, 1934).

The degree of suggestibility varies under social or cultural conditions. A cross-cultural study between Chinese Hong Kong, American and Australian college students revealed that the Chinese population was more prone to suggestibility than their American and Australian counterparts (Yu, 2005). This result is similar to a recent study conducted by Pires, Silva & Ferreira (2013); they revealed that suggestibility corresponded with certain characteristics (e.g. conformity, rigidity, and

normative identity style) to facilitate some behaviour styles (support for authoritarianism) in growing-up surroundings. The results proved that individuals in surroundings that promote cooperation had a strong agreeing style (e.g. collective society) making them prone to suggestibility. This is explained through three points: firstly, individuals growing up in such cultures are inclined to communicate with others in a respectful and cooperative way and tend to behave in a formal and acceptable manner in social settings. Secondly, social or group opinions are more powerful than personal opinions within such groups and people would be reluctant to be defined as 'a stranger'. Finally, individuals growing up in this cultural background tend to be good at self-control, which means they like to present a positive 'face' to the public, even if they have to inhibit their real thoughts; thus, they seem to be more vulnerable to suggestibility.

However, Pires, Silva & Ferreira (2013) also pointed out that intuitive and creative individuals were less suggestible, as they can identify multiple solutions, which might be perceived capable of resolving ambiguities. In other words, people growing up in a cultural context that focuses on cultivating their flexible and creative thinking would be less suggestible and may accept varying ideas more broadly. Thus, in this sense, suggestibility might be oppsite to openness to experience and flexibility; it might also be a barrier to democracy.

## 2.10  Prosocial behaviour

Prosocial behaviour could be regarded as a kind of positive social behaviour, which is an important foundation for establishing good interpersonal relationships in society, as prosocial individuals voluntarily offer their help to others (Eisenberg, Zhou, & Koller, 2001). General prosocial behaviour can be any actions that have the purpose of increasing another person's physical or psychological well-being and have positive consequences for that person, such as help and comfort. Intentional prosocial behaviour can be related to 'helping behaviour', which means it benefits others without a payback obligation; for instance, donating money to charity or doing voluntary work (Schwartz, 2010). It is suggested that children, as early as 18 to 30 months, have the tendency to help their mothers with some easy tasks, such as making a bed, setting tables, or cleaning the floor. These helpful behaviours proved that children in their early stages could recognise and experience the feeling of distress in others and try to comfort the affected person (Grusec, 1991). Prosocial behaviour is influenced by both internal-personal and external-social factors. To some extent, it might be due to genetic factors, and related to altruism, empathy, sympathy, and perspective-taking (Gregory, Light-Häusermann, Rijsdijk, & Eley, 2009; Telle & Pfister, 2012; Eisenberg, Zhou, & Koller, 2001); however, it is mostly influenced by environment, and internalising social moral rules (Grusec, 1991; Hardy, Bean, & Olsen, 2014; Liere & Dunlap, 1978).

Firstly, the assertion that genetic factors significantly contribute to prosocial behaviour can be based on certain monozygotic and dizygotic twins' studies. Monozygotic (MZ) twin pairs share 100% of their genes, whereas dizygotic (DZ) twin pairs share 50%, so genetic influence can be measured through the comparison of MZ and DZ twin similarities and differences. It has been found that in adulthood,

about 50% of the individual difference in altruism, empathy and social responsibility is due to genes and 50% to non-genetic factors (Hur & Rushton, 2007). Though it is still not clear what exactly is being inherited to generate this behaviour, it has been proved to be closely linked to other heritable traits, such as empathy, sympathy, and perspective-taking (Gregory, Light-Häusermann, Rijsdijk, & Eley, 2009).

In terms of the growing-up environment, parenting styles can encourage or inhibit children's prosocial behaviour (Knafo & Plomin, 2006). Compared with a power assertive parenting style, a democratic parenting style seems to be more effective in promoting children's prosocial behaviour. That might be because democratic parents educate their children using reasoning and in a peaceful way. In fact, in the process of educating their children, they appear to be role models for their own children. Thus, this parenting style might be effective in encouraging children's internalisation of altruistic norms (Grusec, 1991). However, parents who rely on power assertive disciplines might use punishment and loss of privileges, so their children might lose opportunities for learning altruistic behaviour (Grusec, 1991). Another suggested way of improving children's helping behaviour is to use praise and incentives, as children's behaviour could be reinforced by verbal praise and positive feedback from others (Knafo & Plomin, 2006).

Social behaviour theory integrates an individual's value orientation and personal goals to interpret the elementsof prosocial behaviour. One is the altruisticelement, which relates to helping others without self-centeredness. Another factormay be empathy, which is indeed the root of altruism (Trivers, 1971; Grusec, 1991). In fact, altruism has different definitions: in evolutionary biology, altruism is defined as

behaviour that benefits others but has some costs; while in social psychology, altruism is a subcategory of helping behaviour that refers to benefiting another person rather than oneself (Trivers, 1971). It has been suggested that prosocial behaviour stemming from empathy is mainly based on individuals' positive appraisal of others, and how they link the current situation to their personal experience (Torregrosa, Ingles, & Garcia-Fernandez, 2011). That means individuals' experiences stimulate them to help people who are suffering from negative affection, as they can use their previous experience of negative affection to offer constructive enlightenment.

However, empathy can be triggered by certain situations, and people's expressions are usually in accordance with what they are experiencing, for instance, being happy after a happy event; if people perceive incongruent information, e.g. being happy after a negative event, less empathy is triggered (Telle & Pfister, 2012). That is to say, expression and circumstance information being congruent can easily elicit empathy and result in prosocial behaviour. Telle and Pfister (2012) stressed that compared with a positive mood in a positive situation, negativity displayed affecting a congruent negative situation elicited more prosocial behaviour. This due to the fact that giving help to others who are suffering from pain or distress and supporting people who are in desperate need of help could both be regarded as a learning of social norms. Moreover, it has been proposed that people who tend to give more help to others also enjoy the sense of happiness and satisfaction from helping behaviour and cooperativeness (Tella & Pfister, 2012).

Moreover, moral rules can be identified as an element of prosocial behaviour, since people might consider helping others to be obeying social moral rules (Staub, 1978). The norm activation theory stresses that people's situational responsibility, which comes from their internalised social standards, may be the most important motivation for prosocial behaviour (Eisenberg, Zhou, & Koller, 2001). Whether people decide to help others depends on both their awareness of the consequences of their actions, and their ascription of responsibility. This theory divides the cognitional process of 'helping' into four phases: the first phase is awareness of need, which means people realise that their help is needed by others. After developing an awareness of the current situation, people begin to have a sense of situational responsibility in the second phase, and this is related to the social norms they have internalised in their mind. The third phase is the efficacy phase, where people follow an appraisal-judgment-reappraisal cycle to think about the consequences of their actions. Finally, they make a decision about whether to offer their help or not (Liere & Dunlap, 1978).

There is a gender difference in prosocial behaviour that can be explained by other related factors such as perspective-taking and sympathy (Eisenberg, Zhou, & Koller, 2001): women tend to present higher perspective-taking and sympathy than men – effectively, women tend to behave prosocially. Furthermore, there is an interrelationship between perspective-taking and sympathy in women, with their strong perspective-taking predicting strong sympathy (Eisenberg, Zhou, & Koller, 2001). In other words, women's sympathy could both directly and indirectly lead to prosocial behaviour.

The display of prosocial behaviour can vary across a collectivistic and individualistic cultural context. It is proposed that collectivistic interdependent living surroundings seem to encourage more helpful, cooperative, and prosocial behaviour than an individualistic environment (Fabes, Carlo, Kupanoff, & Laible, 1999). That might be because a collectivistic culture has a specific moral value relating to helping people and encourages this behaviour, which means they think helping others is a social obligation; even though the required help may derive from self-inflicted mistakes, they consider helping behaviour within a certain social context (Fabes, Carlo, Kupanoff, & Laible 1999). However, an individualistic culture tends to have an option-orientated concept of interpersonal responsibilities, which means that they are concerned with the nature of the relationship or levels of need (Hinde & Groebel, 1991). Moreover, there is a rural-urban difference showing that living in large cities leads to less prosocial behaviour, which might be because urban people are overloaded by the excessive environmental stimulation in everyday life and are more likely to ignore seemingly less important events that are not personally relevant to themselves (Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015).

## 2.11 Right wing authoritarianism

Authoritarianism is regarded as an important psycho-social tendency that can directly influence people's political attitudes and their behaviour. Evidence shows that authoritarianism is associated with intolerance of ambiguity and cognitive rigidity, both of which can be regarded as obstacles to the support for democratic

values (Duncan & Peterson, 2014). It is suggested that the close link between authoritarianism and political attitude can be proved by the negative association between openness and conservatism, that is, authoritarianism can be a predictor of and positively related to conservatism, but negatively related to openness (Corning, 2000). Moreover, rigidity and narrow-mindedness correspond with authoritarian syndrome; additionally, these two traits are related to degrees of conformity (Vaughan & White, 1966).

Unlike democratic countries, authoritarian regimes rely on central, powerful governments and offer limited political freedom for citizens (Rusby, 2010). In fact, childhood experiences such as childhood trauma, school, and neighbourhood insecurity may influence political attitudes in people's later life. Negative childhood experiences may not only make individuals wary of authority, but also introduce vulnerability into their worldview; this can reduce their social participation. In particular, childhood trauma can negatively impact on an individuals' openness, thus enhancing a conservative attitude that leads to strong authoritarian views (De Neve, 2013). That might relate to their exposure to environmental punishment, lack of love, tension, and an aggressive atmosphere in their childhood (Lipset, 1959). That is to say, childhood trauma can negatively impact on children's worldviews and affect their political attitudes. Also, children living in working-class families are more likely to be authoritarian in their later adulthood than children brought up in middle-class homes (Rusby, 2010).

The prefrontal cortex may be critical for comprehending cognitive representations, which can protect one from being authoritarian and from religious fundamentalism,

looking at a neurobiological model of the belief and doubt process (Asp, Ramchandran, & Tranel, nd). In other words, it is suggested that the prefrontal cortex has a psychological function that helps people to be sceptical and think more critically. People with prefrontal cortex damage exhibit behaviours in line with higher authoritarianism and religious fundamentalism, since there is a lack of psychological doubt, which can easily make them vulnerable to authoritarian persuasion (Vaughan & White, 1966).

Authoritarianism can be defined as a stable trait through an individual's life span supported by evidence of genetic influence. For example, Ludeke and Krueger (2013) in their 15-year-long genetically-informative longitudinal twin study, showed that rank-order changes in authoritarianism stemmed from non-shared environmental factors, which means that a higher degree of rank-order stability is primarily related to genetic factors in the phenotype. Similarly, recent research (Ksiazkiewicz, Ludeke, & Krueger, 2016) suggests that genetic factors affect authoritarianism through a cognitive style that refers to a set of factors including individual differences in information searching and processing. Ksiazkiewicz, Ludeke, & Krueger (2016) divide cognitive style into the need for cognitive seeking and the need for cognitive closure. The former is the tendency to engage in cognitive activities that need effort, and to intrinsically discover rewards (Ksiazkiewicz, Ludeke, & Krueger, 2016). With this in mind, such an individual is eager to be engaged in a cognitive task requiring effort, tends to enjoy it, and learns about ideas or attitudes through deliberate searching and processing of information. Therefore, a higher need for cognitive seeking might predict more liberality and openness. However, the need for cognitive closure is a psychological need to reduce ambiguity and come to a conclusion quickly. That is, if

a person is reluctant to change position in the future, it indicates that such a person is more likely to adopt a conservative political ideology; also, a higher degree of need for cognitive closure predicts strong conservatism (Ksiazkiewicz, Ludeke, & Krueger, 2016). To conclude, genetic factors are involved in the development of authoritarianism that impacts on cognitive styles.

Additionally, gender difference can be found in authoritarianism. Women are generally described as more liberal, caring towards out-groups and unwilling to support authoritarianism and ethnocentrism than men (Kemmelmeier, 2010). Males are higher in authoritarianism and ethnocentrism compared with women, which indicates that males' strong desire to be dominate in the society may stems from the need for social structure and intolerance of ambiguity; in order to meet their social-cognitional closure needs, they tend to be more invested in social and public affairs than women to find a social belief (Kemmelmeier, 2010). Notably, those females who experienced a strict home upbringing and less external social contact can also have significant strong authoritarianism (Rusby, 2010). The difference in authoritarianism across genders can be explained by the social construction of gender roles. For example, a traditional and narrow definition of gender roles, regarding men as masculine and women as feminine, not only implies that males should be more authoritarian than females but can also indicate that females should be more submissive. If women tend to be more authoritarian, they might have less happiness and self-growth from being feminine (Peterson & Zurbriggen, 2010). Apart from the above, education can impact on males' and females' authoritarian attitudes: for men, authoritarianism is mostly not related to education, as they take it as a natural social structure; while for women, authoritarianism is negatively

related to their interest in further education (Peterson & Zurbriggen, 2010). Therefore, it can be concluded that both males with high and low educational levels can be authoritarian; however, females with higher educational levels are more willing to be liberal.

It has been suggested that authoritarian and democratic values can predict political and religious orientations based on five moral factors, which are care, fairness, loyalty, authority, and sanctity (Milojev et al., 2014). Liberals tend to pay greater attention to care and fairness, which focus on individual rights and social justice, whilst conservatives tend to be equally concerned about all five moral factors. This is because the motivation behind right wing authoritarianism (RWA) is to establish social cohesion, as well as traditional and authoritarian submission. However, it is suggested that though conservatives also pay attention to care and fairness, their conservatism is negatively associated with them but positively related to loyalty, authority and sanctity (Milojev et al., 2014).

Compared with middle-class individuals, working-class people may have more tendency to limit the rights of out-group members, which means workers are more intolerant of different policies (Grabb, 1979). That might be because they have lower education, lower income, or economic security, and a greater feeling of uncertainty about life; in particular, their low education plays the most important role in forming an authoritarian attitude, as they tend to have less sophisticated knowledge about 'how to appropriately respond to liberal questions'. They might have limited ability to be consistent with the dominant liberal democratic ideology of society (Grabb, 1979). This explanation is in line with a previous study, which stressed that low educated

people may read fewer magazines and books regularly; thus, they might have less information about public affairs, less interest in politics, and less participation in formal organisations (Lipset, 1959).

This chapter has outlined the different characteristics that can have a profound effect on the way people view their political preferences. The next chapter evaluates how differences in age and gender can influence people's worldviews and behaviour in the political domain.

# Chapter 3 Socio-political Behaviour: Age and Gender Differences

## 3.1    Gender

This chapter discusses the ways in which age and gender can have an effect on socio-political tendencies and behaviour.

The role of gender in democracy (democratic history, degree of support for democracy, political participation and motivation for democracy) has been examined in previous studies. Democratic influence on females and males differs among people with diverse cultural backgrounds, which means its impact on males and females might vary in different countries (Wejnert, 2005). In fact, on the one hand, democratisation enhances people's life quality in a socioeconomic sense, because it might offer women more job opportunities to achieve the aim of gender and individual equality. On the other hand, democratic growth can improve social well-being in both socialist and democratic countries, but the former benefits less than the latter, perhaps because liberal democratic political systems are considered more popular in American and Western countries (Wiener, 2007). Countries that have democratic governments are inclined to incorporate policies which benefit both men and women (McGrane, 2008).

In the past, there was always a tremendous imbalance between the percentage of women and men participating in politics. Possibly this was because of women's traditional roles as mothers and wives, which in turn created a situation in which

women's points of view were less heard in political spheres (Osawa, 2015). However, Alozie et al. (2003) carried out a study with more than 14,000 students, whose ages ranged from 9 to 18 years old, and its results showed that girls surpassed boys in political interest and activities. Notably, some ethnic differences were found among participants, showing that only white girls were more democratic than their boy counterparts. However, there were no significant differences between girls and boys from both Black and Asian American backgrounds. In recent decades, women's political participation has generally been measured by the percentage of women in the power structure; it is somewhat in accordance with women's economic status in society (Zeng, 2014). Based on this point, in the current development of economies all over the world, women are improving their social-economic status, which should eventually lead to a higher percentage of women taking part in political activities.

There are some studies which have been conducted across Western and Eastern countries to clarify whether women in different countries are improving their political status and fighting for their rights. America, a country that advocates democracy, has seen a larger proportion of women's support for democracy in the last ten years (Newport, 2009). Newport (2009) indicated that there were gender gaps across all phases of life (18 to 85 years old), with women being more likely to be identified as democrats than men, especially women aged 18 to 29 years old and 45 to 63 years old who strongly support democracy. Newport (2009) stressed that this gender gap not only existed across ages, but also within racial ethnic and marital status: compared with white Americans, Black Americans tended to have more support for democratic orientation, followed by Asian Americans. This finding is not in accordance with the assertion from previous studies with children that suggest

gender difference only exists in white American children, but not in Black and Asian American children. However, it can be ascertained that previous uncertain situations are changing, based on variables accumulating from cultural background.

Education, professional employment and marriage may have an impact on women's political participation (Bolzendahl & Coffé, 2010). There is an interesting assertion that neither working women nor working men differ in terms of their political passion, but they differ in terms of types of participation. Women prefer to engage in private activism, such as signing a petition or boycotting products for ethical reasons, while men prefer to participate in campaign activism, such as being a political party member, collective activity and political contact (McGrane, 2008). This suggestion is dissimilar to the statement that compared with women, men tend to have more concern about politics. Married women, who have higher family responsibilities, lower levels of socio-economic resources, low skill occupations, fewer friends and social engagements might participate less in any political activities. Conversely, divorced but well-educated women and professional employed women are usually involved in a greater number of political activities, because of a higher education level and professional employment, which are positively linked and which can boost enthusiasm for political issues. For such women, participating in political activities can be treated as a reflection of them being enabled to hold the same power as men in society (Welch, 1977). In fact, the political activism gap between men and women derives from social trends and economic resources. The traditional gender role for women in the family may now be changing to reflect the fact that they are experiencing more self-expression and financial autonomy. It appears that the engagement of women in political oriented activism is increasing (Welch, 1977). The

electoral political system, as one of formal democracy, refers to people electing representatives who can best reflect their thoughts and defend their advocacy (Hoodfar and Tajali, 2011). Largely, the electoral system encourages women to participate in politics (Hoodfar & Tajali, 2011; Galligan & Knight, 2011). On the one hand, the democratic system is operationalised in the electoral procedure (Hoodfar & Tajali, 2011); on the other hand, electoral politics recognise women's interests, provide them with political knowledge, and encourage more involvement in political action (Galligan & Knight, 2011). Galligan and Knight's study showed that in both Northern Ireland and Southern Ireland, most women supported the view that women should have a greater influence in politics than men. The study then explained that participating in political affairs could give women a sense of efficacy, which might give them more confidence and a strong willingness to protect their rights (Galligan & Knight, 2011).

Though there are still more males than females taking part in parliaments around the world, the rate of women's participation is increasing (McGrane, 2008). Their participation can improve democratic politics for two main reasons. First, when compared to men, women are better at working together to promote peace or oppose violence; secondly, women are thought to be less aggressively involved in negative political affairs (McGrane, 2008). However, in terms of corruption, which is a negative political behaviour, there is no evidence of differences across gender. Admittedly, female leaders may try their best to defend women's descriptive, substantive and symbolic representation when they are in a position of political leadership. However, this does not necessary mean they do not meet the definition of being incorrupt leaders (O'Brien, 2015). Because female leaders pursue similar

political goals to male leaders, they perform similarly to male leaders to fulfil personal achievements, and they have less experience in politics. Thus, women's representation in government does not reduce the trend for corruption (Sung, 2012). This is evident from the removal of the former South Korean president, Park Geun_hye, from office in 2017 and the impeachment of the former Brazilian president, Dilma Rousseff. In contrast, the suggestion is that in robust democratic countries, such political negative influences decrease, as citizens regard political leaders as the performers of their will (Sung, 2012).

Interestingly, a recent study has suggested that women indeed are not interested in political affairs and have fewer ambitions, which might reduce the extent of their political participation in the future, though they have been gaining greater power in political leadership in recent years (O'Brien, 2015). This might be because women and men do not have the same attitude or enjoy the same opportunities for party leadership. Women like to take a power position that lacks challenges. They prefer being in the background when parties perform well, as they do not want to have the stress of being an ambitious leader; however, there might be another unpopular explanation which is that if their parties perform poorly, they are likely to leave the leadership post, and are less likely to go back to their seats again (O'Brien, 2015).

Indeed, compared with men, women are more interested in political affairs such as signing petitions, raising money or donating money for political reasons. It has been shown that women can develop an interest in politics to attain higher political efficacy equal to that of men and would vote more than men would no matter what attitudes they embraced (Bolzendahl & Coffé, 2010). Behind this is the long historical

campaign they had for gender equality, moral values and political rights (Frith, 2008). Even for advanced industrial countries, it took years for women to gain the right to vote. For example, Switzerland only granted women the right to vote in 1971 (Beer, 2009). Though democracy is popular in Western countries it still has its own challenges. It has been reported that in recent years, more Swedish women spontaneously take part in political and governmental decision-making; and in Scotland, women used to participate less politically, but they are now encouraged to participate in voting (Forbes, Öhrn, & Weiner, 2011). This is because gender equality can be naturally brought about by democracy.

As Beer (2009) mentioned, nowadays gender equality can be assessed in terms of three domains: capabilities, which can be reflected through health, education and nutrition; opportunities, which can be measured by living resource participation (e.g. land, property and labour force) and employment rate; and empowerment, which can be manifested through the percentage of women in legislature. In the current democratic transition, it may be thought that women will finally gain more influence over state politics and take a more influential role in establishing a more anti-authoritarian political system (Viterna, Fallon, & Beckfield, 2008). Four factors feed into women's movements in new democracies: the democratic transition itself; the legacy of previous women's mobilisations; political parties; and international influence. Thus, in the modern age, women are still likely to be fighting for their equal rights and treatment in the political arena just to maintain the benefits they have gained, and this phenomenon seems to be more manifest in robust democratic countries (Viterna, Fallon, & Beckfield, 2008). Inferring from this, women's movements would be more effective in establishing a democratic socio-political

country. Good examples of successful female leaders in Western countries are the British Prime Ministers Margaret Thatcher, and Theresa May; and the Chancellor of Germany Angela Dorothea Merkel.

Not only in Western countries but also in Eastern countries, women are increasingly participating in politics, but they might also have different goals. In the past, the Japanese traditional female role as 'a good mother and a good wife at home' constrained women's political participation. However, in the modern age, even conservative women who hold traditional norms have many ways of overcoming difficulties through political activism without neglecting their commitments to traditional roles at home (Osawa, 2015). One possible reason for this might be that Japanese women who hold traditional gender norms would rather not take on a feminist role arising from political activities, as they might deem feminism to be unacceptable and believe that feminists threaten the existence of traditional roles; however, they also want to keep up-to-date with the outside world and social development. Thus, they would try to acquire more knowledge about political issues to keep up-to-date (Osawa, 2015).

In China, the road to political participation for women is tortuous. Chinese women gained their first participation in agricultural production in the 1950s, and since then Chinese women's social status has been improving. Indeed, Chinese women are beginning to show significant progress in political participation in the new political set-up. In 1953, in the Chinese first national election, women showed their interest in and willingness to participate in political affairs and to learn more about political decisions made by political leaders (Dongchao, 2011). Nowadays, a growing number

of Chinese women are involved in political activities, and more women are elected as political leaders. However, similar to other Asian countries, Chinese women were also restricted by a conservative gender role that they should be a 'wife' and 'mother' at home, instead of participating in any social activities outside.

## 3.2    Age

Attitudes towards political issues and the passion to participate in political activities vary during a person's life span, indicating that there is an age difference in the degree of support for democracy (Goerres, 2009). There are two types of citizenship: one is duty citizenship, which is defined as conservative, and the other is engaged citizenship, which is treated as democratic (Kiisel, Leppik, & Seppel, 2015). The former is a traditional American citizenship ideal, which refers to having the responsibility to vote, pay taxes, belong to a political party, and put considerable trust in the supported party. In comparison, the engaged citizenship emphasises a more assertive role, involving concerns about social welfare, having the right to protest against politicians and government, a willingness to take more direct action and support various social activities to show broad acceptance of differing opinions (Kiisel, Leppik, & Seppel, 2015). Moreover, impressionable individuals in their early adulthood have their lives influenced by political and social experiences, thus prompting their own viewpoints towards politics. This partly supports the assertion that younger individuals are more prone to accepting a new political view and are more open to adopting varying views (Goerres, 2009). In fact, early research has

proved that the older cohort had more propensity than younger ones to adhere to earlier political experiences and conservative attitudes (Cutler & Kaufman, 1975). That is to say, the age gap may contribute to younger citizens' lower level of traditional political activism (Kiisel, Leppik, & Seppel, 2015).

Two thirds of American people over 65 years old are either conservative or democratic supporters; 32% support conservatism, and 33% support democracy (DeSilver & DeSilver, 2014). However, about only one fifth of the younger population, who are 18 to 29 years old, are interested in limited government control; in fact, most young people are keen on socially liberal activities and about 17% are bystanders who do not register to vote, do not follow political leaders, and do not have any political engagement (DeSilver & DeSilver, 2014). Similarly, Kiisel, Leppik, & Seppel (2015) reported that between 2006 and 2012, there was a significant difference in value orientations between older engaged and duty citizens, but this difference was not obvious in younger citizens. The older generation was showing different types of citizenship orientation – half followed duty citizenship, and half followed engaged citizenship. However, the trend did not exist in the younger generation. Moreover, young citizens from Nordic countries, Benelux countries and Germany show more support for democracy in comparison to their Eastern or Southern European counterparts. That might be because Eastern and Southern Europe has experienced a shift from duty citizenship to engaged citizenship (Kiisel, Leppik, & Seppel, 2015).

A study (Harmel & Yeh, 2015) carried out in China amongst people from 18 to 72 years old revealed similar findings. An inverted U-shape was used to describe the

relationship between age and political passion or participation, but with variant meanings in the Chinese population. Firstly, for political voting, the younger cohort is active in voting for political issues, for the reason that they think they have a responsibility to vote for their country, This declines as age increases. In addition, the younger generation participates in political activities in order to get external efficacy. In terms of political interest, the middle-aged cohort shows most interest in politics, followed by the older population, with the younger generation showing the least interest in political issues. Furthermore, regarding political openness, the willingness to criticise and change the current political status reduces as people become older, which means age can mediate the relationship between openness and political behaviour, with younger people being more open (Mondak & Halperin, 2008; Harmel & Yeh, 2015). In summary, complex social factors and citizens' trust in government can explain the age difference in the support for democracy. On the one hand, social factors such as modernisation, openness, and education, all of which are interconnected, might widen the age gap; that is, young people adopt, and are more tolerant of, new ideas. In particular, the widespread use of the internet, which allows the young generation to acquire updated information quickly, makes the younger generation view a political issue from a different viewpoint, which is indeed essential for democracy in its own right (Hamilton & Kim, 2004). On the other hand, older adults show more trust in government, as they enjoy their current social benefits, and they feel safe maintaining the status quo (Kong, 2016). Though older people might have more experience and knowledge about politics and they know how the country must change for better, they have less passion to put a lot of effort into fulfilling their political ideas. For ordinary citizens, focusing on family life and

self-development is more important than 'changing the world', and having a happy family life is their realistic goal (Kong, 2016). In this sense, one can explain the reason why older citizens are more prone to holding conservative political viewpoints rather than employing critical thinking in their socio-political judgements. Moreover, the motivation to engage in political activities might be different across life span. Many young adults may not yet have experienced certain kinds of significant and politicising life events, so they often generate activist commitments; during late adolescence, personality traits might play a particularly powerful role in motivating political involvement (Curtin, Stewart, & Duncan, 2010).

This chapter has shown how age and gender do change the way people view their political preferences. The next chapter discusses how political changes in China have had an impact on political thinking amongst the Chinese middle class.

# Chapter 4 Socio-economic and Political Changes in Contemporary China

This chapter discusses the political changes that have taken place in China and how these have developed the economy and had an impact on the way people participate in political life.

## 4.1    Political forms

The People's Republic of China (PRC), founded in 1949, is seen as the beginning of contemporary China. Since then, China has been a socialist country led by a political system which aims to include the alliance of workers and peasants in socio-political decision- and policy-making (Clarke, 2009). The Communist Party of China (CPC) is the sole governing party of the country, though it coexists with eight other democratic parties. They are: the Chinese Kuomintang Revolutionary Committee, the China Democratic League, the China Democratic National Construction Association, the China Association for Promoting Democracy, the Chinese Peasants' and Workers' Democratic Party, the China Party for Public Interest, the September 3 Society, and the Taiwan Democratic Self-Government League (Wang, 1999). The use of the term 'democratic' does not seem to convey the same meaning as that used in Western countries, as it only shares the 'right for voting' component of democracy. The other components that make up the term democratic may be

missing. However, in communist centralism, people in different blocks of the party (divided by occupations, regions etc) take part in a hierarchical voting system to vote for representatives who can then be elected to higher political positions.

Mao Zengdong's *On New Democracy*, regarded as revolutionary in Chinese politics, specifies that Chinese people should uphold leadership by the CPC, consolidate and improve China's state system of 'the people's democratic republic', and the Chinese political system of a 'people's congress' (Mao, 1954). Since then, this proposal to give 'more rights to people to participate in politics has been developed in Chinese-constitutional law, thus enhancing the possibility that citizens' viewpoints will be considered by the government (Wang,1999). An elected representative participates in political activities such as proposing a bill, giving suggestions and offering criticisms. Each representative acts on behalf of the same number of people in both urban and rural areas. At the Chinese county or township level, citizens directly elect their representatives; however, at municipal level or above the lower level people's congress selects its representatives (Jocobs, 1991).

Chinese 'reform and the opening-up policy' in 1978 brought significant change to China. It was the start of achieving a successful transition. Deng Xiaoping, the proposer of the Chinese 'reform and opening–up policy', stressed that social development was the most important issue, as it could maintain strong socialism in China (Unger, 1997). This social development should improve China's economic level, sustainable awareness, science, and aim to develop a harmonious society (Liao, 2013). That is to say, the Chinese 'reform and opening-up policy' not only brings economic reform, but also leads to Chinese political transformation because the

Chinese economy positively and inherently links to politics (Ma, 2002). In fact, in order to implement this policy effectively, China had to ensure it balanced power between government, the economy, and society (Unger 1997).

Generally, there have been two main changes in Chinese politics since the implementation of the 'reform and opening-up policy'. One is that citizens began to critically evaluate the previous 'exaggerated politics', which refers to using an exaggerated role of politics to define social-moral requirements and development. Before 1978, during the time of the Cultural Revolution in China, dogmatic politics was the criterion for judging people's views and behaviours; however, after Chinese reform, moral development was more significant (Liao, 2013). The other change has been in the transformation of the political pattern: it transformed from revolutionary politics to developmental politics: namely, from 'class struggle', to 'economic focus'. Chinese politics, thought to be tyrannical by some, resolved the contradiction between classes by maintaining the benefits of one class at the expense of depriving another class of benefits. However, with the founding of a new China, the political pattern transformed from traditional authoritarian politics to administrative simplification, which meant that a lower level of institutions had authoritarian power delegated to them in order to coordinate relations between the state and local government. This transformation was the beginning of public democracy in China (Liao, 2013).

## 4.2 Chinese social and economic change

Contemporary Chinese social change mainly refers to the change from an agricultural civilisation to an industrial civilisation during the time of the 'reform and opening-up policy' in 1978. The agricultural civilisation happened before the 'reform and opening-up policy', while the industrial civilisation, characterised by a market-oriented economy, was initiated in the 1978 policy (Zhai, 2007). Agricultural civilisation bestowed upon Chinese people a mindset of building and maintaining a good relationship between humans and nature, because their harmonious coordination with nature reflects human wisdom. Chinese people traditionally think that humans cannot turn against nature; instead, they should feel grateful, respect and submit to nature. In other words, in the old period, Chinese people focused on keeping a balance between the sky, earth, and humans. For example, they believed that the sky gave them sunshine and rain assisted farming on earth; therefore, nature was extremely beneficial for humans (Zhai, 2007). In fact, this relationship is not dissimilar to that in Western culture between a monotheistic God and humans. In Western culture, the people obey 'God' and appreciate 'God's' creations, while in Chinese culture they obey nature and appreciate what nature gives them.

Chinese people living in an agricultural civilisation have two important characteristics: one is their attachment to the familiar environment, which shows that they prefer to stay in well-known locations – they have a strong geographical relationship, and they are satisfied with everything around them. Therefore, they are inflexible about accepting new objectives and are sensitive to the things that could change their current life. The other important characteristic is the expansion of family function; they carry out productive labour, produce offspring, and spend their late-life time within the limited confines of the family structure. Therefore, people do not have a

strong desire to leave home, as home has the function of a small society, which can give them all they need through their lifespan (Zhai, 2007). However, this situation has changed since 1978, because innovation entails openness; a market economy needs people to carry out transactions in society, not simply within their families. In addition, industry needs advanced technology (Zhai, 2011), and thus industrial civilisation has brought about a change in family and social life, as more people participate in social production. In fact, Chinese social change closely relates to its economic development in industrial civilisation.

Gross Domestic Product (GDP) is a reflection of national-economic development; it is also a standard measure of a country's economic power (Stringer & Borch, 2016). From 1979 to 2012, Chinese GDP grew by an average of 9.8% per year. The global economic growth rate has been 2.8% over the past 33 years; the Chinese economic aggregate (the current overall demand for services and goods in the economy) was ranked 10th in the world in 1978 and jumped to 2nd in 2012 (National Bureau of Statistics of the People's Republic of China, 2016; Wei, 2016). From these figures, it is apparent from comparing the Chinese economy before 1978 (the year of the 'reform and opening-up policy') to the current Chinese economy, that staggering development and an immense transformation has occurred.

However, the Chinese economy did not drastically improve without instrumental factors and problems. Overall, the development of the Chinese economy took a tortuous course. At the beginning of the foundation of PRC in 1949, China had positive results and feedback on its economy. With the help of the Soviet Union (USSR), the Chinese government formulated some policy guidelines for economic

development at that time, and the economic model was similar to the USSR's. However, due to the influence of the Cultural Revolution, the Chinese economy was on the decline because of the exaggerated dogmatic politics, which caused the Chinese economy to fail to make any progress (He, 2009). Such an economic situation just confirmed Ma's (2002) assertion that the Chinese economy inherently links to politics, that is, they influence each other. The Chinese Cultural Revolution lost China the chance to promote its economy, but the 'reform and opening-up policy' helped China to find its way in taking steps forward again. Since 1978, China has made great efforts towards economic development. The economic model pushed by the Chinese government changed in the direction of marketisation (industry and services deployed in the market economy), and that was certainly followed by political changes (He, 2009). Economic growth over the past 30 years indicates that CPC has made successful market reforms; in the meantime, CPC has maintained pro-authoritarian values domestically and built up a soft power base on the international stage (Li & Song, 2015).

The rapid economic development brought China some changes in terms of its economic structure, composed of three industries. They are the primary industry (agriculture that provides people with their basic needs for living), the secondary industry (construction, manufacturing, electricity, steam, etc.), and the tertiary industry (transportation, telecommunications, cultural products, resident services, and tourism) (Linden, 2004). It can be inferred that the primary industry just meets the basic requirements of people's lives, while the secondary and tertiary industries particularly enhance the quality of people's lives. Since 1978, China has been in a transformation period from an agrarian economy to an industrial economy; however,

in the past 10 years, after the country met the requirements for developing agriculture and industry, the other needs relating to transportation, telecommunications, cultural products, resident services, and tourism are now on people's agenda to enrich people's lives. Thus, the tertiary industry is catching up to meet the requirements of society, and it is now accounting for a bigger proportion of the Chinese GDP, which indicates that the tertiary industry is showing the dominant direction of Chinese economic development (National Bureau of Statistics of the People's Republic of China, 2016).

Whether or not economic development and citizens' political attitudes are related factors is a question that political science and economics should address. However, we can read from the output of these disciplines that the economic level may reflect how the related instrumentalities work and how they can lead to plans for better working conditions in a country (Wolfe, 1944). Recent research has stressed that economic performance is playing a vital role in shaping the political process; poor economic performance may reduce people's willingness to support democracy and vice versa (Quaranta & Martini, 2016). However, there is a moderating factor between economy and democracy, which is the degree to which people are satisfied with current politics. For example, in democratic countries, satisfaction with democracy is one of the most common indicators for supporting regime norms and procedures, namely, degrees of satisfaction with democracy directly and simply determine the degree of support. In less democratic countries, however, citizens' satisfaction about whether they get what they want from the current government moderates this relationship (Quaranta & Martini, 2016). China's economy is developing rapidly, and more citizens can benefit from this, giving rise to an

improved quality of life. As Wolfe (1944) asserted, it is really hard to say if Chinese people's enhanced satisfaction proportionally reflects their support for democracy; it depends on how the government takes necessary steps to maintain the balance between both political (e.g., freedom of speech, free voting system, etc.) and economic changes (e.g., free, competitive market). In other words, if economic development can continue to enhance Chinese people's quality of life, they will enjoy their current life and follow the current government's direction, regardless of whether there is robust democracy or less democracy.

