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A study of cultural orientation and attitudes and meaning toward play: A cross cultural investigation among emerging adulthood in the People Republic of China, Hong Kong, and United States

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A STUDY OF CULTURAL ORIENTATION AND ATTITUDES AND MEANING

TOWARD PLAY: A CROSS CULTURAL INVESTIGATION AMONG

EMERGING ADULTHOOD IN THE PEOPLE REPUBLIC OF

CHINA, HONG KONG AND UNITED STATES

A Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

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Dr. Christopher Edginton, Co-Chair

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Dr. Michael J. Licari, Dean of the Graduate College

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May, 2012

ABSTRACT

The purpose of this study was to examine play among emerging adults in the

People Republic of China, Hong Kong, and the United States. The primary purpose of

this study was to investigate the relationship between the respondents' perceptions of

play and their personal cultural orientation. The study also explored the relationship

between respondents' perceptions of play's importance and their cultural orientation.

Respondents' frequency of play was also studied to determine whether there were

relationships between frequency of play, countries of origin, and personal cultural

orientation. Finally, the study considered the interactive effects among perceptions of

play, play's importance, personal cultural orientation, and countries of origin. The study

was organized as a non-experimental research design.

Written questionnaires were distributed to 322 respondents. A total of 301

completed instruments were return, which yielded a 93.4 % response rate. Data were

collected from students who were enrolled in physical education, recreation and leisure

courses during the 2010-2011 academic years at the University of Northern Iowa in the

U.S. (n=139), Zhejiang University in the PRC (n=70), and the Community College of

City University of Hong Kong in HK (n=92).

The research instrument in the present study was a self-reported questionnaire that

was divided into six main sections: (a) perceptions of play; (b) frequency of play; (c)

frequencies of play; (d) personal cultural orientation; (e) criteria for reaching adulthood;

and (f) demographics.

Play was important for emerging adults in this study for the following reasons: (a) for socialization, (b) for relaxation, (c) to challenge skill and ability, (d) to express emotion, (e) to expend energy, (f) to establish identity, (g) to develop mature interpersonal relationships, and (h) for development. This study demonstrated that personal cultural orientations have significant effects on perceptions of play and play's importance. Moreover, more females than males perceived play as creativity, expression, and learning. Female emerging adults were: (a) more focused on social status, respect, wealth, rights, and privileges (POW); (b) unwilling to take risks (RSK); and (c) tolerant of ambiguity and uncertain situations (AMB) than were male respondents.

This research found that emerging adults identified perceptions of play within four categories: (a) intrinsic goal/outcome benefits; (b) intrinsic non goal/outcome benefits;(c) relationship non goal/outcome benefits; and (d) relationship non goal/outcome benefits. Emerging adults perceived play's importance within four categories: (a) for development and socialization; (b) for relaxation; (c) to establish identity; and (d) for expression. Emerging adults in HK perceived team sports, social activities, and card games as the most frequent activities they engaged in during play. Emerging adults in HK indicated that all activities they engaged in during play involved other people. In addition, emerging adults in the PRC perceived team sports, entertainment, and travel as the most frequent activities they engaged in during play. The results of this study have added to the body of knowledge related to Chinese definitions of play and play benefits for emerging adults. The study suggest the need for additional

research to gain a greater understanding of Chinese definitions of play and the benefits of

play for emerging adults in different countries.

DEDICATION

Thank God for the wisdom and miracles that he has been bestowed upon me in the dissertation process, and indeed, throughout my life: "But as it is written, Eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him." (1 Corinthians 2:9)

To my parents, Tun-Shun Wong and Siu-Ping So, for their faith in me and allowing me to be as ambitious as I wanted. It was under their watchful eye that I gained so much drive and an ability to tackle challenges head on.

To my God father Professor Dr. Howard Cheng, who passed away before the completion of this dedicated work. He inspired me for this study; he was a great model for being a great professor who was passionate about his teaching. His jokes and laugh always brought students joy and fun in the classroom. Although he is no longer with me, I am sure he shares my joy and happiness in the heaven.

ACKNOWLEDGEMENT

Looking back, I am grateful for all I have received throughout these years. It has certainly shaped me as a person and has led me where I am now. All these years of Ed.D studies are full of gifts.

I would like to express my appreciation to my mentor and Co-chair Dr. Christopher Edginton for offering me the opportunity to pursue my master and Ed.D degree at the University of Northern Iowa. Dr. Edginton had been a role model for me to being an international scholar. I am very grateful to Co-Chair Dr. Kathy Scholl who significantly commend on an earlier draft of this paper and all the insight and support she gave throughout my study. I would like to thank my dissertation committee members: Dr. Sam Lankford who had guided me with his strength to complete this dissertation. Special thanks to Dr. Heather Olsen, and Dr. Katherine Van Wormer, for making this possible. I would like to thank the following individuals: Dr. Billy Ho and Dr. Jane Zhou who were keys in facilitating their students' participation in this research study. Virginia Chan who conducted this study in Hong Kong, Cecilia Zhou and Bin Ruan who translated the questionnaire into simplify Chinese.

The dissertation would never have been written were it not for the fact that I have been blessed in recent years with some of the most remarkable professional I have encountered in my life: Dr. Don DeGraaf, Dr. Holly Donohoe, Dr. Andrew Chu, Dr. Karl Ho, Dr. Y.C. Chan, Dr. Roxco Chun, Dr. Tsor-Kui Lee, Dr. Syrine Lam, Dr. Gladys Lam, Dr. Kam-Wah Chan, Dr. Yat-Hung Chui and Dr. Siu-Ming Kwok.

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CHAPTER 1

INTRODUCTION

Play is a universal phenomenon. The play benefits to infants and children have

been a topic of interest for many years (Brown, 2009). Most of the studies on play have

focused on infants and children, ages 0-12 years (Groos, 1898; Guitard, Ferland, & Dutil,

2005; Hendricks, 2001; Henig, 2008; Isenberg & Jalongo, 2001; Lazarus, 1883; Levy,

1978; Miller & Robinson, 1963; Piaget, 1962; Schiller, 1875; Spencer, 1873; Sutton-

Smith, 1997; Verenikina, Harris, & Lysaght, 2003; Witt & Bishop, 1970; Yuen & Shaw,

2003), and other studies have focused on the play of adolescents, ages 13-17 years

(Aiello, 1999; Colten, & Gore, 1991; Ellis, 1973; Miller & Robinson, 1963; Verenikina et

al., 2003; Weissman, 1990; Witt & Crompton, 2003). However, research has paid little

attention to play and emerging adults, ages 18-29 years. Table 1 provides a list of

important studies and theories regarding play.

Table 1

Play Literature

Topic	Sources
Children and Play (0-12 years old)	Groos, 1898; Guitard et al., 2005; Hendricks, 2001; Henig, 2008; Isenberg & Jalongo, 2001; Lazarus, 1883; Levy, 1978; Miller & Robinson, 1963; Patrick, 1916; Piaget, 1962; Roberts & Sutton-Smith, 1962; Schiller, 1875; Spencer, 1873; Sutton-Smith, 1997; Verenikina et al., 2003; Witt & Bishop, 1970; Yuen & Shaw, 2003
Adolescents and Play (13-17 years old)	Aiello, 1999; Colten, & Gore, 1991; Ellis, 1973; Miller & Robinson, 1963; Verenikina et al., 2003; Weissman, 1990; Witt & Crompton, 2003
Emerging Adults and Play (18-29 years old)	

There are numerous studies that have focused on the topic of play and children. Children are well known to play everywhere and play with nearly everything and anything (Hendricks, 2001). Many social and psychological theorists explaining play viewed it as a form of preparation for adult life (Levy, 1978). Plato and Aristotle attached practical significance to play by linking it to learning. Plato's view was that children act their life roles through play (Frost, 1992). Through play, children not only learn from but are infuenced by their social environment (Yuen & Shaw, 2003), using play experiences to develop their skills, energies, and strengths (Miller & Robinson, 1963). Play is a most important activity in children's lives; children develop the skills required to face and master their environment (Guitard et al., 2005).