## 4.3    Chinese class structure

China's policy and economy both directly and indirectly influence changes in the Chinese population (Simon, 1977). Since the founding of the new China after the revolution (1949), there have been three periods when the population rapidly increased. Firstly, from 1949 to 1957 there was significant growth (from 542 million to 647 million over eight years), which may have come about due to the establishment of more peace after the war resulting in enhanced social security. Also, this may perhaps have been because of better medical conditions and improved living circumstances. Indeed, observably lower mortality and high birth rates led to an increase in the population (Wei, 2016). However, between 1958 and 1961 the country experienced economic problems, mostly exacerbated by the 'Great Famine', which resulted in a decline in national income and quality of life that consequently led to high mortality and a low birth rate. During the second phase (1962 to 1970),

the Chinese population growth rebounded. In fact, although the Chinese government began to realise and think about the problems brought about by the rapid population growth, it did not introduce any explicit policy to solve this problem (Wei, 2016). Undoubtedly, that situation represented a major impediment to Chinese economic development and brought about imbalanced development between the Chinese economy and the Chinese population. According to the statistics, within eight years, the Chinese population increased by 157 million (Wei, 2016). The final rapid growth in population occurred from 1981 to 1990, when the people born during 1962 to 1970 came to reproductive age. Even though the one-child policy was in effect from 1982, in order to control the population rate, it could not stop the high birth rate for the whole nation, and the population increased to 1143 million in 1990 (Wei, 2016).

Due to the substantial increase in population and other factors such as rapid economic development, advanced science and technology, enhanced industrialisation and urbanisation, changes have occurred in the Chinese population structure, so that the middle class has control of a large proportion of the whole nation (Johnston, 2004). Before 1978, the Chinese class structure was an 'alliance' of workers, peasants and intellectuals; however, after the economic reform in 1978, workers played a major role in the Chinese population (Li, 2011). From 1949 to 2006, agricultural labour reduced from 88.1% to 50.4% of the whole population, while the middle-class population increased from 7.9% to 39.1% (Johnston, 2004). In fact, in a mature industrial society, the middle class should be the mainstream, as they are the major source of consumption of power in a stable society; also, they are the link between the upper class and lower class (Barton, Chen, & Jin, 2013).

However, according to occupation, income and education level, the large Chinese middle class can be divided into three categories: a new middle class (e.g. party or government officials, company managers, private entrepreneurs, and professional clerical workers or service sector); old middle class (e.g. self-employed people); and marginal middle class (e.g. working as lower level clerical workers) (Goodman & Chen, 2013). Reportedly, compared with old and marginal groups, the new middle class has a better democratic mentality, and is more satisfied with life. On the one hand, they tend not to participate in any political activities; and on the other hand, they like to support government policies and economic reform (Li, 2011). Indeed, the new Chinese middle class is made up of both liberal and conservative supporters. Their higher educational level enables them to have positive feelings about democracy and a high expectation of social justice, whilst they hope to keep getting the benefit from economic circumstances and maintain their current comfortable life. As a result, they are more prepared to be submissive to authoritarianism for economic security and socio-political stability (Johnston, 2004). Followed by the new middle class, there is a marginal group which is another supporter of democracy owing to lower incomes and a greater need for 'social justice'; this group hopes the government can meet their requirements by listening to their political views (Johnston, 2004). However, the older middle class tends to hold a conservative-political view, which means they support authoritarianism instead of democracy (Johnston, 2004). That might be because they are satisfied with their relatively comfortable lives and equality may easily threaten them with the possibility that they would lose their benefits to assist poor people (the marginal group).

In contrast to the suggestion above, there is evidence showing that the middle class does not support political democracy in authoritarian developing countries (Chen & Lu, 2010). There is a negative relationship between the middle class's dependence on the government and its democratic values; furthermore, there is a negative relationship between the middle class's social and economic satisfaction and its democratic values (Chen & Lu, 2010). This means that dependence on the government as well as the perceived social and economic benefits are two vital factors that can result in the middle class's non-support for democracy in authoritarian countries, as they need to follow the government's direction to make sure they do not lose the benefits they enjoy in society. However, that does not mean that the middle class in authoritarian countries rejects democracy at all, as they also espouse ideological democracy, and they are aware of behaving or acting democratically (Chen & Lu, 2010). For example, if the members of the new middle class are interested in individual rights that are protected in a democratic system, they can be defined as 'libertarians', but they do not really interfere with the decisions made by the political party; instead, they simply demonstrate their freedom and form organisations (Chen & Lu, 2010). Briefly, the new Chinese middle class does not behave or perform as real democratic supporters, who would express their views freely, since this might go against the will of the government; however, because of their higher educational level, they may have democratic minds.

## 4.4    Chinese educational system

Since 1949, the Chinese government has paid substantial attention to the development of the education system across the whole country. Early on, in order to eliminate illiteracy, the Chinese government tried to make a great effort to popularise basic education. After the 1980s, higher education institutions offered academic degrees including bachelors, masters, and doctoral degrees (Liu, 1998). Since the 1990s, there was a popularisation of adult further education, which aimed to encourage citizens to invest in lifelong learning; also, foreign communication and cooperation in education increased (Chan, Ngok, & Phillips, 2008). However, there was a frustration with educational development, as the Cultural Revolution in 1966 was a political activity that brought about a serious disaster for China. Though it was a political struggle, it had a most serious and profound impact on the development of Chinese education and science. During the Cultural Revolution from 1966 to 1976, many advocates of democracy and intellectuals suffered from persecution. It was necessary for many universities to close, and it also affected many scientific research institutions. Consequently, after ten years of adverse experience, only three quarters of the whole population was literate in 1982 (Deng & Treiman, 1997). It is widely accepted that a higher level of education correlates with a tendency towards democratic values (Edelsky, 1994; Onsman & Cameron, 2014). For example, in China, most students have been at the forefront of democratic movements especially reflected in the 1989 pro-democracy uprising (Onsman, & Cameron, 2014). Inferring from that, people who were born in that turbulent period might have a poorer education and thus might have deficient democratic values.

In fact, the Chinese government's emphasis on education has had two profound impacts on its further education system and may have influenced the new

generation's political attitudes. Firstly, the creation of more laws and regulations occurred to protect citizen's rights in terms of making access to education equal (Hannum & Xie, 1994). In 1982, Chinese constitutions established the principle that boys and girls had equal rights to receive education, which indirectly enhanced women's social and political status. The women's right to have access to education directly determined the extent to which they realised their other rights, which meant that education prepared the foundation for Chinese women to achieve power in society (Brown, 2004). Brown's study has suggested that women's education levels positively related to their employment status and political rights. The Chinese nine-year compulsory education policy introduced in 1986 was another breakthrough in educational reform, as this policy had the purpose of offering equal and free educational opportunities to all Chinese children for nine years, regardless of their gender and family's economic condition (Zhang & Minxia, 2006). In this sense, Chinese educational reform offered women in this country a great chance to participate in political affairs.

Secondly, Chinese educational reform was introduced in the form of the special 'Chinese Education' system, that is, it focused on memorising knowledge and written examinations, the latter of which are regarded as the best test of students' ability (Chen, 2014). This special Chinese education pattern has advantages and disadvantages. On the one hand, this schooling pattern extends the students' scope of knowledge, and forms their thinking style easily, as the students have to spend more time at school (from 7:30am to 5:00pm), have to do a lot of homework, and also have to memorise many characters. However, on the other hand, this kind of education may restrict students' creative and critical thinking

as students can find the 'right' answer to any question asked in their standard textbook, and thus students lack the ability to make judgements on what their textbook tells them. Thus, this rigid education may neglect students' individual differences and personality development, by more-or-less limiting their ability to explore and innovate in new areas (Chen, 2014). The inference is that the new Chinese generation might have a different thinking style due to the 'Chinese special educational system', and this may influence their characteristics and future political behaviour.

Both family and schooling influence children's characteristics, as most of their time is spent either at home or in school (Minjie, 2016). However, for Chinese children, schooling tends to be the most important factor in forming their characters (Chen, 2014). It is worth mentioning that when talking about family-education, the Chinese one-child policy, implemented in 1982 to control population increase, might imply personality differences between single and non-single children. One can assume that a single child can undoubtedly receive more care from their parents, even from their grandparents, as there are no brothers or sisters to share the care and attention between (Minjie, 2016). In theory, Chinese single children might have different personality traits compared to non-single children. For example, Chinese single children tend to avoid difficulties when they encounter life troubles, as they have been overprotected by their family and they do not know how to overcome the difficulties; they might have more psychological stresses, as they are the focus of the family and parents often have high expectations of them. In addition, they may have a low level of happiness, as they do not have the company of brothers or sisters but receive excessive care from parents (Minjie, 2016). Notably, the

distinction between Chinese one-child families and Chinese non-one-child families may fade away because of the increased effect of the schooling system and further related socialisation, as Chinese students have to spend most of their time in school, and peers' and classmates' company may offset their loneliness at home (Lam, 1992). However, this raises the need for empirical testing about whether the effect of schooling can narrow the gap between single children and non-single children.

## 4.5 Chinese technological development

Technological development, both economic and scientific in nature is a comprehensive strength for a country (Guochum & Wenjun, 2002). Over the past few decades, China has had higher import and export ratios, broader and deeper relationships with other countries and advanced technical skills in different areas (e.g. transport and education), which is evidence that China has enhanced its development in science and technology (Guochum & Wenjun, 2002).

Information technology has brought about a new era for humanity. The late 20th century was the start of the information age. Since then, computer networking and internet communication has changed the ways people connect and work (Xie, 2007). As a big developing country with a large population, the emergence of internet technology as an efficient allocation of resources, which also entails getting information in a shorter time, has particularly influenced China (Zhu & Wang, 2005). Statistics show that in July 2007, the number of internet users in China exceeded 162 million (Lu, Zhou, & Wang, 2009), including online chat, online games, and the

Web-based short message service (SMS); this figure had jumped to 721 million in 2016 ("China Internet Users", 2017). In fact, China is the second largest internet-user market in the world, closely following the United States (Zhu & Wang, 2005).

The usage of the internet is under fast development, especially in China, not only for the younger generation, but also for the older generation, as the internet is becoming a part of their lives (Zhu & Wang, 2005). In relation to this issue, some theories have tried to explain how the internet has affected people's daily lives and the link between people's beliefs and their 'internet usage' behaviours. For instance, according to the Theory of Planned Behaviour, people's actual behaviour is decided by their cognitive intentions, which are dependent on three factors: attitude; subjective norm (namely when people make decisions and how much they would be affected by influential individuals and groups); and perceived behaviour control which is linked to self-efficacy (Lu, Zhou, & Wang, 2009). From the results of Lu, Zhou, & Wang's (2009) study, there is no difference between older people and young people in terms of learning and using the internet. This is similar to the result showing that older American people evaluated the internet as being central to their lives, just as younger people did (Loges & Jung, 2001). In fact, subjective norm, which relates to the degree to which one is influenced by others, is one important element encouraging Chinese people to use the internet, and this is more obvious amongst the older Chinese generation, which means usage behaviour in the older population is more easily motivated by outside circumstances, such as family members and friends. Internet learning makes these older Chinese people's retirement life more meaningful, as it improves their self-evaluation and helps them receive other people's appraisal (Lu, Zhou, & Wang, 2009).

Internet learning and use is popular amongst the older Chinese generation and results from both the Chinese cultural-specific factor of mandatory retirement (60 years for males and 55 years for females) and recent improved economic conditions, which mediate older Chinese people's use and perceptions of the internet, and finally enhances their well-being (Xie, 2007). However, Pan & Jordan-Marsh (2010) proposed that older Chinese people are different from younger ones. They outlined that the actual usage behaviour of the internet resulted from 'internet adoption' and 'internet use intention'. Furthermore, they pointed out that the former was dependent on perceived ease of use while the latter was based on facilitating conditions. Considering the normal decline in old people's memory, though, they might have the same passion and intention to learn from the internet while they have less adoption ability in terms of internet development (Pan & Jordan-Marsh, 2010). In this sense, despite being under the same technological conditions, young people may receive more information about the outside world in a shorter time, which might offer them more views on an issue.

Internet advanced technology is deemed to greatly facilitate human life, not only in China but globally. From a political perspective, advanced technology can influence citizens' participation in political affairs (Shane, 2004). For a country that aims to promote democracy, the information age has introduced a new concept of 'E-democracy', which means using new information and communication technologies such as the internet, mobile phones, e-mail, and mass media to enhance citizen's engagement in democratic processes (King, 2006). In fact, in both Western and Eastern countries, new media of communication such as the internet and mobile phones are utilised universally by the younger generation in their political

participation, e.g. in Scotland (Macintosh, Robson, Smith, & Whyte, 2003), and Korea (Kim, 2003). Similarly, in China, the politicians use e-networks to discuss socio-cultural issues such as inflation, employment, education and health care reform with 'netizens', most of whom are the young generation (Kang, 2012).

This chapter has shown how the changes in the Chinese political system have had an impact on the lives of Chinese people. Furthermore, it has outlined how economic factors can influence Chinese peoples' lifestyles. In addition, the reform of Chinese education may alter the Chinese population's attitudes towards democracy. Finally, the development of technology has brought China into a new period, which may benefit both old and young Chinese people's daily lives and offer them advanced ways to participate in political affairs. All of these changes in contemporary China may influence political decision-making processes for both the older Chinese generation and the younger generation.

## 4.6 The synthesis: conclusion

More than three decades ago, the Chinese government, in order to make the economy develop steadily, implemented some reformatory policies, such as the 'reform and opening-up policy' in 1978, which was introduced with the aim of 'opening the Chinese market to the world', and advanced technology in diverse productive fields. Educational reform in 1986 and the 'one-child policy' in 1982 aimed to control the population rate. In this way, China aimed to promote the coordinated development of the economy, society, resources and the environment

(Zheng, 2010). Nowadays, almost forty years after implementing these sets of policies, China has progressed some achievements in its country's development. However, the implementation of these policiesmay bring the Chinese new generation a different growing environment.

Firstly, compared with their parents, the new generation have been growing up under superior study and living conditions. Could the new surrounding offer them a chance to form new and different value orientations and political viewpoints? Secondly, the older Chinese generation, born before 1978, experienced the big change in Chinese society, the revolution. Has their personality been influenced by this change, and has this, in turn, shaped their political attitudes? Moreover, has 'China's one-child policy' lead to the development of different personality characteristics and political values among people brought up in families with a single and non-single child? Taken together, the main point of this study is to explore social and cultural factors relating to how people behave socially and politically. The results will shed a light on potential links between psychological characteristics and social-political behaviours in old and new generations, from a cross-cultural perspective, and in Chinese single and non-single child samples.

The idea that personality characteristics might influence people's socio-political tendencies has a long history in the social sciences (Adorno et al., 1950). Some previous studies in this area have stressed certain personality models and suggested how personality influences individuals' political attitudes and behaviours. For example, individual's prosocial behaviour may result from altruism, the root of which is empathy; and cultural differences and educational levels may affect empathy to a

large extent (Liu, 2000). Rushton et al. (1981) pointed out that prosocial disposition might be influenced by social values and empathy. Additionally, women have greater empathic concern than men (Mellor et al., 2012). Moreover, prosocial values and high moral judgment would be positively associated with altruistic behaviour and social responsibility.

Openness was thought to be a very important trait in previous research into exploring the relationship between psychological characteristics and political attitudes. For example, Jost et al. (2003) found that openness to experience was negatively related to conservative political attitudes, right-wing authoritarianism, and social dominance orientation. A Western European two-group-study (Hiel et al., 2000) showed that there was a robust negative correlation between openness and right-wing political ideology in a Belgian sample, while only a very weak negative relationship was found between those in a Polish sample. Similarly, Gerber et al. (2010) admitted that openness to experience and liberal attitudes were linked to politics.

Women with a high educational level were more liberal on women's rights in both American and Japanese culture according to a study 20 years ago (Suzuki, 1991). A more recent study about sex role identity and working time in China (Sun, 2006) pointed out that for those women who had a high level of education (undergraduate or above), sex role identity was negatively related to working time. This means that their attitude towards egalitarian sex role did not push them to work for a longer time. Another study in a Polish sample (Oniszczenko et al., 2011) showed that women, regardless of their age, offer more support for liberal and egalitarian

orientation than men. However, when compared with younger women, middle-aged women were more conservative, perhaps because younger women would reject normative restrictions in choosing their lifestyles.

Normative identity style and its relationship with political behaviour has recently been examined (Berzonsky et al., 2011; Miklikowska, 2012). It refers to a stable sense of self-continuity structure which requires a cognitive process and reflects characteristic ways of acting. It also reflects the style influencing how people make choices and decisions, or problem-solve (Berzonsky et al., 2011). Their research showed that a normative style positively related to tradition, conformity, and security, but negatively to power, hedonism, stimulation, and self-direction. People with normative identity style have cognitive closeness and might be more sensitive to being threatened by political difference; they do not want to change the rules they have internalised (Miklikowska, 2012).

Interpersonal trust is regarded as a factor predicting support for democratic values (Miklikowska, 2012). Some research has focused on particularistic trust (e.g. towards political leaders) and general trust (e.g. towards colleagues and organisations). Particular trust could be treated as political purpose, while general trust can be seen as interpersonal trust. People with high general trust tend to fight with their political trust (Han &Choi, 2011). A person who has more colleagues as friends would easily trust a stranger; this is consistent with the Chinese culture that trust of 'strangers' is through trust of 'familiar persons' (Liu, 2008).

Flexibility, openness to experience, interpersonal trust, empathy, right-wing authoritarianism (RWA) and normative identity style were proven predictors of

support for democratic values (Miklikowska, 2012). The findings showed that among all the psychological underpinnings, RWA and empathy were the strongest predictors. The foundations of RWA are motivational goals of social cohesion, conformity, and security, along with civil liberties perhaps being a potential threat to these goals. This may oppose support for democratic values. On the other hand, empathy reflected an individual's concern about others, which might resonate with democratic values.

Another important recent study conducted by Kaviani and Kinman (2017) explored the link between personality and political attitudes amongst Iranian and British populations. Their results suggest that emotionality was a good predictor for democracy in the Iranian group, while perspective-taking was a predictor for democracy in the British group. Moreover, flexibility and prosocial behaviour were strongly associated with democracy in the British group, while suggestibility and emotionality tended to be stronger in the Iranian group. Kaviani and Kinman's (2017) cross-cultural study also compared the two samples: British participants scored higher on empathy, perspective-taking, flexibility, interpersonal trust, openness, cooperativeness, prosocial behaviour, and democracy; whilst the Iranian's had higher levels of normative identity style, suggestibility, emotionality, and authoritarianism.

Based on these previous studies focused on how individual characteristics influence their political attitudes, especially the two studies carried out by Miklikowska (2012) and Kaviani and Kinman (2017) lay a foundation for the rationale and provide a framework for this study. Kaviani and Kinman's (2017) study also took cultural

background and context into consideration. In the present study, one of the aims is to examine the cultural differences in the target variables between Chinese and British samples. Chan (2013) stated that, due to Chinese particular historical, economic, social and cultural characteristics, democracy may develop in a different way compared to Western achievements in this field. Chan reviewed factors (e.g. Chinese history, political change, population increase) in Chinese society that make democracy in this country develop more slowly and cause some difficulties in that development. However, China is still striving to have a political democratic system. There are still immense challenges in the reinforcement of workers' rights, women's rights and privacy rights in society (Chan, 2013). Another very important piece of research on democracy in China conducted by Lu (2004) demonstrated that the younger and well-educated generation in China showed a higher level of support for democracy. With this in mind, two lines of study, namely trans-generational and cross-cultural, will be followed to explore how individual psychosocial characteristics link with political attitudes in different eras and cultural contexts.

In this study, the hypothesis is that individual characteristics underpin the differences in people's socio-political attitudes and behaviours that, in turn, have influences found in their cultural background. Namely, it is proposed that empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness to experience, suggestibility, prosocial behaviour, and authoritarianism can impact on individuals' political behaviour (democracy). The links between these characteristics and democratic values may vary in Chinese and British cultural contexts and may be diverse for both the older Chinese generation and the

younger generation. Additionally, there might be gender differences in these psychological characteristics and political behaviour.

# Chapter 5 Method

## 5.1 Design

Quantitative research is effective in large and generalised samples (Quick & Hall, 2015). Utilising a quantitative study enables many factors to be investigated, some of which may be linked to each other; also, it allows the researcher to work on a wide range of variables in terms of how they are related to the research questions (McCusker & Gunaydin, 2014). Moreover, a quantitative study emphasises statistical information instead of individual perceptions (as seen in a qualitative study). Statistical analysis is an objective method which can control the researcher's bias and allow a deductive approach. Findings from statistical operations not only lead to the interpretation of present trends and prediction of possible future outcomes but also offer researchers evidence to detect potential relationships and causes or variables predicting different aspects of human behaviour (McCusker & Gunaydin, 2014). This research project is a cross-cultural and trans-generational study which aims to examine how psychological characteristics might predict adherence to democratic values. Sufficient and comparable samples were needed for each group to allow an objective approach through statistical analysis. I consider culture and generation as separate main factors to examine if measured psychosocial characteristics are related to support for democracy, and how groups differ in cross-cultural and trans-generational settings. In fact, the ten psychosocial characteristics, including personality traits, as will be mentioned later in the present chapter, are inter-related. Such inter-correlations have been, in previous research, well

documented (Kaviani & Kinman, 2016; Miklikowska, 2012). Eleven measures were employed in this study to address the research targets and gauge the pattern of potential links between these predictive variables and the outcome variable (adherence to democratic values). In the meantime, recruiting large numbers of participants from two countries and using different measures in this study allowed the study to explore the response variability in each group for the same measures, and whether this variation can be attributed to the differences across culture or generation groups (Wagner, Hansen, & Kronberger, 2014).

However, as previous articles emphasise (McCusker & Gunaydin, 2014; Wagner, Hansen, & Kronberger, 2014), in cross-cultural, quantitative studies, culture differences in terms of understanding the semantic structure need to be considered, which means cultural and linguistic context should be taken into consideration when interpreting human behaviour, cognitions, feelings and so on. Therefore, the first factor to consider was the translation of questionnaires and scale used in this study. Failure to establish such equivalence between two cultures could lead to subjective judgment, as the original measures in this cross-cultural study are in English. Based on this, a translation and back-translation method was used to provide an equivalent, culturally valid set of questionnaires (this will be expanded upon below). Moreover, in a quantitative study, the final versions of the translated measures should be tested in a preliminary study in a representative small sample before being utilised in the main studies (Quick & Hall, 2015). Bearing this in mind, a translation and back-translation process was carried out before recruiting participants, and a pilot study

was conducted to test the validity and reliability of the measures before cross-cultural and trans-generational studies were undertaken.

In the present study, eleven self-reported questionnaires, which were composed of 99 questions, were used. Empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism were regarded as independent variables (predictive variables), while adherence to democratic values was included as a dependent or outcome variable. Moreover, age and gender acted as additional independent/predictive variables to control for the potential effect of age and gender.

## 5.2 Translation and back translation

In the cross-cultural study, translation and back translation represented a key phase to ensure the effective acquisition of data. According to Smit et al. (2006), the equivalence of semantic, technical, cultural and conceptual content should be considered in the process of translation and back translation. Thus, it was important to ensure that each translated item was relevant and adaptable to the particular culture; in other words, the translation procedure allowed the meaning of each item to be maintained in the other culture. In this way, cultural metrics was achieved.

Figure 5.1 depicts the procedure and phases of translation and back-translation in the present study. Firstly, all the titles of the 11 measurements were removed, and the 99 items were numbered from 1 to 99. This was done to reduce translators'

subjective definitions for every measure. Two psychological bilingual translators separately translated the 99 original English items (E1) to Chinese. Then, two versions from these two psychological bilingual translators were compared and double-checked by the researcher to generate the initial Chinese version (C1). This provided a more objective translation. Secondly, an official licensed Chinese translator, who was not a psychologist and did not have any knowledge about the original English measurements, translated the Chinese versions (C1) back to English (E2). Thirdly, as E2 was treated as a reflection of the Chinese measurements, to keep content and conceptual equivalence, 5 native English speaking psychological researchers who did not know the target language (Chinese) compared the translated English versions (E2) with the original English measurements (E1); they checked whether E2 conveyed the same meaning as E1 (see Figure 5.1). At this stage, 24 problematic items were spotted which needed to be re-translated (see Table 5.1). Based on the comments arising, the two psychological bilingual translators who did the first translation (from E1 to C1) amended the problematic items (C1R). Then the new translated items were translated back again into English by the same official licensed Chinese translator (from C1 to E2). Then again, the revised back translation, English versions (E2R) were sent to the former native English speakers for re-checking. The set of Chinese measurements was finalised based on the comments received. All items were approved to have reasonably equivalent meaning to the English versions.

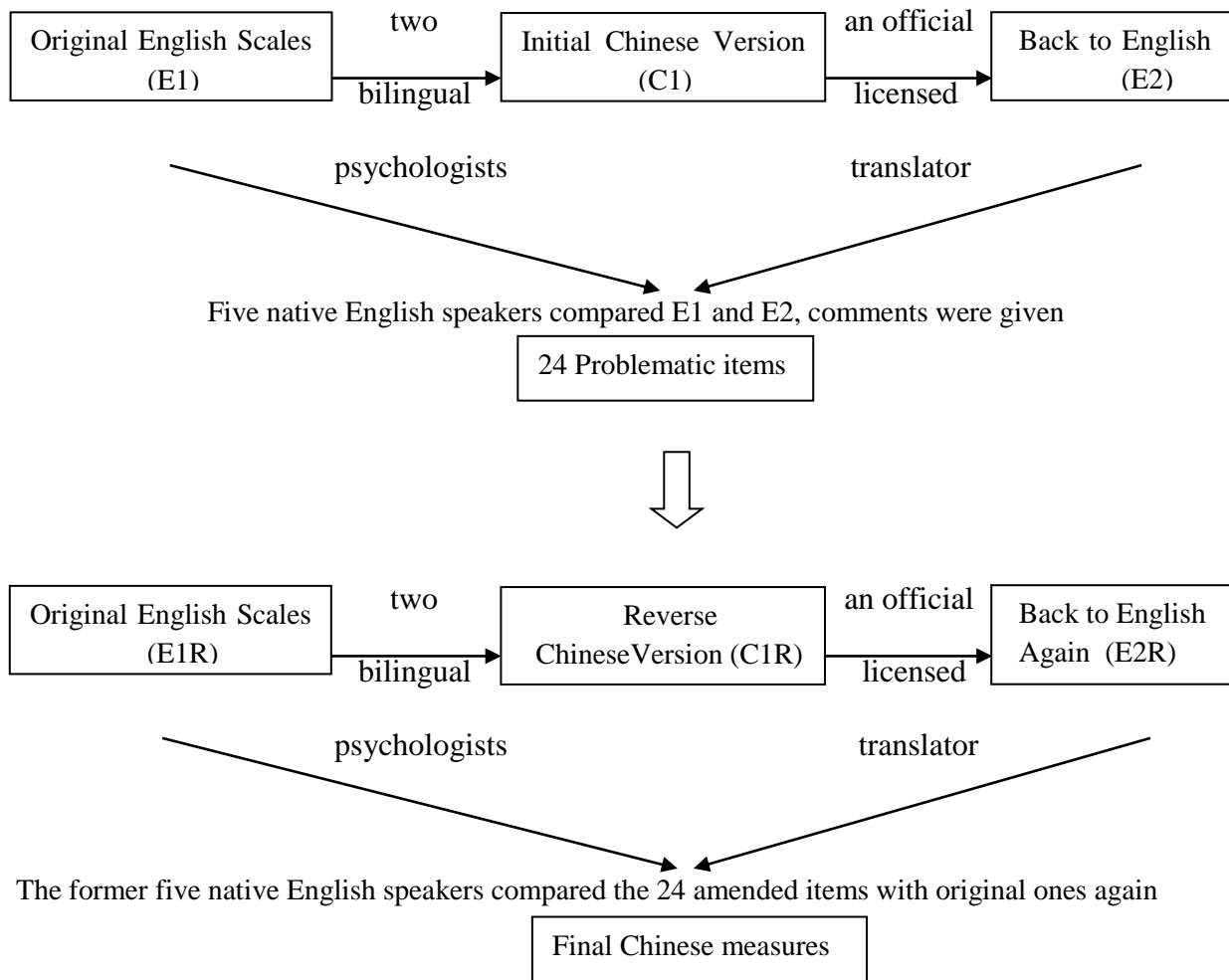Figure 5.1. Translation and back-translation procedure and phases

| Original English Scales (E1) | two bilingual | Initial Chinese Version (C1) | an official licensed | Back to English (E2) |
| --- | --- | --- | --- | --- |

psychologists                              translator

Five native English speakers compared E1 and E2, comments were given

| 24 Problematic items |
| --- |

| Original English Scales (E1R) | two bilingual | Reverse ChineseVersion (C1R) | an official licensed | Back to English Again (E2R) |
| --- | --- | --- | --- | --- |

psychologists                              translator

The former five native English speakers compared the 24 amended items with original ones again

| Final Chinese measures |
| --- |

Table 5.1  Problematic items (24) in translation and back translation process

| The original version (E1) | Back translation version (E2) |
| --- | --- |
| The society needs to show openness towards people thinking differently, rather than a strong leader, the world is not particularly evil or dangerous | This society requires to show openness to people's "different ideas" instead of a strong leader; this world is not special evil and hazardous |
| Our forefathers ought to be honored more for the way they have built our society, at the same time we ought to put an end to those forces destroying it | Our ancestors should be respected more for they have built up our social fabric; at the same time, we should end the forces destroying it |
| On a vacation, I prefer going back to a tried and true spot | On holidays, I like to return to a tried and authentic place |
| I enjoy solving problems or puzzles | I like to solve problems and puzzles |

| | |
|---|---|
| I think that if people don't know what they believe in by the time they're 25, there's something wrong with them | I think if people do not know what is their belief by the age of 25, they would not be mature |
| I believe that the "new morality" of permissive is no morality at all | I believe the permission of "new morality" can be "no morality" |
| Women should try to better themselves as human beings and to pursue self-realization through working | Women should try to become better and pursue self-realization through being employed |
| This country would be better off if we worried less about how equal people are | If we pay little worry on the equality of people, this country will become better. |
| No matter what a person's beliefs are, he is entitled to the same legal rights and protection as anyone else | No matter what one's viewpoint is, he/she has the same legal right and protection as other persons |
| I try to look at everybody's side of a disagreement before I make a decision. | Before I make decision, I will try to look on a disagreement from everybody's eyes |
| I sometimes try to understand my friends better by imagining how things look from their perspective | Sometimes, I try to understand my friends better by imaging how would they look on things from their viewpoint |
| When I'm upset at someone, I usually try to "put myself in his shoes" for a while | When I am dissatisfied with somebody, I will try to look on things from his/her perspective. |
| Some people have complained that I always want to have things my own way | Some people complained that I always want to do the things using my own way |
| When I know what I want, I won't agree to anything less | When I know what I want, I will not consider other's suggestions |
| I am usually quite flexible in my opinions when people disagree with me | When people disagree with me, I can very flexible to take their advices |
| I have donated blood | I have offered the blood for free |
| I have helped a classmate who I did not know that well with a homework assignment when my knowledge was greater than his or hers | I have helped an unfamiliar classmate with his/her study, because I know more than him/her at that time |
| I enjoy making other people feel better | I like to let other people have comfortable and happy feelings |
| I have tender, concerned feelings for people less fortunate than me | I have a tender and worrying feel to those who is less lucky than me |
| When a friend starts to talk about his/her problems, I try to steer the conversation towards something else | When a friend talks about his/her troubles, I try to transfer the topic to other issue. |

| I can tell when others are sad even when they do not say anything | I can recognize when people feel down and unhappy by the expression on their faces , even if they do not say a word |
|---|---|
| I find it silly for people to cry out of happiness | I find it is strange for the one who cries for his happiness |
| When I see someone shiver, I often feel a chill myself | When I see someone in tremble, I usually feel cold |
| Fear and social disgrace or punishment rather than conscience prevents most people from breaking the law | It is fear and social stigma or punishment, instead of conscience, to prevent most people from crimes |

To deal with cultural adaption and sensitive or incomprehensible words and expressions in Chinese culture, some words were replaced with other more suitable words. A panel reviewed potential culturally sensitive items and made necessary amendments. In this process, some items were also tailored if they were not culturally understandable or acceptable. Also, items which might cause potential political problems in China were replaced with similar but less politically sensitive words (See Table 5.2).

Table 5.2    Sensitive items and their replacements

| **Original items** | **Reversed items to be used in Chinese** |
|---|---|
| God's laws about abortion, pornography marriage must be strictly followed before it is too late, violations must be punished | Religion rules about the relationship among abortion, pornography and marriage must be strictly followed before it is too late, violations must be punished |
| People ought to put less attention to the Bible and religion, instead they ought to develop their own moral standards | People ought to put less attention to the religion and religion books, instead they ought to develop their own moral standards |
| I believe we should look to our religions authorities for decisions on moral issues | I believe we should look to our government authorities for decision on moral issues |

| | |
|---|---|
| I think that if people don't know what they believe in by the time they're 25, there's something wrong with them | I think that if people don't know what their values are by the time they're 25, there's something wrong with them |
| If a Russian was elected in a local government election, the people should not allow him to take office | If a foreigner was elected in our local government election, the people should not allow him to take office |

## 5.3 Study procedure and participants

*Study 1. A preliminary study*

The main aim of the pilot study was to examine the validity and reliability of the measures in Chinese society. In total, 119 European and 98 Chinese participants participated in the pilot study voluntarily; original English and translated Chinese versions were used for European participants and Chinese participants separately. In the European group, all the participants were recruited from the University of Bedfordshire, with 57 males and 62 females; for the Chinese participants, the data was collected from the University of Bedfordshire and an online survey (www.socialbehaviour.tk), with 47 male participants and 51 female participants included.

All the European participants and some of the Chinese participants who were recruited from the University of Bedfordhsire filled in the questionnaires either in the university library or classrooms. Before their classes began, a prerequisite permission from the lecturers was obtained. Both places offered the participants quiet and comfortable surroundings, so as to allow them to focus on the survey and pay more

attention to the items in the questionnaires. Before they started to answer the questions, they were given oral explanations of the study, such as the aim, participants' obligations and rights. They were told to ask for help or further clarification if they could not understand the statements. They were free to withdraw from the survey at any time if they did not want to continue. They were asked to read the 'Participant's Information' and sign the 'Consent Form' which were on the first two pages making sure they understood the purpose of the study and were willing to take part in the study. There were additional demographic questions about gender, age, nation, years living in the UK, working status, and educational background. Though some Chinese data were collected from an online survey, the process was identical. The set of online questionnaires contained the same content, arrangement mode, and order.

### *Study 2. Trans-generational study*

A study was conducted using translated Chinese measurements in China amongst young and old Chinese people in order to examine if there were any differences between the younger (18-25 yrs) and older generations (45-60 yrs) for the variables measured; whether there was a gender and age difference for these variables; and how their personality characteristics could predict their democratic attitudes and tendencies in each group.

Altogether, 733 participants were recruited in Guizhou province which is located in the southwest of China. All of them were required to finish the translated Chinese

version of the questionnaire which consisted of 11 parts (99 items), with the 'Participant's Information' and 'Consent Form' as the first two pages; Participant's Information offered them some information about the study and the Consent Form required their signature to show their willingness to participate in this study. Before the 11 sections, there was a third page to collect some demographic information including gender, age, ethnicity, family status, work status, and educational background.

To recruit the young Chinese participants, I contacted two universities (Guihzou University and Guizhou Normal University) for permission to approach their university students. At the start of our negotiations, I sent the Gate Keeper Letter which was from the department of psychology at Bedfordshire University to Professor Zhu Kejing (The Director of the Student Administration of the Art Institute at Guizhou University), and Mrs. Liu Zilinn (a lecturer in Media at Guizhou Normal University). Fortunately, after they had discussed the possibility with their supervisors, they sent permission letters to collect the data. In total, 400 young Chinese participants from these two universities voluntarily took part in the survey. All of them were required to complete the set of questionnaires in local classrooms with silent and comfortable surroundings. Before they started the survey, a psychological assistant explained the aim of the study, and the participants' obligations and rights. All the participants were told that this was an anonymous survey, and that they needed to focus on every statement in all parts of the questionnaires; they were allowed to ask for help from the psychology assistant if they could not understand any item in the questionnaires. They were also told that

they could withdraw from the survey at any time if they felt mentally or physically uncomfortable.

This study also aimed to recruit older Chinese participants whose ages were between 45 and 60 years old. According to the Chinese retirement policy, males retire at 60 and females at 55 years old. The older Chinese group deliberately consisted of both retried and non-retired participants. In total, 333 older Chinese participants were recruited from different work places: No. 5 middle School of Guiyang City, The People's Hospital of Guizhou Province, and the Construction Bank of China (Guizhou branch). Some of them completed the set of questionnaires at the beginning of their department conferences, which allowed the research assistant enough time to explain the aim of the survey and draw their attention to the Participants' Information and Consent Form; the other participants were approached in their working offices. However, for both settings for the data collection, oral permission was obtained from each department head. Older participants had quiet surroundings when they were filling out the questionnaire. As per data collection from the younger generation, the research assistant explained the goals, important matters, and participants' obligations and rights before participants began answering the questions. Some older participants (n=12) withdrew from the study for personal reasons, such as 'It is too long', 'This topic is too sensitive in China', 'I cannot spend much time on understanding these statements'. Finally, 333 participants fully completed the set of questionnaires.

*Study 3. Cross-cultural study*

A young sample from China was compared with a young sample from the UK to detect any cultural differences in this regard. Unlike the European participants in the previous pilot study, in this study, only local White British young people were recruited. In other words, all the participants were offspring of local White British people who had been born in the United Kingdom (England, Scotland, Wales, and North Ireland), and brought up in the UK. In keeping with the aim of the study (comparing the characteristics of the Chinese and British with different cultural backgrounds), it is assumed that exposure to and growing up in a certain culture could impact on our psychological as well as sociopolitical characteristics.

All the 400 Chinese participants were derived from the previous trans-generational study. Local White British participants were recruited from the University of Bedfordshire, Newcastle University, and Norwich University. For the participants recruited from the University of Bedfordshire, the same process as for recruiting European participants in the preliminary study was used. Notably, to include participants with the correct profile, firstly the participants were asked about their family background (to make sure they were local White British), and their age (they needed to be between 18 and 25 years old). Though only a few students did not meet the requirements, 170 local White British people were successfully recruited for this study, although 158 finally completed the set of questionnaires in full. Again, the 'Participant's Information Sheet' and 'Consent Form' needed to be filled out and signed at the start.

*Study 4. A study on Chinese young single child and non-single child Chinse participants*

In the previous trans-generational study and cross-cultural study, 400 young Chinese participants were recruited from two universities in Guizhou province: Guizhou University and Guizhou Normal University. In this study, the 400 young Chinese participants were divided into two groups according to whether they were from a 'single child' family or not. Among the young Chinese participants, only 106 of them were single children while the rest (n=294) were non-single children.

## 5.4 Materials

Before the main study, a pilot study was carried out to test the validity and reliability of all the measures (as will be described in the next chapter). Among these scales, the perspective-taking scale (Interpersonal Reactivity Index), openness to experience scale (NEO-PI-R), and prosocial behaviour scale (Self-Report Altruism Scale) had been previously used and validated in Chinese mainland samples (Siu & Shek, 2005; McCrae & Terracciano, 2005; Allik & McCrae, 2004; Chou, 1996). The inter-correlation between these three scales and other scales can offer convergent and divergent validity. For all scales, higher scores represented higher levels of the variables measured unless otherwise indicated. The 11 questionnaires employed in the study have been used in previous studies conducted in Eastern countries (See, Kaviani & Kinman, 2017) such as Iran and Afghanistan showing they are applicable and appropriate for use in different cultural settings.

*Empathy*

The empathy scale was a short form extracted from the Toronto Empathy Questionnaire (TEQ) (Spreng et al., 2009) to measure one's ability to understand and respond adaptively to others' emotions. It consisted of 10 items, each having 5 response options: never (1), rarely (2), sometimes (3), often (4), and always (5). An example item was: "It upset me to see someone being treated disrespectfully". The Toronto Empathy Questionnaire is a combined questionnaire that is composed of 16 items. It has been used among 200 University of Toronto students (100 female students included) with good item-remainder coefficients, ranging from .36 to .59; Cronbach's α for internal consistency reliability was .85 (Spreng et al., 2009).

*Flexibility*

The flexibility scale with 8 items, extracted from HEXACO. FLX (Lee & Ashton, 2009), was used to measure individuals' adaptability to opposite standpoints expressed by others and the willingness to change accordingly. The scale consisted of items such as 'When people tell me that I am wrong, my first reaction is to argue with them', with response options from 1 (strongly disagree) to 5 (strongly agree). This questionnaire has been tested in 12 languages (English, Dutch, Italian, Croatian, Filipino, French, German, Greek, Hungarian, Korean, Polish, and Turkish), the final reliabilities were very high, ranging from .94 (Polish) to .97 (Croatian) (Lee & Ashton, 2009).

*Perspective-taking*

This short scale was from the Interpersonal Reactivity Index (IRI) (Davis, 1983). It reflected the individual's ability to understand the viewpoints of others. There were six items in this short scale, e.g. 'Before criticising somebody, I try to imagine how I would feel if I were in their place'. Depending on participants' experiences, they could choose one option from 1 (does not describe me well) to 5 (describes me very well). This Interpersonal Reactivity Index questionnaire consisted of 28 items which were designed to measure four aspects of personality: social function (perspective-taking), self-esteem, emotionality, and sensitivity. According to Davis (1980) all of the four sub-scales had very satisfactory rest-retest reliabilities (internal reliabilities), from .71 to .77.

*Egalitarian sex role*

Twelve items were selected from the original measure of Egalitarian Sex Role Attitudes (Suzuki, 1991). This scale measured each individual's attitude towards the roles women should play in their lives. It included four domains: the marital domain, the parental domain, the vocational domain, and the social domain. Four options were given for responses, from 1 (strongly disagree) to 4 (strongly agree). One item sample is 'Women should work even if they are not in need economically'. This original English 40-item questionnaire has been translated into Japanese to test the psychometric properties in Japan with 238 American women and 420 Japanese women included in the study. For the translated Japanese version, the total reliability coefficient alpha was .89. The domain-total reliability coefficient alphas

were: the marital domain: .74; the parental domain: .71; the vocational domain: .74; and the social domain: .69.

## Normative identity style

The seven-item normative identity style questionnaire was extracted from the Normative Identity Style-4 (ISI-4) (Smits et al., 2008). It measured to what extent individuals automatically adopt and internalise the goals and standards of a significant person or group. A sample item was 'I never question what I want to do with my life, because I tend to follow what important people expect me to do'. Reponses ranged from 1 (not at all like me) to 5 (very much like me). ISI-4 which has been used in some studies (e.g. Doumen et al., 2012; Luyckx, Lens, Smits, & Goossens, 2010; Missotten, Luyckx, Vanhalst, Branje, & Goossens, 2011; Smits, Doumen, Luyckx, Duriez, & Goossens, 2011; Smits, Soenens, Vansteenkiste, Luyckx, & Goossens, 2010), and the internal reliabilities for them were between .65 and .70.

## Interpersonal trust

The interpersonal trust scale included eight items, which were derived from the original Interpersonal Trust Scale (Rotter, 1967). A high score on this scale would show trust in a variety of social objects. Every item had response options ranging from 1 (strongly disagree) to 4 (strongly agree). One item sample was 'Most repairmen will not overcharge, even if they think you are ignorant of their specialty'. This questionnaire was developed by Rotter (1967); internal consistency was based

on split-half reliability, for 248 male participants r=.77; for 299 females, r=.75; for all participants, r=.76; all of them are significant, *p*<.001.

*Openness*

Based on Neo-openness subscales (Costa & McCrae, 1992), a short form was utilised with 12 items to reflect each individual's willingness to confront new challenges and accept unconventional ideas. An example was 'I often try new and foreign foods'. Participants were required to rate their response based on a 5-point rating scale, from 1 'strongly disagree' to 5 'strongly agree'. This reversed questionnaire was tested for police officers, college students and a Hispanic American sample, and the data showed that the internal consistency for the openness subscale was as high as .87 (Costa & McCrae, 1985).

*Suggestibility*

This short form included eight items derived from the Suggestibility Scale (Kotov& Watson, 2004). It was used to measure how easily an individual could be influenced by outside surrounding and to identify a personality trait that reflects a general tendency to accept other people's ideas and views. One item sample was 'When making a decision, I often follow other people's advice'. A 5-point scale from 1 'strongly disagree' to 5 'strongly agree' was used to rate each item. This Short Suggestibility Scale (SSS) consisted of 21items, and the internal consistency was .87 (N=712) (Kotov & Watson, 2004).

*Prosocial behaviour*

This consisted of 10 items derived from The Self-Report Altruism Scale (Rushton, Chrisjohn, & Fekken, 1981). This short form scale measured the frequency at which participants had been engaged in altruistic behaviour in the past. Participants rated how often (from 'never' to 'very often') they behave prosocially on a 5-point scale (1-5). One item was 'I have offered my seat on a bus or train to a stranger across a street''. The original Self-Report Altruism Scale (SRA) has 20 items, and the scores on this scale are correlated with peer ratings for altruism (Rushton, Chrisjohn, & Fekken, 1981). Based on this, it has been used in peer rating studies for reliability tests, and the result showed that the internal consistency of the peer-rated-SRA-scale for altruism was at a high level (.89).

*Authoritarianism*

Nine items made up the authoritarianism short form. It was extracted from Right Wing Authoritarianism (RWA) (Altemeyer, 1998; Zakrisson, 2005), and was designed to assess ethnic tolerance, racism and sexism. One item was 'It would be best if newspapers were censored, so that people would not be able to get hold of destructive and disgusting material'. Responses ranged from 1 (strongly disagree) to 4 (strongly agree). In Zakrisson's (2005) research, the RWA scale was used in three samples: a construction sample, mostly amongst undergraduates; a modification sample, comprising 63 university students; and a validation sample, which included 173 high school students and undergraduate students from all parts of Sweden. The Cronbach's Alpha was .80, .78, and .72 respectively.

*Adherence to democratic values*

Based on the Support for Democratic Value Scale (10 items, Miklikovaska, 2012), 9 extracted items made up the scale to assess how far individuals would support democratic values behaviour. One item sample was 'It is necessary that everyone, regardless of their views, can express themselves freely' which was rated on a 4-point scale ranging from: 1 (strongly disagree) to 4 (strongly agree). This scale was used in the study that aimed to explore the link between underpinnings and democratic values with 1341 middle adolescents included in this study. The results denoted that the internal consistency was sound ($\alpha$= .71) (Miklikovaska, 2012).

*Evidence of previous psychometric properties of the study measures*

The psychometric properties of these scales were also tested in two recent studies, which can lend more support and provide a methodological foundation for using them in this current study (Miklikovaska, 2012; Kaviani & Kinman, 2017). The psychometric properties are displayed in the table below.

Table 5.3 Internal consistencies (Cronbach's Alpha) and validities from two recent studies

| | Miklikovaska (2012) | Kaviani & Kinman (2016) | |
|---|---|---|---|
| | | R | V(r) |
| Empathy | .78 | .63 | .44* |
| Flexibility | - | .71 | .29* |
| PerspectiveTaking | - | .69 | .38* |
| EgalitarianSexRole | - | .85 | - |
| NormativeIdentityStyle | .73 | .79 | .37* |
| InterpersonalTrust | .64 | .56 | .43* |
| Openness | .70 | .83 | validated |
| Suggestibility | - | .75 | .31* |
| ProsocialBehaviour | - | .87 | .27* |
| RightWingAuthoritarianism | .64 | .69 | .38* |
| Democracy | .71 | .71 | .36* |

Note: R=reliability, V=validity, *$p<.05$

## 5.5 Data analysis

The collected data in different phases of the study were analysed using SPSS software (Statistic Package for Social Science, Version 21). Firstly, Cronbach's Alpha statistical procedure was used to test the internal consistencies of the scales; A Pearson correlation statistical procedure was used to assess the convergent/divergent validity of the scales. Moreover, the ten characteristics were divided into two levels: personal level and social level. The former included empathy, flexibility, perspective-taking, openness and suggestibility; while the social level included egalitarian sex role, normative identity, interpersonal trust, prosocial behaviour and authoritarianism. Separate multiple hierarchical regression statistical analysis was used to explore the predictors for democracy in each group. In addition,

for the cross-cultural study, a 2×2 (group×gender) ANOVA analysis was designed to test if there would be a group and gender difference for the variables. For the trans-generational study, 2×2 (age×gender) ANOVA was conducted to test if there would be age and gender differences for the variables.

**5.6 Ethics**

Before carrying out the pilot study and main study, a proposal was submitted to an ethics committee at the University of Bedfordshire, United Kingdom, to be granted Ethical Permission. Based on the content in this study proposal, such as the rationale for this study, the measures which would be used in the study, steps to be taken, information sheet for participants and consent form, the ethics committee proposed some other issues that particularly needed to be addressed and clarified for this study. They mostly related to health and safety requirements for the researcher while collecting data in China. In general, there were three points they mentioned: preparing a synthetic description of the study, clarifying how to apply some sensitive items included in the measures within the Chinese population, and clarifying how to assess the samples and how to protect participants' rights. According to the ethics committee's comments and suggestions, more details were given to comply with their requirements. Moreover, a letter (Appendix K) was sent to the Chinese universities (Guizhou Province University and Guiyang Normal University) to explain the study (the contact details of the Chinese professors and lecturers have been mentioned above). The letter contained information confirming that participants'

rights would be well protected at all times and in all places according to their cultural backgrounds and customary habits. These universities sent permission letters showing their willingness to cooperate. An information sheet for participants (Appendix A) and consent form (Appendix B) were prepared to be given to participants before they decided to take part in the research. In the process of completing the questionnaires and scales, the participants were told that if there were any sensitive issues that made them uncomfortable (e.g. angry and upset), they could freely withdraw from the study. Based on these responses to the reviewers' comments and suggestions, an ethics permission letter was obtained from the ethics committee of the University of Bedfordshire.

# Chapter 6 Study 1: Psychosocial Differences between Chinese and European Youth Living in the UK: Reliability and Validity Evidence

## 6.1 Participants and procedure

In order to test the reliability and validity of the translated measures, a pilot study was held between European (those who study or work in the United Kingdom) and Chinese (those who study or work in the United Kingdom) people. This pilot study tried to gain insight into the relationships between empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, authoritarianism, and democracy; in the meantime, it also aimed to explore the relationships between these eleven variables. Moreover, this pilot study was orchestrated with the objective of discovering differences in all 11 variables between the two groups (European group and Chinese group), and between males and females. With these aims, 119 European and 98 Chinese participants participated in this pilot study voluntarily; the English version and translated Chinese version were used by European and Chinese groups respectively. In the European group, all the participants were recruited from the University of Bedfordshire, with 57 males and 62 females; for the Chinese sample, the data was collected either from the University of Bedfordshire or via an online survey (www.socialbehaviour.tk), with 47 males and 51 females taking part in the study.

All the European participants and some of the Chinese participants who were recruited from the University of Bedfordshire were invited to complete the questionnaires in a quiet place, either in the library or in a classroom. Both places offered the participants quiet and comfortable surroundings, allowing them to focus on the survey, and pay more attention to the details of these questionnaires. Before commencing the survey, the participants received guided oral explanations about the study, including the aim, participants' obligations and rights, and their right to withdraw from the survey at any time during the process. Furthermore, the participants were asked to read the 'Participant's Information' and 'Consent Form' as part of the questionnaire set. All the participants signed the consent form, which outlined their acceptance to take part in the study. Apart from the set of 11 questionnaires, participants answered some additional demographic questions including gender, age, nationality, years living in the UK, working status, and educational background. Since some Chinese data were collected from the online survey, volunteers went through the same guided process with no oral explanations.

## 6.2 Results

### 6.2.1 Descriptive findings

Table 6.1 shows the demographic details of European and Chinese participants. As shown in this table, in both groups, there are slightly more female participants than male, with 52% females and 48% males in the Chinese group, and 52% females

and 48% males in the European group. The mean ages for both groups are comparable, with Chinese participants' overall mean age being slightly higher than that of European participants (23.55 and 22.53 for Chinese and European groups respectively). As can be seen in the Chinese group, most of the participants are postgraduates (52%), while most of the European participants are undergraduates (86%). In terms of how many years the participants have been in the United Kingdom, the data show that in the Chinese group, most of the participants (70%) have been living in the UK for only one or two years; in the European group, most of the participants (76%) had been in the UK for over six years.

Table 6.1 Demographic details for the Chinese group and European group

| | CH | | TOTAL | EU | | TOTAL |
|---|---|---|---|---|---|---|
| | M | F | | M | `F | |
| **N** | 47 | 51 | 98 | 57 | 62 | 119 |
| % | 48% | 52% | 100% | 47.9% | 52.1% | 100% |
| Effective% | 48% | 52% | 100% | 47.9% | 52.1% | 100% |
| **Age** | | | | | | |
| Mean | 23.79 | 23.32 | 23.55 | 22.68 | 22.39 | 22.53 |
| SD | 2.81 | 2.44 | 2.62 | 3.25 | 3.84 | 3.56 |
| Min | 19 | 19 | 19 | 18 | 18 | 18 |
| Max | 36 | 29 | 36 | 32 | 35 | 35 |
| **Education** | | | | | | |
| Undergraduate | 22(46.8%) | 22(43.1%) | 44(44.9%) | 41(71.9%) | 45(72.6%) | 86(72.3%) |
| Postgraduate | 23(48.9%) | 28(54.9%) | 51(52%) | 12(21.1%) | 13(21%) | 25(21%) |
| Doctor | 2(4.3%) | 1(2%) | 3(3.1%) | 1(1.8%) | | 1(0.8%) |
| Other | | | | 3(5.3%) | 4(6.5%) | 7(5.9%) |
| **Years in UK** | | | | | | |
| 1-2 years | 34(72.3%) | 35(68.6%) | 69(70.4%) | 17(29.8%) | 18(29%) | 35(29.4%) |
| 3-5 years | 10(21.3%) | 13(25.5%) | 23(23.5%) | 2(3.5%) | 6(9.7%) | 8(6.7%) |
| 6+ years | 3(6.4%) | 3(5.9%) | 6(6.1%) | 38(66.7%) | 38(61.3%) | 76(63.9%) |

Note: M=male; F=female; CH= Chinese group, EU=European group

### 6.2.2 Internal consistency

Table 6.2 shows the details for internal consistencies for all the measures for the two groups separately. Cronbach's Alpha for most of the measures is moderate to strong (CH: .55 to .82; EU: .58 to .77). In Chinese group, Cronbach's Alpha for authoritarianism and the interpersonal trust scales are low, while in the European group, Cronbach's Alpha for the interpersonal trust scale is lower than for other scales.

Table 6.2 Internal consistencies (Cronbach's Alpha) for the Chinese group and the European group

| Measures | CH | EU |
|---|---|---|
| Empathy | .69 | .77 |
| Flexibility | .62 | .64 |
| Perspective-taking | .67 | .68 |
| Egalitarian Sex Role | .74 | .80 |
| Normative Identity Style | .75 | .85 |
| Interpersonal Trust | .55 | .58 |
| Openness | .63 | .67 |
| Suggestibility | .72 | .76 |
| Prosocial Behaviour | .82 | .75 |
| Authoritarianism | .56 | .69 |
| Democracy | .66 | .70 |

Note: CH= Chinese group, EU=European group

### 6.2.3 Inter-correlations between variables: convergent and divergent validity

Table 6.3 shows the statistical correlations between the ten independent variables (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behavior, authoritarianism) and democracy separately for each group. Furthermore, this table shows the inter-correlations between the ten independent variables.

In the Chinese group, most of the correlations between independent variables with adherence to democratic values are significant, including empathy (r=.53, $p$<.001), openness (r=.48, $p$<.001), egalitarian sex role (r=.39, $p$<.001), perspective-taking (r=.32, $p$<.01), authoritarianism (r=-.32, $p$<.01), flexibility (r=.22, $p$<.05), normative identity style (r=.20, $p$<.05), and prosocial behavior (r=.19, $p$<.05). This shows empathy has the strongest relationship with an adherence to democracy, followed by openness, egalitarian sex role, perspective-taking, authoritarianism, flexibility, normative identity style, and prosocial behaviour; also, among the eight independent variables, only authoritarianism (r=-.32, $p$<.01) is negatively correlated with democracy. In addition, the table demonstrates that there are positive relationships between flexibility and empathy, perspective-taking and empathy, openness and empathy, egalitarian sex role and empathy, prosocial behavior and empathy, openness and perspective-taking, egalitarian sex role and perspective-taking, prosocial behaviour and perspective-taking, prosocial behaviour and openness, authoritarianism and suggestibility, interpersonal trust and normative identity style, and authoritarianism and normative identity style. At the same time, there are negative relationships between suggestibility and empathy, suggestibility and openness, normative identity style and openness, authoritarianism and openness, and interpersonal trust and egalitarian sex role.

In the British group, except for interpersonal trust and prosocial behaviour, the other independent variables statistically correlated to democracy. The correlations are moderate to strong as follow: for authoritarianism (r=-.55, $p$<.001), openness (r=.53, $p$<.001), empathy (r=.51, $p$<.001), normative identity style (r=-.51, $p$<.001), egalitarian sex role (r=.44, $p$<.001), suggestibility (r=-.32, $p$<.001),

perspective-taking (r=.31, *p*<.001), flexibility (r=.26, *p*<.01). As can be seen, authoritarianism has the strongest relationship with an adherence to democracy; moreover, openness, empathy, and normative identity style have stronger correlations with democracy, as their Pearson Correlation values are all above .50, which refers to the fact that they have moderate to good correlations with democracy. Egalitarian sex role, suggestibility, perspective-taking, and flexibility, have a significant, but weaker statistical relationship with adherence to democracy than the variables outlined above. Additionally, among the eight correlations, authoritarianism, normative identity style, and suggestibility, have negative correlations with democracy; authoritarianism has a stronger negative correlation than the other two variables. Furthermore, there are positive relationships between flexibility and empathy, perspective-taking and empathy, openness and empathy, egalitarian sex role and empathy, prosocial behaviour and empathy, interpersonal trust and flexibility, openness and perspective-taking, prosocial behaviour and perspective-taking, egalitarian sex role and openness, normative identity style and suggestibility, authoritarianism and suggestibility, prosocial behaviour and normative identity style, and authoritarianism and normative identity style.

Comparing these two groups, interpersonal trust does not statistically correlate adherence to democracy in either group; however, in the Chinese group, except for interpersonal trust, suggestibility fails to statistically correlate adherence to democracy, and for the EU group, prosocial behaviour does not statistically correlate adherence to democracy.

Furthermore, these inter-correlations among these variables can emphasise the convergent/divergent validity of the current measures. Among these scales, the perspective-taking scale (Interpersonal Reactivity Index), openness to experience scale (NEO-PI-R), and prosocial behaviour scale (Self-Report Altruism Scale) have been previously used and validated in Chinese mainland samples (Siu & Shek, 2005; McCrae & Terracciano, 2005; Allik & McCrae, 2004; Chou, 1996). The correlations between these scales and other scales were deemed as evidence for the convergent/divergent validity of other related scales. The Pearson correlation between perspective-taking and empathy, perspective-taking and egalitarian sex role, perspective-taking and democracy, and flexibility and empathy was .36 ($p<.001$), .29 ($p<.01$), .32 ($p<.01$), and .24 ($p<.01$) respectively. There were also correlations between openness and normative identity style (r=-.31, $p<.01$), openness and suggestibility (r=-.42, $p<.001$), openness and authoritarianism (r=-.51, $p<.001$), openness and democracy (r=.53, $p<.001$), and interpersonal trust and normative identity style (r=.19, $p<.05$).

Table 6.3 Inter-correlation (r) among variables in the Chinese group and the European group

| | Em | Flex | PT | ESR | NIS | IT | Open | Sugg | PB | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| Demo-CH | .53*** | .22* | .32** | .39*** | -.20* | .01 | .48*** | -.17 | .19* | -.32** |
| Demo-EU | .51*** | .26** | .31*** | .44*** | -.51*** | -.00 | .53*** | -.32*** | .02 | -.55*** |
| Em-CH | | .24** | .36*** | .33*** | -.31 | .13 | .33*** | -.20* | .25* | -.22 |
| Em-EU | | .19* | .35*** | .33*** | -.31*** | .13 | .46*** | -.20* | .25** | -.22** |
| Flex-CH | | | .10 | .12 | -.02 | .06 | .10 | -.07 | .12 | -.08 |
| Flex-EU | | | .13 | .02 | -.24** | .30*** | .11 | -.08 | -.08 | -.07 |
| PT-CH | | | | .29** | .10 | .02 | .36*** | -.13 | .33*** | .08 |
| PT-EU | | | | .05 | -.27** | -.09 | .37*** | -.03 | .19* | -.10 |
| ESR-CH | | | | | .11 | -.20* | .06 | -.12 | .10 | .08 |
| ESR -EU | | | | | -.28** | .01 | .28** | -.15* | .11 | -.33*** |
| NIS-CH | | | | | | .19* | -.31** | .11 | .12 | .34*** |
| NIS-EU | | | | | | -.11 | -.56*** | .47*** | .16* | .38*** |
| IT-CH | | | | | | | .05 | -.06 | .09 | -.17 |
| IT-EU | | | | | | | -.09 | -.04 | .14 | .02 |
| Open-CH | | | | | | | | -.42*** | .29** | -.51*** |
| Open-EU | | | | | | | | -.38*** | .06 | -.52*** |
| Sugg-CH | | | | | | | | | -.11 | .36*** |
| Sugg-EU | | | | | | | | | .02 | .19* |
| PB-CH | | | | | | | | | | -.07 |
| PB-EU | | | | | | | | | | .10 |

Note: CH= Chinese group, EU=European group, Em=Empathy, Flex=Flexibility, PT=Perspective-taking, ESR=Egalitarian Sex Role, NIS=Normative Identity Style, IT=Interpersonal Trust, Open=Openness, Sugg=Suggestibility, PB=Prosocial Behaviour, Au=Authoritarianism, Demo=Democracy. *$p<.05$; **$p<.01$; ***$p<.00$

*6.2.4 Regression model*

To test how well the ten independent variables (empathy, flexibility, perspective-taking, openness, suggestibility, egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism) might predict the dependent variable (democracy), and to gauge the contributory of role of independent variables separately in predicting democracy, a hierarchical multiple regression analysis was performed.

As seen in Table 6.4, all the variables are divided into two levels: Personality Level (Empathy, Flexibility, Perspective-taking, Openness, Suggestibility) and Social Level (Egalitarian Sex Role, Normative Identity Style, Interpersonal Trust, Prosocial Behaviour, Authoritarianism). Using this hierarchical multiple regression in both groups, not only were we able to examine the predictive value of each of the measures in the whole sample, but also to compare to what extent personality and social levels would predict democracy.

For the Chinese group, the five independent personality variables (empathy, flexibility, perspective-taking, openness, suggestibility) explained 40% ($R^2$=.40) of the variance in democracy. After the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) variables had been entered into the analysis, the model as a whole explained 49% ($R^2$=.49) of variance in democracy. In other words, social level explains an additional 9% ($R^2$ change = .09) of the variance in democracy after controlling for personality level. Moreover, this is a significant contribution, as indicated by $p$=.012; also, it can be inferred that there is no possible self-correlation among these independent variables,

143

as the DW (Durbin-Watson statistic) value is 2.0 (an acceptable DW value should be around 2.0). Another important finding from this table is that among these independent variables, empathy ($\beta$=.29, $p$<.01) and egalitarian sex role ($\beta$=.29, $p$<.01) are the best predictors of democracy, followed by openness ($\beta$=.25, $p$<.05), and suggestibility ($\beta$=.12, ns).

For the European group, the results show that personality level explained 41% ($R^2$=.41) of the variance in democracy. After social level had been included in the analysis, the model as a whole explained 57% ($R^2$=.57) of variance in democracy, meaning that social level explains an additional 17% ($R^2$ change = .17) of the variance of democracy after controlling for the personality level in the EU group. Similar to the Chinese group, this is a significant contribution ($p$=.000), and there is no self-correlation among the ten independent variables, given the DW value (2.1). Additionally, it can be ascertained from this table that in the EU group, there were four out of ten variables that were statistically significant, with authoritarianism recording the highest Beta value ($\beta$=-.34, $p$<.000), followed by empathy ($\beta$=.25, $p$<.01), egalitarian sex role ($\beta$=.19, $p$<.01), and flexibility ($\beta$=.15, $p$<.05).

Comparing the two groups, as the two models are significant, and there are no self-correlations among all the variables, therefore, looking at first model, personality level (empathy, flexibility, perspective-taking, openness, suggestibility) in the Chinese and EU groups can explain a similar percentage of the variance in democracy (40% and 41% respectively). However, after entering the social level in the second model, the percentage increased to 49% in the Chinese group; while it jumped to 57 % in the European group, which shows that in the European group,

the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) predicts democracy more than that in the Chinese group.

Table 6.4 Hierarchical multiple regression

| | | | CH | | | | EU | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $R^2$ | $R^2$ change | Sig F change | $\beta$ | $R^2$ | $R^2$ change | Sig F change | $\beta$ |
| **Step 1** | **Personality Level** | .40 | | .000 | | .41 | | .000 | |
| | Empathy | | | | .29** | | | | .25** |
| | Flexibility | | | | .07 | | | | .15* |
| | Perspective-taking | | | | .08 | | | | .12 |
| | Openness | | | | .25* | | | | -.01 |
| | Suggestibility | | | | .12 | | | | -.10 |
| | | | | | | | | | |
| **Step 2** | **Social Level** | .49 | .09 | .012 | | .57 | .17 | .000 | |
| | Egalitarian Sex Role | | | | .29** | | | | .19** |
| | Normative Identity | | | | -.10 | | | | -.14 |
| | Interpersonal Trust | | | | .05 | | | | -.09 |
| | Prosocial Behaviour | | | | .00 | | | | -.00 |
| | Authoritarianism | | | | -.19 | | | | -.34*** |

Note: Statistical significance: *$p$<.05; **$p$<.01; ***$p$<.00; CH= Chinese group, EU=European group;

DW for CH group and EU group is 2.0 and 2.1 respectively

### 6.2.5 Differences in variables across nationality and gender factors

In order to test the potential differences between the Chinese and European groups, and between males and females for all the variables (including ten independent variables plus one dependent variable), a 2 (Group: CH, EU) ×2 (Gender: men, women) ANOVA was performed using SPSS for Windows 21. Table 6.2.5 depicts that there are main group effects for eight variables (except flexibility, egalitarian sex role and prosocial behaviour). That is to say, the Chinese group scored higher than the

European group on normative identity style [F(1,213)=9.18, p<.01], interpersonal trust [F(1,213)=5.77, p<.05], suggestibility [F(1,213)=10.25, p<.01], and authoritarianism [F(1,213)=40.49, p<.001]; however, the European group scored higher than the Chinese group on empathy [F(1,213)=8.78, p<.01], perspective-taking [F(1,213)=24.56, p<.001], openness [F(1,213)=32.80, p<.001], and democracy [F(1,213)=13.39, p<.001]. Moreover, there is a main effect for gender only on egalitarian sex role, which means that the females from two groups scored higher than the males on egalitarian sex role [F(1,213)=6.78, p<.05]. However, there is no interaction effect between group and gender; that is to say in this 2x2 ANOVA analysis, though there are two separate levels for nation (Chinese and European) and gender (males and females), there is no effect of one of the variables differing depending on the level of the other variables.

Table 6.5 Two-way ANOVA (nationality/group×gender)

| | CH Group | EU Group | Male | Female | *p*-value Group | Gender | *p*-value Gr×Gen |
|---|---|---|---|---|---|---|---|
| Empathy | 26.66(4.85) | 28.77(5.43) | 27.11(5.38) | 28.48(5.10) | .003 | NS | NS |
| Flexibility | 23.56(3.82) | 23.89(4.18) | 23.67(4.67) | 24.10(3.67) | NS | NS | NS |
| Perspective-taking | 14.04(3.87) | 16.71(4.00) | 15.54(4.01) | 15.47(4.24) | .000 | NS | NS |
| Egalitarian | 37.53(3.85) | 36.71(5.40) | 36.17(5.16) | 37.92(4.23) | NS | .010 | NS |
| Normative | 20.79(4.80) | 18.51(5.87) | 20.10(5.84) | 19.03(5.17) | .003 | NS | NS |
| Interpersonal Trust | 18.59(2.66) | 17.64(3.02) | 17.84(3.28) | 18.28(2.48) | .017 | NS | NS |
| Openness | 37.76(5.05) | 42.07(5.79) | 39.88(6.21) | 40.34(5.55) | .000 | NS | NS |
| Suggestibility | 23.17(4.38) | 21.05(5.17) | 21.97(5.30) | 22.04(4.59) | .002 | NS | NS |
| Prosocial Behaviour | 28.64(6.72) | 28.21(6.40) | 28.93(7.09) | 27.92(5.98) | NS | NS | NS |
| Authoritarianism | 23.51(3.06) | 20.34(4.04) | 21.86(4.56) | 21.70(3.32) | .000 | NS | NS |
| Democracy | 24.98(3.45) | 26.85(4.01) | 25.51(4.44) | 26.46(3.21) | .000 | NS | NS |
| N | 98 | 119 | 104 | 113 | | | |

Note: CH= Chinese group, EU=European group, NS=not significant

## 6.3 Discussion

The main aim of this pilot study was to test the reliability and validity of the translated Chinese measures. Moreover, it explored psychological and cultural factors related to people's social and political tendencies in younger generation participants with different cultural backgrounds (Chinese and European). In addition, the design of the study was to gain an insight into how the patterns of responses on empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness to experience, suggestibility, prosocial behaviour, authoritarianism, and their adherences to democratic values differed across Chinese and European groups.

According to the results for internal consistencies, Cronbach's Alphas for all the measures were medium to high. Except for interpersonal trust ($\alpha$= .58), the figures for other measures were above .64; for egalitarian sex role and normative identity style, the Cronbach's Alpha was as high as .80 and .85 respectively. Among these measures, perspective-taking, openness to experience, and prosocial behaviour had been used in Chinese mainland samples in different studies (Siu & Shek, 2005; McCrae & Terracciano, 2005; Allik & McCrae, 2004; Chou, 1996), and the validities for these measures were tested to be sound. Based on these previously used translated measures, the convergent/divergent validity could be proved by the correlations between these three measures and other related measures.

The results of hierarchical multiple regression showed that in both groups, empathy and egalitarian sex role were found to be predictors for democracy. In the Chinese group, they were the best predictors for democracy; while in the European group,

they were less strong predictors than authoritarianism. This indicated that authoritarianism was an important social characteristic for the European group; however, it was not proved to be the case in the Chinese group.

Furthermore, findings of the two-way ANOVA revealed that the Europeans were higher in empathy, perspective-taking, openness, and democracy than their Chinese counterparts; the Chinese participants scored higher on normative identity style, interpersonal trust, suggestibility, and authoritarianism. In terms of egalitarian sex role, women in both groups scored higher than men.

Empathy and egalitarian sex role seemed to be two vital elements for democracy in both groups. Previous research has shown that empathy is a general skill, which can facilitate positive social behaviour, and enhance healthy social relationships (Eisenberg, Eggum & Di Giunta, 2010). Empathy leads to more understanding among people that can, in turn, result in more agreement (Morell, 2010). In line with this, Boler (1997) and Morell (2010) emphasised that empathy could be deemed to be a foundation for democracy and social change. Empathy also helps people to recognise equality rights for all which in turn prepares the ground for a smoother process in conflict resolution (Morell, 2010). The close positive relationship between egalitarian sex role and adherence to democracy in both groups might be attributed to the respondents' educational backgrounds and the enhanced women's social status. There are reports that higher educational levels predict stronger support for democracy, as well-educated individuals tend to have more critical and creative thinking, which could lead to adherence to democratic values through respect for various ideas and viewpoints (Rong & Shi, 2001; Shu, 2004). According

to the educational background of participants in this study (mostly with undergraduate or postgraduate degrees), one can assume that they tend to tolerate different even opposing views which is in agreement with adherence to democratic values. Regarding women's enhanced rights, women could be trying to enhance their domestic and social status (Rempala, Tolman, Okdie, & Ahn, 2014). This is consistent with the results of a previous review (Fortin, 2005) that revealed there are an increasing number of women participating in the work force instead of just being 'child-carers' at home. Thus, they would have more freedom to continue their education, apart from their crucial role in family formation and fertility over their life cycle. Indeed, the higher rate of women's labour force participation is a vital symbol of their enhanced political status, as they begin to follow similar life goals as men, including political equality (Inglehart, Norris & Welzel, 2002). One aim of democracy is to reduce artificial and arbitrary barriers to power, which offers women a chance to perform more proactively in political areas (Beer, 2009). In this sense, the difference between men and women is gradually narrowing, and individual differences are becoming more important than gender differences. Furthermore, egalitarian sex role could be influenced by cultural background (Rempala, Tolman, Okdie, & Ahn, 2014). That is to say, in developing Asian countries (e.g. China), support for gender equality is not just a consequence of democratisation but is a part of broad cultural change that is transforming traditional society into an industrialised society. In fact, this brings growing mass demands for democratic institutions (Inglehart, Norris, & Welzel, 2002). From this perspective, it is reasonable that egalitarian sex role would predict adherence to democracy positively in both groups.

The link between authoritarianism and adherence to democracy in the European group is in line with previous research (Miklikowska, 2012). There are suggestions that authoritarian individuals have less tolerance of ambiguous and dissimilar ideas (Corning, 2000). Moreover, flexibility is another predictor for democracy in the European group and could be the outcome of differing educational styles in European and Chinese societies. Critical thinking could be treated as an important thinking skill that can be cultivated through school education in Western countries; it seems to be lacking in Asian education systems (Durkin, 2008). This, in turn, would allow open-mindedness and the political-critical thinking which can result in a reliable grounding for a robust democracy (Durkin, 2008; Kruglanski, and Boyatzi, 2012). Notably, people high in flexibility would be able to shift their attention to relevant issues quickly and tolerate negative feelings more effectively to broaden their decision-making patterns (Labouvie-Vief, 2003). This seems to be the consequence of critical thinking (Durkin, 2008). In addition, the finding that openness can positively predict adherence to democracy in the Chinese group, in fact, is not in accordance with the assertion that openness is influenced by cultural background. Westerners are deemed to be more open-minded as they advocate a more egalitarian sex role attitude and believe more in progressive sex role ideologies that suggest that 'a woman should have the same freedom of action as a man'; whereas, people in Eastern countries reportedly have less openness, since they follow traditional sex role norms (Costa, Terracciano, & McCrae, 2001). Similarly, egalitarian sex role showed a stronger adherence to democracy in the Chinese group than in the European group. In fact, the result that both openness and egalitarian sex role showed a stronger adherence to democracy in the Chinese group might

correspond to the social change brought about for Chinese women over the past thirty years. In modern China, women have benefited from enhanced domestic and social status and have developed a strong willingness to have equal gender roles in society (Bargh & Ferguson, 2000). Openness enables them to be more tolerant of dissimilarities, thus supporting liberalism that eventually lays the foundation for democracy (Gerber, Huber, Doherty, Dowling, & Ha, 2010).