When children become adolescents, they pay less attention to play. Adolescence has been defined as a period in one's life course involving extensive change (Colten, & Gore, 1991). One's life involves the expression of emotions, and also the release of such emotions. Without the venting of emotions, an accumulation can occur and damage the individual (Ellis, 1973). People have a great deal of autonomy when they play and play allows the individual to be self-governed and spontaneous (Miller & Robinson, 1963). Play provides a context for understanding how individuals express their emotions and gain a sense of control (Verenikina et al., 2003). Through play, adolescents develop skills such as team work during this stage of development. Large muscle activities, problem solving activities, trust building activities, and initiative activities are excellent for adolescents as they can benefit in terms of their development physically, socially and

cognitively (Miller & Robinson, 1963). However, researchers have paid little attention to play and emerging adults; therefore it is an important topic to research.

"Emerging adulthood" is a concept that refers to the period between 18 and 29 years (Arnett, 2003). It is a time of transition, a developmental bridge between adolescence and adulthood (Arnett, 2004). Moreover, emerging adulthood is the stage for identity explorations in the areas of love and work (Arnett, 2000). Identity issues have long been seen as central to adolescent development (Arnett, 2002), which includes (a) managing emotions, (b) developing mature interpersonal relationships, and (c) establishing identity. Play often involves the unique expression of moods, desires, personality, mental processes, and abilities and is a composite reflection of the individual (Barnett, 1982). Therefore, play can be a significant element for building identity for emerging adults.

Arnett (2000) contended that emerging adulthood is not a universal period but a period that exists only in cultures that postpone the entry into adult roles and responsibilities until well past the late teens. Culture plays a significant role in emerging adulthood. Emerging adulthood in more traditional, non-Western cultures may appear different than in Western cultures because of different cultural practices (Nelson, Badger, & Wu, 2004). Formal education may end earlier in Latin American cultures and the marriage age tends to be younger (Economic Commission for Latin American and the Caribbean, 2000). In Southeast Asia (Santa Maria, 2002), the average ages of people entering marriage and parenthood are rising in urban areas. Japan and China have a tradition of collectivistic values (Naito & Gielen, 2005; White, 1993); children have been

taught that they will be responsible for caring for their parents in old age. Therefore, research has shown that emerging adults in different cultures have different practices in the areas of marriage, education, and obligation to others.

<u>Devaluing Play</u>

Children's play has been a topic of interest for many years, and play is an essential part of the lives of children. As individuals grow emotionally, morally, and intellectually, society has come to expect individuals to work more and play less; therefore they are often made to feel guilty for playing (Brown & Vaughan, 2009). The devaluing of play seems to play a significant role in modern culture. As Vandenberg and Kielhofner (1982) noted, modern Western culture views adult play as juvenile. Play is seen as nonproductive because, from the economic point of view, it is a waste of time.

Emerging adults progress through a stage in which they explore their self-identity. Researchers have suggested that the change in context they experience if they attend college may promote involvement in risky behaviors such as alcohol use (Barnes, Welte, & Dintcheff, 1992; Crowley, 1991; Schulenberg, Bachman, O'Malley, & Johnson, 1994). Some of the studies (Iso-Ahola & Crowley, 1991; Kleiber & Rickard, 1985) reported that much of adolescent negative leisure behavior is motivated by a lack of optimal arousal or, conversely, a need for challenge. In addition, the absence of meaningful use of free time can lead to a problematic developmental process (Larson & Kleiber, 1991).

However, a number of studies have shown that adolescent activity (play) involvement may decrease antisocial behavior and produce related outcomes such as (a) structuring time (Brown, 2009; Osgood, Wilson, Bachman, O'Malley, & Johnston, 1996),

(b) providing links to competent adults and peers (Csikszentmihalyi,1993), and (c) building existing skills and interests (Csikszentmihalyi, 1990; Mahoney, 2000)

<u>Emerging Adulthood as the Theoretical Base for This Study</u>

Most play studies have focused on the ages between birth and 12 years. Researchers have also investigated play activities in individuals up to the age of 17 years. However, scholars have tended to overlook play as important throughout the entire lifespan. Play for emerging adults and play in particular are under-researched. As Brown and Vaughan (2009) stated, play is a powerful force that may help to determine the survival of the human race. Brown (2009) revealed that play is an essential way that humans learn to socialize. Moreover, Arnett and Taber (1994) indicated that college students move through a life stage in which they can explore truth and their self-chosen points of view. Arnett and Taber (1994) also reported that college students move through a series of identifiable stages, from believing in absolute truths to a self-chosen set of values in the course their college/university experience. It is evident that examining play in the context of students' college or university experiences may be valuable.

Youth development prepares adolescents to meet challenges through a series of activities and experiences that help them to become socially, emotionally, physically, intellectually, and manually competent (Chickering & Reisser, 1993; Witt & Crompton, 2003). Colton and Gore (1991) acknowledged that play provides a platform for exploration. Arnett (2004) proposed five features of emerging adulthood, including the opportunity for (a) exploring identity, (b) experiencing instability, (c) focusing on themselves, (d) feeling in-between youth and adulthood, and (e) exploring possibilities.

Moreover, the progress through developmental tasks includes (a) leaving home, (b) advancing in the capacity for mature intimacy, and (c) developing individuation during emerging adulthood (Scharf, Mayseless, & Kivenson-Baron, 2004).

<center>Comparative Study of Play</center>

Play is often part of an adaptive package of cultural elements that are used by members of different societies in various ways. Play as subjective experience that is adaptive is a concept that has yet to be addressed from a cross-cultural perspective. Comparative studies of games across cultures have been conducted since 1898 (Chick, 1984; Culin, 1898; Roberts, Arth, & Bush, 1959). Studies have addressed the different types of games in a variety of countries and the similarity of games across the globe. Furthermore, researchers have found that the presence or absence of different game types is correlated with both habitat and social environmental variables (Roberts et al., 1959). Most of the studies have focused on the game type itself and how it has been formed in different countries. However, research has paid little attention to the definition of play in different cultures.

As Chick (1998) stated, cross-cultural comparative researchers have largely ignored expressive culture in general and entertainment in particular. Play has been viewed as entertainment. Expressive culture refers to the part of culture wherein activities or practices serve for the release of emotions or as models, reflections, or expressions of themes inherent in the more instrumental aspects of culture (Chick, 2000)

It is evident that little research has been conducted regarding emerging adults and the cultural orientations that may influence their definitions of play. Further, there are

limited studies of cross-cultural comparisons of play and its components in The People's

Republic of China, Hong Kong, and the United States of America.

<div align="center">Cultural Beliefs</div>

To understand emerging adults in The People's Republic of China (PRC), Hong

Kong (HK), and the United States (US), it is necessary to have a complete understanding

of the following areas: (a) cultural beliefs, (b) Chinese culture, and (c) American culture.

All cultures are characterized by a set of beliefs that provide the basis for

reasoning and thinking, opinions about issues and ways in which lifestyles are manifested

(Arnett, 1995), and how culture is formed by the members of a group (Hofstede, 1980;

Lewicki, Litterer, Minton & Saunders, 1994). Cultural beliefs form the foundation for

every aspect of socialization that takes place in a society (Arnett, 1995). Therefore, it is

important to examine cultural beliefs as part of gaining a full understanding of the

philosophy of play in emerging adulthood.

Personal cultural orientations are individuals' values that can be found across

countries or cultures. Values are "broad tendencies to prefer a certain state of affairs over

others" (Hofstede 1980, p. 19). Cultural orientation is a result of personal learning

through interactions with social environments such as family, workplace, community,

host country, and media (Yoo & Donthu, 2005).

The concepts of individualism and collectivism provide the framework for

Eastern culture. Individualism is dominant in Western culture and collectivism is

dominant in Eastern culture.

Purpose of the Study

The purpose of this study is to examine play among emerging adults in the People's Republic of China, Hong Kong, and the United States. Emerging adulthood can be thought of as a period of late adolescence or early adult life that is a stage of identify exploration in the areas of love and work (Arnett, 2000). Moreover, play can be thought of as the unique expression of moods, desires, personality, mental process, and abilities and is a composite reflection of the individual (Barnett, 1982). Therefore, play can be a significant element to build identity for emerging adults.

This cross-cultural study of play among emerging adults is important for a variety of reasons. Cross-cultural research studies often provide unique insights into societies. Moreover, cross-cultural research involves the comparison of two presumably distinct cultures (Chick, 2000).

Emerging adulthood is a term that originated in U.S., and it is significant to compare emerging adults in the U.S. and non-Western countries, such as the PRC and HK. As Hofstede (1980) stated, cross-cultural and comparative research has endeavored to explore and explain cultural similarities and differences. The participants in this study are emerging adults from three cultural backgrounds that share commonalities as well as dissimilarities in their perceptions about play. This study will focus on emerging adults in HK, the PRC, and the U.S.

Two Eastern cultures will be included because their modes of thinking are often characterized as very different from those of Westerners (Nakamura, 1964). Although a Buddhist and Confucian heritage is common to both HK and the PRC, their cultures also

show some marked differences. For example, HK is a colonized territory combined with a refugee population. It has been viewed as a mixture of Chinese and Western cultures.

<center>Statement of the Problem</center>

The primary problem to be investigated in this study is the relationship between the respondents' perceptions of play and their cultural orientation. Further, the study will explore the relationships between respondents' perceptions of play's importance and their cultural orientation. An exploration of respondents' frequency of play will also be studied to determine whether there are relationships to ethnicity and cultural orientation. Finally, the study will consider the interactive effects among perceptions of play, play's importance, cultural orientation, and countries.

Research Questions

1. What are the respondents' perceptions of play?

   1a. What are the relationships between respondents' perceptions of play and their personal cultural orientation?

   1b. What are the differences between respondents' perceptions of play, their countries, and the number of siblings?

   1c. What are the relationships between respondents' perceptions of play and their perception of play's importance?

   1d. What are the interactions between respondents' perceptions of play, play's importance, their personal cultural orientation, and their countries?

2. What are the respondents' perceptions of play's importance?

2a. What are the relationships between respondents' perception of play's importance, their personal cultural orientation, and their countries?

3. What are the relationships between respondents' frequency of play, their countries, and their personal cultural orientation?

4. What are the respondents' criteria for reaching adulthood?

4a. What are the cultural associations between the respondents' criteria for reaching adulthood and their countries?

4b. What are the associations between respondents' criteria for reaching adulthood and father's educational attainment, marital status, and parenthood status?

5. What are the differences between perception of play, play's importance, and personal cultural orientation and gender?

Hypotheses

The following hypotheses are stated in null forms, for the purpose of statistical analyses.

1a. There is no statistically significant relationship between respondents' perceptions of play and their personal cultural orientation;

1b. There is no statistically significant difference between respondents' perceptions of play, their countries, and the number of siblings;

1c. There is no statistically significant relationship between respondents' perceptions of play and their perception of play's importance;

1d. There is no statistically significant difference between the interaction of respondents' perceptions of play, play's importance, their personal orientation, and their countries;

2. There is no statistically significant relationship between the relationships of respondents' perception of play's importance, their personal cultural orientation, and their countries;

3. There is no statistically significant relationship between respondents' frequency of play, their cultural orientation, and their countries;

4a. There is no statistically significant association between the respondents' criteria for reaching adulthood and their countries;

4b. There is no statistically significant association between respondents' criteria for reaching adulthood, father's educational attainment, marital status, and parenthood status;

5. There is no statistically significant difference between perceptions of play, play's importance, and personal cultural orientation and gender.

The Significance of the Study

It has long been recognized that play is of benefit to people. However, as previously mentioned, there have been limited studies that have examined play in the context of adulthood. Moreover, most of the studies about play have been developed in Western cultures and less attention has been paid to adopting a more comprehensive perspective in the field of Chinese play research. This comparative study provides an opportunity to understand how individualism and collectivism factors affect emerging

adults' attitudes toward play in Western and Chinese cultures. It will open the door for understanding the study of adult play in the Chinese context. The reason for conducting comparative research is to study the effects of cultural factors on behavior.

<u>Delimitations</u>

The study is delimited to:

1. A convenience sample of students at the University of Northern Iowa in the United States of America, Zhejiang University in The People's Republic of China, and the City University of Hong Kong in Hong Kong majoring in leisure and tourism management;

2. Students at the University of Northern Iowa in the United States of America, Zhejiang University in The People's Republic of China, and the City University of Hong Kong in Hong Kong enrolled in classes during the 2010-2011 academic year;

3. Junior, seniors, or graduate students majoring in either Leisure or Physical Education at the University of Northern Iowa in the United States of America, Zhejiang University in the People's Republic of China, and City University of Hong Kong in Hong Kong;

4. The instrument in this study of play is a self-reporting questionnaire; and

5. College population of emerging adults might not represent all of the emerging adults population.

Limitations

The study is limited by the following:

1. The study sample may not be representative of emerging adults around the globe; the college population of emerging adults might not represent all of the emerging adult population.

2. Portions of the instrument do not have fully established validity and reliability measures; and

3. The truthfulness of responses provided by research participants included in the study;

4. All data come from self-reports. Although this likely had minimal impact on questions concerning may have under- or over-reported substance use based on perception of play. The self-reported method of participation might suffer from a response error, as differences between actual and reported participation are likely occur (Chase & Harada, 1984).

Assumptions

The study was conducted under the following assumptions:

1. The measuring instrument is valid and reliable;

2. Research participants completed the questionnaire honestly and correctly; and

3. The study samples are representative of emerging adults in the United States of America, The Republic of China, and Hong Kong majoring in physical education, recreation, or leisure.

<u>Definition of Terms</u>

The following major terms are defined for the purpose of clarity in this study.

1. <u>Emerging adulthood</u> refers to the period between the

ages of 18 and 29 years that is a time of transition, a developmental bridge

between adolescence and adulthood (Arnett, 2004).

2. <u>Play</u> has different qualities or aspects, and different scholars have chosen to

focus on one or more of these aspects in their studies for the past 100 years.

3. <u>Cultural Beliefs</u> form the foundation for every aspect of socialization that

takes place in a society (Arnett, 1995).

4. <u>Personal Cultural Orientations</u> are individuals' values that can be found across

countries or cultures. Values are "broad tendencies to prefer a certain state of

affairs over others" (Hofstede 1980, p. 19). Cultural orientation is a result of

personal learning through interactions with social environments such as family,

workplace, community, host country, and media (Yoo & Donthu, 2005).

5. <u>Collectivism</u> is related to solidarity, concern for others, and integration with

other people (Shkodriani & Gibbons, 1995). The origins of the concept of

collectivism are attributed to the Chinese philosopher Confucius (551-479BCE).

Confucius is considered to be the prime contributor to the pervasive spread of

collectivism in the East, evident in an orientation toward family, communalism,

and group thinking (Kim, 2009).

6. <u>Individualist</u> cultures give priority to independence and self-expression;

collectivist cultures place a higher value on obedience and conformity (Triandis,

1995). For example, the curricula of Western universities promote individualism, self-expression, and questioning. Broad socialization is part of the intellectual heritage of the West.