Europeans scored higher on both empathy and perspective-taking than their Chinese counterparts. This is consistent with the theoretical account mentioned before (Bailey, Henry & Von Hippel, 2008). Empathy encompasses both emotional and cognitive empathy. The former refers to subjective feelings and can be defined as an appropriate automatic emotional response to others' emotional states; while cognitive empathy is a conscious understanding of others' emotions and feelings (Bailey, Henry & Von Hippel, 2008; Khanjani et al., 2015). In this sense, empathy is indeed interconnected with perspective-taking. Firstly, culture would mediate empathy and plays a role in shaping both affective and cognitive empathic responses (Atkins., Uskul, & Cooper, 2016). It was found that high empathic concern and low personal stress could facilitate prosocial behaviour; however, compared with young European Canadian adults, Eastern Asian counterparts reported lower empathic concern and greater personal stress (Cassels, Chan, & Chung, 2010). Another current study carried out amongst East Asian and White British university students in the United Kingdom showed that participants in both groups differed in both affective and cognitive empathy; British counterparts reported greater empathic concern and showed lower empathic accuracy (Atkins, Uskul, & Cooper, 2016).

151

However, our results suggested that European participants were higher in perspective-taking than Chinese participants. This is different from a previous study showing that Chinese university students were better at perspective-taking than their American counterparts, presumably due to the Chinese collectivistic culture (Wu & Keysar, 2007). Moreover, compared with the Western group, the Chinese could orient more effectively and quickly to another's perspective when the current context was different from their expectation (Kessler, Cao, O'Shea, & Wang, 2014). In fact, these two studies demonstrated that people in collectivistic cultures are more interdependent, as their self-concepts rely on social relationships and obligations. Chinese participants might think representation of others is more important than the representation of themselves. Therefore, when they evaluate an event relating to them, they tend to report the event from a third person's perspective (Wu & Keysar, 2007). However, people in individualistic cultures are more independent, and their self-concept is related to their own needs and goals. In other words, they tend to focus on the representation of themselves rather than others. They tend to report an event from a first-person perspective (Wu & Keysar, 2007). In Western cultural contexts, the self is experienced as an independent individual who focuses on his internal attributes, such as preferences, desires, and traits; however, in Eastern cultural contexts, the self is experienced as an interdependent and interpersonal-connected individual who pays more attention to their social relationships and others surrounding them (Kitayama Duffy & Uchida, 2007). This difference between 'self and others' helps people form self-concepts and defines them as independent or interdependent individuals accordingly at an early age, thus leading to varying responses and levels of accuracy in terms of reading

others' emotions and feelings (Markus & Kitayama, 1991). Though the result in this study is not in accordance with the suggestion from previous studies that the Chinese show more perspective-taking than Western participants in the cultural context, it can reflect the positive relationship between empathy and perspective-taking in the European group.

It is notable that European participants were more open to experience than their Chinese counterparts, suggesting that openness to experience can be different according to cultural backgrounds. It has been proved that culture can influence people's openness to experience. Individuals like to establish cognitive structures and social norms according to the cultural backgrounds they were brought up in, based on which they have formed their own mind-sets. This can help them solve problems using sets of cultural frames of mind, cultural knowledge base, and cultural normative ways (Chen, Soenens, Vansteenkiste, Van Petegem, & Beyers, 2016). Furthermore, it has also been mentioned that people who are high in openness are prepared to approach new cultures helping them learn new mind-sets (Chen, Soenens, Vansteenkiste, Van Petegem, & Beyers, 2016). This indicates that openness to experience is treated as a cognitive process and integrated action, which reflects how quickly people can shift from a previous mind-set to a new one, with the aim of solving current problems in new surroundings (Chen, Soenens, Vansteenkiste, Van Petegem, & Beyers, 2016). Furthermore, openness to experience can correspond to gender attitudes in Western and Eastern countries. In Western continents, such as Europe and North America, individualistic cultures support less traditional sex role attitude, but more modern sex role ideologies in which there is not much difference between men and women (Costa, Terracciano, & McCrae, 2001).

However, it is widely accepted in Eastern cultures that women's roles should be different from men's roles, with women being responsible for 'home internal affairs' (such as doing housework, taking care of children) and men being responsible for 'outside external affairs' (such as earning money, participating in politics). In Eastern countries, women tend to obey the traditional sex role norms that results in less openness, and consequently a fixed mind-set and narrowed vision, which in turn can create a barrier to openness (Costa, Terracciano, & McCrae, 2001).

The current findings have shown that the European group supported democracy more than their Chinese counterparts, which can be explained by the stronger empathy, perspective-taking, and openness among the European group compared to their counterparts. In fact, empathy, perspective-taking, and openness can be regarded as the foundations of democracy. Empathy helps individuals overcome biased viewpoints towards out-groups, and considers their benefits (Eisenberg, Eggum & Di Giunta, 2010). Perspective-taking enables individuals to consider things from an out-group's perspective to consider their welfare, which increases their cognitive empathy and reduces their prejudice and discrimination towards out-groups (Shih, Wang, Trahan Bucher, & Stotzer, 2009). Openness can be treated as one of the important supporters of liberalism, as it might lead to tolerance of dissimilar ideas, even unpopular ideas (Sullivan & Transue, 1999). In this sense, openness could be described as a strong willingness to extend an out-group's political rights and is defined as a need to enhance democracy (Oskarsson and Widmalm, 2016). Except for the above psychological characteristics, the European strong democratic attitude, due to both their long democracatic history and their

robust democratic political system, may influence citizens' personality characteristics (Dahl, 1989; Bryan, 2004).

Chinese participants tended to have stronger normative identity style and authoritarianism than their European counterparts. In fact, these two characteristics are interconnected and both of them are strongly inter-twined with socio-cultural factors, such as language, societal norms, history, and belief systems. The characteristics of normative identity style are a high level of self-control, intolerance of ambiguity, need for closure, and resistance to change (Szabo & Ward, 2015). The behaviour of a normative individual is in agreement with social norms, traditional values, obligations, and the improvement of stability. Hence, when they are obliged to adopt values different from the values of significant family members or important others, they can easily experience frustration and anxiety (Berzonsky, Cieciuch, Duriez, & Soenens, 2011). In order to avoid having contradictory feelings, people high in normative identity style might try to keep their self-views private which builds automatic internalisation of values, norms, and rules (Berzonsky, 1989). Culture is a vital element of forming normative style; namely, an individual is comfortable and effective in familiar surroundings where other people have similar or identical values and goals. This culture is manifested in societies with totalitarian communist political systems originating mostly in Eastern countries, where people need to comply with stable social and traditional norms. Living with similar goals and values does not allow such individuals to be tolerant of other conflicting values and attitudes (Szabo & Ward, 2015). In terms of authoritarianism, it can be defined as intolerance of ambiguity and cognitive rigidity (Duncan & Peterson, 2014). As mentioned before, authoritarianism can be closely related to cultural background, so

that we may infer that authoritarianism is a culture (Kemmelmeier, 2010). Indeed, authoritative surroundings growing up can be treated as an important factor in forming authoritarianism. For example, authoritative parenting is defined as firm control, high demands, and total obedience. With authoritative parenting, children would internalise norms or rules from their parents to facilitate their self-concept instead of searching for original and natural skills that determine their personality; also, obedience to authority and intolerance of out-groups are vital characteristics of authoritarianism (Rudy & Grusec, 2001). However, an authoritative parenting style is quite normal in communist countries, more so than in individualistic, liberal societies (Rudy & Grusec, 2001). In this sense, both authoritative family and social surroundings growing up in communist countries have more chance of influencing their children's tendency for authoritarianism. Moreover, in terms of its intolerance of dissimilar views and tendency to conservatism, authoritarianism is regarded as an obstacle for democratic values (Duncan & Peterson, 2014), as democracy requires people to tolerate others' positions in politics, even if they disagree with others' opinions (Sullivan & Transue, 1999). In the present study, one can conclude that European participants adhere to stronger democratic values and support less authoritarianism than their Chinese counterparts.

Suggestibility can negatively relate to creative thinking, but positively relate to social conformity, and normative identity style (Yu, 2005; Pires, Silva & Ferreira, 2013). An individual high in conformity and normative identity style tends to accept others' opinions without critical thinking (Wegrocki, 1934). According to this, suggestibility can be linked to a specific cultural background, which is in accordance with the result from a cross-cultural study amongst students from Chinese Hong Kong,

America and Australia. In that study, the Chinese population was more prone to suggestibility than their counterparts, while American and Australian students showed more creative imagination (Yu, 2005). Suggestibility corresponds to certain personality characteristics, such as conformity and normative identity style which influence the individual's thinking style and behaviour within the context of their surroundings growing up (Pires, Silva & Ferreira, 2013). That is to say, suggestibility links to children's growing environments. It has also been proved that individuals in surroundings where people are concerned about cooperation tend to show a strong agreeing style that in turn leads to suggestibility. That might be because of their respectful and cooperative communication technique. That is, if an individual disagrees with something within a group, the group always firmly resists such an opposing opinion. Therefore, individuals who desire to avoid distancing themselves from the group and being considered strangers, have to be more prone to suggestibility (Pires, Silva & Ferreira, 2013). However, intuitive and creative individuals are less suggestible, which means suggestibility is associated with creative imagination; since intuitive and creative people always have imaginative and innovative thinking styles, they can use their own original ideas to seek answers to unresolved problems in a broad range of areas (Yu, 2005). In other words, people growing up in a culture that focuses on cultivating their flexible and creative thinking tend to be less suggestible. These findings might partly explain the discoveries in this study that Chinese students have higher levels of suggestibility than their European counterparts.

Trust can be divided into two concepts: interpersonal trust and political trust. The latter can be linked to democracy, while the former refers to building social

relationships (Kaase, 1999). Western individualist culture regards the individual as an independent entity, while Eastern collectivist culture regards the person as one element within a web of multiple relationships with others (Han & Choi, 2011). Thus, people within an Eastern culture tend to build and maintain harmonious interpersonal relationships and avoid causing discomfort to others. Therefore, they like to develop several social psychological mechanisms that have a positive effect on their relationships, such as social tact, social face, and interpersonal trust. Asian people regard interpersonal trust as a matter of relationship property rather than a matter of individual property (Han & Choi, 2011). A cross-cultural study between the Chinese population and European American population (Wei, Su, Carrera, Lin, & Yi, 2013) proved that Chinese people had more emotional suppression, which might be positively related to their interpersonal harmony and social goals. In other words, in Chinese interdependent culture, people present stronger endorsement of emotional self-control, compared to European and American participants. Similarly, in the present study, the result supported the fact that Chinese people are higher in interpersonal trust than Europeans.

Despite the fact that there was no group difference for egalitarian sex role, there was a gender difference indicating that females supported egalitarian sex role more fully than their male counterparts. This result proves that in the modern age, women's social and political status has been improved in both Eastern and Western countries. This enhancement for gender equality may be due to the fact that, in recent decades, more women have participated in work outside the home instead of just staying at home acting as wives and mothers (Thornton, Alwin & Camburn,

1983; Arber & Ginn, 1995). From this social perspective, it is a popular concept in most women's minds that pursuing equal rights at home and in the work place is a positive reflection of their enhanced status (Larsen & Long, 1988). For young Chinese young women, gender equality in the education system can be another vital factor for their support for egalitarian sex role, as in China in past generations, girls had less attention and fewer educational opportunities than boys in a family (Li, 2004). Compared with previous Chinese gender inequality policies, young Chinese women benefit more from the new policies in which girls have the same right to education as boys (Lee, 2012). Similarly, in other Eastern countries, research has shown that there were still differences between American women and Japanese women in egalitarian sex role, with American women supporting egalitarian sex role more than their Japanese counterparts; however, compared with the past twenty years, women in both Japan and America have improved their egalitarian sex role attitudes (Suzuki, 1991). Though this study was initiated many years ago, it can nevertheless be used as evidence that women in both Asian and Western/American countries are fighting for their equal rights and treatment in various areas.

### 6.3.1 Conclusion

In conclusion, the psychometric properties of the translated Chinese measures were tested by this pilot study. Based on their internal consistencies and convergent/divergent validity, the reliability and validity of the Chinese versions were deemed sound. Moreover, empathy and egalitarian sex role can be treated as the best predictors for adherence to democratic values in the Chinese group; while

authoritarianism is the best predictor for democracy in the other group. There are group differences for some of the variables: the Chinese group scored higher on normative identity style, interpersonal trust, suggestibility and authoritarianism; while the European group scored higher on empathy, perspective-taking, openness and democracy. These differences can be explained by the social factors (e.g. parenting styles, educational opportunities, and historical factors). Women scored higher on egalitarian sex role than their male counterparts indicating that pursuing gender equality in both domestic and social affairs is not only the goal of Western women but is also becoming the aim of Chinese women.

# Chapter 7 Study 2: A Trans-generational Study between the Younger Generation and Older Generation in China

## 7.1 Participants and procedure

Altogether, 733 participants were recruited in Guizhou province which is located in the southwest of China. They were required to complete the translated Chinese version of the questionnaires, which consisted of 11 parts (99 items). Firstly, they were given the 'Participant's Information' and 'Consent Form'. The Participant's Information gave them some details about the study and the Consent Form was included for them to read and sign to show their willingness to participate in this study. Then they filled in the 11 study questionnaires plus a set of demographic questions about gender, age, ethnicity, family status, work status, and educational background.

Young Chinese participants (n=400) came from two universities (Guihzou University and Guizhou Normal University) in Guizhou province and they took part in the survey voluntarily. They answered the questions in groups in local classrooms with quiet and comfortable surroundings. Before they started the survey, a psychological assistant explained the aim of the study, and the participants' obligations and rights. The participants were told that this was an anonymous survey and that they needed to focus on every statement in all parts of the questionnaires; they were allowed to ask for help from the psychological assistant if they could not understand any aspect of the questionnaires. They were also told that they could withdraw from the survey at any time for any reason if they wished. All 400 student participants successfully filled in the set of questionnaires without anyone withdrawing.

Older Chinese participants (age 45-60 yrs, n=333) were recruited from different work places: No. 5 middle School of Guiyang City, The People's hospital of Guizhou Province, The Construction Bank of China (Guizhou branch). They completed the same set of questionnaires and additional forms and questions either in conferences or at work. The psychological assistant firstly explained the aim of the survey and participants' obligations and rights. Then the participants answered the questionnaires. Both of the places offered the older participants quiet surroundings to make sure they could focus on the questionnaires. Among these participants, 56 participants withdrew from the study for personal reasons, and 333 finally completed the survey.

## 7.2 Results

### 7.2.1 Descriptive findings

Table 7.1 shows the demographic details for the young Chinese participants and older Chinese participants. The number in the older Chinese group is less than the number of young Chinese participants. In both groups, there were more female participants than male participants (67% females and 56.8% females in the younger and older groups respectively). In the younger group, the participants' ages ranged from 18 to 25 years old, while in the older group, the age range was from 45 to 60 years old. It can be seen from the education subsection that the younger Chinese participants were recruited from amongst undergraduate students, while the older

Chinese participants had different educational backgrounds (middle school, high school, undergraduate, postgraduate, and so on). However, in the older group, most of the older participants (both males and females) had an undergraduate degree (56.9% and 49.7% for males and females respectively).

Table 7.1. Demographic variability in young Chinese and older Chinese groups

|  | Young | | TOTAL | old | | TOTAL |
| --- | --- | --- | --- | --- | --- | --- |
|  | M | F |  | M | F |  |
| **N** | 132 | 268 | 400 | 144 | 189 | 333 |
| % | 33% | 67% | 100% | 43.2% | 56.8% | 100% |
| Effective% | 33% | 67% | 100% | 43.2% | 56.8% | 100% |
| **Age** |  |  |  |  |  |  |
| Mean | 21.94 | 21.37 | 21.56 | 50.74 | 51.26 | 51.04 |
| SD | 1.32 | 1.15 | 1.23 | 4.89 | 5.33 | 5.14 |
| Min | 18 | 19 | 18 | 45 | 42 | 42 |
| Max | 25 | 25 | 25 | 60 | 60 | 60 |
| **Education** |  |  |  |  |  |  |
| Middle School |  |  |  | 23(16%) | 33(17.5%) | 56(16.8%) |
| High School |  |  |  | 28(19.4%) | 49(25.9%) | 77(23.1%) |
| Undergraduate | 132(100%) | 268(100%) | 400(100%) | 82(56.9%) | 94(49.7%) | 176(52.9%) |
| Postgraduate |  |  |  | 6(4.2%) | 7(3.7%) | 13(3.9%) |
| Other |  |  |  | 5(3.5%) | 6(3.2%) | 11(3.3%) |

Note: M=male; F=female; young=young Chinese group, old=older Chinese group

### 7.2.2 Inter-correlations between variables

Table 7.2 shows the correlations between ten independent variables (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, authoritarianism) and the dependent variable (democracy); it also indicates the correlations between the ten predictors.

In the young Chinese group, empathy, perspective-taking, egalitarian sex role, interpersonal trust, and authoritarianism are statistically correlated with adherence to democracy, with correlations ranging from weak to moderate; authoritarianism (r=.10, $p$<.05), interpersonal trust (r=-.13, $p$<.01), empathy (r=.19, $p$<.001), and egalitarian sex role (r=.28, $p$<.001). Among these, egalitarian sex role has the stronger relationship with adherence to democracy. Among the four predictors, only interpersonal trust (r=-.13, $p$<.01) is negatively correlated with democracy; the other three are positively correlated with democracy. Moreover, as Table 7.2 shows, among the ten predictors, it can be seen that there are positive correlations between, empathy with flexibility, perspective-taking, egalitarian sex role, normative identity style, openness, prosocial behaviour; flexibility with perspective-taking, interpersonal trust, openness; perspective-taking with normative identity style, prosocial behaviour, authoritarianism; egalitarian sex role with suggestibility, authoritarianism; normative identity style and authoritarianism; interpersonal trust and prosocial behaviour; openness and prosocial behaviour; suggestibility and authoritarianism; prosocial behaviour and authoritarianism. Among all the positive correlations, egalitarian sex role (r=.32, $p$<.001) has the strongest relationship with empathy, followed by perspective-taking (r=.30, $p$<.001), and prosocial behaviour (r=.23, $p$<.001); also, prosocial behaviour (r=.32, $p$<.001) has a stronger relationship with perspective-taking than with flexibility (r=.23, $p$<.001). In addition, there are negative correlations between egalitarian sex role and flexibility, suggestibility and flexibility, interpersonal trust and egalitarian sex role, authoritarianism and interpersonal trust, suggestibility and openness, authoritarianism and openness. Among these negative correlations, suggestibility has a stronger relationship with openness (r=-.26, $p$<.001)

than with authoritarianism (r=-.16, $p$<.001); also, interpersonal trust (r=-.25, $p$<.001) has a comparatively strong relationship with egalitarian sex role.

In the older group, egalitarian sex role, normative identity style, interpersonal trust, openness, and suggestibility are significantly correlated with adherence to democracy; interpersonal trust (r=-.13, $p$<.01), normative identity style (r=-.15, $p$<.01), egalitarian sex role (r=.22, $p$<.001), suggestibility (r=-.22, $p$<.001), and openness (r=.23, $p$<.001). Openness and egalitarian sex role are positively associated with adherence to democracy, while openness has a stronger relationship with adherence to democracy than egalitarian sex role; suggestibility, normative identity style, and interpersonal trust are negatively correlated with adherence to democracy, with suggestibility as the strongest and most negative relationship with democracy, followed by normative identity style and interpersonal trust. Furthermore, some relationships can be found among the ten independent variables. There are positive relationships between empathy with flexibility, perspective-taking, egalitarian sex role, normative identity style, openness, prosocial behaviour and authoritarianism; between perspective-taking with egalitarian sex role, openness and authoritarianism; between egalitarian sex role with openness and authoritarianism; between normative identity style with suggestibility and authoritarianism; between suggestibility and prosocial behaviour; and finally between prosocial behavior and authoritarianism. Among all the positive correlations, perspective-taking (r=.29, $p$<.001) has the strongest relationship with empathy, followed by egalitarian sex role (r=.19, $p$<.001) and openness (r=.19, $p$<.001); the positive relationship between egalitarian sex role and authoritarianism is the second strongest (r=.27,

*p*<.001). In addition, negative relationships are also found among the ten independent variables; they are between flexibility with egalitarian sex role, suggestibility, prosocial behaviour and authoritarianism; between normative identity style with openness and prosocial behaviour; between interpersonal trust with authoritarianism, openness and suggestibility. Among all the negative relationships, the strongest correlations are between normative identity style and openness (r=-.24, *p*<.001), openness and suggestibility (r=-.24, *p*<.001); the negative relationship between flexibility and authoritarianism (r=-.19, *p*<.001) is the second strongest, followed by the comparatively less strong-negative relationship between flexibility and suggestibility (r=-.18, *p*<.001).

When comparing the young Chinese group with the older Chinese group, it can be identified that egalitarian sex role and interpersonal trust are statistically correlated with adherence to democracy in both groups. However, except for these two independent variables, empathy, perspective-taking, and authoritarianism are statistically correlated with adherence to democracy in the young Chinese group, while normative identity style, openness and suggestibility are statistically correlated with democracy in the older Chinese group.

Table 7.2 Inter-correlation (r) among variables in the younger Chinese group and older Chinese group

| | Em | Flex | PT | ESR | NIS | IT | Open | Sugg | PB | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| Demo-Y | .19*** | -.07 | .10* | .28*** | .00 | -.13** | .06 | .01 | .06 | .10* |
| Demo-O | 02 | -.05 | .08 | .22*** | -.15** | -.13** | .23*** | -.22*** | -.00 | .04 |
| Em-Y | | .10* | .30*** | .32*** | .10* | -.07 | .16** | .12** | .23*** | .01 |
| Em-O | | .10* | .29*** | .19*** | .09* | .01 | .19*** | -.01 | .16** | .13** |
| Flex-Y | | | .23*** | -.08* | -.04 | .17*** | .09* | -.10* | .07 | -.05 |
| Flex-O | | | .07 | -.13** | -.00 | .07 | .09 | -.18*** | -.11* | -.19*** |
| PT-Y | | | - | .08 | .12* | .05 | .20 | .03 | .32*** | .09* |
| PT-O | | | | .13** | -.04 | .05 | .10* | -.03 | .09 | .10* |
| ESR-Y | | | | | .06 | -.25*** | -.01 | .16** | -.01 | .14* |
| ESR -O | | | | | .04 | -.05 | .13** | -.02 | .06 | .27*** |
| NIS-Y | | | | | | -.03 | -.28 | .32 | .07 | .22*** |
| NIS-O | | | | | | .03 | -.24*** | .16** | -.02* | .13** |
| IT-Y | | | | | | | .08 | -.04 | .11* | -.12** |
| IT-O | | | | | | | .00 | .03 | .01 | -.12* |
| Open-Y | | | | | | | | -.26*** | .18*** | -.16** |
| Open-O | | | | | | | | -.24*** | .01 | -.02 |
| Sugg-Y | | | | | | | | | -.02 | .11* |
| Sugg-O | | | | | | | | | .10* | .09 |
| PB-Y | | | | | | | | | | .11* |
| PB-O | | | | | | | | | | .11* |

Note: Statistical significance: *p<.05; **p<.01; ***p<.00; Y=young Chinese group; O=old Chinese group; Demo=Democracy; Em=Empathy; Flex=Flexibility; PT=Perspective-taking; ESR=Egalitarian Sex Role; NIS=Normative Identity Style; IT=Interpersonal Trust; Open=Openness; Sugg=Suggestibility; PB=Prosocial Behaviour; Au=Authoritarianism

*7.2.3 Regression model*

To test how well the ten independent variables (empathy, flexibility, perspective-taking, openness, suggestibility, egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism) would predict the dependent variable (adherence to democratic values), and to examine which of the independent variables best predict adherence to democracy, a hierarchical multiple regression analysis was performed separately for both groups.

As can be seen in Table 7.3, all the variables are divided into two levels: Personality Level (Empathy, Flexibility, Perspective-taking, Openness, Suggestibility) and Social Level (Egalitarian Sex Role, Normative Identity Style, Interpersonal Trust, Prosocial Behaviour, Authoritarianism). Using this hierarchical multiple regression in both groups, we can not only examine the predictive value of each of the measures in the separate sample but can also compare, between personality and social level, which one would predict democracy more.

For the younger Chinese group, personality level, which included five independent variables, was entered first. The results show that these five independent variables (empathy, flexibility, perspective-taking, openness, and suggestibility) explain 5% ($R^2$=.05) of the variance in adherence to democracy. After the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) variables were entered into the analysis, the model as a whole explains 11% ($R^2$=.11) of variance in the outcome variable (adherence to democracy). In other words, social level explains an additional 6% ($R^2$ change = .06) of the variance in democracy after controlling for the personality level. Moreover,

this is a significant contribution, as indicated by $p$=.000; also, there is no possible self-correlation among these independent variables, as the DW value is 2.0. Another important finding from this table is that among these independent variables, only egalitarian sex role significantly predicts adherence to democracy ($\beta$=.22, $p$<.000).

For the older Chinese group, the same steps were taken. The results show that personality level explains 9% ($R^2$=.09) of the variance in the outcome variable (democracy). After social level was entered, the model as a whole accounts for 15% ($R^2$=.15) of variance in the outcome variable (democratic values). That is, in the older group, social level explains an additional 5% ($R^2$ change = .05) of the variance after controlling for the personality level. This finding is identical to the results for the younger group ($p$=.001). There is no self-correlation among the ten independent variables, as suggested by the DW value (1.8). Additionally, the table demonstrates that in the older group, the contribution of four variables turns out to be statistically significant, and this includes the fact that egalitarian sex role records the highest Bata value ($\beta$=.19, $p$<.01), followed by suggestibility ($\beta$=-.17, $p$<.01), openness ($\beta$=.16, $p$<.01), and interpersonal trust ($\beta$=-.12, $p$<.05).

When comparing the two groups, based on the effective statistic models in each group (p<.01, DW values are around 2.0 in both groups), personality level (empathy, flexibility, perspective-taking, openness, suggestibility) in the older group appeared to predict more variance in adherence to democracy than in the younger group (9% in the older group and 5% in the younger group). After entering the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism) as the second step, the whole model explains 15% of the

variance in adherence to democracy in the older group, while it is 11% for the younger group, which shows that social level explains more variance in the outcome variable in the younger group. That is, it better predicts adherence to democracy than personality level in the older group. Furthermore, in both groups, egalitarian sex role is an important characteristic: it plays the most important role in predicting adherence to democracy in both groups. However, it is the only predictor for adherence to democracy in the younger Chinese group. Apart from this, suggestibility, openness, and interpersonal trust also prove to be predictors of adherence to democracy in the older group.

Table 7.3 Hierarchical multiple regression

| | | Younger | | | | Older | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $R^2$ | $R^2$ change | Sig F change | $\beta$ | $R^2$ | $R^2$ change | Sig F change | $\beta$ |
| **Step 1** | **Personality Level** | .05 | | .001 | | .09 | | .000 | |
| | Empathy | | | | .18 | | | | -.03 |
| | Flexibility | | | | -.11 | | | | -.10 |
| | Perspective-taking | | | | .06 | | | | .07 |
| | Openness | | | | .03 | | | | .20$^{**}$ |
| | Suggestibility | | | | -.02 | | | | -.19** |
| **Step 2** | **Social Level** | .11 | .06 | .000 | | .15 | .05 | .001 | |
| | Egalitarian Sex Role | | | | .22$^{***}$ | | | | .19** |
| | Normative Identity | | | | -.02 | | | | -.08 |
| | Interpersonal Trust | | | | -.05 | | | | -.12* |
| | Prosocial Behaviour | | | | .02 | | | | -.00 |
| | Authoritarianism | | | | .06 | | | | -.00 |

Note. Statistical significance: *$p$<.05; ** $p$<.01; ***$p$<.001; DW=2.0 in young group, DW=1.8 in old group

### 7.2.4 Differences in the variables across groups (generation) and genders

In order to test if there are differences between the younger Chinese group and the older Chinese group, and between males and females for all the variables (including

10 independent variables and one dependent variable), a 2 (Group: younger, older) ×2 (Gender: men, women) was performed using SPSS 21. Table 7.4 shows that there are main group effects for eight variables (except flexibility, perspective-taking and suggestibility). That is to say, there is a difference between the younger Chinese and older groups in empathy, egalitarian sex role, normative identity style, interpersonal trust, openness, prosocial behavior, authoritarianism, and democracy. In more detail, the young group scored higher than the older Chinese group on empathy [F(1,729)=9.21, p<.01], egalitarian sex role [F(1,729)=5.35, p<.05], openness [F(1,729)=19.42, p<.001], and democracy [F(1,729)=59.24, p<.001]. However, the older Chinese group scored higher than the younger Chinese group on normative identity style [F(1,729)=37.30, p<.001], interpersonal trust [F(1,729)=40.22, p<.001], prosocial behaviour [F(1,729)=20.20, p<.001], and authoritarianism [F(1,729)=10.88, p<.01]. Moreover, there is a main effect for gender, which means there are difference between males and females for egalitarian sex role (P<.001), suggestibility (P<.01), prosocial behaviour (P<.05), authoritarianism (P<.05), and democracy (P<.05). Specifically, males scored higher only on prosocial behaviour [F(1,729)=4.42, p<.05]; while, females scored higher on egalitarian sex role [F(1,729)=96.21, p<.001], suggestibility [F(1,729)=10.17, p<.01], authoritarianism [F(1,729)=4.20, p<.05], and democracy [F(1,729)=4.10, p<.05]. In addition, the last column shows that there are interactions between groups and genders on egalitarian (p<.001) sex role and democracy (p<.01) separately.

Table 7.4 Two-way ANOVA (age ×gender)

| | Y Group | O Group | Male | Female | p-value Group | Gender | p-value Group*Gender |
|---|---|---|---|---|---|---|---|
| Empathy | 28.01(4.12) | 26.88(4.62) | 27.12(4.69) | 27.72(4.19) | .002 | NS | NS |
| Flexibility | 23.36(3.52) | 23.69(2.98) | 23.68(3.17) | 23.41(3.36) | NS | NS | NS |
| Perspective-taking | 14.64(4.26) | 15.20(4.61) | 14.78(4.77) | 14.96(4.22) | NS | NS | NS |
| Egalitarian | 38.76(4.70) | 37.42(4.24) | 36.09(4.12) | 39.40(4.33) | .021 | .000 | .000 |
| Normative | 20.39(4.47) | 22.62(4.87) | 21.49(4.94) | 21.35(4.69) | .000 | NS | NS |
| Interpersonal Trust | 18.09(2.52) | 19.27(2.13) | 18.66(2.56) | 18.60(2.34) | .000 | NS | NS |
| Openness | 37.07(4.53) | 35.68(4.04) | 36.66(4.33) | 36.31(4.39) | .000 | NS | NS |
| Suggestibility | 23.68(3.89) | 24.02(3.70) | 23.28(3.94) | 24.17 (3.69) | NS | .001 | NS |
| Prosocial Behaviour | 28.73(5.27) | 30.89(5.91) | 30.43(5.79) | 29.28(5.55) | .000 | .036 | NS |
| Authoritarianism | 24.14(2.48) | 24.71(2.13) | 24.21(2.34) | 24.51(2.33) | .001 | .041 | NS |
| Democracy | 26.17(2.88) | 24.42(2.42) | 24.99(2.87) | 25.61(2.76) | .000 | .043 | .005 |
| N | 400 | 333 | 276 | 457 | | | |

Note: NS=Not Significant; Y=younger Chinese Group; O=older Chinese Group

### *7.2.5 Simple effect test for egalitarian sex role and democracy (MANOVA): a post hoc test*

According to the results from Table 7.4, there are interaction effects for egalitarian sex role and democracy, which means interaction effects represent the combined effects of factors (group and gender) on the dependent variables (egalitarian sex role and democracy). A simple effect test was performed to test if the impact of one factor depends on the levels of the other factor. For example, in this study, difference with regard to the levels of factor A (group) were tested at B1 (male) and B2 (female); then, factor B (gender) was tested at the level of A1 (younger) and A2 (older) respectively.

As seen in the egalitarian sex role subsection in Table 7.5 and Figure 7.1, in the older Chinese group, females (M=38.30, SD=4.25) scored significantly higher than males (M=36.28, SD=3.95); in the younger Chinese group, similarly females

(M=40.18, SD=4.22) scored higher than males (M=35.89, SD=4.31). Furthermore, there is no statistically significant interaction between older Chinese males and younger Chinese males; however, there is a statistically significant difference between older Chinese females and younger Chinese females showing that younger females (M=40.18, SD=4.22) scored higher than older females (M=38.30, SD=4.25) in this group.

According to the democracy subsection in Table 7.5 and Figure 7.2, these are no statistically significant interactions between older Chinese males and older Chinese females in terms of adherence to democracy. However, in the younger Chinese group, females (M=26.49, SD=2.76) scored higher than males (M=25.51, SD=3.02). Moreover, based on the statistically significant interactions between older Chinese males and younger Chinese males, older Chinese females and younger Chinese females, the results reveal that younger males (M=25.51, SD=3.02) scored higher than older males (M=24.51, SD=2.65); similarly, younger females (M=26.49, SD=2.76) scored higher than older females (M=24.35, SD=2.23).

Table 7.5 Group×gender interactions for egalitarian sex role and democracy

|  |  | Male *vs* Female |  | Older *vs* Younger |
|---|---|---|---|---|
| **Egalitarianism** | Old | *P*=.000<br>36.28(3.95) *vs* 38.30 (4.25) | Male | NS |
|  | Young | *P*=.000<br>35.89(4.31) *vs* 40.18(4.22) | Female | *P*=.000<br>38.30(4.25) *vs* 40.18(4.22) |
| **Democracy** | Old | NS | Male | *P*=.002<br>24.51(2.65) vs 25.51(3.02) |
|  | Young | *P*=.001<br>25.51(3.02) vs 26.49(2.76) | Female | *P*=.000<br>24.35(2.23) vs 26.49(2.76) |

Note: NS=Not Significant; Y=young Chinese Group; O=old Chinese Group

Figure 7.1 Simple effect for egalitarian sex role
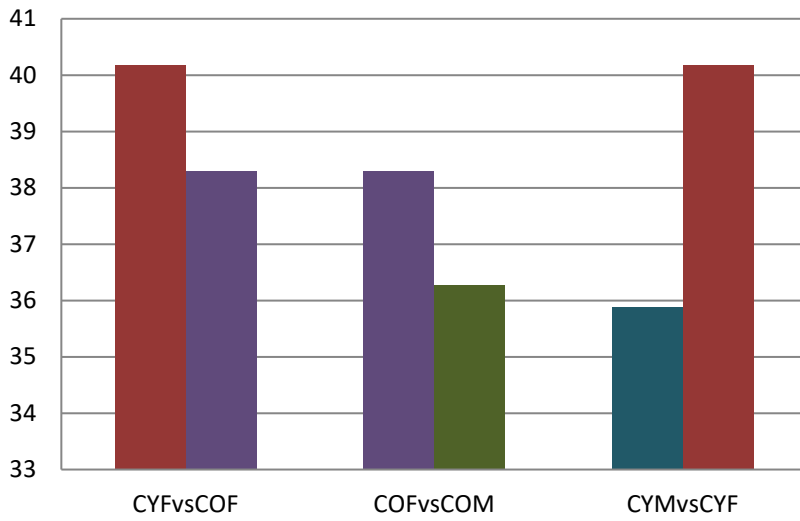
Note: CYF=Chinese young females, COF=Chinese old females, COM=Chinese old males, CYM=Chinese young males



Figure 7.2 Simple effect for democracy
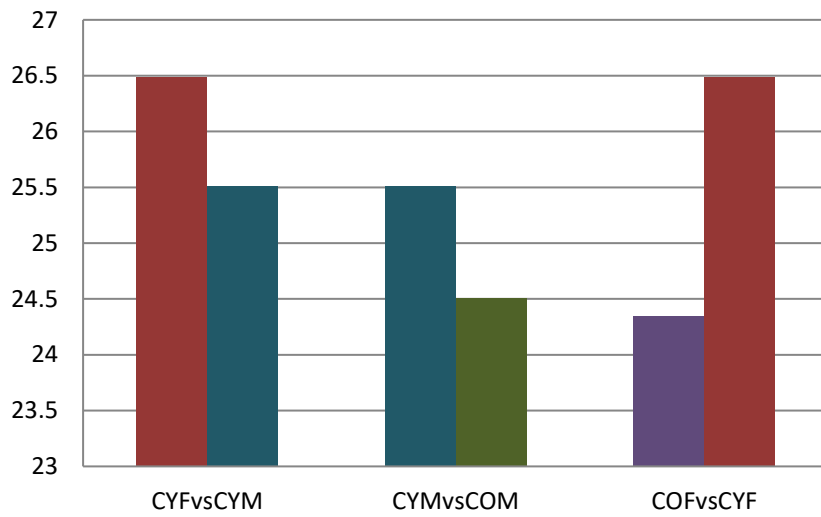
Note: CYF=Chinese young females, CYM=Chinese young males, COM=Chinese old males, COF=Chinese old females

## 7.3 Discussion

This trans-generational study aimed to explore how psychological characteristics (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, authoritarianism) influence young Chinese and older generations' political tendencies (adherence to democracy) separately, and whether there are gender and group differences for all the variables.