CHAPTER 2

LITERATURE REVIEW

The purpose of the study was to examine the relationship between perceptions of play and emerging adults' cultural orientation (individual or collective) in the PRC, Hong Kong, and the U.S. Specifically, this portion of study will review the relevant literature on the areas of culture, play, and, emerging adulthood. The following review addresses the applicable related literature on differences between Chinese culture and Western culture, definitions of play, and emerging adulthood, and focuses in more detail on the PRC, Hong Kong, and the U.S. This is followed by a review of research on (a) philosophical differences between Chinese culture and American culture; (b) American definitions of play and Chinese definitions of play; (c) the characteristics of emerging adults in the PRC, Hong Kong, and the U.S.; and (d) the relationship between emerging adulthood, personal cultural orientation, and play.

<u>Philosophical Differences between Eastern Culture and Western Culture</u>

Understanding differences in the philosophical frameworks or beliefs between Eastern and Western cultures requires a complete understanding of the following areas: (a) the differences between Chinese philosophy and Greek philosophy, (b) the different characteristics of Easterners and Westerners and, (c) Individualism and Collectivism.

China and Greece were two ancient civilizations in which people began to raise fundamental questions about a wide range of phenomena (Lyayd, 1900). Table 2 presents the differences between Chinese philosophy and Greek philosophy. The Greeks view themselves as independent thinking and perceived that they were individuals with

distinctive point of view, which contributed to the foundation of Western culture. Western

philosophers have many candidates for the "most important concept of the tradition," but

"truth" is likely to make everyone's short list.

Table 2

Differences between Chinese Philosophy and Greek Philosophy

Chinese Philosophy	Greek Philosophy
People are concerned less with control of others than with self-control	People are in charge of their own lives and free to act as they choose.
People maintain a harmonious social network.	People are free from constraints.
Chinese are concerned about unity.	Greeks are concerned about unique individuals.
The Chinese orientation toward life was shaped by the blending of three different philosophies: Taoism, Confucianism, and Buddhism.	Greek philosophers could trust either logic or their senses.
Chinese are interdependent.	Greeks are independent.
One of the characteristics of the Chinese is respect authority.	One of the characteristics of the Greeks is curiosity.

Source: Nisbett, R. E. (2003). *The geography of thought. How Asians and Westerners think differently ...and why.* New York, NY: Free Press.

Surprisingly, however, Western analysis of Eastern thought has not focused

primarily on the concept of truth, as if one could not conceive of a philosophical tradition

worthy of the name that did not include truth-based reasoning (Hansen, 1985). Chinese

and Greeks have different interpretation about the concept of one's self, Chinese focus on

self-control and pay little attention about control of other and Greeks tend to in charge

their lives. Chinese enjoy unity in order to maintain harmonious social network with their

family, friends and neighbor and they are interdependent. Chinese philosophy was shaped by the blending of three different philosophies: Taoism, Confucianism, and Buddhism, it emphasis to respect authority, further explanation will be follow in later section. In contrast, Greeks concern about unique individuals in order to free from constraints and they are independent. Curiosity is one of main characteristics in Greek philosophy and it builds the foundation of their belief in logic or senses.

Confucian doctrine places great importance on constraining the self, controlling emotions, and putting the needs and interests of the family before one's own. Some scholars have claimed that the classical Chinese had no concept of truth (Hall & Ames, 1987; Hansen, 1983, 1985). Chinese philosophers, Confucians in particular, were typically men of practical action, serving as government functionaries. However, they did not use a concept of truth in philosophizing about what they were doing. Classical Chinese philosophical theories about how to evaluate doctrines did not depend on a distinction that matches up with a familiar true/false dichotomy (Hansen, 1985).

The Different Characteristics of Eastern and Western Cultures

There is good reason to believe that Easterners and Westerners experience the world in different ways. Table 3 presents various characteristics of Easterners and Westerners. Munro (1969) observed that Chinese and Western philosophical practices differ in respects relevant to truth. Easterners view family as having interrelated members and they are accepting of hierarchy and group control. In contrast, Westerners view family as a collection of persons with attributes that are independent of any connections with others and they emphasis equality for personal action. Easterners concern about the

feelings of other to maintain harmony in interdependent world, therefore, debate is

uncommon in Asia as it may conflict with harmonious relationships. However,

Westerners are more concerned with knowing themselves and prepared to sacrifice

harmony for fairness and argumentation is second nature for them.

Table 3

Different Characteristics of Easterners and Westerners

Easterners	Westerners
Easterners view family as having interrelated members.	Westerners view family as a collection of persons with attributes that are independent of any connections with others
Debate is uncommon in modern Asia.	The whole rhetoric of argumentation is second nature.
Easterners live is an interdependent world in which the self is part of a larger whole.	Westerners live in a world in which the self is a unitary free agent.
Easterners are concerned about the feelings of others and strive for interpersonal harmony.	Westerners are concerned with knowing themselves and are prepared to sacrifice harmony for fairness.
Easterners are accepting of hierarchy and group control.	Westerners prefer equality and scope for personal action.

Source: Nisbett, R. E. (2003). The geography of thought: How Asians and Westerners think differently ...and why. New York, NY: Free Press.

The Influence of Culture in Emerging Adulthood: Individualism and Collectivism

All cultures are characterized by a set of beliefs that provide the basis for

reasoning and thinking, opinions regarding issues, and ways in which lifestyles are

manifested (Arnett, 1995). In addition, such thinking also is categorized by the members

of a group (Hofstede, 2001; Lewicki et al., 1994). Cultural beliefs form the foundation for various aspect of socialization that takes place in given society (Arnett, 1995) including social constructs about play. Therefore, it is important to examine cultural beliefs as part of gaining a full understanding of the philosophy of play in emerging adulthood.

According to Hofstede (2001), individualism and collectivism refer to the degree to which individuals look after themselves or remain integrated into groups. As stated by Triandis and Gelfand (1998), the opportunity to explore play along the cultural dimensions of individualism and collectivism should be considered when comparing Chinese and American cultural beliefs regarding play. It is obvious that one's play behavior/ meanings may be influence by one's personal cultural orientation or the individualism/ collectivism orientation.

Table 4 presents background information about collectivism and individualism. Individualist cultures tend to give priority to independence and self-expression; collectivist cultures tend to place a higher value on obedience and conformity (Triandis, 1995). For example, the curricula of Western universities promote individualism, self-expression, and questioning. Broad socialization is part of the intellectual heritage of Western thinking. Collectivism is related to solidarity, concern for others, and integration with other people (Shkodriani & Gibbons, 1995). The Chinese culture is generally described as collectivistic because Chinese society emphasizes the goals, needs, and views of the family and community over those of the individual. For instance, becoming financially independent is one of the criteria for adulthood for both American and Chinese emerging adults; American emerging adults perceive that this has been

addressed when they pay their own bills. However, Chinese emerging adults interpret this

criterion as taking care of their families, which generally consist of a spouse, children,

and elderly parents (Lin, 1935).

A variety of studies have shown that the values of African Americans and Asian

Americans tend to be less individualistic and more collectivistic than the values of white

Americans (Fuligni, Tseng, & Lam, 1999; Phinney, Ong, & Madden, 2000). These

studies indicated that emerging adults in minority cultures have more obligations and

duties toward others.

Table 4

Background Information on Collectivism and Individualism

Collectivism	Individualism
Chinese philosopher Confucius (551-479 BC) originated the concept of collectivism (Kim, 2009).	Alexis De Tocqueville was the originator of the term "individualism" (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985).
Collectivists see themselves as part of an in-group and they are willing to give priority to the goals of these in-groups (Sharma, 2009).	Individualists prefer to act independently rather than as members of groups, and with a strong self-concept and sense of freedom, they develop great autonomy and personal achievement (Oyserman, Coon, & Kemmelmeier, 2002)
Collectivism is related to benevolence, tradition, and conformity (Schwartz., Melech, Lehmann, Burgess, Harris, & Owens, (2001).	Individualism is related to values such as power, achievement, and hedonism (Schwartz et al., 2001).
Norms are more important than attitudes in Collectivist culture (Bontempo & Rivero, 1992; Davidson, Jaccard, Triandis, Morlaes, & Diaz-Guerrero, 1976; Kashima, Siegel, Tanaka, & Kashima, 1992; Trafimow & Finlay, 1996)	Attitudes are more important than norms in Individualist culture (Bontempo & Rivero, 1992; Davidson, Jaccard, Triandis, Morlaes, & Diaz-Guerrero, 1976; Kashima, Siegel, Tanaka, & Kashima, 1992; Trafimow & Finlay, 1996)

Western Definitions of Play

While many definitions of play have been offered in research, no definitive or

universally accepted definition has emerged. Play can be difficult to understand because

it appears in diverse forms in the literature. Figure 1 indicates that play, games, and

recreation are viewed as specific forms of leisure (Rossman, 1995). Play is spontaneity,

self-expression, and nonserious (Rossman, 1995); games are rule bound (Goffman, 1961);

games control skill and chance (Rossman, 1995); and recreation has also been viewed as

restoration from one's work (De Grazia, 1964).
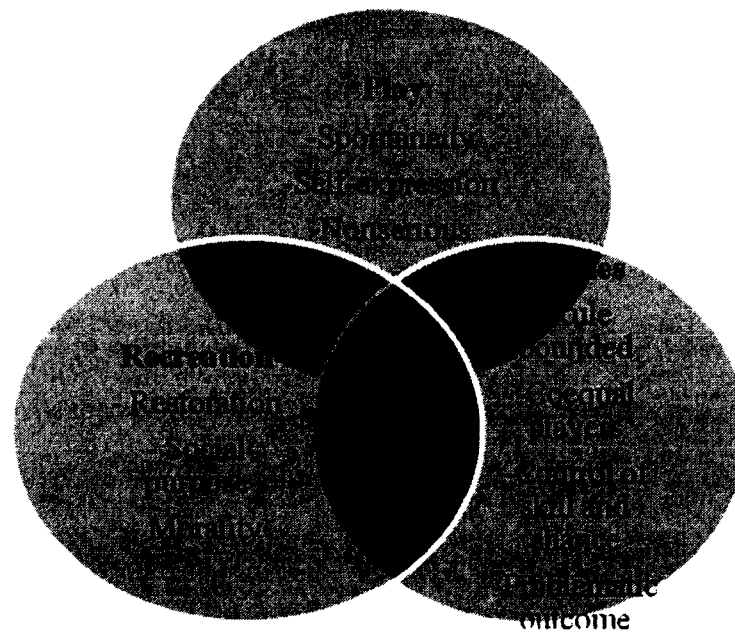
Figure 1. Relationship of Central Definitions of Leisure, Recreation, Play and Games

Source: Rossman, J. R. (1995). *Recreation programming: Designing leisure experiences.* Champaign, IL: Sagamore Publishing.

Play has different qualities or aspects, and different scholars have chosen to focus on one or more of these aspects in their studies over the past 100 years. It is important to explore how these scholars have defined play. Play theories can be divided into two basic categories: classical theories of play and modern theories of play. Tables 5 and 6 present 15 theories of play within the framework of classical and modern theories. The first theory indicates that the concept of play has varied widely over the past two centuries, and the second shows that the way in which play is perceived has direct implications for the value ascribed to play in child development. Classical theories of play originated in the 19th century and attempted to explain the existence and purpose of play (Mellou, 1994). These theories included (a) the surplus energy theory of play (Schiller, 1875; Spencer, 1873), (b) the recreation theory of play (Lazarus, 1883), (c) the pre-exercise theory of play (Groos, 1898,1901), (d) the recapitulation theory of play (Hall, 1906), (e) the catharsis theory of play (Carr, 1934; Claparede, 1911), and (f) the relaxation theory of play (Patrick, 1916). These theories focused on release energy, emotion and tension; restore energy and prepare for adult life. Classical theories of play have been viewed as a significant element in the development of children.

Table 5

Classical Theories of Play

Theories of play	Author	Year	Theory	Example
Surplus Energy Theory	Spencer Schiller	1873 1875	Play is an artificial exercise of power that releases energy.	Rough-and-tumble play (play wrestling and play chasing)
Recreation Theory	Lazarus	1883	Play is used to restore energy.	Regular vigorous activities provide relaxation and energetic use of the big muscles; physical play
Pre-exercise Theory	Groos	1898, 1901	Play is preparation for adult life.	Different kinds of sensation play, such as play with water, mud, sand, clay, and dough
Recapitulation Theory	Hall	1906	Play is the means for children to express their instincts.	Climbing, swinging, throwing, catching, running, yelling
Catharsis Theory	Carr Claparede	1934 1911	Play releases excess energies and emotions.	
Relaxation Theory	Patrick	1916	Play releases tension.	Football, wrestling, swimming, gymnastics, running

Modern theories of play that developed after 1920 attempted to explain the role of

play in child development (Mellou, 1994) and included (a) the compensatory theory of

play (Reaney, 1916; Robinson, 1920), (b) the psychoanalytic theory of play (Erikson,

1950; Peller, 1952; Waelder, 1933), (c) the developmental theory of play (Piaget, 1952,

1962), (d) the generalization theory of play (Witt & Bishop, 1970), (e) the optimal

arousal theory of play (Ellis, 1973), (f) the autotelics of play or flow experience

(Csikszetmihalyi, 1975, 1990), (g) the achievement-motivation theory of play (Levy,

1978), (h) the conflict-enculturation theory of play (Roberts & Sutton-Smith, 1962) , and (i) the attribution theory of play (Decharms, 1968; Rotter, 1966).

The compensatory theory of play (Reaney, 1916; Robinson, 1920) sees play becomes a substitute outlet for desires and goals when such goals are blocked. Play allows an individual to make up for unpleasant or unavailable experiences; The psychoanalytic theory of play (Erikson, 1950; Peller, 1952; Waelder, 1933) sees play as providing a context for expressing these emotions and gaining a sense of control (Verenikina et al., 2003); the developmental theory of play (Piaget, 1952, 1962) sees that reality and play behavior are molded by the child to fit each stage of cognitive development and play is the act of bending reality to fit one's existing level of cognitive functioning.

The generalization theory of play (Witt & Bishop, 1970) assumes that any learned play behavior will be generalized to other settings and behaviors by the participants; the optimal arousal theory of play (Ellis, 1973) views play as the behavior motivated by the need to elevate the level of arousal toward the optimal behavior. When individuals become bored, they seek stimulation in their environment; play occurs when an individual seeks stimulation from their surroundings; the autotelics of play or flow experience (Csikszetmihalyi, 1975,1990) in a setting or frame of action where the activity is perceived to be voluntary or autotelic; the achievement-motivation theory of play (Levy, 1978) suggests that play involves the desires to strive, excel, master, and succeed. It incorporates risk-taking as an element in producing play and the related outcomes in competitive situations.

The conflict-enculturation theory of play (Roberts & Sutton-Smith, 1962) suggests that play offers the participant an opportunity to experience and learn behaviors in a safe environment; and the attribution theory of play (Decharms, 1968; Rotter, 1966) is defined as activities in which individuals attribute the outcomes and the consequences of their behavior (Levy, 1978). An internal locus of control motivational disposition directs the individual toward forms of play in which the outcome is under the player's control. On the other hand, an external locus of control motivational disposition directs the individual toward forms of play where the outcome is out of player's control.

Both classical theories of play and modern theories of play explain why people play. However, to fully understand play, it is necessary to understand the definitions of play. One way of defining play is to think of it as a state of mind rather than as an activity (Brown & Vaughan, 2009). Further explanation will follow in a later section.