The results show that egalitarian sex role was the best predictor for adherence to democracy for both younger and older generations. Notably, it was the only and best predictor for democracy in the younger group, while in the older group, it was followed by suggestibility, openness, and interpersonal trust.

There are gender and group differences for egalitarian sex role and democracy: the younger Chinese generation holds a more egalitarian attitude towards sex role than their older counterparts. Also, the female Chinese participants (in both groups) have stronger egalitarian sex role attitudes than their male counterparts. Moreover, there are interactions between groups and gender for both egalitarian sex role and democracy; that is, younger Chinese females show the strongest support for egalitarianism, followed by older Chinese females, but there is no statistically significant difference between older Chinese males and younger Chinese males. The younger Chinese generation might be a better supporter of democracy than the older Chinese generation; and Chinese females hold more democratic values than their male counterparts.

Except for the two important variables of egalitarian sex role and democracy, the results also reveal group and gender differences for other personality traits: the younger Chinese generation is higher in empathy and openness; while the older Chinese generation is higher in normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism. Moreover, Chinese females tend to have higher suggestibility and authoritarianism; while Chinese males score higher on prosocial behaviour.

These gaps between the older and younger Chinese generations might be generated by their different surroundings growing up. Both younger and older generations were brought up within the same cultural context. However, from 1955 to 2000, China underwent a massive transformation including immense progress in the economy, law, and socio-political policies (Aolan, 2015). In the present study, trans-generational effect was explored based on the assumption that younger (18-25 years old; we may call them the millennium generation) and older (45-60 years old) generations have been affected by different social, economic, and technological developments. Chinese reform and the opening-up in 1978, which aimed to enhance the Chinese economy, not only brought about economic reform, but also led to Chinese political-social transformation, as the Chinese economy is positively and inherently linked to politics (Ma, 2002). The older generation grew up in the period when China changed from an agricultural civilisation to an industrial civilisation, which may mean they had different life experiences, which, in turn, have impacted on their political attitudes. However, the younger generation may have had a better education, more chances to learn advanced technology and may get more information from the outside world to keep them up-to-date with the modern age.

All of the factors mentioned above can be regarded as factors which inform our understanding of the gap between the younger and older generations.

The present study's findings are similar to the previous study (study 1) implying that egalitarian sex role is an essential characteristic for democracy in both the young Chinese and European groups. From these two studies, one can draw the conclusion that women globally show a tendency towards an equal role in society. That is, women are fighting for their family, social, and political status all over the world (Lopez-Claros & Zahidi, 2005). Based on a country's cultural and historical background, however, women in Western countries are treated more equally than women in Asian and some developing countries (Karl, 1995). This thesis, in Chapter 2 (egalitarian sex role section), has emphasised that women's labour market participation is positively related to their social work and political participation and as mentioned in Chapter 1, the aim of democracy is not only to pursue equal rights for women, but also the 'disadvantaged population' including women. Recent Chinese research (Xun & Qi, 2016) on the relationship between family and work, and satisfaction with work suggested that compared with Chinese men, Chinese women prefer to pay more attention to their families, although they prioritise their job, which in turn can result in more life stress and less work satisfaction. This may offer a useful hint to conclude that participating in the work market and production has enhanced Chinese women's domestic and public status. In fact, pursuing equal public status could be positively related to being eager to be equally treated in social, economic and political affairs. Moreover, in contemporary China, women's equal public and domestic roles are promoted through legislation that attempts to promote

equality, introduce women into social work, suggest a new ideology of equality, and lead women to enhance their economic, social, and political interests (Stacey & Croll, 1984). This may have a positive impact on the young Chinese generation's attitude towards egalitarian sex role and political status. The Chinese government has carried out some policies in line with gender equality, which enhance the prospects of more Chinese women having jobs outside the home. Chinese women's strong sense of egalitarian sex role found in the present study and its association with adherence to democracy in both younger and older groups is, therefore, explicable.

Moreover, it has also been found that suggestibility, openness, and interpersonal trust were correlated to adherence to democracy in the older group. Openness had a positive impact on adherence to democracy and the two other characteristics were negatively related to adherence to democracy. Sullivan and Transue (1999) suggested that openness to experience indicates tolerance of dissimilar ideas and acceptance of different views, which is indeed in agreement with the goal of democracy. Recent research has also shown that openness was positively related to the willingness to extend political rights to disliked groups (Oskarsson and Widmalm, 2016), which provides support for liberalism (Gerber, Huber, Doherty, Dowling, & Ha, 2010) and contradicts right-wing political ideology (van Hiel, Kossowska, & Mervielde, 2000). Regarding how suggestibility impacts on adherence to democracy, some earlier studies have illustrated that suggestibility might predict positive authoritarianism, and thus predict negative adherence to democracy. For example, suggestibility is shown to be positively associated with conformity as a personality characteristic (Wegrocki, 1934). People high in conformity may behave in harmony

with out-groups and show more rigidity and narrow-mindedness (which goes with an authoritarian mind-set) in their behaviour and thinking styles (Vaughan & White, 1966). These studies demonstrate that high suggestibility can be an indirect factor that has a negative effect on adherence to democracy. Bearing this in mind, one can assume that people with a high level of suggestibility, less creative thinking and critical thinking, and high in conformity are more likely to adhere to authoritarianism than democracy.

In addition, we found that in the older group, interpersonal trust was another negative predictor of democracy, which is not in line with the results of previous studies that showed that interpersonal trust was a prerequisite factor for effective democracy (Warrent, 1999; Kavinia & Kinman, 2017). It is assumed that high levels of interpersonal trust can give rise to people's readiness and willingness to participate in political activities. This peculiar finding in the present study might be related to the transformation period through which the older Chinese generation lived. Undeniably, previous strong Chinese authoritarian politics had a profound impact on the older Chinese generation's political attitude. They were raised in a certain collective social and political context in which the Chinese economy and education underwent rapid development, which might influence their interpersonal trust (Zhong, 2014). For the older Chinese generation, the link between their interpersonal trust and support for democracy can be mainly analysed by the elementof their trust, and their ambivalent political feelings. On the one hand, trust is influenced by cultural values coming from political institutions instead of personal political interest, which remains rather stable over time (Zhong, 2014); that is to say,

people who trust the government are not necessarily interested in politics. On the other hand, people's political feelings mostly refer to their satisfaction with the government (Grönlund & Ferrera, 2007), and life satisfaction is a result of democracy (Sullivan & Transue, 1999). This is because political trust is built on the fulfilment of citizens' expectations, whereas citizens' satisfaction can measure people's attitudes towards political performance (Grönlund & Ferrera, 2007). Based on this analysis, the older Chinese generation's improved lives have made them satisfied with the Chinese government and lead them to place more trust in their government, as they have benefited from the new policies. However, the older Chinese generation was deeply influenced by authoritarian political institutions, which might build a barrier to acceptance of democratic values. In this sense, the older Chinese generation's high interpersonal trust might denote their support for democracy to some extent.

The results show that Chinese females have a higher sense of egalitarian sex role than their male counterparts, and the fact that young Chinese females hold the strongest attitudes towards egalitarianism is indeed linked to Chinese women receiving more attention after 1949. As related policies were put in place to achieve the goal of gender equality (Stacey & Croll, 1984), working women tend to pursue more economic and ideological independence by participating in social events and tend to have more life achievements (Morgan, 2013). In this study, a larger proportion of older female participants had work experience, and about 56.7% of them had an educational level above undergraduate. Young Chinese women participants were recruited from universities, so they had a better education and

have been exposed to more up-to-date information on outside world. This might allow them to enjoy a strong belief in egalitarian gender roles (Shu, 2004). Shu (2004) stressed the important function of education in forming egalitarian gender attitudes. It is suggested that more highly educated individuals tend to hold more egalitarian sex role attitudes; females can more easily have egalitarian gender attitudes than males.

Similarly, the younger Chinese generation seems to support democracy more fully than the older Chinese generation, and young Chinese females hold the most democratic values for democracy. This result is quite similar to that for egalitarian sex role, which means young Chinese females tend to support both egalitarian sex role and democratic values in this study. This similarity between the two characteristics implies that egalitarian sex role and adherence to democracy have common ground in enhancing women's roles (domestic, social and political status). According to Beer (2009), egalitarian sex role is an indirect resource for democracy. Women who were engaged more in domestic work in the past, have strived to gain more political power in the past few decades by chasing equal rights with men. This enables them to shift their main focus towards work place participation in political activities (Beer, 2009). A women's movement for equal rights, as well as social and political roles, empower the female population, which in turn reinforces the foundation of a democratic system in society.

Furthermore, a higher education level can predict democracy (Onsman & Cameron, 2014). Creative and critical thinking are encouraged through the modern education establishment; they are two important factors for democracy as discussed earlier.

The younger generation is more familiar critical thinking in contemporary universities than their older counterparts (Benesch, 1993). In recent decades (from 1989), compared with previous policies, China has seen a pre-democracy era with more modern educational styles and procedures incorporated into the Chinese educational system (Onsman & Cameron, 2014). Education, in general, prepares the ground for democracy (Edelsky, 1994) allowing power to be more in the people's hand (Bobba & Coviello, 2007). Also, as mentioned earlier, enhanced education has caused the younger Chinese generation to hold a more egalitarian attitude towards sex role; both young Chinese women and older Chinese women lend more support to egalitarian sex role and gender-equal policies. Young Chinese females are supportive of egalitarian sex role, due to gender-equal policies in society, and better family and educational status.

Notably, according to the interaction between group and gender on adherence to democracy, it is suggested that apart from young Chinese females, young Chinese males are the second strongest supporters of democracy compared with older Chinese females. This might be because the updated Chinese education system that includes democratic thinking has had a profound impact on the new Chinese generation (Rong & Shi, 2001). Therefore, these have embedded democratic values in the younger Chinese generation and signal an essential change from a non-democratic to a democratic trend in the modern Chinese society.

The result showing that the level of empathy is higher in the young Chinese population is in accordance with the findings of previous studies (Bailey, Henry, & Von Hippel, 2008; Gruhn et al., 2008; O'Brien, Konrath, Gruhn, & Hagen, 2012;

Khanjani et al., 2015). There might be multiple reasons for this. For example, older people have more social problems that result from their demoted social activities and are deficient in understanding others' feelings and needs (Bailey, Henry, & Von Hippel, 2008), due to the sense of loneliness and social isolation after retiring and having a narrowed social network (Khanjani et al., 2015). Also, lower social satisfaction and higher social losses due to poor health (Khanjani et al., 2015) may be a factor. In fact, this can be accounted for by the change of empathy across life span as an inverse-U-shaped-function, with the highest level of empathy emerging during the adult period (O'Brien, Konrath, Gruhn, & Hagen, 2012).

In this study, the younger Chinese generation's higher openness, lower normative identity style, and lower authoritarianism can be discussed by the same token, as there are interactions among these three characteristics. Openness to experience includes several traits such as having broad interests, being liberal and liking novelty (Heinström, 2003). Obviously, these traits are associated with high levels of creative ability (George & Zhou, 2001). The younger Chinese generation can be involved in a new educational system, one aim of which is cultivating creative and critical ability (Onsman & Cameron, 2014). Evidently, the updated Chinese educational system could potentially enhance openness in the young Chinese population. Another important factor might be the information era, which includes wide use of the media and internet (Yun & Chang, 2010). The information revolution (or explosion) not only brings people benefits but also brings about some changes for new generations. People can get new knowledge and more information quickly and effectively, which significantly widens their horizons. The information era has a higher profound impact on the new generation than the older. Since the young population has been brought

up in the 'digital age', they are better prepared for complying with new things and changes; also, the degree of the young generation's interest in new technology is higher than the older generation's (Yun & Chang, 2010).

Moreover, there is a negative link between openness and normative identity style. Openness to experience is related to information-seeking during the process of solving a problem (Berzonsky & Sullivan, 1992). In the normative identity style section (Chapter 2), this thesis has discussed how there are three social cognitive identity styles: informational oriented style, normative identity style, and a diffuse/avoidant style (Berzonsky, Cieciuch, Duriez, & Soenens, 2011). Individuals with informational oriented style try to find different ways to solve a problem, which indeed is in line with the openness characteristic (Berzonsky & Sullivan, 1992). Openness to experience is related to making a great deal of effort to gain information seeking, secondary information acquisition, critical information judgement, and interests in documents which can provoke new ideas instead of documents which confirm previous ideas (Heinström, 2003). It is difficult for individuals with a normative identity style to be open to original values and actions and they protect themselves from dissonant experiences and information (Berzonsky & Sullivan, 1992). Bearing this in mind, normative identity style is negatively related to openness to experience, such as openness to values, actions, and fantasy, as normative-oriented style is defined as being rigid and close to internalised norms and rules. In other words, a person with normative identity style would be inclined to stick to domain-specific rules rather than searching for alternative modes of operating; this helps them to protect themselves from changing domain norms and

an internalised concept arising from critical self-judgement (Berzonsky & Sullivan, 1992). This offers an explanation for higher openness and less normative identity style in the younger Chinese generation compared with their older counterparts. Moreover, this result is consistent with the results from past research demonstrating that middle-aged and older adults are more likely than younger adults to make inferences according to diagnostic norms of behaviour (Hess, Osowski, & Leclerc, 2005).

There was a study (Duriez & Soenens, 2006) aimed at testing the relationship between the big five personality factors, three identity styles, right-wing authoritarianism and social dominance orientation. The researchers recruited 328 Flemish-speaking Belgian participants whose ages ranged from 18 to 24 (similar to our young participants). The results showed that openness to experience could negatively impact on both normative identity style and RWA; also, both openness to experience and normative identity style could impact on RWA – the former had a negative link, whereas, the later had a positive and strong link. From their study, it can be noted that RWA relates to lack of openness to experience and to high normative identity style. According to Van Hiel, Pandelaere, & Duriez (2004), social conformity and cognitive conservatism are two resources of RWA, which implies that the requirements for cognitive simplification and conservative values are vital factors for RWA. However, normative identity can meet the needs of RWA, as an individual with a greater tendency to normative-orientations conforms to and relies on the previous values and expectations of important others (family members, significant person or group); thus, accepting new information might be seen as a threat to their

hard-core beliefs. To explain this, identity development is related to two dimensions, namely, exploration and commitment. The former refers to the degree of willingness which people have to become involved in a search for values, beliefs and goals relating to social roles, plans and ideologies. The latter refers to the degree of adherence to a set of values, goals and convictions (van Hoof, 1999). Normative identity style brings about low exploration and high commitment, while an information-oriented style leads to high exploration, though it can be paired with high or low commitment (van Hoof, 1999). Based on this, normative identity style mostly endorses authoritarian values but openness mostly weakens it.

It was found that the older Chinese generation was higher in interpersonal trust than their younger counterparts, which is consistent with other studies. Interpersonal trust indeed is associated with social and political activities (Van Lange, 2015). A younger or less educated population with a low income rarely engages in any social and political activities (Shah, 1998; Webb, Hine, & Bailey, 2016). That might be due to the fact that young, less educated people are more concerned about their financial problems and consequently dissatisfaction with their current life, which in turn leads them to place less trust in others; in other words, they show less passion for engaging in any social activities (Shah, 1998). As people's subjective financial well-being increases, they tend to get more satisfaction from their life, sequentially; it is easier for those people to establish and maintain cooperation with individuals and groups, which enhances their life satisfaction, prosocial behaviour, and life quality (Van Lange, 2015). Similarly, among older people, higher economic support and higher intelligence are positively associated with larger investment in

interpersonal trust (Webb, Hine, & Bailey, 2016). Thus, it can be concluded that the gap between the older and younger generations in interpersonal trust stems from a stable and improved economic status, which encourages people to feel more comfortable in building up positive social relationships and participating in more prosocial and political activities. In fact, this is a positive circle based on financial well-being.

The findings in the present study, which outlines how prosocial behaviour increases with age, is analogous to the findings of other related studies. According to Matsumoto, Yamagishi, Li, & Kiyonari (2016), the prosocial behaviour of older people increases the satisfaction in mutual-beneficial behaviour and leads to a decline in the belief that manipulating others is a wise way to be successful in life. Wenner & Randall (2016) stated that community cohesion is an important factor in generating prosocial behaviour in the older population. This is in line with previous statements that older people need to encourage mutually beneficial behaviour to succeed through different life stages (Erikson, 1982). This might be because older people have more health and mobility problems that may impede them from being generative; however, grittiness provides them with a chance to overcome the difficulties in spite of the challenges or obstacles (Duckworth, Peterson, Matthews, & Kelly, 2007). Compared with younger people, older people look for community cohesion (Okun & Michel, 2006), which might be related to an interpretation that, instead of immediate benefits, older people focus more on long-term gains generated and maintained by mutually beneficial behaviour. Moreover, older people

are facing more complexsituations in their social lives than younger people whose life prospects are simpler (Matsumoto, Yamagishi, Li, & Kiyonari, 2016).

It should be mentioned that in this study, it has been proved that the younger Chinese generation has more empathy than the older Chinese generation. As discussed in the Empathy Section (in Chapter 2), empathy can give rise to prosocial behaviour (Uzefovsky et al., 2014; Bailey, Henry & Von Hippel, 2008). That is to say, there should be a positive correlation between empathy and prosocial behaviour. It seems that this is inconsistent with the present results. In fact, prosocial behaviour can additionally be impacted upon by social moral rules; specifically, people who tend to give more help to others follow more social moral rules coming from their internalised standard-social norms (Eisenberg, Zhou, & Koller, 2001). Notably, older Chinese people appeared to behave in accordance with normative identity style which involves internalised standard-social norms. In other words, the older Chinese generation feels a strong moral responsibility and motivation to behave prosocially. Based on this, though the older Chinese generation scored less on empathy, they can still have a strong motivation stemming from their moral rules to behave prosocially.

Apart from gender differences for egalitarian sex role and adherence to democracy, this study also found gender differences for suggestibility, prosocial behaviour, and authoritarianism; Chinese women had higher levels of suggestibility and authoritarianism, while Chinese men showed more prosocial behaviour. Firstly, the finding showing that Chinese men are involved in more prosocial behaviour is not in line with the suggestion that women tend to act more prosocially probably due to

their higher perspective-taking and empathy (Eisenberg, Zhou, & Koller, 2001).

However, there is another study (Eagly, 2009) which emphasises that there is not

much difference in the frequency of prosocial behaviour between men and women;

instead, the difference is in the resources of giving help to others. In other words,

women's prosocial behaviour is relational, while men's prosocial behaviour is more

collectively oriented which makes it stronger and more intensive. This might be

related to social structure, labour division, social expectations, and individual

dispositions (Eagly, 2009). According to this, an interpretation of Chinese men's high

prosocial behaviour might be attributed to China's cultural background; that is,

Chinese men's prosocial behaviours are strongly shaped by Chinese collective culture.

Furthermore, the result shows that Chinese women have a higher level of

authoritarianism than Chinese men. This is not in line with one previous study that

suggests females are generally described as liberals, since they are less likely to hold

negative attitudes and prejudice towards out-groups (Kemmelmeier, 2010). It is also

in disagreement with another finding in the present study that demonstrates that

Chinese women were better supporters of democracy than Chinese men, which

might be due to their higher ratio of participation in the job market and production,

and higher educational levels, all of which factors which were positively related to

their positive attitudes to egalitarian sex role and democracy. However, this

contradiction needs to be explained bearing in mind China's specific cultural

background and its rapid development over the past few decades. Undeniably,

Chinese women's enhanced domestic and social status has actually consolidated

their democratic values. Nevertheless, the profound influence brought about through

thousands of years of conservative culture may still make them conform with cultural norms and have submissive minds, especially the older Chinese women (Stacey, 1985; Croll, 1995). In other words, this is an unfinished liberal campaign for Chinese women, with contemporary consequences that result in having a strong sense of democracy, although the internalised conservative imperatives are difficult to reinterpret. Regarding Chinese females' high suggestibility, it may result from their high level of conformity. It has been proved that higher scores for suggestibility predict high levels of conformity (Wegrocki, 1934; Hirabe & Monzen, 1998). Also, high suggestibility actually lays a foundation for a tendency towards authoritarianism.

### 7.3.1 Conclusion

In conclusion, the main aim of this study was to explore how psychological traits act differently to influence political attitude between a younger Chinese generation and older Chinese generation, and whether there are gender and age differences in the variables. Though the two generations live with the same cultural background, the economic, educational and technological change brought about by contemporary Chinese policy has created a gap between the two generations. Egalitarian sex role is the best predictor for democracy in both generations. Compared with the older Chinese generation, the younger Chinese generation's stronger support for democracy may be explained by their higher empathy, egalitarian sex role and openness to experience, the latter two of which are benefited by the reformed Chinese education system. The older Chinese generation's high interpersonal trust and less democratic values seem contradictory in terms of the results of previous

studies. This is indeed in accordance with the traditional Chinese collective cultural background, which would support trust for others. This is similar to another result in this study showing that although Chinese females showed stronger support for egalitarian sex role and democracy, they reported higher levels of suggestibility and authoritarianism. Furthermore, certain Chinese cultural aspects can also explain this finding. Though better education and benefits from gender equality policies have placed Chinese women in a transient time phase (from non-democratic to democratic values), they are still strongly influenced by Chinese conservatism, which may pose a threat to real democracy.

# Chapter 8 Study 3: A Cross-cultural Study between Chinese Youth and White British Youth

## 8.1 Participants and procedure

In this cross-cultural study, participants between 18 years and 25 years were recruited. Unlike the European participants in Study 1, local White British young volunteers were included in the study. In other words, all the participants were offspring of local White British people who were born in the United Kingdom (England, Scotland, Wales, and Northern Ireland), and were brought up in the UK. In keeping with the aim of this study, Study 3 compared the characteristics of two populations from two countries (China and the United Kingdom) with different cultural backgrounds. This allowed us to examine whether or not the longer the participants are exposed to and grow up in a certain culture, the more their characteristics are impacted upon by that culture's norms and imperatives.

Young Chinese participants (n=400) were taken from the previous trans-generational study which was mentioned in the last chapter (Chapter 7). Local White British participants were recruited at the University of Bedfordshire, Newcastle University, and Norwich University (n=158). For the participants recruited at the University of Bedfordshire, the same procedure for recruiting European participants in Study 1 (Chapter 6) was followed. They participated in this study within a reasonable time before a class started or in the library. Teachers and librarians granted the necessary permission. Participants were given an oral explanation of the study, including the aim, information on participants' obligations and rights, the need

to screen and include relevant participants (local White British), and some questions were asked regarding students' parents, age, and where they grew up. Finally, 158 local White British successfully took part in this survey and filled in the questionnaires. The same procedure as for Studies 1 and 2 was followed for data collection.

## 8.2 Results

### 8.2.1 Descriptive findings

Table 8.1 shows the demographic details of the young Chinese participants and the young White British participants. In both groups, there were more female participants than male participants (67% and 62.7% in the Chinese and British groups respectively). It also shows that the mean age in both groups was comparable (21.56 and 20.56 in the Chinese and British group respectively). The participants' ages were in the range from 18yrs to 25 yrs. In terms of education, all the Chinese participants were recruited from amongst the undergraduate student population, while 94.3% of British participants were undergraduates, the rest of them were postgraduates (5.7%).

Table 8.1 Demographic variability in Chinese (CH) and United Kingdom (UK) groups

|  | CH | | TOTAL | UK | | TOTAL |
|---|---|---|---|---|---|---|
|  | M | F |  | M | F |  |
| **N** | 132 | 268 | 400 | 59 | 99 | 158 |
| % | 33% | 67% | 100% | 37.3% | 62.7% | 100% |
| Effective% | 33% | 67% | 100% | 37.3% | 62.7% | 100% |
| **Age** | | | | | | |
| Mean | 21.94 | 21.37 | 21.56 | 21.02 | 20.29 | 20.56 |
| SD | 1.32 | 1.15 | 1.23 | 1.62 | 1.84 | 1.79 |
| Min | 18 | 19 | 18 | 18 | 18 | 18 |
| Max | 25 | 25 | 25 | 25 | 25 | 25 |
| **Education** | | | | | | |
| Undergraduate | 132(100%) | 268(100%) | 400(100%) | 53(89.8%) | 96(97.0%) | 149(94.3%) |
| Postgraduate | | | | 6(10.2%) | 3(3.0%) | 9(5.7%) |

### 8.2.2 Inter-correlations between variables

Table 8.2 shows the correlations between ten independent variables (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, authoritarianism) and the dependent variable (adherence to democracy); also, it indicates the correlations between the ten predictors.

In the Chinese group, empathy, perspective-taking, egalitarian sex role, interpersonal trust, and authoritarianism are statistically correlated with adherence to democracy. The correlations range from weak to moderate: authoritarianism (r=.10, $p<.05$), interpersonal trust (r=-.13, $p<.01$), empathy (r=.19, $p<.001$), egalitarian sex role (r=.28, $p<.001$). As is shown in Table 8.2, egalitarian sex role is found to be the strongest link with adherence to democracy then empathy, interpersonal trust, and authoritarianism. Also, among the four variables, only interpersonal trust (r=-.13, $p<.01$) is negatively correlated with adherence to democracy; the other three are inversely correlated with adherence to democracy. Moreover, among the ten variables, there are positive correlations: empathy with flexibility, perspective-taking, egalitarian sex role, normative identity style, openness and prosocial behaviour; flexibility with perspective-taking, interpersonal trust and openness; perspective-taking with normative identity style, prosocial behaviour and authoritarianism; egalitarian sex role with suggestibility and authoritarianism; normative identity style with authoritarianism; interpersonal trust with prosocial

behaviour; openness with prosocial behaviour; suggestibility with authoritarianism; and prosocial behaviour with authoritarianism. Among all the positive correlations, egalitarian sex role (r=.32, $p$<.001) has the strongest relationship with empathy, followed by perspective-taking (r=.30, $p$<.001), and prosocial behaviour (r=.23, $p$<.001); also, prosocial behaviour (r=.32, $p$<.001) has a stronger relationship with adherence to perspective-taking than flexibility (r=.23, $p$<.001). In addition, there are negative correlations: egalitarian sex role with flexibility; suggestibility with flexibility; interpersonal trust with egalitarian sex role; authoritarianism with interpersonal trust; suggestibility with openness; authoritarianism with openness. Among these negative correlations, suggestibility has a stronger relationship with openness (r=-.26, $p$<.001) than authoritarianism (r=-.16, $p$<.001); also, interpersonal trust (r=-.25, $p$<.001) has a comparably strong relationship with egalitarian sex role.

In the British group, empathy, perspective-taking, egalitarian sex role, normative identity style, openness, and prosocial behavior are significantly correlated with adherence to democracy. The correlations are weak to moderate openness (r=.51, $p$<.001), authoritarianism (r=-.42, $p$<.001), empathy (r=.33, $p$<.001), perspective-taking (r=.31, $p$<.001), normative identity style (r=-.27, $p$<.001), egalitarian sex role (r=.22, $p$<.01) and prosocial behavior (r=.21, $p$<.05). In other words, openness has the strongest relationship with adherence to democracy, followed by authoritarianism, empathy, perspective-taking, normative identity style, egalitarian sex role, and prosocial behavior; also, among the correlations with democracy, only authoritarianism and normative identity style are negative. Furthermore, apart from

the statistical correlations between independent variables and dependent variables, there are other correlations between the ten independent variables. As seen in Table 8.2, there are positive correlations for: flexibility and empathy; perspective-taking and empathy; egalitarian sex role and empathy; openness and empathy; prosocial behavior and empathy; perspective-taking and flexibility; interpersonal trust and flexibility; egalitarian sex role and perspective-taking; openness and perspective-taking; prosocial behavior and perspective-taking; openness and egalitarian sex role; suggestibility and normative identity style; prosocial behavior and normative identity style; authoritarianism and normative identity style; and finally prosocial beahviour and openness. Among these positive correlations, the strongest correlation is between empathy and perspective-taking (r=.43, $p$<.001), followed by authoritarianism and normative identity style (r=.40, $p$<.001), and openness and perspective-taking (r=.38, $p$<.001). In addition, there are negative correlations between normative identity style and perspective-taking; interpersonal trust and egalitarian sex role; authoritarianism and egalitarian sex role; openness and normative identity style; openness and interpersonal trust; suggestibility and openness; and authoritarianism and openness. Among these negative correlations, authoritarianism (r=-.40, $p$<.001) has the strongest relationship with openness then normative identity style (r=-.38, $p$<.001). The negative correlation between authoritarianism and egalitarian sex role (r=-.21, $p$<.01) is stronger than other negative correlations.

Table 8.2 Inter-correlation (r) among variables in the Chinese group and United Kingdom group

|  | Em | Flex | PT | ESR | NIS | IT | Open | Sugg | PB | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| Demo-CH | .19*** | -.07 | .10* | .28*** | .00 | -.13** | .06 | .01 | .06 | .10* |
| Demo-UK | .33*** | .10 | .31*** | .22** | -.27*** | -1.0 | .51*** | -.06 | .21* | -.42*** |
| Em-CH |  | .10* | .30*** | .32*** | .10* | -.07 | .16** | .12** | .23*** | .01 |
| Em-UK |  | .23** | .43*** | .23** | -.04 | .06 | .28*** | .09 | .34*** | .01 |
| Flex-CH |  |  | .23*** | -.08* | -.04 | .17*** | .09* | -.10* | .07 | -.05 |
| Flex-UK |  |  | .35*** | -.06 | -.10 | .28*** | .09 | -.09 | .05 | .11 |
| PT-CH |  |  | - | .08 | .12* | .05 | .20 | .03 | .32*** | .09* |
| PT-UK |  |  |  | .32*** | -.16* | .10 | .38*** | -.03 | .21** | -.08 |
| ESR-CH |  |  |  |  | .06 | -.25*** | -.01 | .16** | -.01 | .14* |
| ESR -UK |  |  |  |  | -.09 | -.15* | .32*** | .06 | .01 | -.21** |
| NIS-CH |  |  |  |  |  | -.03 | -.28 | .32 | .07 | .22*** |
| NIS-UK |  |  |  |  |  | .09 | -.38*** | .32*** | .18* | .40*** |
| IT-CH |  |  |  |  |  |  | .08 | -.04 | .11* | -.12** |
| IT-UK |  |  |  |  |  |  | -.16* | .07 | .01 | .10 |
| Open-CH |  |  |  |  |  |  |  | -.26*** | .18*** | -.16** |
| Open-UK |  |  |  |  |  |  |  | -.16* | .23** | -.40*** |
| Sugg-CH |  |  |  |  |  |  |  |  | -.02 | .11* |
| Sugg-UK |  |  |  |  |  |  |  |  | .08 | .09 |
| PB-CH |  |  |  |  |  |  |  |  |  | .11* |
| PB-UK |  |  |  |  |  |  |  |  |  | -.02 |

Note: Statistical significance: *$p$<.05; **$p$<.01; ***$p$<.00; CH=Chinese group; UK=Local United Kingdom group; Demo=Democracy; Em=Empathy; Flex=Flexibility; PT=Perspective-taking; ESR=Egalitarian Sex Role; NIS=Normative Identity Style; IT=Interpersonal Trust; Open=Openness; Sugg=Suggestibility; PB=Prosocial Behaviour; Au=Authoritarianism

*8.2.3 Regression model*

To test how well the ten independent variables (empathy, flexibility, perspective-taking, openness, suggestibility, egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism) would predict the dependent variable (adherence to democracy) and identify which of the independent variables is the best predictor of adherence to democracy, a hierarchical multiple regression analysis was performed.

Table 8.3 depicts how all the variables are divided into two levels: Personality Level (Empathy, Flexibility, Perspective-taking, Openness, Suggestibility) and Social Level (Egalitarian Sex Role, Normative Identity Style, Interpersonal Trust, Prosocial Behaviour, Authoritarianism).

For the Chinese group, personality level which included five independent variables was firstly entered and the results show that these five independent variables (empathy, flexibility, perspective-taking, openness, suggestibility) explain 5% ($R^2$=.05) of the variance of the outcome variable (adherence to democracy). After the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) variables were included, the model as a whole explains 11% ($R^2$=.11) of variance in adherence to democracy. In other words, social level explains the additional 6% ($R^2$ change = .06) of the variance in adherence to democracy after controlling for personality level. Moreover, this is a significant contribution (*p*=.000). Additionally, there is no possible self-correlation among these independent variables, as the DW value is 2.0. Another important piece of information from this table is that among these independent variables, only

egalitarian sex role can significantly predict adherence to democracy ($\beta$=.22, $p$<.000).

For the British group, the same steps were taken. The results show that personality level explains 30% ($R^2$=.30) of the variance in adherence to democracy. After social level factors were entered into the analysis, the model as a whole explains 38% ($R^2$=.38) of the variation in the outcome variable (adherence to democracy). This means that in the British group, social level explains an additional 8% ($R^2$ change = .08) of the variance of adherence to democracy after controlling for the personality level. As for the Chinese group, this is a significant contribution ($p$=.004) and no self-correlation was detected between the ten independent variables (DW value = 1.7). Additionally, in the British group, there are three out of ten variables which significantly contribute to the outcome variable, (openness as the highest contributor, $\beta$=.43, $p$<.01, followed by authoritarianism, $\beta$=-.29, $p$<.000, and empathy, $\beta$=.17, $p$<.05).

as for our previous studies, the young Chinese group and the young British group are compared in a table to identify the differences between them. Based on the efficient models (p<.01, the DW value is around 2.0 in both groups), it can be seen from this table that after personality level (empathy, flexibility, perspective-taking, openness, suggestibility) is entered in the first model, it explains only 5% of the variance in adherence to democracy in the Chinese group, while it explains 30% in the UK group. This obviously shows a large difference in terms of personality level between the two groups. However, after entering the social level in the second model, the data explains 11% and 38% of the variance in adherence to democracy

in the Chinese group and the UK groups respectively. In other words, social level explains an extra 6% and 8% of the variance in adherence to democracy in the Chinese and UK groups respectively. Based on these data, personality level predicts adherence to democratic values much more in the UK group than in the Chinese group. However, the social level predicts adherence to democracy similarly in both groups.

Table 8.3 Hierarchical multiple regression for the Chinese and UK samples

| | | CH | | | | UK | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $R^2$ | $R^2$ change | Sig F change | $\beta$ | $R^2$ | $R^2$ change | Sig F change | $\beta$ |
| **Step 1** | **Personality Level** | .05 | | .001 | | .30 | | .000 | |
| | Empathy | | | | .18 | | | | .17[*] |
| | Flexibility | | | | -.11 | | | | -.01 |
| | Perspective-taking | | | | .06 | | | | .08 |
| | Openness | | | | .03 | | | | .43[**] |
| | Suggestibility | | | | -.02 | | | | .00 |
| **Step 2** | **Social Level** | .11 | .06 | .000 | | .38 | .08 | .004 | |
| | Egalitarian Sex Role | | | | .22[***] | | | | -.01 |
| | Normative Identity | | | | -.02 | | | | -.04 |
| | Interpersonal Trust | | | | -.05 | | | | -.05 |
| | Prosocial Behaviour | | | | .02 | | | | .06 |
| | Authoritarianism | | | | .06 | | | | -.29[***] |

Note: Statistical significance: *$p$<.05, ** $p$<.01, ***$p$<.001; DW is 2.0 for CH group, DW is 1.7 for UK group

### 8.2.4 Differences in the variables across groups (nations) and genders

In order to test if there are differences between the Chinese group and British group, and between males and females for all the variables (including 10 independent variables and 1 dependent variable), a 2 (Group: CH, UK) ×2 (Gender: men, women) was performed using SPSS, 21. Table 8.4 sets out the results of the two-way ANOVA. As can be seen, there are significant main effects for groups for nine variables

(excluding flexibility and egalitarian sex role). That is to say, there are significant differences between the Chinese and British groups in empathy, perspective-taking, normative identity style, interpersonal trust, openness, suggestibility, prosocial behavior, authoritarianism, and democracy. In further detail, the Chinese group scored higher than the British group for normative identity style [$F(1,554)=10.50$, $p<.01$], interpersonal trust [$F(1,554)=7.24$, $p<.01$], suggestibility [$F(1,554)=25.65$, $p<.001$], prosocial behaviour [$F(1,554)=5.49$, $p<.05$] and authoritarianism [$F(1,554)=256.46$, $p<.001$], while the British group scored higher than the Chinese group for empathy [$F(1,554)=14.09$, $p<.001$], perspective-taking [$F(1,554)=4.31$, $p<.05$], openness [$F(1,554)=90.51$, $p<.001$], and democracy [$F(1,554)=31.83$, $p<.001$]. Moreover, there is a main effect for gender, which means there are differences between males and females for empathy ($P<.001$), flexibility ($P<.05$), egalitarian sex role ($P<.001$), suggestibility ($P<.05$), prosocial behaviour ($P<.05$), and democracy ($P<.05$). Specifically, males scored higher only on flexibility [$F(1,554)=3.97$, $p<.05$] and prosocial behaviour [$F(1,554)=5.57$, $p<.05$]; however, females scored higher on empathy [$F(1,554)=13.15$, $p<.001$], egalitarian sex role [$F(1,554)=41.09$, $p<.001$], suggestibility [$F(1,554)=4.80$, $p<.05$], and democracy [$F(1,554)=4.22$, $p<.05$].

Table 8.4 Two-way (Group [Chinese, UK] and Gender [men, women]) ANOVA

| | CH Group | UK Group | Male | Female | p-value Group | Gender | p-value Group*Gender |
|---|---|---|---|---|---|---|---|
| Empathy | 28.01(4.12) | 29.80(5.18) | 27.76(4.65) | 28.91(4.40) | .000 | .000 | NS |
| Flexibility | 23.36(3.52) | 23.70(4.97) | 23.85(3.72) | 23.25(4.11) | NS | .047 | NS |
| Perspective-taking | 14.64(4.26) | 15.44(4.20) | 14.74(4.71) | 14.93(4.00) | .038 | NS | NS |
| Egalitarian | 38.76(4.70) | 38.39(4.13) | 36.47(4.43) | 39.79(4.17) | NS | .000 | .000 |
| Normative | 20.39(4.47) | 18.86(4.79) | 20.14(4.87) | 19.86(4.47) | .001 | NS | NS |
| Interpersonal Trust | 18.09(2.52) | 17.39(2.73) | 17.98(2.74) | 17.84(2.53) | .007 | NS | NS |
| Openness | 37.07(4.53) | 41.70(5.77) | 38.83(5.46) | 38.15(5.26) | .000 | NS | NS |
| Suggestibility | 23.68(3.89) | 21.50(4.51) | 22.31(4.26) | 23.45(4.10) | .000 | .029 | NS |
| Prosocial Behaviour | 28.73(5.27) | 27.60(6.22) | 29.29(6.27) | 27.96(5.12) | .020 | .019 | NS |
| Authoritarianism | 24.14(2.48) | 19.72(3.46) | 22.52(3.46) | 23.08(3.40) | .000 | NS | NS |
| Democracy | 26.17(2.88) | 27.77(3.75) | 26.15(3.54) | 26.86(3.04) | .000 | .040 | NS |
| N | 400 | 158 | 191 | 367 | | | |

Note: Statistical significance: *p<.05; **p<.01; ***p<.00; NS= Not Significance; CH=Chinese group; UK=Local United Kingdom group

### *8.2.5 Simple effect test on egalitarian sex role (MANOVA): a post hoc test*

According to the results from Table 8.4, there is an interaction effect on egalitarian sex role. A simple effect test was performed to test how the groups perform at the two levels of gender (males and females respectively), and how genders perform at the two levels of groups (CH and UK) respectively.

From Table 8.5 and Figure 8.1, it can be concluded that in the Chinese group, there is a statistically significant difference between females and males, indicating that Chinese females (M=40.18, SD=4.22) scored significantly higher than Chinese males (M=35.89, SD=4.31) for egalitarian sex role. However, this could not be found in the British group. In addition, British male participants (M=37.76, SD=4.46) scored significantly higher than their Chinese counterparts (M=35.89, SD=4.31), while

Chinese females (M=40.18, SD=4.22) scored significantly higher than British females (M=38.76, SD=3.89) for egalitarian sex role.

Table 8.5 Interaction of group×gender on egalitarian sex role

| | | Male *vs* Female | | CH *vs* UK |
|---|---|---|---|---|
| **Egalitarianism** | CH | *P*=.000 35.89(4.31) *vs* 40.18 (4.22) | Male | *P*=.005 35.89(4.31) *vs* 37.76(4.46) |
| | UK | NS | Female | *P*=.004 40.18 (4.22) *vs* 38.76(3.89) |

Note: CFY=Chinese young females, BYF=Local-British young females, BYM=Local British young males, CYM=Chinese young males

**Figure 8.1  Interaction of group *gender on egalitarian sex role**
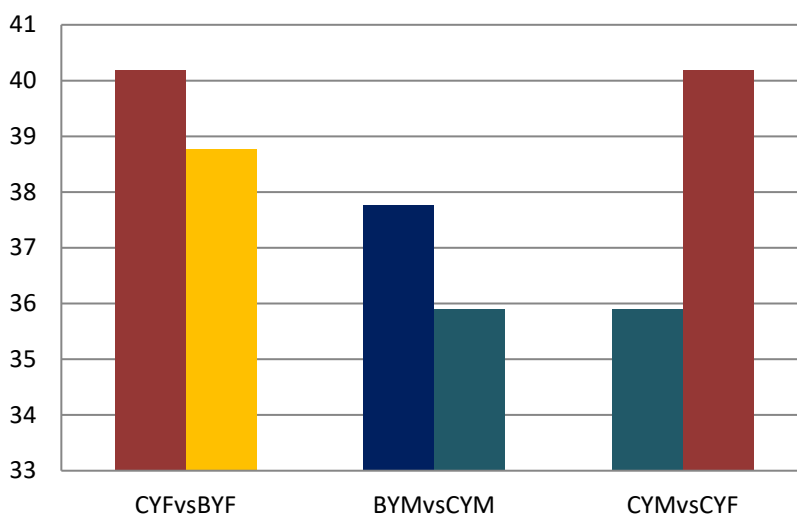


Note: CYF=Chinese young females, CYM=Chinese young males, BYM=British young males, BYF=British young females

## 8.3 Discussion

This cross-cultural study aimed to explore how the psychological characteristics (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style,

interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism) predict young individuals' political tendencies (adherence to democracy) in samples with different cultural backgrounds (the Chinese and the British culture). Moreover, this study was conducted with the aim of gaining insight into potential gender (males and females) and group (Chinese group and British group) differences for all the variables.

The results indicate that in the young Chinese population, egalitarian sex role is the only predictor for adherence to democracy. Whereas, in the young British group, openness is the best predictor for adherence to democratic values, followed by authoritarianism and empathy. Among these three predictors, authoritarianism predicts adherence to democracy inversely.

There are some group differences for some variables, with the Chinese group being higher in normative identity style, interpersonal trust, suggestibility, prosocial behaviour, and authoritarianism, while the British group is higher in empathy, perspective-taking, openness, and democracy. This result is quite similar to the result in Study 1 that showed that the Chinese group scored higher on normative identity style, interpersonal trust, suggestibility, and authoritarianism than their European counterparts.

Besides group differences, there are gender differences in empathy, flexibility, egalitarianism, suggestibility, prosocial behaviour, and democracy. That is to say, the female participants reported stronger empathy, sex role egalitarianism, suggestibility, and adherence to democracy, while the males scored higher on flexibility and prosocial behaviour. Moreover, there is an interaction between group and gender for

egalitarian sex role, which indicates that young Chinese females are stronger supporters of egalitarianism; notably, compared with young White British males, young Chinese males show less support for egalitarianism.

Egalitarian sex role is a vital predictor of adherence to democracy in the younger Chinese generation, which is in accordance with the results of the previous chapter comparing younger and older Chinese generations. The potential reasons behind this finding has been discussed in the previous chapter. The Chinese government, founded in 1949, aimed to enhance gender-equal policies to protect women's rights and help them pursue equal status in both domestic and social domains (Stacey & Croll, 1984). Moreover, it might be related to participants' higher educational levels (the young Chinese participants in this study were recruited from universities), which might point to the suggestion that highly educated individuals hold more egalitarian sex role attitudes that can directly result in robust adherence to democracy and a reduced authoritarian attitude (Shu, 2004). As one goal of democracy is to balance the power between people of higher social rank and people of lower social class, this in turn can prepare a sound grounding for the development of egalitarianism in society, eventually facilitating equality between men and women (Beer, 2009). In addition, according to Beer (2009), economy and social modernisation are another two factors influencing gender equality, which can impact on people's democratic values, which again emphasises the important link between women's high participation rate in the work force and their strong democratic attitudes. In modern society, more women participate in the work force, which enhances their social status in line with social egalitarianism (Lopea-Claros & Zahidi, 2005; Karl, 1995;

Xun & Qi, 2016). Thereby, being supported by this social idea, it seems that an egalitarian sex role attitude is embedded and strengthened in the young Chinese population. This is good news for the future of democracy in that society.

For the British group, the finding is also in accordance with the findings from previous studies, showing that empathy can help people overcome biases, prejudice and discrimination against out-groups (Finlay & Stephan, 2000). This can be concluded from the positive link between empathy and adherence to democracy. Moreover, openness is the best predictor for democracy for the British group and that is consistent with the results of some previous studies. Curtin, Stewart, & Duncan (2010) found that openness was an important and direct predictor for political activism; namely, individuals with high openness are more likely to participate in more political activities, as they are strongly willing to listen and accept various ideas. In fact, the degree of support for democracy depends on the degree of tolerance (Sullivan and Transue, 1999; Capara, Barbaranelli, & Zimbardo, 1999). Robust democracy needs more tolerance for various political ideas, including even unpopular ideas (Sullivan and Transue, 1999). Moreover, this includes tolerance of political participants' different ages, genders, and educational backgrounds (Capara, Barbaranelli, & Zimbardo, 1999). According to Kruglanski & Webster (1996), both openness and flexible thinking stem from being tolerant to differing ideas and being able to accept uncertain consequences. Both lack of openness and excessive levels of intolerance can lead to stereotypes, conformity, and dogmatism, all of which characteristics are negatively related to support for democratic values, for the reason that unwillingness to seek new information may lead established views towards out-

groups to be disconfirmed or altered. That is, individuals who prefer to behave relying on stereotypes would be potentially hostile to democracy (Bargh & Ferguson, 2000).

For the British group, authoritarianism is an important predictor for adherence to democracy. This is also supported by previous studies. Although it is suggested that authoritarianism is mostly influenced by gene heredity, it can be modified and changed by environmental factors, including family surroundings and cultural environment (Rusby, 2010). In fact, as a psychological characteristic, authoritarianism can positively relate to other personality traits, such as rigidity, narrow-mindedness, high level of conformity and low level of openness (Vaughan & White, 1966), all of which can lead to a low level of adherence to democratic values. Moreover, authoritarianism can be further explained by the positive relationship between openness and adherence to democracy. Both previous and recent pieces of research have suggested that openness supports a willingness to extend political rights to out-groups, and strong tolerance of various ideas which facilitates more support for liberalism and reduces the support for right-wing political ideology (van Hiel, Kossowska, & Mervielde, 2000; Gerber, Huber, Doherty, Dowing, & Ha, 2010; Oskarsson and Widmalm, 2016).

Apart from openness and authoritarianism, the result shows that empathy can positively predict adherence to democracy, a result which could not be found in the young Chinese group. In the empathy section (in Chapter 2), this thesis mentioned that there are two categories of empathy. One is emotional empathy that focuses on the subjective feelings resulting from emotional contagion, by which an individual

automatically and accordingly responds to others' emotional states. The other type of empathy is cognitive empathy, which refers to taking on another's perspective to understand the context, and consciously and accurately responding to another's emotional state (Bailey, Henry & Von Hippel, 2008; Khanjani, et al., 2015). In fact, in most situations, both emotional empathy and cognitive empathy would work together to determine an individual's behaviour; however, cognitive empathy is predominant in a complex context, as it requires an individual's cognitive estimation (Khanjani et al., 2015). In addition, cognitive empathy can be regarded as perspective-taking, which means taking on others' standpoints to understand their thoughts and decisions (Bailey, Henry & Von Hippel, 2008), with less biases and prejudices (Wang, Kenneth, Ku, & Galinsky, 2014). Being empathetic towards dissimilar groups is a vital prerequisite condition for holding democratic attitudes (Eisenberg, Eggum & Di Giunta, 2010). Because higher empathy can help individuals to take on the out-group's point of view to consider benefits for them, it has the function of overcoming biases, prejudice and discrimination against out-group members and leading to toleration of their different ideas (Finlay & Stephan, 2000; Shih, Wang, Trahan Bucher, & Stotzer, 2009). This explains the positive link between empathy and adherence to democracy. That means that empathy helps people understand others' thoughts through taking their perspectives, even if those are opposite to their own thoughts and values.

The Chinese group's high normative identity style is closely associated with the Chinese cultural background and parenting style (Çelen & Kuşdil, 2009; Ibáñez-Alfonso, Sun and van Schalkwyk, 2015). Most noteworthy is that authoritative

parenting is positively related to children's normative identity style in most Chinese families (Ibáñez-Alfonso, Sun and van Schalkwyk, 2015). Authoritative parenting can be understood as limiting children's freedom of expression and behaviour based on parenting rules (Çelen & Kuşdil, 2009). In other words, children growing up in highly authoritative families tend to adopt parents' rules and follow their internalised norms. In this sense, the young Chinese generation's high level of normative identity style should be considered to be a result of both parenting patterns and socio-cultural contexts. Furthermore, as mentioned before, right-wing authoritarianism adheres to conventional norms and values; an authoritarian person would be hostile to norm violators (Duriez & Soenens, 2006). Taking these two characteristics together, normative identity style indeed is closely associated with authoritarianism. That means an individual with a normative identity style would rather follow the established rules and authorities and would treat those who violate these norms as enemies. New information they perceive should be in accordance with their existing worldview or internalised norms. Additionally, they regard their internalised norms in an ordered, structured, and consistent way, so that they would ensure they are not following contradicting norms outside their own model (Berzonsky & Kinney, 2008). With this in mind, the Chinese group's high normative identity style and authoritarianism, therefore, can be explained by assessing Chinese culture and the traditional Chinese family parenting style.

Secondly, there is a group difference in interpersonal trust between the young Chinese group and the young White British group; it is similar to the results of Study 1 that compared a European group and Chinese group. These findings are also in

accordance with the suggestion and conclusion deriving from a cross-cultural study between Chinese, Europeans and Americans showing that Chinese participants were higher in emotional suppression, which is positively related to their interpersonal harmony and social goals (including political goals). Moreover, Chinese participants showed their stronger endorsement of emotional self-control, which means that in the Chinese interdependent cultural context, individuals tend to feel close to each other emotionally (Wei, Su, Carrera, Lin, & Yi, 2013). In fact, interpersonal trust has different meanings and goals in Western and Eastern cultural contexts. In Western culture, people high in individualism would see the world from their personal standpoint and tend to stay outside complex social internal-relationships. However, in Eastern culture, people high in collectivism (involving the individual as a factor in a web-multiple social relationship) tend to build and maintain long-term interpersonal relationships and avoid upsetting the social relationships that they have built up (Han & Choi, 2011). Han & Choi (2011) analysed that to achieve this aim, individuals in Eastern countries would rather develop a series of social psychological mechanisms to protect and benefit from this complex set of social relationships. Interpersonal trust is one of these psychological mechanisms, which is vital to prove that they are involved in making an effort to protect their social relations with others.

Similar to Study 1, in this cross-cultural study, it was found that the Chinese are more suggestible than their White British counterparts. A previous cross-cultural study compared Chinese college students with American and Australian college students showing that Chinese students were more prone to suggestibility than their

American and Australian counterparts (Yu, 2005). Chinese people's high suggestibility implies that they are more easily influenced by outside surroundings including cultural and educational factors. From the cultural point of view, suggestibility is closely related to conformity that is, accepting others' viewpoints without both critical and creative thinking (Wegrocki, 1934). Furthermore, within a cultural context encouraging more social cooperation and harmony, individuals would show more suggestibility in the way they think and behave. In such a cultural context, individuals sometimes tend to give up their own personal preferences in order to meet others' expectations and avoid being seen as an 'odd person' (Pires, Silva & Ferreira, 2013). From an educational point of view, Western education mainly focuses on cultivating students' critical and creative thinking. In recent decades, it has been reported that the Chinese education system has added teaching material to promote a critical and creative thinking style (Yu, 2005), although this factor needs to be considered within the context of the Chinese culture of communalism.

In this study, compared with the young White British group, the young Chinese group showed more prosocial behaviour. This result indeed does not suggest that prosocial behaviour stems from empathy (because the White British group scored higher on empathy which will be discussed later in this section), and empathy is closely and positively linked to prosocial behaviour (Eisenberg, Eggum & Di Giunta, 2010; Telle & Pfister, 2012; Bethlehem et al., 2016). Furthermore, it cannot be explained by the idea that an authoritative parenting style can be seen as a barrier for enhancing children's prosocial behaviour, while the democratic parenting style

helps facilitate children's prosocial behaviour (Grusec, 1991; Knafo & Plomin, 2006). Nonetheless, from a socio-cultural perspective, the young Chinese generation's strong prosocial behaviour might be explained by Chinese social and moral norms. In fact, some studies have reported that there were differences in altruism (prosocial behaviour) between collective and individualistic populations (Hinde & Groebel, 1991; Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015), with individuals in collective surroundings tending to lend more help to others, probably due to their strong sense of social responsibility and eagerness to maintain important social relationships in the collectivistic social context (Hinde & Groebel, 1991). In other words, prosocial behaviour has different resources and foundations in collectivistic and individualistic cultures; helping behaviour in the collectivistic context depends on social norms and strong social obligations, while prosocial behaviour in the individualistic context mostly derives from empathy and personal willingness (Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015). Moreover, individuals' prosocial behaviour can be influenced by moral norms (Staub, 1978). That is to say, internalised social standard norms concerning altruism would boost and confirm people's prosocial behaviour (Eisenberg, Zhou, & Koller, 2001). In keeping with these analyses, the young Chinese generation's high level of altruism can contribute to the Chinese cultural context of collectivism, in accordance with high Chinese interpersonal trust, and high suggestibility. It means that they have similar motives and aims that protect and maintain certain social relationships. In addition, this thesis proposes that the Chinese high level of altruism is indeed in accordance with its high normative identity style including the tendency to keep internalised moral norms, which in turn, provides a strong motivation for offering help to others.

Furthermore, the results suggest that there are group differences in empathy, perspective-taking, openness and democracy, with the White British sample scoring higher than their Chinese counterparts. This result is in line with the result of the previous study in which the young European generation scored higher on these variables compared to the Chinese. The young White British group's high empathy is associated with high perspective-taking, which can also be defined as cognitive empathy (Bailey, Henry & Von Hippel, 2008; Khanjani, et al., 2015). Additionally, both empathy and perspective-taking can support adherence to democratic values and develop sympathy towards out-groups by accepting their dissimilar ideas through overcoming biases, prejudice and discrimination (Eggum & Di Giunta, 2010; Finlay & Stephan, 2000). However, the result shows that the young White British group's higher empathy and perspective-taking contradict with the argument that individuals in a collectivistic cultural context are more prepared to take on another's perspective, due to their interdependent social relationships (Wang, Kenneth, Ku, & Galinsky, 2014). Chinese university students' capacity for empathy and perspective-taking exceeded those of both their American and United Kingdom counterparts (Wu & Keysar, 2007; Kessler, Cao, O'Shea, and Wang, 2014). In contrast, the present result is consistent with a recent cross-cultural study aiming to examine the link between empathy and problematic use of the internet (Melchers, Li, Chen, Zhang, & Montag, 2015). That is, compared with Chinese university students, German university students had much higher levels of empathy quotient; also, they had higher empathetic concern and perspective-taking. The researchers suggested that lower Chinese empathetic concerns might be due to their higher personal distress in the context of fierce social competition; as the more self-oriented stress is

experienced in social interactions, the less ability people have to approach other's perspectives. Similarly, another piece of research related to cultural differences in affective and cognitive levels of empathy (Atkins, 2014) and indicated that British participants reported greater empathic concern than their Chinese counterparts. Atkins (2014) emphasised that British people's higher empathetic concern may be due to their strong cognitive empathy. In other words, cognitive empathy can be deemed as a good predictor for empathy in a Western cultural context, but not in an Eastern cultural context.

Furthermore, the young White British group's greater openness is closely related to their strong domestic values, which has been shown by the result of this study. Openness was the strongest predictor for adherence to democracy. This group difference in openness can be explained by collectivism and individualism. On the one hand, individualism may enhance openness, which can encourage a less traditional sex role attitude and give women more freedom and power within society (Costa, Terracciano, & McCrae, 2001). On the other hand, their greater openness may stem from their flexible thinking style and tolerance of uncertainty, both of which indeed can be regarded as impetus for adherence to democratic values (Kruglanski & Webster, 1996) because less individualistic societies lay the foundations for uncertain avoidance (e.g. normative identity style) and power unfairness (e.g. authoritarianism) (De Jong, Smeets, & Smits, 2006). The young White British group's greater support for democracy can also be explained by their democratic education. One of the basic purposes of Western schools is to cultivate students' moral and intellectual responsibilities for living and working in a democratic

society (Soder, 1996). an education system that plans to cultivate students' capabilities for critical and creative thinking can give rise to enhanced democratic values (Benesch, 1993; Gainer, 2012). This is due to the fact that both types of thinking reflect high levels of flexibility and tolerance, which go against conformity, standard norms, rigidity, dogmatism, and authoritarianism (Guyton, 1988). In this sense, in individualistic countries, such as Western and American countries, democratic education actually runs through the whole educational system due to their robust democratic foundation and long democratic history (Dahl, 1989, 2005; Bryan, 2004).

Regarding gender difference, the result that female participants have a higher level of empathy than their male counterparts is in accordance with the assertion that women are always more empathetic than men during their life span (Toussaint & Webb, 2005; Rueckert & Naybar, 2008; O'Brien, Konrath, Gruhn, & Hagen, 2012). Research that aimed to investigate the link between humour style and empathy reported that men's unfriendly humour style (aggressive and self-enhancing humour) is positively associated with lower empathy and lower perspective-taking capacities (Wu, Lin, & Chen, 2016). Humour style is closely related to whether one can perceive and identify others' viewpoints. In fact, empathy could be largely influenced by parenting style and the social environment that emphasises a difference in social roles and expectations between men and women (Lennon & Eisenberg, 1987). Men are endowed with more social functions, while women are endowed with more family functions, hence nurturance and empathy are two salient characteristics to enable women to play their family roles successfully; instead, these characteristics

are less effective and do little to explain socialisation amongst men (Lennon & Eisenberg, 1987).

Furthermore, the strong support for sex role egalitarianism amongst both female groups was confirmed again in this study (see Study 1). Once more, sex role egalitarianism is a worldwide topic for females in different countries, which indicates that women are pursuing equal rights in both domestic and social activities all over the world (Beer, 2009). In terms of domestic role, modern females ability to balance and control fertility, child-care, and housework shared with husbands has enhanced their domestic status (Grady, Tanfer, Billy & Lincoln-Hanson, 1996). In terms of social factors, their passion and high rate of work market participation has brought them economic independence and better social status (Morgan, 2013). This supports the results of a previous study carried out more than twenty years ago that compared egalitarian sex role between American and Japanese women (Suzuki, 1991). It indicated that though American women supported egalitarianism more strongly than their Japanese counterparts, Japanese women held far more egalitarian sex role attitudes than twenty years before.

Chinese women have the highest egalitarianism, which may be due to the Chinese government reforms which began in 1949, since they enabled Chinese women to work outside as part of the domestic work force (Stacey & Croll, 1984). After several decades of implementing this policy, the young Chinese female generation has benefited more from the affirmation of Chinese women's social rights and social contributions. On the other hand, the Chinese educational system's concept of a fair chance for girls and boys, to a large extent, has changed the Chinese traditional

norm by which boys were seen as more important than girls in the family and society (Rong & Shi, 2001). Education itself can progress females leading them to hold more egalitarian sex role views. Besides this, up-to-date knowledge and critical thinking skills have widened women's horizons and enabled them to develop a strong attitude towards egalitarian sex role (Shu, 2004). In other words, more social attention, higher family expectation, and a sense of personal achievement have worked together to improve and confirm young Chinese females' egalitarian sex role attitudes.

Moreover, similar to previous studies, women tend to provide stronger support for democracy and a liberal society. This is in accordance with the assertion that women's high egalitarian sex role attitude is always related to adherence to democracy and is one of the important resources of democratic values (Kemmelmeier, 2010). This is also in line with the assumption that high empathy can help people overcome discrimination and biased viewpoint towards out-groups. Therefore, it might lead to more tolerance towards dissimilar ideas (Eisenberg, Eggum & Di Giunta, 2010; Bethlehem et al., 2016), which is in line with the findings of this present study showing that women have higher levels of empathy then men. In addition to egalitarian sex role and empathy, education is regarded as another important factor facilitating the development of democratic values, through training in critical thinking and openness (Benesch, 1993; Kruglanski, and Boyatzi, 2012). Critical thinking style can give rise to openness, and finally result in tolerance. Notably, the female participants in this study were recruited from universities (UK universities and Chinese universities), so their higher educational backgrounds

undoubtedly lay a foundation for the cultivation of openness and support for democracy.

In addition, the result showed that women are more suggestible than their male counterparts. This is indeed not in agreement with women's strong desire for democracy, as suggestibility is always positively related to conformity, rigidity, and lack of critical thinking, all of which can attenuate the level of adherence to democracy (Stacey, 1985; Croll, 1995). However, in terms of gender differences for other related characteristics (self-esteem and self-monitoring), this result can be explained by another possibility. Suggestibility is associated with self-esteem and self-monitoring, and there is a gender difference in this respect (Godino, 2009; Bleidorn et al., 2016). Males have higher self-esteem and self-monitoring than females, because they strongly need a sense of achievement and good work performance, which is thought to be due to a biological source that relates to hormonal influence (Frazier & Fatis, 1980; Day, Shleicher, Unckless, & Hiller, 2002). Males' aggressive and task-oriented roles indicate that they are less influenced by outside surroundings and have less suggestibility (Anderson & McLenigan, 1987). From these analyses, it can be inferred that males' lower level of suggestibility could be attributed to their higher self-esteem and higher self-monitoring.

Markedly, in this study, males are more likely to be flexible and show prosocial behaviour. In fact, both of these two results are not in accordance with previous assertions. The research on gender difference in cognitive flexibility is scarce. The result that all male participants have more cognitive flexibility than their female counterparts is not in line with the assertion that males are more cognitively rigid

than women, which suggests that, in theory, women should have more cognitive flexibility (Vollhardt, 1990). Moreover, it is not in accordance with the suggestion that women are generally described as liberal while men give more support for authoritarianism, which indirectly indicates that women are more tolerant and flexible in accepting new ideas than men (Kemmelmeier, 2010). However, this issue can be analysed in the context of the big five personality model, as cognitive flexibility is positively related to openness (Kruglanski & Webster, 1996). A study showed that males, especially young males, indeed evinced more intellectual interests that are related to openness to experience, and females had more aesthetic interests (Chapman, Duberstein, Sörensen, & Lyness, 2007). Similarly, another study on gender difference for the big five personality model reported that women scored higher in neuroticism, agreeableness, and warmth; whereas men were higher in assertiveness and openness to ideas (Costa, Terracciano, & McCrae, 2001). Notably, their study divided openness into feelings and ideas as two distinct areas; though men had more openness to ideas which is more related to flexibility, women nevertheless had more openness to feeling which is more related to emotion. A recent piece of research focusing on gender difference in the big five traits suggested that women tended to show higher levels of neuroticism and agreeableness, whereas men tended to be higher in extraversion and openness; there was no gender difference in conscientiousness (Vianello, Schnabel, Sriram, & Nosek, 2013). Based on the results of these previous studies concerning gender difference in openness to experience, it can be inferred that males' higher flexibility might contribute to their higher openness; there is a positive relationship between the two characteristics.

Moreover, it has been proven in this cross-cultural study that females were higher in empathy than males. Most noteworthy is that empathy is undoubtedly regarded as the source of prosocial behaviour (Eisenberg, Eggum & Di Giunta, 2010; Telle & Pfister, 2012; Bethlehem et al., 2016). In theory, women should have more prosocial behaviour than men. However, the result of this study illustrated that women endorsed less prosocial behaviour than men, which was in contradiction with the result that women had more empathy than men. This is not in line with the assertions of previous studies showing that women's strong willingness to behave prosocially stems from their stable prosocial moral reasoning, better perspective-taking, and easily stimulated sympathy (Eisenberg, Zhou, & Koller, 2001). According to recent study on gender difference in prosocial behaviour (Abdullahi & Kumar, 2016), prosocial behaviour can be measured using seven dimensions including social responsibility, emphatic concern, perspective-taking, personal distress, oriented moral reasoning, mutual concern moral reasoning, and self-report altruism. There are indeed gender differences in perspective-taking and mutual moral reasoning, with women scoring higher in both of them; whereas, there was no gender difference in other dimensions of prosocial personality, which means men perform the same as women in social responsibility, emphatic concern, personal distress, oriented moral reasoning, and self-report altruism (Abdullahi & Kumar, 2016). A previous study reported that there were different motivations in men and women's helping behaviour, with men's helping behaviour resulting from heroic and chivalrous motivations, whereas women's helping behaviour was fostered by nurturing and caring intentions (Eagly & Crowley, 1986). Furthermore, in terms of offering help to strangers and long-term close friends, men have a stronger tendency to give help to

both of them, while women's helping behaviour is mostly directed towards close relationships (Eagly & Crowley, 1986). In this sense, women tend to behave more prosocially. However, owing to men's stronger social-role and social motivation, they may show a higher level of prosocial behaviour.

### 8.3.1 Conclusion

Briefly, psychological characteristics have various influences on people's political attitudes in different cultural backgrounds. Furthermore, there are national and gender differences in some of these psychological traits. Egalitarian sex role is a vital predictor for democracy in the younger Chinese generation; young Chinese females' strong support for egalitarian sex role proves that they benefit from the current policies and are pursuing and solidifying gender equality in different areas. In British culture, openness, authoritarianism and empathy seem to be predictors for democracy. Just as for European participants, young British people had higher levels of empathy, perspective-taking, and openness than their young Chinese counterparts; therefore they showed stronger support for democracy. Except for the related psychological characteristics, the robust British democracy is also influenced by democratic education and a long democratic history. These results prove the assertion that individuals' socio-political attitudes and behaviours are underpinned by individuals' characteristics, which in turn, may be influenced by their cultural backgrounds.

# Chapter 9 Study 4: A Study on Chinese Single Child and Non-single Child Participants

## 9.1 Participants and procedure

The aim of this study was to examine the differences within the young Chinese group based on whether or not they were a single child in their family. The sample of the young Chinese generation (n=400) in Studies 2 and 3 was divided into two groups, namely single child and non-single child groups according to the information they offered in the demographic questionnaire. The single child group consisted of 106 participants and the non-single child group of 294 participants.

## 9.2 Results

### 9.2.1 Descriptive findings

Table 9.1 shows that in both the single child and non-single child groups, there were more female participants than male participants. Single child males' average age was higher than the other sub-group; the single child group's mean age was more than that of the non-single child group. Notably, though all the Chinese participants were recruited from two Chinese universities, there was one male single child participant who reported 'High School' as his educational level (probably he ticked the wrong item). However, this ratio does not influence the analysis in the discussion part that relates to participants' educational background.

Table 9.1 Demographic variability in Chinese single child and Chinese non-single child groups

|  | Single | | TOTAL | non-single | | TOTAL |
|---|---|---|---|---|---|---|
|  | M | F |  | M | F |  |
| **N** | 31 | 75 | 106 | 101 | 193 | 294 |
| % | 29.2% | 70.8% | 100% | 34.4% | 65.6% | 100% |
| Effective% | 29.2% | 70.8% | 100% | 34.4% | 65.6% | 100% |
| **Age** |  |  |  |  |  |  |
| Mean | 21.94 | 21.37 | 21.56 | 21.02 | 20.29 | 20.56 |
| SD | 1.32 | 1.15 | 1.23 | 1.62 | 1.84 | 1.79 |
| Min | 18 | 19 | 18 | 18 | 18 | 18 |
| Max | 25 | 25 | 25 | 25 | 25 | 25 |
| **Education** |  |  |  |  |  |  |
| High School |  |  |  | 1(1.0%) | 0(0.0%) | 1(0.3%) |
| Undergraduate | 31(100%) | 75(100%) | 106(100%) | 100(99%) | 193(100%) | 293(99.7%) |

Note: single=Chinese single child group, non-single=Chinese non-single child group; M=males, F=females

### 9.2.2 Inter-correlations between variables

Table 9.2 shows the inter-correlations between both independent (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism) and the dependent (adherence to democracy) variables.

In the single child group, empathy, perspective-taking, egalitarian sex role, normative identity style, openness, and prosocial behaviour are significantly correlated with adherence to democracy: egalitarian sex role (r=.30, $p$<.01), openness (r=.28, $p$<.01), empathy (r=.26, $p$<.01), perspective-taking (r=.23, $p$<.01), prosocial behaviour (r=.21, $p$<.05), normative identity style (r=-.18, $p$<.05). This shows that egalitarian sex role has a stronger relationship with adherence to

democracy than openness, empathy, perspective-taking, prosocial behaviour, and normative identity style. Also, among the six predictors, only normative identity style (r=-.18, $p$<.05) is negatively correlated with adherence to democracy. Moreover, the inter-correlations between the ten variables demonstrate that there are positive correlations for: empathy with flexibility, perspective-taking, egalitarian sex role, suggestibility and prosocial behaviour; flexibility with perspective-taking, and interpersonal trust; perspective-taking with prosocial behaviour; normative identity style with suggestibility and authoritarianism; openness with prosocial behaviour. Among all the positive correlations, egalitarian sex role (r=.39, $p$<.001) has the strongest correlation with empathy, followed by prosocial behaviour (r=.37, $p$<.001), and perspective-taking (r=.34, $p$<.001); also, perspective-taking (r=.35, $p$<.001) has a comparatively stronger correlation with prosocial behaviour. In addition to that, there are negative correlations only between normative identity style with openness, and openness with suggestibility.

In the non-single child group, only empathy, egalitarian sex role, interpersonal trust and authoritarianism are significantly correlated with adherence to democracy, similar to their single child counterparts; egalitarian sex role (r=.27, $p$<.001), authoritarianism (r=.18, $p$<.01), empathy (r=.16, $p$<.01), interpersonal trust (r=-.13, $p$<.01). In other words, similar to the single child group, egalitarian sex role has the strongest relationship with adherence to democracy, followed by authoritarianism, empathy and interpersonal trust; also, among the correlations with adherence to democracy, only interpersonal trust is negatively correlated with adherence to democracy. Furthermore, apart from the statistical correlations between independent

variables and dependent variables, there are also correlations between the ten independent variables. Table 9.2 shows that there are positive correlations for: empathy with perspective-taking, egalitarian sex role, normative identity style, openness and prosocial behavior; flexibility with perspective-taking and interpersonal trust; perspective-taking with normative identity style, openness, prosocial behavior and authoritarianism; egalitarian sex role with normative identity style, suggestibility and authoritarianism; normative identity style with suggestibility, prosocial behavior and authoritarianism; interpersonal trust with prosocial behaviour; openness with prosocial behaviour; suggestibility with authoritarianism; prosocial behaviour with authoritarianism. Among these positive correlations, the strongest correlation is between normative identity style and suggestibility (r=.32, $p<.001$), followed by perspective-taking (r=.30, $p<.001$) prosocial behaviour (r=.30, $p<.001$), perspective-taking (r=.29, $p<.001$) and egalitarian sex role (r=.29, $p<.01$). In addition, there are negative correlations between empathy and interpersonal trust, flexibility and suggestibility, egalitarian sex role and interpersonal trust, normative identity style and openness, interpersonal trust and authoritarianism, openness and suggestibility, openness and authoritarianism. Among these negative correlations, egalitarian sex role has the strongest relationship with interpersonal trust (r=-.30, $p<.001$), then normative identity style and openness (r=-.27, $p<.001$).

Table 9.2 Inter-correlations (r) among variables in Chinese single child group and non-single child group

| | Em | Flex | PT | ESR | NIS | IT | Open | Sugg | PB | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| Demo-S | .26** | -.05 | .23** | .30** | -.18* | -.13 | .28** | -.10 | .21* | -.09 |
| Demo-N | .16** | -.08 | .04 | .27*** | .09 | -.13** | -.03 | .07 | -.01 | .18** |
| Em-S | | .16* | .34*** | .39*** | -.01 | .04 | .13 | .29** | .37*** | -.03 |
| Em-N | | .08 | .29*** | .29** | .14** | -.11* | .18** | .04 | .17** | .02 |
| Flex-S | | | .30** | -.09 | -.10 | .25** | .12 | -.06 | .05 | -.07 |
| Flex-N | | | .20*** | -.08 | -.02 | .15** | .09 | -.11* | .08 | -.05 |
| PT-S | | | - | .12 | -.07 | -.05 | .14 | .00 | .35*** | -.01 |
| PT-N | | | | .07 | .19** | .09 | .22*** | .05 | .30*** | .13* |
| ESR-S | | | | | .32 | .08 | .37 | .06 | .13 | .06 |
| ESR -N | | | | | .10* | -.30*** | -.03 | .17** | -.06 | .13* |
| NIS-S | | | | | | -.06 | .31** | .34* | -.05 | .19* |
| NIS-N | | | | | | -.03 | -.27*** | .32*** | .11* | .23*** |
| IT-S | | | | | | | .16 | .02 | .02 | -.14 |
| IT-N | | | | | | | .05 | -.07 | .14** | -.12* |
| Open-S | | | | | | | | -.33*** | .19* | -.24 |
| Open-N | | | | | | | | -.23*** | .18** | -.13* |
| Sugg-S | | | | | | | | | .08 | .10 |
| Sugg-N | | | | | | | | | -.07 | .12* |
| PB-S | | | | | | | | | | .01 |
| PB-N | | | | | | | | | | .14** |

Note: Statistical significance: *p<.05; **p<.01; ***p<.00; single=Chinese single child group, non-single=Chinese non-single child group; Demo=Democracy; Em=Empathy; Flex=Flexibility; PT=Perspective-taking; ESR=Egalitarian Sex Role; NIS=Normative Identity Style; IT=Interpersonal Trust; Open=Openness; Sugg=Suggestibility; PB=Prosocial Behaviour; Au=Authoritarianism

### 9.2.3 Regression model

To test how well the ten independent variables (empathy, flexibility, perspective-taking, openness, suggestibility, egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, and authoritarianism) can predict the dependent variable (adherence to democracy), and which of the independent variables is the best predictor of adherence to democracy, a hierarchical multiple regression analysis was separately performed for each group.

as for the findings in the previous studies in this research project, all the ten independent variables are divided into personality level and social level. Personality Level (Empathy, Flexibility, Perspective-taking, Openness, and Suggestibility) and Social Level (Egalitarian Sex Role, Normative Identity Style, Interpersonal Trust, Prosocial Behaviour, and Authoritarianism) were entered in sequence. Performing the hierarchical multiple regression for both groups, I tried to examine the predictive value of each measure and compare the contribution of personality and social levels separately, to see which one of them would predict adherence to democracy most.