Table 6

Modern Theories of Play

Theories of play	Author	Year	Theory	Example
Compensatory Theory	Reaney Robinson	1916 1920	Play is a substitute outlet for desires and goals when other avenues to accomplish such goals are blocked.	The boy who fails at games may compensate for the failing by excessive study in order to gain recognition in the classroom.
Psychoanalytic Theory	Waelder Peller Erikson	1933 1952 1950	Play reduces the anxiety of real-life interactions to experience the pleasure principle.	Role play
Developmental Theory	Piaget	1952/ 1962	Play is the act of bending reality to fit one's existing level of cognitive functioning.	Sensorimotor Stage (0-2 years), Preoperational Stage (2-7 years), Operational Stage (8-12 years)
Generalization Theory	Witt & Bishop	1970	Play is generalized to other settings and behaviors.	If a child learns to enjoy sliding down a small slide, that child will also enjoy sliding down the dangerous fire escape at the back of an apartment house.
Optimal Arousal Theory	Ellis	1973	Play is the behavior motivated by the need to elevate the level of arousal toward the optimal behavior.	
The Autotelics of Play or Flow Experience	Csikszetmihalyi	1975/ 1990	Play is the experience of flow in a setting or frame of action where the activity is perceived to be voluntary or autotelic.	

Theories of play	Author	Year	Theory	Example
Achievement-Motivation Theory	Levy	1978	Play involves the desire to strive, excel, master, and succeed.	
Conflict-Enculturation Theory	Roberts & Sutton-Smith	1962	Play engages the individual in social learning in a safe environment.	Physical skill: building a house, Model strategy: bridge, Monopoly, poker, Chance: horse racing, dice games, roulette games
Attribution Theory	Rotter Decharms	1966 1968	Play is activity in which individuals attribute the outcomes and the consequences of their behavior.	

Play may appear in many different forms, actions, and behaviors. What then are

the characteristics of play? Play characteristics have varied components and may be held

in combination with others while some stand alone. As indicated Table 7, play is

behavior (Avedon & Sutton-Smith, 1971; Edginton, Hanson, Edginton & Hudson, 1980;

Ellis, 1973; Kraus, 2001); play is recreation, sport, and leisure activities (Cordes &

Ibrahim, 1996; Godbey & Parker, 1976; Kelly, 2000; Kraus, 2001; Miller & Robinson,

1963; Nash, 1965; Sapora & Mitchell, 1961); play is voluntary activity, meaningful to the

player, symbolic, rule-governed, and pleasurable (Fromberg, 2005); and play involves

intrinsic motivation (Kelly, 2000; Kraus, 2001).

Table 7

Selected Characteristics of Play

	Types of behavior	Play is voluntary	Play is motivation	Play is intrinsic motivation	Play is activity	Play is learning	Play is leisure activity	Play is recreation/sport	Play is creation	Play is life understanding	Play is relationship building	Play is free time
Avedon & Sutton-Smith, 1971	X											
Cordes & Ibrahim, 1996					X					X		
Edginton et al, 1980	X											
Ellis, 1973	X											
Frank, 1963						X						
Godbey & Parker, 1976		X					X					
Huizinga, 1949		X										
Heintzman, Van Andel, & Visker, 1994											X	
Jensen, 1977									X			
Kelly, 2000				X				X				
Kraus, 1998				X				X				
Kraus, 2001	X											
MacLean, Peterson, & Martin, 1985										X		
Miller & Robinson, 1963					X							X
Nash, 1965					X					X		
Sapora & Mitchell, 1973			X		X							

Brown and Vaughan (2009) stated that play is no less important than oxygen and is a powerful force that may determine the likelihood of the survival of the human race. In the last 100 years, numerous studies about children and play have been conducted. Play has benefits for adults; however, scholars have noted only that play benefits children's lives in aspects such as (a) the release of energy (Henig, 2008; Schiller, 1875; Spencer, 1873), (b) the restoration of energy (Lazarus, 1883), (c) preparation for adult life (Groos, 1898; Henig, 2008), (d) expression of one's instincts (Hall, 1906), (e) the release of emotions (Carr, 1934; Claparede, 1911, (f) the release of tension (Patrick, 1916), (g) a way of learning (Roberts & Sutton-Smith, 1962), and (h) the support of cognitive functioning (Piaget, 1952, 1962). It has been suggested that play is a central part of neurological growth and development, and it is important for children to build complex, skilled, responsive, socially adept, and cognitively flexible brains (Henig, 2008).

Piaget (1952, 1962) offered a perspective on the development of individuals by defining play as the act of bending reality to fit a person's existing level of cognitive functioning. Figure 2 displays how "play" is a significant factor in different developmental stages in children between birth and 17 years of age. Play also benefits individuals who are identified as emerging adults. Such individuals are often engaged in identity explorations in love and work (Arnett, 2004). Emerging adults can develop emotional, mature interpersonal relationships and self-identity through play. In addition, play in the area of emerging adults has not been a frequent focus of investigation; therefore, it is an important topic to research. Emerging adults and play will be further elaborated on in a later section.
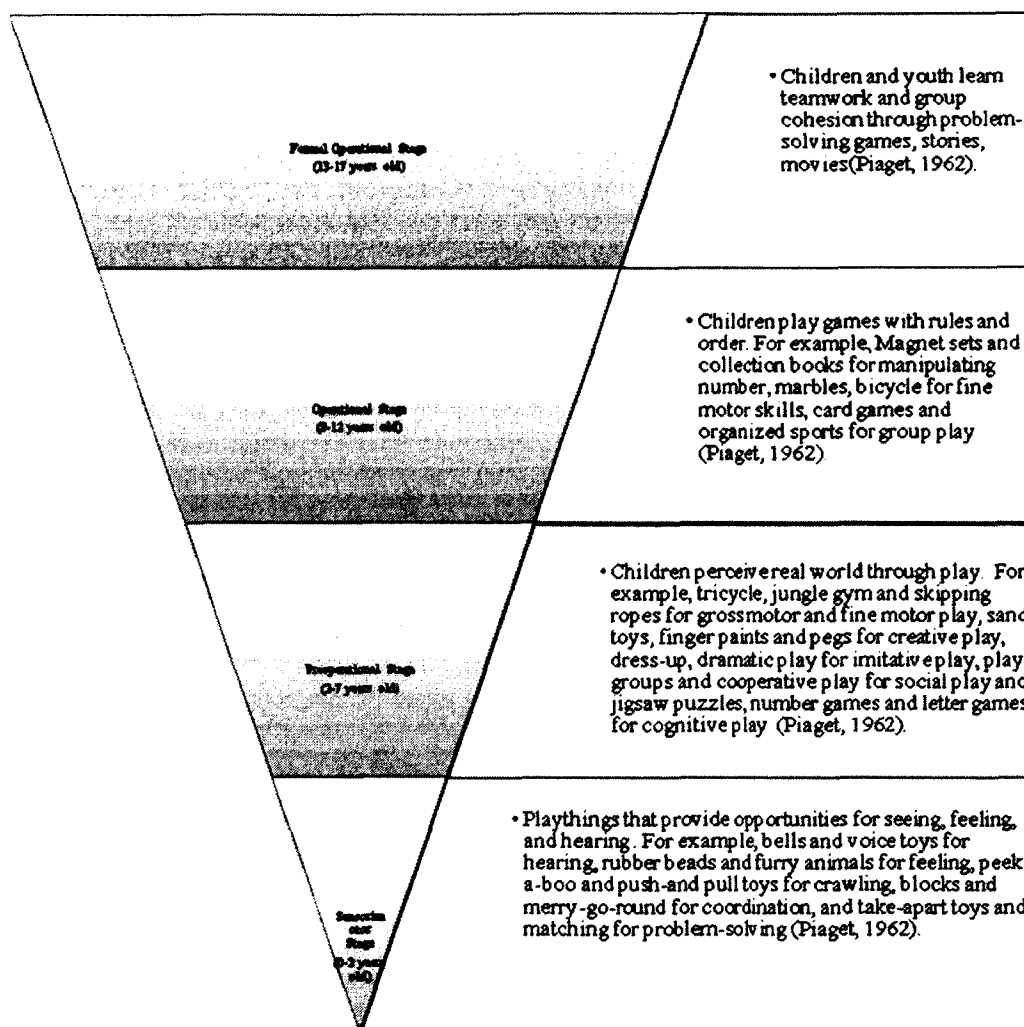
Figure 2. Developmental Stages of Play Behavior

Source: Piaget, J. (1962). *Play, dreams and imitation in childhood* (C. Cattegno & F. M. Hodgsen, Trans). New York, NY: W. W. Norton.