For the single child group, personality level (Empathy, Flexibility, Perspective-taking, Openness, and Suggestibility) was entered first. The results showed that these five independent variables explain 18% ($R^2$=.18) of the variance in the outcome variable, adherence to democracy. After social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) variables were included in the analysis, the model as a whole explains 24% ($R^2$=.24) of variance in adherence to democracy. In other words, social level explains an additional 7% ($R^2$ change = .07) of the variance after controlling for personality level. Moreover, this is

a significant contribution ($p$=.002); also, it can be noted that there is no possible self-correlation between these independent variables, as the DW value is 2.1. Another important finding demonstrated in this table is that among these independent variables, only egalitarian sex role can predict adherence to democracy significantly ($\beta$=.22, $p$<.05).

For the non-single child group, the same steps were taken and the results reveal that personality level explains only 4% ($R^2$=.04) of the variance in adherence to democracy. After social level was entered into the analysis, the model as a whole explains 11% ($R^2$=.11) of variance in adherence to democracy, which means in the non-single child group, social level explains an additional 7% ($R^2$ change = .07) of the variance of adherence to democracy after controlling for personality level. Similar to the single child group, this is a significant contribution ($p$=.000), and no self-correlation is obtained between the ten independent variables (DW value=1.9). In addition, Table 9.3 shows that in the non-single child group, the contributions of two variables are statistically significant, with egalitarian sex role recording the highest Beta value ($\beta$=.20, $p$<.01), followed by authoritarianism ($\beta$=.14, $p$<.05).

When personality level (empathy, flexibility, perspective-taking, openness, suggestibility) is entered into the analysis, it explains 18% of the variance in adherence to democracy in the single child group, while it explains only 0.4% of the variance in the non-single group. This is an evident difference in the personality level between the two groups. However, after entering the social level (egalitarian sex role, normative identity style, interpersonal trust, prosocial behaviour, authoritarianism) in the analysis model, the data shows that only 6% and 7% of the

variance in adherence to democracy are explained by social level in the single child and non-single child groups respectively. Based on these data, personality level predicts adherence to democracy more substantially in the single child group than in the non-single child group. However, the social level predicts adherence to democracy at the same rate in both groups.

Table 9.3 Hierarchical multiple regression in single child and non-single child groups

| | | single | | | | non-single | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $R^2$ | $R^2$ change | $P$ | $\beta$ | $R^2$ | $R^2$ change | $P$ | $\beta$ |
| **Step 1** | **Personality Level** | .18 | | .002 | | .04 | | .039 | |
| | Empathy | | | | .12 | | | | .11 |
| | Flexibility | | | | -.10 | | | | -.06 |
| | Perspective-taking | | | | .13 | | | | -.01 |
| | Openness | | | | .18 | | | | -.01 |
| | Suggestibility | | | | -.09 | | | | -.00 |
| **Step 2** | **Social Level** | .24 | .07 | .002 | | .11 | .07 | .000 | |
| | Egalitarian Sex Role | | | | .22* | | | | .20** |
| | Normative Identity | | | | -.07 | | | | .02 |
| | Interpersonal Trust | | | | -.12 | | | | -.02 |
| | Prosocial Behaviour | | | | .07 | | | | -.02 |
| | Authoritarianism | | | | .12 | | | | .14* |

Note: Statistical significance: *$p$<.05; ** $p$<.01; ***$p$<.001; single=Chinese single child group, non-single=Chinese non-single child group

### 9.2.4 Differences for the variables across groups and genders

In order to test if there are differences between the single child group and non-single child group, and between males and females for all the variables (including the ten independent and one dependent variables), a 2 (Group: single child, non-single child)×2 (Gender: men, women) ANOVA was performed using SPSS 21. Table 9.4 indicates that there are main effects of gender for only four variables (empathy,

egalitarian sex role, suggestibility and democracy). That is to say, there are differences between males and females in empathy ($P<.01$), egalitarian sex role ($P<.001$), suggestibility ($P<.001$), and democracy ($P<.05$). More broadly, females scored higher than males on all of these four variables: empathy [$F(1,396)=5.31$, p<.05], egalitarian sex role [$F(1,396)=74.41$, p<.001], suggestibility [$F(1,396)=13.54$, p<.001], and democracy [$F(1,396)=5.02$, p<.05]; however, there is no main group effect on any variables, and no interaction effect between group and gender was found. In other words, there is no difference for all the variables between the single child group and the non-single child group.

Table 9.4 Two-way ANOVA (2 [Group: single child, non-single child] ×2 [Gender: men, women]) for all variables

| | S Group | N Group | Male | Female | *p*-value Group Gender | | *p*-value Group*Gender |
|---|---|---|---|---|---|---|---|
| Empathy | 27.87(4.35) | 28.06(4.04) | 27.52(4.48) | 28.25(3.92) | NS | .022 | NS |
| Flexibility | 23.25(3.43) | 23.40(3.56) | 23.58(3.29) | 23.25(3.63) | NS | NS | NS |
| Perspective-taking | 14.51(4.31) | 14.75(4.06) | 14.41(4.65) | 14.75(4.06) | NS | NS | NS |
| Egalitarian | 39.08(5.00) | 38.65(4.58) | 35.89(4.31) | 40.18(4.23) | NS | .000 | NS |
| Normative | 19.70(4.45) | 20.64(4.46) | 20.48(4.79) | 20.35(4.31) | NS | NS | NS |
| Interpersonal Trust | 17.97(2.48) | 18.13(2.54) | 18.17(2.76) | 18.05(2.40) | NS | NS | NS |
| Openness | 37.49(4.46) | 36.93(4.56) | 37.44(4.64) | 36.90(4.48) | NS | NS | NS |
| Suggestibility | 23.66(4.63) | 23.68(3.59) | 22.80(4.16) | 24.11(3.68) | NS | .000 | NS |
| ProsocialBehaviour | 28.55(5.41) | 28.80(5.22) | 29.77(5.92) | 28.23(4.85) | NS | NS | NS |
| Authoritarianism | 24.15(2.52) | 24.14(2.46) | 23.93(2.56) | 24.25(2.43) | NS | NS | NS |
| Democracy | 26.42(3.28) | 26.07(2.72) | 25.51(3.02) | 26.49(2.76) | NS | .026 | NS |
| N | 106 | 294 | 132 | 268 | | | |

Note: single=Chinese single child group, non-single=Chinese non-single child group; NS=not significant

## 9.3 Discussion

Based on the transgenerational and cross-cultural studies (Study 7 and Study 8), this study split the whole young Chinese generation sample into two groups: single child and non-single child groups. The aim of this extra work was to explore whether even under the same social and educational surroundings, there would be a gap between the two groups in the younger Chinese generation.

In this study, it has been found that in both the single child and non-single child groups, egalitarian sex role is a pivotal predictor for adherence to democracy. Additionally, for the non-single child group, authoritarianism is the other predictor for adherence to democracy. Unfortunately, the two-way ANOVA results do not reveal any group difference for any of the variables. However, there are gender differences in empathy, egalitarian sex role, suggestibility, and democracy, with young Chinese young females higher in these four variables than their male counterparts.

Similarly to my previous studies, egalitarian sex role is an important trait for adherence to democratic values. As mentioned in previous chapters, the positive relationship between egalitarianism and democracy might be due to the ideology of equal rights offered by Chinese society to the disadvantaged classes of people including women over the past few decades (Beer, 2009); also, this thesis has identified that women are indeed real supporters of democratic values, as they show a strong willingness to be treated as equals to men in different areas in society (Lopez-Claros & Zahidi, 2005). New Chinese cultural developments due to both open social and family policies have created a new environment that allow the younger

Chinese generation to pay more attention to gender equality and liberalised views. Egalitarianism is supported by the Chinese government and has been broadly accepted by the Chinese public (Stacey & Croll, 1984). For instance, there is a growing number of Chinese women and mothers who now have jobs outside home, some of whom even have key positions at their places of work. This means that Chinese women's social status and efforts at work now receive considerable credit from society and the public (Yongping, Jie, Bijun, & Mow, 2004); Chinese nine-year compulsory education policy was implemented in 1986 with the purpose of offering equal and free educational chances to all Chinese children, regardless of their gender and family's economic status (Zhang & Minxia, 2006). Moreover, due to the influence from the positive social gender change, the family concept that 'values only boys' has been changed. That is, in old China, boys were much more valued than girls, as they were regarded as the only ones who could carry on the family line and could help to greatly fulfill the whole family's needs (Stockman, 1994). However, in contemporary China, girls are treated as important as boys in both single child and non-single child families (Tsui & Rich, 2002). In fact, based on these social and family factors, it seems that there is not much difference in the levels of egalitarianism between the single child Chinese and non-single child Chinese participants.

Moreover, it is found that authoritarianism is another predictor for adherence to democracy in the non-single child group, which was not observed in the single child group. Notably, in this study, authoritarianism showed a positive adherence to democracy for the non-single child group, which is not in line with many previous findings about the link between authoritarianism and democracy. For instance,

authoritarianism stems from intolerance of ambiguity and cognitive rigidity, which goes against adherence to democracy (Duncan & Peterson, 2014). Authoritarianism essentially implies that governments need to impose power and control in society to control 'wrong-doing', which consequently limits political freedom for citizens (Duncan & Peterson, 2014). Furthermore, authoritarianism is negatively related to openness, which is regarded as one of the strongest factors for supporting liberalism (De Neve, 2013). This peculiar finding might be explained by the structure and education of non-single child families. Though the non-single child group was brought up in the same social context as the single child group, their family structure differs. Having more than one child may lead to less attention and affection received from parents. Thus, children in non-single families are expected to be more considerate and understanding towards their parents to reduce their burden (Settles, Sheng, Zang, & Zhao, 2013). That is, children growing in a non-single child family might tend to suppress their feelings and ideas to obey their parents' arrangements to be a good example among siblings (Liu, Lin, & Chen, 2010). However, out of the family context, children of both single and non-single families receive the same education at school, while sharing their ideas and attitudes, and what they learn in their family contexts (Gai & Wang, 2006). Bearing this in mind, Chinese children from non-single child families have the possibility of swinging between authoritarian and democratic values which are promoted by the family and educational environment respectively.

The result that Chinese women have higher levels of empathy is in accordance with previous studies showing that women are more empathetic than men during their

life span, due to their high levels ofemotional understanding (O'Brien, Konrath, Gruhn, & Hagen, 2012; Toussaint & Webb, 2005). From a biological point of view, it might be because of their high levels of oxytocin (OT) and arginine vasopression (AVP) which can directly facilitate positive social feelings and behaviour (Skuse & Gallagher, 2009). In fact, Chinese young females' empathy and high sense of sex role egalitarianism are positively related to their adherence to democracy. Empathy is one of the vital sources for prosocial behaviour and can inhibit aggressive behaviour, which may indicate that people with more empathy recognise the welfare of out-group, thus tolerate dissimilar ideas (Eisenberg, Eggum & Di Giunta, 2010; Bethlehem et al., 2016). Furthermore, empathy can directly influence support for democratic values by helping people overcome biased viewpoints and discrimination towards dissimilar groups (Finlay & Stephan, 2000).

Concerning egalitarian sex role and its impact on democratic attitudes in young Chinese females, research shows that improving gender equality has been one of the aims of democracy through its history (Beer, 2009; Inglehart, Norris & Welzel, 2004). Women have experienced great changes over the past few decades and gained opportunities to participate in political activities taking important governmental positions (e.g. Angela Merkel, the current Chancellor of Germany; Theresa May, the current Prime Minister of the United Kingdom; Tsai Ing-wen, the current Taiwanese President). Women's social status has been enhanced and their contribution to society has been outstanding in both Western countries and most Asian developing countries (Ely, 1995). Besides, bearing in mind personal and social economic contexts and their positive impact on women's independent lives through

participation in the work force, they are now in an excellent position to regard themselves as equal to men in society; this, in its own right, provides further support for democracy (Thornton, Alwin & Camburn, 1983). China has introduced a big program in the areas of technology and the economy, in which a large number of Chinese women are working (Honig & Hershatter, 1988). Chinese women's participation in the workplace has enhanced both their support for egalitarian sex role and social status. It has revolutionised the traditional thinking and norms that suggested women could be nothing more than a 'good wife' and 'good mother' at home. Furthermore, education is another marker for democracy, as a higher educational level normally predicts stronger support for democratic values (Peterson & Zurbriggen, 2010). In the Chinese social context, gender equality including free education and offering women more freedom have been pursued by the government since 1949 (Stacey & Croll, 1984). In the context of this background, young Chinese females studying in higher education (recruited by Chinese universities), together with the Chinese micro-social context relating to the economy and gender equality policies, mean young Chinese females are well-prepared for holding strong attitudes in support of egalitarianism and democracy. In fact, the positive relationships between the economy, independent thinking, egalitarianism and democracy have prepared the ground for women to focus more on work, acquire a greater sense of achievement and income. Thus, they are pursuing a more egalitarian sex role by enhancing their individual abilities, and facilitating adherence to democratic values by tolerating dissimilar viewpoints (Thornton, Alwin & Camburn, 1983; Trevor, 1999; Inglehart, Norris, & Welzel, 2004; Fortin, 2005).

In this study, it has also been found that young Chinese females scored higher than their male counterparts on suggestibility. This result is similar to that in the trans-generational study (chapter 7) and cross-cultural study (Chapter 8). Both Chinese and British women have higher levels of suggestibility than their male counterparts. In essence, apart from being older Chinese or younger Chinese females, their high suggestibility level is mostly influenced by Chinese culture. On the one hand, suggestibility is positively related to conformity and submissiveness, while negatively related to critical thinking (Stacey, 1985; Croll, 1995). As mentioned before, it seems that young Chinese females' high suggestibility is not in line with their strong support for egalitarianism and democracy. On the other hand, the long-term conservative culture of China that defines women as conformist seems to have been adopted and internalised by Chinese people (Wegrocki, 1934; Hirabe & Monzen, 1998). That is, women's high suggestibility can be triggered in certain cultural contexts. In other words, Chinese females might be in the process of being supportive of democratic values but they are restrained by the Chinese cultural context that combines both traditional and modern imperatives. Consequently, if traditional conformity still plays a serious role in Chinese women's lives, lack of critical thinking would increase suggestibility levels.

Unexpectedly, there was no group difference between the Chinese single child group and the Chinese non-single child group for any of the variables. According to Liu, Lin, & Chen (2010), due to the fact that Chinese single children are the main focus of the family, they can effortlessly receive enough love and attention from their parents and grandparents. Thus, they are more concerned with their inner-world and tend to have more selfish behaviours (Chen, 2003; Settles, Sheng, Zang, & Zhao, 2013).

Such a unique family structure and democratic family education might make Chinese single children have high openness, flexibility, critical thinking and a strong sense of equality, all of which can lead to support for democratic values (Aquilino & Supple, 2001). The similarity between Chinese single children and non-single children in terms of personality traits might be due to their school and educational surroundings. That is, other than family parenting, schooling can have a profound impact on personality for Chinese children (Larson & Verma, 1999), as they spend much of their time in school with other children (Dandy & Nettelbeck, 2002). The earlier Chinese educational style that allowed students to spend most of their time (from 7:30am to 5:00pm) in the classroom, gives both single children and non-single children more chance to grow together and have a mutual impact on each other (Chan, 1999).

### 9.3.1 Conclusion

Egalitarian sex role is the best predictor for democracy in both the single child and non-single child groups, which is in line with the previous studies in this project. In the non-single child group, authoritarianism is another predictor for democracy, but it indicates a positive adherence to democracy, which is not in accordance with previous studies, as authoritarianism has been proved to be a barrier to liberalism. Chinese non-single children's contradictory results may be explained by their family structure; that is, less attention from parents may lead them to be suppressed and submissive in order to set an example for siblings and reduce the family burden. However, when they spend more time in schools communicating or exchanging

ideas with their friends or classmates who are single children, they may be influenced by their free ideas. This can also explain why there is no group difference between the single child and non-single child groups. Under the previous Chinese educational system, though family education is important to forming children's personalities, schools also play a vital role in the process. Young Chinese females' strong democratic attitudes can be explained by their higher levels of empathy and egalitarian sex role. However, their high suggestibility seems not to be in line with their democratic values. Young Chinese females have the tendency to support democracy but they are still affected by China's long history of conservative culture. In this sense, their high suggestibility should be considered within the specific Chinese cultural context.

# Chapter 10 General Discussion

## 10.1 Review of the four studies and the key findings

This study included four sub-studies. The main aim of Study 1 (the pilot study) was to examine the reliability and validity of the translated Chinese questionnaires employed in the present research. The other studies aimed to explore how individuals' psychological characteristics (empathy, flexibility, perspective-taking, egalitarian sex role, normative identity style, interpersonal trust, openness, suggestibility, prosocial behaviour, and authoritarianism) impact on their political behaviour, including the contributory role of each variable in adherence to democratic values, and the gender/group differences in these variables in different contexts. The series of studies was designed to detect potential differences between: (a). the younger Chinese generation and the younger European generation both living in the United Kingdom (pilot study); (b). between the older Chinese generation and younger Chinese generation (trans-generational study); (c). between the younger Chinese generation and the young local White British generation (cross-cultural study); (d). finally, between young Chinese groups brought up in non-single child and single child families (single-child study). Moreover, the research aimed to gain an insight into gender differences in the eleven variables in each group.

For the pilot study, 98 Chinese students who were studying in United Kingdom universities, and 119 young European participants who were living in the UK were included. For the main studies, 333 Chinese mainland older participants, 400 Chinese

mainland young participants (106 single child and 294 non-single child participants) and 158 local White young British participants were recruited. All the Chinese participants used the translated Chinese questionnaires. Moreover, in every study, a hierarchical multiple regression was implemented in these studies in order to determine the contributory role of each variable in the outcome variable (adherence to democratic values). A two-way ANOVA (group×gender) analysis aimed to gain an insight into gender and group differences for the eleven variables.

The results showed that the Cronbach's Alpha for the translated Chinese scales were good, from .62 to .82, but for the scales of interpersonal trust and authoritarianism, the Cronbach's Alpha were lower than for other scales. Based on three measurements (perspective-taking, openness to experience, and prosocial behaviour scale) which had been used in the Chinese mainland population, the inter-correlations between these variables showed convergent and divergent validity.

Egalitarian sex role seems to be a vital predictor for democracy in both younger and older Chinese groups. For the young local White British group, instead of egalitarian sex role, openness is the best predictor for democracy. When comparing with older Chinese generation, the young Chinese generation is higher in empathy, egalitarian sex role, openness and democracy. However, when comparing with young local White British, the young Chinese generation is higher in normative identity style, interpersonal trust, suggestibility, prosocial behaviour, and authoritarianism. Females are regarded as better supporters of egalitarian sex role in each study; in particular, young Chinese females seem to be an important population, as they are not only

treated as loyal supporters for egalitarian sex role but also show the strongest support for democracy. Unfortunately, there is no difference between the Chinese single child group and the Chinese non-single child group.

## 10.2 General discussion of the four studies

Though from the pilot study, the general Cronbach's Alpha values for most of the translated Chinese scales were good, the scores for interpersonal trust and authoritarianism stayed low. The possible reason for this is the sensitive questions which were asked in this study; that is, during the process of collecting data, some participants might have hidden their real answers when coming across hard and sensitive questions. In particular, for the authoritarianism scale, as to a large extent, this scale is related to political issues, when the Chinese participants were doing this questionnaire, they might have thought their answers would be linked to their names, which might bring them possible political troubles.

Regarding the predictors for democracy in each study, egalitarian sex role was a predictor for adherence to democracy in both the older Chinese and younger groups, especially as it is an important predictor for adherence to democracy in the young Chinese generation; while empathy and authoritarianism are two vital predictors for adherence to democracy in both the European and local British groups. Notably, though egalitarian sex role is a significant predictor for adherence to democracy in both the Chinese single and non-single child groups, authoritarianism distinctively

becomes a positive predictor for adherence to democracy in the non-single child group.

Egalitarian sex role is a significant predictor for adherence to democratic values in both the older and younger Chinese generations, which may potentially be due to the impact of Chinese social reform. Firstly, since the new Chinese government founded in 1949, Chinese women's roles have been redefined in both public and domestic spheres by allowing them to work in society (Stacey & Croll, 1984). The biggest goal of the new modernisation era was to turn China rapidly into a powerful and modern socialist society by developing agriculture, industry, science and technology, and strong defence (Ching, 1984). The older Chinese generation was reared in the transient time period, which gives us a hint that their political attitudes and political behaviour might have been impacted upon by the social change. In fact, to establish a modern Chinese socialist society, both men and women needed to be involved. Therefore, this offered a perfect chance for Chinese women to participate in the work force and production cycle (Zhangling, 1983). In other words, the rapid development of modern China initiated a new social phenomenon whereby more Chinese women were recruited into the labour force, employed, and rewarded in production activities. This gave them the right to be paid equally to men, and share the wealth with men (Wang, 1999). In the meantime, the Chinese government carried out some general strategies to legislate for gender equality, encourage women to step into the production field, balance a new ideology of gender equality, and encourage women to enhance their economic, social, and political activities (Stacey & Croll, 1984), all of which undoubtedly consolidated the contemporary position of Chinese women's social rights.

Furthermore, the reform of the education system also enhanced girls' educational rights, thus indirectly improving gender equality for the whole society (Xian-zuo, 2007). In old China, tradition supported the idea that boys are superior to girls; this may still be reflected in remote rural areas. Boys played a vital role both inside and outside the family, as they were treated as persons who could carry on the family line (Stockman, 1994; Rong & Shi, 2001). As a result, in old China, boys had priority to have more education, which brought them even more advantages compared to girls. However, since the implementation of the nine-year compulsory education policy in 1986, girls have been endowed with the same rights as boys and can equally enjoy education (Xian-zuo, 2007). Such an education policy in China aims to cultivate more talents and has led to the emerging social phenomenon of more women going out to work. A society with working women with a better education would be more beneficial to social, economic and political developments (Parish, Zhe, & Li, 1995).

Bearing this in mind, the rapid development is interconnected with levels of education, both of which can result in a stronger attitude towards gender egalitarianism in society. Egalitarianism including gender equality essentially lays a sound foundation for democracy.

Democracy was derived from ancient Greece and has been well developed in Western countries. In its developmental history, democracy took different forms including representative democracy and direct democracy (participatory democracy). China, as one of the biggest developing countries, regards the People's Congress as its political regime, which is decided by the current State system (Wong, 1987).

Unlike other robust democratic countries, the specific cultural background in China undoubtedly generates barriers to achieve the goal of real democracy (Nathan, 1993). However, this does not mean China is outside the 'door' of democracy; it is still on its way. Among all the changes, pursuing gender equality is closely relevant to the development of real democracy to a large extent under the specific Chinese cultural background. In this sense, egalitarianism is a suitable indicator of adherence to democracy within the context of the Chinese cultural background. Both egalitarianism and democracy share the same aim to offer disadvantaged people (including women) equal rights and balance power among citizens (Beer, 2009). This is supported by the results of the current study.

Interestingly, except for egalitarian sex role, authoritarianism was the other predictor for adherence to democracy in the Chinese non-single child group (positively correlated). This is not in line with the results of previous studies. One plausible justification for this result could relate to their family structure and school life. Considering the non-single child group have to share their parents' and grandparents' love and attention with other siblings, they may try to be more compliant with their parents to reduce the family burden (Settles, Sheng, Zang, & Zhao, 2013). This might lead to non-single children conforming more and being higher in normative identity style (Liu, Lin, & Chen, 2010). On the other hand, when the non-single children spend time in school with single children, they would be influenced by their single child peers who have grown up in different, freer surroundings (Gai & Wang, 2006). This may explain this apparent contradiction.

The result that high empathy and low authoritarianism proved to be the two best predictors for adherence to democracy in both the European and local British groups is in accordance with the findings of a previous study which tested 1341 upper secondary school students in Finland (Miklikowska, 2012). Authoritarianism closely associates with the characteristics of normative identity style, conformity, and security, all of which can pose a threat to changing individuals' internalised concepts and goals. For example, liberalism, as a flexible political ideology, which facilitates tolerating dissimilar ideas would represent a great threat to authoritarianism's political goals (Cohrs, Kielmann, Maes, & Moschner, 2005). The main aspect of empathy is concern about others' feelings (emotional empathy) and trying to understand others' benefits (cognitive empathy), both of which may resonate with the requirements of democracy, namely being tolerant of various possibilities without biased viewpoints (Bailey, Henry & Von Hippel, 2008; Morell, 2010). In fact, in the pilot study, for the young Chinese population living in the UK, empathy was also found to be an important predictor for democracy. This might be explained by the Western cultural influence on young Chinese students in the UK as they are exposed to the cultural norms of the host society. However, this would not be in the case for Chinese mainland university students.

In terms of the group and gender differences in each study, both European and local British groups show higher levels of empathy, perspective-taking, openness, and democracy compared with the young Chinese generation. Moreover, compared with both European and local British groups, the young Chinese group is higher in normative identity style, interpersonal trust, suggestibility, and authoritarianism. Interestingly, when compared with the older Chinese generation, the younger

Chinese generation scored higher on empathy, egalitarian sex role, openness, and adherence to democracy, just as the European and British participants did. In addition, there are gender differences in some of the variables, with female participants consistently being higher in egalitarian sex role than their male counterparts, and Chinese women holding more support for democratic values than Chinese men. Notably, both older Chinese females and younger females were higher in suggestibility, which is not in accordance with their strong support for democracy.

Both European and local British groups consistently scored higher in empathy, perspective-taking, openness, and democracy than their Chinese counterparts (young Chinese university students living in the UK and young Chinese university students living on the mainland), while these two young Chinese groups consistently scored higher on normative identity style, interpersonal trust, suggestibility, and authoritarianism. These differences might be attributed to the acceptance of democratic values (Kaviani & Kinman, 2017), and cultural differences (Wei, Su, Carrera, Lin, & Yi, 2013; Pires, Silva & Ferreira, 2013). As discussed in the previous results chapters, empathy, perspective-taking, and openness are the basic psychological characteristics that can trigger democratic values as they are thought of as the foundation for political tolerance through concern for others' benefits, the evaluation of the current context from an objective perspective and being critical and creative (Cohrs, Kielmann, Maes, & Moschner, 2005; Shih, Wang, Trahan Bucher, & Stotzer, 2009; Kruglanski, and Boyatzi, 2012). In fact, individuals with a strong adherence to democratic values might show higher levels of empathy, perspective-taking, and openness. Moreover, for both young Chinese populations living in the UK and the mainland of China, their high normative identity style and authoritarianism

might be influenced by their collective culture, which may lead them to be lower in adherence to democracy but higher in authoritarianism (Miklikowska, 2012; Grabb, 1979). In fact, their high levels of authoritarianism are in line with their normative identity characteristics, as normative identity style refers to the adherence to a conservative mind-set and reflects the tendency to meet significant others' expectations. Authoritarianism includes the traits of maintaining social cohesion, conformity, and security; all of these factors may become an obstruction to support for democracy (Kaviani & Kinman, 2017).

Chinese higher interpersonal trust and suggestibility might be explained by China's cultural background (Wei, Su, Carrera, Lin, & Yi, 2013; Pires, Silva & Ferreira, 2013). It is argued that interpersonal trust can boost democracy through participation in democratic activities (Kaviani & Kinman, 2017); it can also be profoundly affected by culture, implying that Chinese people's higher interpersonal trust might be related to their social goals and harmony (Wei, Su, Carrera, Lin, & Yi, 2013). Similarly, in the context of the cultural background, concerning cooperative communication style, an individual is prone to more suggestibility (Pires, Silva, & Ferreira, 2013). In other words, as they do not want to be treated as a 'stranger' within a group by holding different ideas and acting differently, thus they might reserve some of their alternative opinions and comply with the surroundings.

Notably, when compared with the European and local British participants, the Chinese participants scored higher on normative identity style, interpersonal trust, and authoritarianism, while the European and local British groups scored higher on empathy, openness, and democracy. However, when compared with the older

Chinese generation, the younger Chinese generation reported higher levels of empathy, openness and adherence to democracy, which is similar to their counterparts in the European and British samples. At the same time, the older Chinese generation has greater tendencies to normative identity style, interpersonal trust, and authoritarianism just as the younger Chinese generation does.

Firstly, the gap between the older Chinese generation and the younger Chinese generation might be due to Chinese reform and the open policy carried out from 1978 which aimed to enhance the Chinese economy, and eventually changed the social state from being 'closed to the outside world' and triggered Chinese educational reform (Misra, 2001; Xian-zuo, 2007). Older Chinese participants were born between 1956 and 1971, which indicates that their experiences were profoundly influenced by the Chinese 'closed' period that in turn could have resulted in different mind-sets and personal characteristics. According to Kurmaeva (2011), family education, school education, and childhood experience play vital roles in forming an individual's personality. For example, children growing up in authoritative families show more conformity, rigidity, normative identity style, and conservative attitudes in their behaviour that can directly lead to more support for authoritarianism (Wang, Wiley, & Chiu, 2008). Before 1978, China was a comparatively closed authoritarian society with a social context that embraced 'less democratic and more authoritarian' elements. Dominant parenting styles were followed by Chinese families, which were influenced by Chinese society (Brockett, Cooper, Wang, & Shin, 1998). However, after 1978, the new open policy brought about new surroundings for growing up in for the new Chinese generation, which

impacted on Chinese families and the educational system (Brockett, Cooper, Wang, & Shin, 1998). For instance, the central idea for this reform was to be 'open' to the world, that is, to open up the Chinese market to the world in terms of both exports and imports; develop Chinese social infrastructure through advanced technology; and educate Chinese people with creative and critical ideas to change their rigid mind-sets through the new educational model. In the meantime, one of the achievements of educational reform that benefited Chinese children most was the nine-year compulsory education plan introduced in 1986, which offered a fair and equal educational opportunity to the new generation (Zhang & Minxia, 2006). Taken together, the gap between these two Chinese generations can be attributed to the change in the Chinese social context brought about by the Chinese reforms.

Furthermore, the gap between the young Chinese generation and the young European/British generation might be owing to the degrees of acceptance of democracy (Kaviani & Gail, 2017). In fact, the young Chinese generation's democratic values are cultivated by the new Chinese educational reform, which provides more emphasis on students' creative and critical thinking skills (Hallinger, 2010). In addition, Chinese families focus more on respecting their children's own inclination (Rong & Shi, 2001) and governmental actions for a 'fair and open' atmosphere in the work place (Lin, Cai, & Li, 1998). These changes can be treated as milestones, which prepare the ground psychologically for adherence to democracy. However, one has to bear in mind that the young Chinese generation's adherence to democratic values is restricted by the long-term influence of conservatism, and Chinese regime polity that refers to centralised controls (Jing, Lu, Yong, & Wang,

2002). The long history of robust democratic values consistently runs through Western culture, education, and social development (Saint-Paul & Verdier, 1993).

Notably, these results, together with the cultural backgrounds, highlight that the connections between empathy, normative identity style, openness, interpersonal trust, and authoritarianism, and their adherence to democracy are important factors in distinguishing to what extent the older Chinese group, the younger Chinese group, and the European/British group might support democratic values. Thus, lower levels of support for democracy might be related to normative identity style, interpersonal trust, and authoritarianism; while higher levels of democratic values might be related to empathy and openness. This is in accordance with why the younger Chinese generation is high in empathy, openness, and adherence to democracy compared with the older Chinese generation, although they tend to be high in normative identity style, interpersonal trust, and authoritarianism compared with Western participants. This was, in the first instance, one of the main aims of the current study.

Two interaction effects were found for group and gender in both the trans-generational and cross-cultural studies. In the former, it can be noted that though there is no significant difference between the older Chinese and younger Chinese males in egalitarian sex role, the younger Chinese female participants scored higher, followed by the older Chinese females, the older Chinese males, and the younger Chinese males. In addition to egalitarian sex role, there were group and gender interactions for adherence to democracy, with the young Chinese females being the best supporters for democracy, followed by the young Chinese males, old Chinese

males, and old Chinese females. However, there is no significant difference between the older Chinese males and the older Chinese females. Regarding the only group and gender interaction for egalitarian sex role in the cross-cultural study, it can be noted that despite there being no significant statistical difference between young local British males and females, young Chinese females were still the best supporters. However, young Chinese men showed the least support for egalitarian sex role. This information is presented in more detail in Figures 7.1, 7.2, and 8.1 showing group and gender interactions in these two studies.

Young Chinese females are loyal supporters of both egalitarian sex role and democracy in both trans-generational and cross-cultural studies. As mentioned above, Chinese girls and females indeed benefit greatly from the new Chinese policies concerning egalitarian sex role and have a strong willingness to maintain their positions and keep the social balance by considering their viewpoints (Liu, 2003). However, young Chinese males are the lowest supporters of egalitarian sex role perhaps because of the fierce competition in both education and work places and the enhancement of females' abilities and positions. This in fact can be seen as a threat to Chinese males' social and economic positions (Lin, 2000; Izraeli & Adler, 1994). Notably, though older Chinese females are the second strongest supporters of egalitarian sex role (young Chinese females are the strongest supporters), they turned out to be the weakest supporters of democratic values. This big discrepancy might be attributed to the long-term Chinese authoritarian socio-political system and modern social transformation. Older Chinese female participants were born between 1956 and 1971, during a time when they would have been profoundly impacted

upon by traditional Chinese authoritarian policies (Salaff & Merkle, 1970; Wolf, Witke, & Martin, 1975). As Chinese reform policies were implemented successfully, older Chinese females became satisfied with their family and social positions, which were brought about by the changes in egalitarianism; thus, they support egalitarian sex role strongly, since they have enjoyed the consequent benefits (Li & Zhang, 1994). However, regarding democracy, they seem cautious and seem to have an aversion to the possibility that it may destroy their achievements, benefits, and rights given by the Chinese government (Barlow, 2004). In other words, they try to protect their rights and current social role by following and supporting the Chinese government's decisions by conforming.

## 10.3 Conclusion

As stated in the previous chapters, one of the primary aims of this study was to explore how individual psychological characteristics affect political attitudes, and how these influences differ within various cultural contexts, backgrounds, and family structures. Furthermore, this study was carried out to test whether there are group or gender differences for these variables in each sub-study.

Empathy and authoritarianism can be deemed as good predictors for democracy in both the EU and UK group, while egalitarian sex role is always the best predictor for democracy in both the younger and older Chinese groups. Empathy, openness, normative identity style, interpersonal trust and authoritarianism might be regarded

as important psychological characteristics to distinguish the degree of support for democracy. Strong support for democracy might be related to empathy and openness; while less support for democracy might be related to normative identity style, interpersonal trust, and authoritarianism.

The younger Chinese generation shows their higher support for democracy compared with the older Chinese generation but is less supportive compared with the young EU/UK generation, who were born and brought up in the context of a long history of robust democratic culture. This is a hint indicating that modern China is leading young people towards being prepared for democracy; notably, this change needs to be considered in the context of China's specific cultural background and the restraint coming from its policies. Young Chinese females can be regarded as loyal supporters of democracy, which mainly stems from their higher degree of egalitarian sex role. Undoubtedly, the development on the economy, education, and technology has brought the young Chinese generation into a new social context with a comparatively free and open atmosphere. In fact, older Chinese females as well as the EU/UK females showed their strong support for egalitarian sex role, which indicated that gender egalitarianism is becoming a worldwide issue. This change might not necessarily be a product of democracy but might be linked to the social developments in both Asian and Western countries.

## 10.4 Limitations

All of the young Chinese and EU/UK population were recruited in Chinese and UK universities; the samples may thus not be representative of the wider young Chinese and EU/UK population. It is not universal for young people to attend university; therefore, only more highly educated young citizens were selected for this study, as the less educated population will not attend university. However, there are differences between more highly and less educated citizens. For example, for well-educated citizens, their higher educational levels might intensify their support for democracy, as they receive more new information and knowledge and enhance their exposure to training to acquire critical thinking skills, both of which can boost support for democratic values (Benesch, 1993; Shu, 2004; Onsman & Cameron, 2014). This is in accordance with the results of this study which show that all of the young groups show higher levels of support for democracy. Thus, in order for this study to have enhanced equivalence, further research should use samples outside university in order for a more general young population to be assessed more vigorously.