Chinese Definitions of Play

Western play theories have been developed over the past 100 years and view play as a means of learning and emotional development. The play literature provides evidence that perceptions of play can differ according to the culture, the study subject, and the play context. The Chinese translation of "play" is an umbrella term; it includes the meaning of play and games.

Playing is older than culture, and culture originates through play and as play (Huizinga, 1949). The word "play" that Huizinga was taught by his colleague Duyvendak was "wan." "Wan" means playing, and the Chinese concept usually means the aimless or absent-minded handling of some object or affair. A well-known Chinese proverb about play goes like this: "Play makes you be absent-minded." "Wan" is not a positive term, for play has been categorized as nonserious.

Cooney and Sha (1999) stated that play was considered part of physical development and more recreational in purpose. Play means the opportunity to choose an activity for Chinese children. Pan (1994) stated that children's play in China could be categorized into two play forms. Traditional play forms are those activities handed down from one generation to the next and are often linked with different Chinese festivals. Chinese traditional games include kite flying, chopsticks games, Chinese yo-yo, and rope jumping. Modern play forms include shadow puppets, marble games, electrical toys, swings, and Legos.

Holmes (2008) has explored the similarities and differences between the conceptions of play in Hong Kong and the United States from the children's point of

view (Holmes, 2008). He reported the following results: (a) The essential ingredient of play is "fun" in both countries; (b) Hong Kong children view play as an activity that involves manipulation of an object, whereas U.S. children view play as the opportunity to build interpersonal relationships; (c) children from Hong Kong and USA enjoy sports and computer games; and (d) children in Hong Kong enjoy computer games, and the consequence of lack of outdoor play space moves children's play indoors.

<u>Emerging Adulthood</u>

Arnett (2000) contended that "emerging adulthood is not a universal period but a period that exists only in cultures that postpone the entry into adult roles and responsibilities until well past the late teens" (p. 478). Culture plays a significant role in emerging adulthood. Emerging adulthood is not only found in Western culture; it also exists in Chinese culture (Nelson, Badger, & Wu, 2004). Nelson et al. (2004) examined emerging adulthood in Chinese young people and further explored the role that culture might play in emerging adulthood. Nelson et al.'s research indicated that Chinese emerging adults tend to focus on three criteria for becoming an adult: (a) accepting responsibility for the consequence of one's actions,(b) learning always to have good control of one's emotions, and (c) becoming financially independent from one's parents. These items are directly related to the ideology of collectivism. Even though the criteria for adulthood are similar between American and Chinese emerging adults, they are based on different philosophical frameworks or beliefs.

A variety of studies have been conducted in the United States measuring how young people conceptualize the transition to adulthood (Arnett, 1994, 1997, 1998, 2000,

2001; Crockett, 2000; Greene, Wheatley, & Aldava, 1992; Scheer & Palkovitz, 1995).

accepting responsibility for one's self, becoming capable of making independent

decisions, and becoming financially independent (Arnett, 1997, 1998, 2003) are three

main criteria for adulthood that appear repeatedly in the studies of young people's

conceptions. African Americans and Asian Americans are more likely to embrace criteria

related to Family Capacities, Norm Compliance, and Role Transitions than white

Americans (Arnett, 2003). These findings reflect cultural values of family obligations and

consideration for others.

<u>Common Characteristics of Emerging Adulthood In the People's</u>
<u>Republic of China, Hong Kong, and the United States</u>

Emerging adulthood is a period in the life course when young people actively

derive greater self-understanding from different encounters with new events, transitions,

and settings (Gottlieb, Still, & Newby-Clark, 2007). Emerging adulthood is characterized

by five main features (Arnett, 2004): (a) the age of identity exploration, especially in love

and work; (b) the age of instability; (c) the age of self-focused; (d) the age of feeling in-

between; and (e) the age of possibilities. Identity exploration that takes place in emerging

adulthood can be seen clearly with respect to two main areas of identity development:

love and work (Erikson, 1950).

Emerging adulthood is a time of great instability, and emerging adults experience

frequent changes in their lives in terms of love partners, jobs, and educational status.

Emerging adulthood is also the most self-focused time of life. Being self-focused does

not mean that individuals are selfish or egocentric; it means that they are free to make

decisions independently (Arnett, 2005). Emerging adults feel in-between, neither adolescent nor fully adult, on the way to adulthood but not there yet. They accept responsibility for themselves and make independent decisions, along with the more tangible but still gradual criterion of financial independence.

Emerging adulthood is the age of possibilities because it is a time when people have the opportunity to make dramatic changes in their lives, and it is a time when hopes are high and optimism is almost universal (Arnett, 2004). Emerging adults believe that life will work out well for them in long run. However, emerging adults are different in different cultures.

The People's Republic of China

Two decades ago, low-paid Chinese workers transformed the PRC into one of the world's biggest economies. The PRC is the world's third-largest economy after the United States and Japan (Flamini, 2010). The PRC has grown about 9% per year for more than 25 years, the fastest growth rate for a major economy in history. It has moved 300 million people out of poverty since 1975 (Zakaria, 2005). The PRC's exports to the United States have grown by 1600% since 1980. The PRC's exports were running at a $1.25 trillion annual rate in middle of 2007. This $1.25 trillion is two-fifths of the PRC's gross domestic product (GDP) of $3 trillion (Dumas, 2008). The PRC is now America's second-biggest trading partner after Canada, with $62.3 billion in trade to date in 2010 (U.S. Census Bureau, 2010a).

The PRC's growth not only benefits that country, but also the world, and in particular the United States. A Morgan Stanley report showed that cheap imports from

the PRC have saved American consumers more than $600 billion in the past 100 years (Zakaria, 2005). Chinese people actively engage in and are engaged by international ideas, forces, and trends—a process that has compelled the PRC to associate with the outside world and the international system (Guoqi, 2008). Globalization has further integrated the PRC into the world system economically, and the PRC is eager to play a more active role in international affairs. The country's long process of internationalization has become clearer and more important in its search for a new national identity (Guoqi, 2008).

The PRC is becoming a more powerful nation and its economy impacts the whole world. However, since the one-child policy was instituted in 1979, prescribing that each new family should have only one child, social structure in China has been changing. The PRC is becoming a small-family culture (Hesketh, Lu, & Xing, 2005). Emerging adults in the PRC are living in a small-family culture; they have no siblings to play with as they grow up. The single child's parents and their grandparents on both the father's and mother's side provide a caring environment. Therefore, children under the one-child policy may become spoiled. Some studies in the early 1980s showed that Chinese only children were selfish, unsociable, conceited, fragile, more egocentric, less cooperative, less affinitive, and more maladjusted than sibling children (Jiao, Ji, & Jing, 1986; Miller & Maruyama, 1916). Moreover, the one-child policy has contributed to a gender imbalance; Hudson and Den Boer (2002) indicated that China will have 29-33 million surplus males between the ages of 15 and 34 by 2020. A large portion of young men may

not have the opportunity to explore romantic relationship in emerging adulthood (Nelson & Chen, 2007).