Moreover, the Chinese participants were all recruited only in one province of China (Guizhou province); Guizhou province is located in the southwest of China and it is a small and less advanced province. The regional limitations for the Chinese participants might form a barrier to generalising the findings to the whole Chinese population. Each individual's psychological traits differ in the context of various surroundings growing up. For example, big and well-developed cities might offer citizens better educational circumstances, better media systems, and more advanced information, all of which may in turn lay a firmer foundation for democracy. Future

studies could target recruiting participants from diverse urban and rural areas of China to cover more provinces.

Furthermore, the finding that there is not any difference between the Chinese single child group and non-single child group for the target variables should be retested by recruiting more Chinese single child and non-single child participants from diverse places in China. The Chinese 'single child' seems to be a special and precious population, as the one child policy only lasted for 36 years (1979 to 2015). The single-child's family structure, surroundings growing up, the pattern of interaction with their family members and outside world might be different from a non-single child's, which may form a gap between the two populations in terms of psychological traits, and finally generate disparate political values and behaviours. Unfortunately, this has not been proved in this study; as mentioned before, this might be due to the special educational system in varying regions, that is in less advanced cities, school children spend more time with their peers in school than they spend with their siblings at home. As a result, though they have a different family structure, their peers could easily influence their values and ideas. In this sense, it is understandable that there is no difference between the two groups. However, the school times vary in different regions, which means in more advanced regions, such as Shanghai, Beijing and Guangzhou cities, students spend less time in schools, as they are encouraged to spend more time outside the class to develop their hobbies instead of only focusing on academic achievements. Thus, recruiting both single child and non-single child participants in diverse areas of the mainland should be considered for future studies.

A qualitative study method could be added to complement the design of future studies. Though based on the large number of participants, a quantitative study seemed to be a better option, as it can allow large amounts of information to be collected via self-reporting which achieved the goal for this study. There were some interesting results, for example, that older Chinese females showed their strong support for egalitarian sex role but the weakest support for democracy; that the young Chinese male group seemed to be a good supporter for democracy but the results dramatically showed the group to be the weakest supporter of egalitarian sex role. Though the possible interpretations have been given in previous chapters, there still needs to be some convincing evidence that outlines the justification for these results, which might include the complex social/cultural-developmental factors to explain the contradictory results. A further qualitative study could supply the information, as it could help to produce expressive data providing descriptive details.

## 10.5 Implications

This study expanded on the knowledge of how personality influences individuals' political values; it updated and upgraded relevant studies to a cross-cultural and trans-generational study using the Chinese population. Also, it used a set of measures for personality, most of which had not been used in the Chinese mainland population, such as normative identity style, egalitarian sex role, suggestibility, empathy, flexibility, democratic values, interpersonal trust, and authoritarianism. As one of the few political-psychological studies comparing Asian individuals with

Western individuals in terms of political values based on their different cultural backgrounds, this study could be regarded as a landmark piece of research, as it has 'opened the gate' for investigating Chinese citizens' political values from a psychological science perspective.

Firstly, one implication of this study is that it has supplied the reliability and validity of the translated Chinese measures, which were used in this study; this is the first study that has used a number of English versions of measurements, then through a translation and back translation process has finally generated the adapted Chinese versions. This work has provided the foundation and outlines for further similar studies that might be carried out in other Asian countries, and it has offered data for these translated measures for future Chinese scholars in this area; that is, it has offered the possibility of applying these translated Chinese measures to the Chinese population again.

Secondly, another potential implication of this study is that it can offer the political strategists and policy makers some guidelines for making new political policies or reforming some current policies in order to bring Chinese democracy to a new stage based on China's cultural background. As this study has presented its results at two different levels (personality and social levels), which may be worthwhile for political strategists to consider how new or reformed policies might be accepted widely in public. Moreover, it has informed them about which groups have a strong desire for democracy, which may be helpful for them in carrying out political policies accordingly, as one aim of government performance is letting citizens accept and support policies generally.

Furthermore, the results of this study might offer some vital information for the education system; the results of this study can inform educational institutions what personalities could be vital factors for developing democratic values. For instance, empathy was proven to be one of the vital personality traits that could boost democracy through acceptance of dissimilar ideas and tolerance; normative identity style could be regarded as an important factor that can trigger authoritarianism for its deficiency of critical thinking; however, cultivating students' critical thinking seems to be one of the main responsibilities of schools in good education systems.

Also, the results highlighted the gap between two groups of young adults coming from two cultural backgrounds in terms of various personality traits, which may make Chinese educational workers consider whether they need to change current educational skills accordingly. Thus, during the long process of education, on the one hand, schools can make some effort to develop the factors that can lay the foundation for future democracy; on the other hand, students can benefit more and acquire more skills at different educational levels.

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# Appendix  A

## Information sheet for participants

*(Please remove and keep this information sheet)*

**A study on psychological characteristics predicting socio-political tendency and prosocial behaviour in China: A transgenerational and cross-cultural study**

This is a cross-cultural study which is conducted in United Kingdom and China. The aim of the study is to explore social and cultural factors related to psychological characteristics and social behaviour. Your participation will be a part of this study.

This survey includes 11 parts (99 questions) and might require you about 15-20 minutes to finish. There are alternative answers to each question, but notably, there is no right or wrong answer for each item, just according to your experience and point of view to answer. All data collected will be kept confidential and be used for research purpose only. Any identifying characteristics will not be available to anyone, other than my supervisors and me.

If you need more detail regarding to the study or any other queries, please contact us via below contact details.

**Researcher:** Yingjuan Liu

University of Bedfordshire student

Yingjuan.liu@study.beds.ac.uk

**Supervisors:** Dr. Hossein Kaviani          Dr. Candan Ertubey

University of Bedfordshire      University of Bedfordshire

Hossein.Kaviani@beds.ac.uk    Candan.Ertubey@beds.ac.uk

# Appendix B

## Informed Consent Form

This research project is carried out at the Department of Psychology, University of Bedfordshire, UK. Aim to measure psychological characteristics and social behaviour of individuals with different cultural background.

By ticking in the boxes below, I am agreeing that:

☐ **I have understood the purpose of this study and I am giving permission for my responses to the 99 questions.**

☐ **I am participating voluntarily and I understand that the data collected from my participation will be used in the research only.**

☐ **I aware of the potential risk (if any) and have understood that I could withdraw from the study at any time.**

Signature of participant ……………………………..

Date ……………………….

# Appendix C

参与者信息书

（*请将此页撕下保留*）

**尊敬的参与者：**

您好，我是英国贝德福德大学心理学系的一名在读博士研究生，现在正在进行一项关于心理特征与社会行为的调查研究，研究题目为"**心理特征与社会政治倾向以及亲社会行为的关系在中国的研究：跨年代与跨国研究**"（**A study on psychological characteristics predicting socio-political tendency and prosocial behaviour in China: A transgenerational and cross-cultural study**）。

该研究的目的在于探讨和比较中国大陆两代人（18-25 岁与 45-60 岁）的心理特征对社会行为的影响。此外，我们还将比较在不同的文化及社会背景下，心理特征对社会行为的影响，即比较中国青年组（18-25 岁）与英国青年组（18-25 岁）。本次调查将会作为该心理研究报告的重要依据。

为此，我们特意邀请您参与我们的调查。此次调查有 11 个部分共 99 个问题，大约需要15-20 分钟完成，您的答案并没有对错之分，仅用于此次心理研究，也不会向研究者及导师外的第三人公布。因此，我们真诚地希望您能够依据个人对该问题的经验及看法或者根据实际情况作答，但您有权随时结束调查。您所提供的所有资料将被严格保密，并且在研究结束后，予以销毁。

如您在参与期间或之后有任何关于该研究的疑问或探讨，可通过以下联系方式联系我们。非常感谢您的参与！

**研究员：** 　刘应娟

　　　　　　Yingjuan.liu@study.beds.ac.uk

　　　　　　英国贝德福德大学心理学专业在读博士研究

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　　　　　　Dr. Candan Ertubey

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　　　　　　英国贝德福德大学心理学教研室

# Appendix D

<div align="center">知情同意书</div>

该调查是由英国贝德福德大学心理学系开展的关于在不同的社会及文化背景下心理特征如何影响社会行为的调查。若您已同意接受此次调查，请在以下的方框内打勾"✓"。

☐ 我已了解此次心理调查的目的并志愿参与这次调查。

☐ 我已明白我参与的此次调查将仅被用于由英国贝德福德大学开展的关于"不同的社会及文化背景下心理特征与社会行为的差异"的心理研究。

☐ 我已明白我有权利在任何时候终止此次心理调查。

签名：.........................................

日期：.......................................

# Appendix E

## Demographic questionnaire


**Age:** ……………………………………

**Gender** (please tick in the appropriate box)

Male           ☐

Female        ☐


**Ethnicity** (Please specify which European country you come from)


…………………………………………………………………………..


**How many years you have lived in UK** (please tick in the appropriate box)

1-2 years   ☐

3-5 years   ☐

6+ years    ☐


**Education: Please specify the highest education qualification you have obtained or are in the progress of obtaining** (please tick in the appropriate box)

Bachelor's Degree     ☐

Master's Degree       ☐

Doctor's Degree       ☐

Post-doctor's Degree   ☐

Other specification:

……………………………………………………………………

# Appendix F

## 基本信息

**年龄：** .........................

**性别：** （请在相应的方框内画"✓"）

男☐　　　女☐

**民族：** （请在相应的方框内画"✓"或在"其他"处填写）

汉族☐　　苗族☐　　布依族☐　　其他...............................

**您来英国多少年了：** （请在相应的方框内画"✓"）

1-2 年☐

3-5 年☐

6+ 年☐

**目前您所获得的最高学历或正在攻读的学位是什么？**

（请在相应的方框内画"✓" 或在"其他"处填写）

大学本科 ☐

硕士研究生 ☐

博士研究生 ☐

其他...............................

# Appendix G

## Demographic questionnaire

**Age:** ……………………………………

**Gender** (please tick in the appropriate box)

Male          ☐

Female        ☐

**Ethnicity** (please tick in the appropriate box)

England       ☐

Scottish       ☐

Welsh         ☐

Irish          ☐

**County of birth:** ……………………………………………………………………

**Education: Please specify the highest education qualification you have obtained or are in the progress of obtaining** (please tick in the appropriate box)

Bachelor's Degree    ☐

Master's Degree      ☐

Doctor's Degree      ☐

Post-doctor's Degree  ☐

Other specification:

………………………………………………………………

# Appendix H

## 基本信息

年龄：.........................

**性别**：（请在相应的方框内画"✓"）男□　　　女□

**民族**：（请在相应的方框内画"✓"或在"其他"处填写）

汉族□　　苗族□　　布依族□　　其他...............................

**您的出生地（请具体到市/县）**：.................................

**您是独生子女吗?**（请在相应的方框内画"✓"）　　是□　　　不是□

**若不是，请注明您家里有几个兄弟姐妹（*不包括自己*）**.........................

**目前您是**？（请在相应的方框内画"✓"或在"其他"处填写）

学生□　已参加工作的工作人员□　已退休人员□　其他..............................

**目前您所获得的最高学历或正在攻读的学位是什么？**

（请在相应的方框内画"✓"或在"其他"处填写）

初中 □

高中 □

大学本科 □

硕士研究生 □

博士研究生 □

其他...............................

# Appendix I

**Part 1**

|  | **Never** | **Rarely** | **Sometimes** | **Often** | **Always** |
|---|---|---|---|---|---|
| **1.**It upsets me to see someone being treated disrespectfully | O | O | O | O | O |
| **2.**I enjoy making other people feel better | O | O | O | O | O |
| **3.**I have tender, concerned feelings for people less fortunate than me | O | O | O | O | O |
| **4.**When a friend starts to talk about his/her problems, I try to steer the conversation towards something else | O | O | O | O | O |
| **5.**I can tell when others are sad even when they do not say anything | O | O | O | O | O |
| **6.**I become irritated when someone cries | O | O | O | O | O |
| **7.**I am not really interested in how other people feel | O | O | O | O | O |
| **8.**I get a strong urge to help when I see someone who is upset | O | O | O | O | O |
| **9.**I find it silly for people to cry out of happiness | O | O | O | O | O |
| **10.**When I see someone being taken advantage of, I feel kind of protective towards him/her | O | O | O | O | O |

**Part 2**

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **1.** People sometimes tell me that I'm too stubborn | ○ | ○ | ○ | ○ | ○ |
| **2.** I often cooperate with other people even when I don't really agree with them | ○ | ○ | ○ | ○ | ○ |
| **3.** Some people have complained that I always want to have things my own way | ○ | ○ | ○ | ○ | ○ |
| **4.** When I know what I want, I won't agree to anything less | ○ | ○ | ○ | ○ | ○ |
| **5.** I am usually quite flexible in my opinions when people disagree with me | ○ | ○ | ○ | ○ | ○ |
| **6.** I can get a bit defensive when people try to change my mind about an issue | ○ | ○ | ○ | ○ | ○ |
| **7.** When people tell me that I'm wrong, my first reaction is to argue with them | ○ | ○ | ○ | ○ | ○ |
| **8.** I find it hard to compromise with people when I really think I'm right | ○ | ○ | ○ | ○ | ○ |

**Part 3**

| | Does not describe me well | | | Describe me very well | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **1.**I sometimes find it difficult to see things from the "other guy's" point of view | ○ | ○ | ○ | ○ | ○ |
| **2.** I try to look at everybody's side of a disagreement before I make a decision | ○ | ○ | ○ | ○ | ○ |
| **3.**I sometimes try to understand my friends better by imagining how things look from their perspective | ○ | ○ | ○ | ○ | ○ |
| **4.**I believe that there are two sides to every question and try to look at them both | ○ | ○ | ○ | ○ | ○ |
| **5.**When I'm upset at someone, I usually try to "put myself in his shoes" for a while | ○ | ○ | ○ | ○ | ○ |
| **6.**Before criticizing somebody, I try to imagine how I would feel if I were in their place. | ○ | ○ | ○ | ○ | ○ |

**Part 4**

|  | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|---|---|---|---|
| **1.** Domestic chores should be shared between husband and wife | O | O | O | O |
| **2.** Women should work even if they are not in need economically | O | O | O | O |
| **3.** Whether married or not, for purposes of independence, women should work | O | O | O | O |
| **4.** The differences of capabilities between individuals are more numerous than those between men and women | O | O | O | O |
| **5.** There will be much social progress and development when more women work | O | O | O | O |
| **6.** In order to be equal with men, women should aim to better their position through independence | O | O | O | O |
| **7.** Women should try to better themselves as human beings and to pursue self-realization through working | O | O | O | O |
| **8.** Working women put a strain on the family | O | O | O | O |
| **9.** A mother who stays home and raises children is not the only ideal type of mother | O | O | O | O |
| **10.** Boys and girls should have equal opportunity in education | O | O | O | O |
| **11.** For a woman, the roles of wife and mother are important, but working outside is equally important | O | O | O | O |
| **12.** Women should enter into jobs traditionally held by men, those of pilot, engineer, taxi driver, and chef | O | O | O | O |

**Part 5**

|  | Not at all like me | | | Very much like me | |
|---|:---:|:---:|:---:|:---:|:---:|
|  | **1** | **2** | **3** | **4** | **5** |
| **1.** I automatically adopt and follow the values I was brought up with | O | O | O | O | O |
| **2.** I strive to achieve the goals that my family and friends hold for me | O | O | O | O | O |
| **3.** I never question what I want to do with my life because I tend to follow what important people expect me to do | O | O | O | O | O |
| **4.** I think it is better to adopt a firm set of beliefs than to be open-minded | O | O | O | O | O |
| **5.** I think it's better to hold on to fixed values rather than to alternative value systems | O | O | O | O | O |
| **6.** I prefer to deal with situations in which I can rely on social norms and standards | O | O | O | O | O |
| **7.** When I make a decision about my future, I automatically follow what close friends or relatives expect from me | O | O | O | O | O |

**Part 6**

|  | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|---|---|---|---|
| **1.** Hypocrisy is on the increase in our society | O | O | O | O |
| **2.** In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy | O | O | O | O |
| **3.** Fear and social disgrace or punishment rather than conscience prevents most people from breaking the law | O | O | O | O |
| **4.** Most people can be counted on to do what they say they will do | O | O | O | O |
| **5.** In these competitive times, one has to be alert or someone is likely to take advantage of you | O | O | O | O |
| **6.** Most students in school would not cheat even if they were sure they could get away with it | O | O | O | O |
| **7.** Most repairmen will not overcharge, even if they think you are ignorant of their specialty | O | O | O | O |
| **8.** Most people answer public opinion polls honestly | O | O | O | O |

**Part 7**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **1.** I often try new and foreign foods | O | O | O | O | O |
| **2.** I prefer to spend my time in familiar surroundings | O | O | O | O | O |
| **3.** On a vacation, I prefer going back to a tried and true spot | O | O | O | O | O |
| **4.** I follow the same route when I go someplace | O | O | O | O | O |
| **5.** I enjoy solving problems or puzzles | O | O | O | O | O |
| **6.** I have a lot of intellectual curiosity | O | O | O | O | O |
| **7.** I have a wide range of intellectual interests | O | O | O | O | O |
| **8.** I believe letting students hear controversial speakers can only confuse and mislead them | O | O | O | O | O |
| **9.** I believe we should look to our religious authorities for decisions on moral issues | O | O | O | O | O |
| **10.** I believe that loyalty to one's ideals and principle is more important than "open-mindedness" | O | O | O | O | O |
| **11.** I think that if people don't know what they believe in by the time they're 25, there's something wrong with them | O | O | O | O | O |
| **12.** I believe that the "new morality" of permissive is no morality at all | O | O | O | O | O |

**Part 8**

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **1.** I am easily influenced by other people's opinions | ○ | ○ | ○ | ○ | ○ |
| **2.** When someone coughs or sneezes, I usually feel the urge to do the same | ○ | ○ | ○ | ○ | ○ |
| **3.** When I see someone shiver, I often feel a chill myself | ○ | ○ | ○ | ○ | ○ |
| **4.** When making a decision, I often follow other people's advice | ○ | ○ | ○ | ○ | ○ |
| **5.** I discovered many of my favorite things through my friends | ○ | ○ | ○ | ○ | ○ |
| **6.** I follow current fashion trends | ○ | ○ | ○ | ○ | ○ |
| **7.** I have picked-up many habits from my friends | ○ | ○ | ○ | ○ | ○ |
| **8.** If I am told I don't look well, I start feeling ill | ○ | ○ | ○ | ○ | ○ |

**Part 9**

|  | Never | Once | More than once | Often | Very often |
|---|---|---|---|---|---|
| **1.** I have given money to a charity | O | O | O | O | O |
| **2.** I have donated blood | O | O | O | O | O |
| **3.** I have helped carry a stranger's belongings (books, parcels, etc.) | O | O | O | O | O |
| **4.** I have allowed someone to go ahead of me in a line-up (at Xerox machine, in the supermarket). | O | O | O | O | O |
| **5.** I have pointed out a clerk's error (in a bank, at the supermarket) in undercharging me for an item | O | O | O | O | O |
| **6.** I have let a neighbor whom I didn't know too well borrow an item of some value to me (e.g., a dish, tools, etc.) | O | O | O | O | O |
| **7.** I have helped a classmate who I did not know that well with a homework assignment when my knowledge was greater than his or hers | O | O | O | O | O |
| **8.** I have offered to help a handicapped or elderly stranger across a street | O | O | O | O | O |
| **9.** I have offered my seat on a bus or train to a stranger who was standing | O | O | O | O | O |
| **10.** I have helped an acquaintance to move households | O | O | O | O | O |

**Part 10**

| | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|---|---|---|---|
| **1.**Our country needs a powerful leader, in order to destroy the radical and immoral currents prevailing in society today | O | O | O | O |
| **2.**The 'old-fashioned ways' and 'old-fashioned values' still show the best way to live | O | O | O | O |
| **3.**God's laws about abortion, pornography and marriage must be strictly followed before it is too late, violations must be punished | O | O | O | O |
| **4.**The society needs to show openness towards people thinking differently, rather than a strong leader, the world is not particularly evil or dangerous | O | O | O | O |
| **5.**It would be best if newspapers were censored so that people would not be able to get hold of destructive and disgusting material | O | O | O | O |
| **6.**Our forefathers ought to be honored more for the way they have built our society, at the same time we ought to put an end to those forces destroying it | O | O | O | O |
| **7.**People ought to put less attention to the Bible and religion, instead they ought to develop their own moral standards | O | O | O | O |
| **8.**It is better to accept bad literature than to censor it | O | O | O | O |
| **9.**Fact show that we have to harder against crime and sexual immorality, in order to uphold law and order | O | O | O | O |

**Many Thanks for Participation!**

# Appendix J

第一部分

**以下是一些陈述，请仔细阅读每一句并根据自己的情况及发生的频率，在后面相应的方框内打"✓"**

|  | 从不 | 很少 | 有时 | 经常 | 总是 |
|---|---|---|---|---|---|
| **1**. 我看到一些人不被尊敬地对待时，我会感到不安. | □ | □ | □ | □ | □ |
| **2**. 我喜欢让其他人感觉到舒服和高兴。 | □ | □ | □ | □ | □ |
| **3**. 对于相比我不幸运的人，我有一种想对她/他温柔和关心的感觉。 | □ | □ | □ | □ | □ |
| **4**. 当一个朋友开始谈论他/她遇到的麻烦时，我尝试着把谈话转换到其他事物上。 | □ | □ | □ | □ | □ |
| **5**. 当别人低落或不高兴的时候，即便他们什么都不说，我也能识别得出。 | □ | □ | □ | □ | □ |
| **6**. 当其他人哭的时候，我会感到恼怒。 | □ | □ | □ | □ | □ |
| **7**. 对于其他人的感受如何，我真的不是很感兴趣。 | □ | □ | □ | □ | □ |
| **8**. 当我看到有人不安时，我有强烈的欲望想帮助他们。 | □ | □ | □ | □ | □ |
| **9**. 我觉得人们因为高兴而哭泣很奇怪。 | □ | □ | □ | □ | □ |
| **10**. 当我看到某人被利用时，我有点想保护她/他。 | □ | □ | □ | □ | □ |

第二部分

**请仔细阅读以下陈述，并思考在多大程度上你同意该说法，在后面相应的方框内打"✓"**

| | 强烈<br>不同意 | 不同意 | 中立 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|---|
| **1**. 人们有时会告诉我我太顽固了。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **2**. 我经常和其他人合作，就算当我<br>并不是真正同意他们观点的时候我<br>也会和他们合作。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **3**. 一些人抱怨过我总是想用我自己<br>的方式去做事情。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **4**. 当我知道我想要什么的时候，<br>我就不会接受其他人的意见。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **5**. 当人们不同意我观点的时候，<br>我通常可以相当灵活地接受<br>他们的意见。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **6**. 当人们在某个话题上尝试改变<br>我的想法时，我会变得有点防御。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **7**. 当人们告诉我我错了的时候，<br>我的第一反应就是和他们争论。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **8**. 当我真的认为我是对的时候，<br>我发觉我很难向其他人妥协。 | ☐ | ☐ | ☐ | ☐ | ☐ |

第三部分

请仔细阅读以下描述，并根据自己的情况从五个渐变等级选项中（**A，B，C，D 和 E**）
选出符合自己的选项，在相应的方框内打"✓"

|  | **A** | **B** | **C** | **D** | **E** |
|---|---|---|---|---|---|
|  | 描述得<br>并不像我 | | | 描述得<br>非常像我 | |

**1**. 我有时发现从别人的观点
看事物是困难的。　　□　□　□　□　□

**2**. 在我做出决定之前，我尝试
着从每个人的角度去看待不同
的意见。　　□　□　□　□　□

**3**. 我有时会通过想象从我朋友们
的观点来看事物是怎样的，来
尽量更好地了解他们。　　□　□　□　□　□

**4**. 我相信任何问题都有两面，
并且我会尽量地从这两方面
去看待问题。　　□　□　□　□　□

**5**. 当我对某人不满时，我会
尝试着把自己放在他的立场上
考虑事情。　　□　□　□　□　□

**6**. 在我批评某人之前，我会
尝试着想象如果我在他的位置，
我的感受将会如何。　　□　□　□　□　□

**第四部分**

**请仔细阅读以下陈述，根据你在多大程度上同意这些说法，在后面相应的方框内打"✓"**

|  | 强烈<br>不同意 | 不同意 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|
| **1.** 家务事应该由夫妻双方共同承担。 | ☐ | ☐ | ☐ | ☐ |
| **2.** 女性应该工作，尽管她们没有<br>经济上的需要。 | ☐ | ☐ | ☐ | ☐ |
| **3.** 无论结婚与否，为了独立，<br>女性应该工作。 | ☐ | ☐ | ☐ | ☐ |
| **4.** 个体之间的能力差异比男女<br>之间的能力差异要多得多。 | ☐ | ☐ | ☐ | ☐ |
| **5.** 当更多的妇女有了工作，<br>社会将会有更大的进步和发展。 | ☐ | ☐ | ☐ | ☐ |
| **6.** 为了与男性平等，女性应该以<br>通过独立来提高她们的地位为目标。 | ☐ | ☐ | ☐ | ☐ |
| **7.** 妇女们应该尽量让自己变得更好，<br>并且尽量通过工作来追求自我实现。 | ☐ | ☐ | ☐ | ☐ |
| **8.** 工作的妇女让家庭处于紧张状态。 | ☐ | ☐ | ☐ | ☐ |
| **9.** 一个呆在家里养育孩子的母亲<br>并不是唯一的理想型的母亲。 | ☐ | ☐ | ☐ | ☐ |
| **10.** 男孩和女孩应该有接受教育<br>的平等机会。 | ☐ | ☐ | ☐ | ☐ |
| **11.** 对于一名妇女，妻子和母亲的<br>角色是重要的，但在外面有份工作<br>同等重要 。 | ☐ | ☐ | ☐ | ☐ |
| **12.** 妇女们也应该从事那些传统意义<br>上男人才从事的工作。比如飞行员，<br>工程师，出租车司机和大厨。 | ☐ | ☐ | ☐ | ☐ |

第五部分

请仔细阅读以下陈述，并根据自己的情况在五分量表中选出符合自己的选项，在后面的方框中打"✓"

| | 1 一点也 不像我 | 2 | 3 | 4 | 5 非常 像我 |
|---|---|---|---|---|---|
| **1**. 我自动地接纳和遵循伴随我 成长的价值观念。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **2**. 我努力地去达到我的家人 和朋友为我提出的目标。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **3**. 我从未想过要为我的人生 做点什么，因为我倾向于去 做重要人士期待我做的事。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **4**. 我认为接纳一套固定的信仰 比思想开放要好。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **5**. 我认为坚持固定的价值观比 考虑有选择的价值体系要好。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **6**. 我喜欢处理一些可以依靠 社会规范和标准来处理的境况。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **7**. 当我对我的未来作出决定时， 我会自动地遵循我亲密的朋友 和亲属对我的期望。 | ☐ | ☐ | ☐ | ☐ | ☐ |

**第六部分**

**请仔细阅读以下陈述，根据你在多大程度上同意这些说法，在后面相应的方框内打"✓"**

|  | 强烈<br>不同意 | 不同意 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|
| **1.** 在我们的社会里，虚伪<br>正在不断地增加。 | □ | □ | □ | □ |
| **2.** 在与陌生人的交往中，最好<br>对他们防范小心直到可以证明<br>他们是可以信赖的。 | □ | □ | □ | □ |
| **3.** 是恐惧和社会的耻辱或惩罚<br>防止了大多数人违法，而并非<br>道德心。 | □ | □ | □ | □ |
| **4.** 许多人可以被指望着去做他们<br>说的要做的事。 | □ | □ | □ | □ |
| **5.** 在这竞争激烈的时期，每个人<br>不得不警觉，否则其他人就有<br>可能利用你。 | □ | □ | □ | □ |
| **6.** 许多在校生考试都不会作弊，<br>即使他们确定他们会侥幸不被抓到。 | □ | □ | □ | □ |
| **7.** 许多修理工都不会要价太高，<br>即使他们认为你对他们的<br>专业修理一无所知。 | □ | □ | □ | □ |
| **8.** 许多人都是诚实地在做民意测验。 | □ | □ | □ | ☑ |

311

**第七部分**

**请仔细阅读以下陈述，并根据自己的情况从"强烈同意"到"强烈不同意"之间选择符合自己的选项，在后面相应的方框内打"✓"**

| | 强烈<br>不同意 | 不同意 | 中立 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|---|
| **1.** 我经常会去尝试新的及<br>国外的食物。 | □ | □ | □ | □ | □ |
| **2.** 我喜欢待在我熟悉的环境里。 | □ | □ | □ | □ | □ |
| **3.** 在度假时，我喜欢回到一个<br>去过的真实的地方。 | □ | □ | □ | □ | □ |
| **4.** 当我去某个地方的时候，<br>我喜欢走同一条路线。 | □ | □ | □ | □ | □ |
| **5.** 我喜欢解决问题或谜题。 | □ | □ | □ | □ | □ |
| **6.** 我对思考性的事物充满好奇。 | □ | □ | □ | □ | □ |
| **7.** 我有广泛的知识兴趣。 | □ | □ | □ | □ | □ |
| **8.** 我相信让学生听富有争论性的<br>演讲只会混淆和误导他们的思想。 | □ | □ | □ | □ | □ |
| **9.** 我认为在道德问题上做决定时，<br>应该遵从政府的权威。 | □ | □ | □ | □ | □ |
| **10.** 我相信一个人忠诚于他的理想<br>和原则要比'心胸开阔'重要得多。 | □ | □ | □ | □ | □ |
| **11.** 在我看来，如果人们到了 25 岁<br>的 时候还不知道他们的价值观是<br>什么，那么他们就不够成熟。 | □ | □ | □ | □ | □ |
| **12.** 我相信'新道德'的许可就会<br>彻底放纵'没道德'。 | □ | □ | □ | □ | □ |

**第八部分**

**请仔细阅读以下陈述，并思考在多大程度上你同意该说法，在后面相应的方框内打"✓"**

|  | 强烈不同意 | 不同意 | 中立 | 同意 | 强烈同意 |
|---|---|---|---|---|---|
| **1**. 我很容易受其他人意见的影响。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **2**. 当有人咳嗽或打喷嚏时，我通常觉得我也急着要那么做。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **3**. 当我看到有人颤抖时，我常常也会感到寒冷。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **4**. 当作决定时，我通常会遵循其他人的意见。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **5**. 从我朋友那里，我发现了许多我喜欢的东西。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **6**. 我跟随着当前的流行趋势。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **7**. 我从朋友那里学到了很多习惯。 | ☐ | ☐ | ☐ | ☐ | ☐ |
| **8**. 如果我被告知我看上去气色不好，我就开始感觉我生病了。 | ☐ | ☐ | ☐ | ☐ | ☐ |

**第九部分**

**请仔细阅读以下陈述，并根据自己的情况及发生的频率，在后面相应的方框内打"✓"**

|  | 从不 | 一次 | 一次以上 | 时常 | 总是 |
|---|---|---|---|---|---|
| **1**. 我曾向慈善机构捐过钱。 | □ | □ | □ | □ | □ |
| **2**. 我曾无偿献过血。 | □ | □ | □ | □ | □ |
| **3**. 我曾帮过陌生人拿过东西（书，包裹等）。 | □ | □ | □ | □ | □ |
| **4**. 曾经我在排队的时候，我允许过一些排在我后面的人排到我前面（在等待复印时，再超市里时等）。 | □ | □ | □ | □ | □ |
| **5**. 我曾经因为银行或超市里的某个职员因某一个项目少收我钱时指出了该职员的错误。 | □ | □ | □ | □ | □ |
| **6**. 我曾借给一位我不是很熟悉的邻居一样对我而言有些价值的东西（盘子，工具等）。 | □ | □ | □ | □ | □ |
| **7**. 我曾帮助过一个我不是很熟悉的同学辅导功课，因为那时我学习比他/她好。 | □ | □ | □ | □ | □ |
| **8**. 我曾帮助过一个残疾的或年迈的陌生人过马路。 | □ | □ | □ | □ | □ |
| **9**. 我曾在公共汽车上或火车上给一个站着的陌生人让座。 | □ | □ | □ | □ | □ |
| **10**. 我曾帮过熟人搬过家。 | □ | □ | □ | □ | □ |

**第十部分**

**请仔细阅读以下陈述，根据你在多大程度上同意这些说法，在后面相应的方框内打"✓"**

| | 强烈<br>不同意 | 不同意 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|
| **1.** 我们国家需要一个强势的领导人，来摧毁当今社会的激进和不道德的流行趋势。 | ☐ | ☐ | ☐ | ☐ |
| **2.** "古老的方法"和"古老的价值观念"仍然展示了生活的最好的方式。 | ☐ | ☐ | ☐ | ☐ |
| **3.** 宗教的有关流产，色情文学和婚姻三者之间关系的法律在为时过晚之前应该被严格地遵循，违背者必须受到惩罚。 | ☐ | ☐ | ☐ | ☐ |
| **4.** 这个社会需要对人们不一样的想法展现出开放性，这样胜过一个强势的领导人，这个世界并不是特别的邪恶和危险。 | ☐ | ☐ | ☐ | ☐ |
| **5.** 报纸最好在出版前都被审查过，以至于人们可能不会得到破坏性的和恶心的信息。 | ☐ | ☐ | ☐ | ☐ |
| **6.** 我们的祖先应该因他们建造了我们社会生活的结构而受到更多的尊敬，与此同时，我们应该终结那些破坏它的武装力量。 | ☐ | ☐ | ☐ | ☐ |
| **7.** 人们应该少关注宗教和有关宗教的书籍，相反，他们应该发展他们自己的道德标准。 | ☐ | ☐ | ☐ | ☐ |
| **8.** 接受一部差的文献著作比审查它好。 | ☐ | ☐ | ☐ | ☐ |
| **9.** 事实说明我们不得不大力对抗犯罪和不道德的性活动，以维护法律和社会秩序。 | ☐ | ☐ | ☐ | ☐ |

第十一部分

**请仔细阅读以下陈述，根据你在多大程度上同意这些说法，在后面相应的方框内打"✓"**

| | 强烈<br>不同意 | 不同意 | 同意 | 强烈<br>同意 |
|---|---|---|---|---|
| **1.** 民主主义可能存在它自身的问题，<br>但是它比其他形式的政府要好。 | ☐ | ☐ | ☐ | ☐ |
| **2.** 由于示威活动频繁地变得混乱无序<br>和具有破坏性，所以激进和极端的<br>政治团体不应该被允许游行示威。 | ☐ | ☐ | ☐ | ☐ |
| **3.** 如果我们少担心人民如何平等，<br>这个国家将会变得更好。 | ☐ | ☐ | ☐ | ☐ |
| **4.** 只要有许多未受过教育的和无知的<br>人拥有选举权，你就不能指望民主。 | ☐ | ☐ | ☐ | ☐ |
| **5.** 社会不应该容忍与大多数人的意见<br>存在根本分歧的意见。 | ☐ | ☐ | ☐ | ☐ |
| **6.** 每个人，不管他们的观点如何，都<br>可以自由地表达自己。这个很有必要。 | ☐ | ☐ | ☐ | ☐ |
| **7.** 每个人都应该有权利表达他们自己<br>的观点，尽管这个观点和大多数人的<br>不一样。 | ☐ | ☐ | ☐ | ☐ |
| **8.** 不管一个人的信仰是什么，他都拥有<br>和其他人一样合法的权利和保护。 | ☐ | ☐ | ☐ | ☐ |
| **9.** 如果一个外国人（比如：日本人）<br>在我们当地的政府选举中被推选，<br>人们就不应该允许他上位。 | ☐ | ☐ | ☐ | ☐ |

**您的问卷调查已结束，再次忠心感谢您的合作！**

# Appendix K

 University of

Bedfordshire

Faculty of Health and Social Sciences

Department of Psychology, Institute of Applied Social Research
Luton Campus, University Square, University of Bedfordshire

PhD student: Yingjuan Liu, Email: yingjuan.liu@study.beds.ac.uk
Supervisors: Hossein Kaviani, Email: hossein.kaviani@beds.ac.uk
              Candan Ertubey, Email: candan.ertubey@beds.ac.uk

29 / 06 / 2015

Dear Sir/Madam,

**Re: A study on psychological characteristics predicting socio-political tendency and prosocial behaviour in China: a transgerneral and cross-culture study.**

As part of my doctorate degree, my research aim is to develop a better understanding of the relationship between psychological characteristics and social behaviour. In order to achieve this, we are aiming to work on people from different cultures (China vs UK) and different age groups (18-25yrs vs 45-60yrs) to represent different generations. In this cross-culture and transgerational study, Chinese young generation (18-25yrs) and Chinese elder generation (45-60yrs) are expected to be included. The survey includes 11 questionnaires (99 items in total), all of which are related about psychological characteristics and social behaviour, it requires about 15-20 minutes to complete.

I am writing to ask if you would consider allowing me to use a sample of students and teachers from your university. I would like to invite students whose age are between 18 to 25 years old and teachers whose age are between 45 to 60 years old to complete the questionnaires which was mentioned above. I would aim to recruit about 300 participants in each group in China. I have produced a participant information sheet for the students and teachers, which outlines what they will be required to do as a participant in my study.

All data collected in this study will be kept confidential and anonymous. Data from individual students and teachers will not be seen by anyone others than myself and my supervisors. Even us, will not identify any individual as the data been collected anonymously.

I would really appreciate your help with this and if so, I would need a letter on your university head paper confirming that you are happy to accommodate this study at your university. If you have any further questions, please feel free to get touch with us, our contact details can be found at the top of this letter (see above).

Many thanks for taking the time to consider this request.

Kind regards,

Yingjuan Liu