<u>Hong Kong</u>

Hong Kong is the world's 11th largest trading economy, sixth largest foreign exchange market, and 13th largest banking centre, and is the location of Asia's second largest stock market (Hong Kong Government, 2006). There are 7 million individuals and a concentration of 6,380 people per square kilometers (Hong Kong Government, 2011).

Hong Kong has grown rapidly in the last few decades, and today, it is one of the most densely populated cities in the world (Marafa & Tung, 2004). The Hong Kong economy has been transformed from a manufacturing to a financial and service-oriented focus during the past several decades. This has occurred as a result of the opening of the Chinese economy and the increasing trend of globalization (Man, 2001). Long working hours, work-centered values, and lifestyles conducive to living in an industrialized society have set the tone for rapid economic growth in Hong Kong. This phenomenon has imposed severe constraints that keep people from playing.

The emerging adults in Hong Kong have been developing a multi-cultural identity, a bicultural identity, and also facing identity confusion. Arnett (2002) stated that immigrants may develop identities that combine their native culture, the local culture, and the global culture, thus leading to a multicultural identity. He also indicated that developing a bicultural identity means a local identity is retained alongside a global identity, and there is no doubt that local cultures are being modified by globalization. By the same token, emerging adults have a similar identity in Hong Kong.

Hong Kong is a unique society in which traditional Chinese culture and Eastern beliefs have existed side by side with British colonial and Western culture (Reifel & Reifel, 2001). People in Hong Kong are drawn to concepts from overseas and are willing to learn new ideas from other cultures (Wong, 2008). Hong Kong is often thought of as a blend of Eastern and Western cultures. This unique multi-cultural society has constructed a complex environment that absorbs and digests new knowledge easily. Therefore, the significant characteristics of emerging adults in Hong Kong are multi-cultural identity and bicultural identity.

The emerging adults who are between 18 and 25 years old were born in the years between 1985 and 1992. In Hong Kong, emerging adults have witnessed the British government's management turnover (1997); therefore, inhabitants of Hong Kong do not recognize their identity as Chinese; most of them claim that they are people from Hong Kong (Mathews, 1997). The emerging adults in Hong Kong did not develop their Chinese identity under British colonial rule. Therefore, the Chinese government has been paying considerable attention to nurturing a Chinese identity among the new generation (children, youth, and adolescents) in Hong Kong. For example, the Chinese government has been holding different events and activities at the community level and promoting basic laws at different primary schools, high schools, and universities. The Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China serves as the constitutional document of the Hong Kong Special Administrative Region (HKSAR) of the PRC. The Basic Law ensures that the current political situation will

remain in effect for 50 years. The rights and freedoms of people in Hong Kong are based on the impartial rule of law and an independent judiciary.

Arnett (2002) reported that identity confusion is increasing among young people in non-Western cultures. Emerging adults in Hong Kong have been experiencing conflict between their traditional cultures and the values of the West since 1997. Emerging adults in Hong Kong experience a state of identity confusion rather than successfully forming an identity (Mathews, 1997). Therefore, multi-cultural identity, bicultural identity, and identity confusion should be considered when studying emerging adults in Hong Kong.

Chen and Chang (2007) indicated that college entrance exams are highly competitive, and students are encouraged to focus on academics in China. In addition, the same situation applies in Hong Kong; academic results are seen as the most important ends. Arnett (2004) indicated that college in the United States is for finding out what they want to do. Emerging adults who attend college have 2 years before they have to make a definite decision, and they can always change their mind even after they declare a major (Arnett, 2004). However, college students in Hong Kong are strongly discouraged from changing their major throughout their 3-year college careers. Emerging adults in Hong Kong have little opportunity to explore their interests and identity at college. College gives emerging adults the opportunity to explore their identity in United States; however, colleges in Hong Kong do not serve the same function.

United States

According to the U.S. Census Bureau (2010b), the U.S. population numbers more than 310 million. In 2008, Barack H. Obama became the first African-American to be

elected President (The White House President Barack Obama, 2011). In Congress, Democrats retained majorities in both the House and the Senate from 2008 to 2010, with 57 Senators and 178 Representatives. However, the economy crashed in 2008, with the Dow Jones Industrial Average tumbling 4.4% in one day, Lehman Brothers filing for bankruptcy, and President Bush putting mortgage giants Fannie Mae and Freddie Mac under government conservatorship (U.S. History Timeline, 2011).

College students in United States make important decisions that pertain to various domains of life, such as occupation, friendship, and romantic relationships. As a consequence, entering college is for many late adolescents a major step in the journey toward achieving an adult identity (Montgomery & Côté, 2003). "College environments provide a diversity of experiences that can both trigger consideration of identity issues and suggest alternative resolutions for identity concerns" (Waterman, 1993, p. 53). Moreover, college is a prime setting for love explorations, because people are mostly emerging adults and mostly unmarried in one place; young people can also explore various possible educational directions that would lead to different occupational futures in college (Arnett, 2004).

The transition to college involves changes in personal relationships with family and friends, social skills, and extracurricular involvement that provide contexts for exploration and renegotiation of identities (Eccles, Templeton, Barber, & Stone, 2003; Shaver, Furman, & Buhrmester,1985). Peers are a particularly salient context for college-going emerging adults. Because emerging adults who are attending college away from home spend significantly more of their time with peers, who often have different

backgrounds and ideas than with their families, peers may be especially likely to serve as

triggers and contexts for ethnic identity development (Azmitia, Syed, & Radmacher,

2008; Hurtado & Gurin, 2004; Phinney, Romero, Nava, & Huang, 2001).

Emerging adulthood might be thought of as a crisis (Labouvie-Vief, 2006), and

the transition to adulthood is marked by a series of psychological changes such as

increased emotional regulation as well as changes in roles (Schulenberg, Maggs, &

O'Malley, 2003). Arnett (2005) reported that alcohol and drug use is a notable

characteristic of emerging adulthood in the United States. According to the National

Survey on Drug Use and Health (Substance Abuse and Mental Health Services

Administration [SAMHSA], 2002) in 2002, nearly 70% of 21- to 25-year-olds used

alcohol in the past month, a higher percentage than in any other age group.

Emerging adults who attend college face a stage in which they typically leave a

parent's home and explore a new environment at college. Bachman, Wadsworth,

O'Malley, Johnston, and Schulenberg (1997) found that increased drinking after high

school was associated with leaving the parental home and acquiring freedom from adult

supervision. Moreover, Chen, Dufour, and Yi (2004) showed that the prevalence of heavy

drinking among 18-24 year olds has been increasing in the last decade. Drinking

problems have impacted emerging adults in United States. Role transition is one of the

factors for drinking among emerging adults.

Five Features of Emerging Adulthood Tie in with Personal Cultural Orientations

"Emerging adulthood" (Arnett, 2004) is a term that originated in American

culture, but it also applies to Eastern culture. There are general characteristics, the five

features of emerging adulthood that describe emerging adults; however, the characteristics of emerging adults in the PRC, Hong Kong, and the U.S. are different. Emerging adults have their own personal cultural orientations in these three counties. Therefore, it is important to tie two concepts together as part of gaining a full understanding of characteristics of emerging adulthood in the PRC, Hong Kong, and the U.S.

Table 8 provides an overview of the way in which the five features of emerging adulthood tie in into personal cultural orientations: (a) "the Age of Identity Exploration" ties in with the personal cultural orientations of Independence (IND), Interdependence (INT), Masculinity (MAS), and Gender Equality (GEQ); (b) "the Age of Self-Focused" ties in with the personal cultural orientations of Independence (IND), Interdependence (INT), Social Inequality (IEQ), and Tradition (TRD); (c) "the Age of Instability" ties in with the personal cultural orientations of Power (POW) and Prudence (PRU); (d) "the Age of Possibilities" ties in with the personal cultural orientation of Risk Aversion (RSK); and (e) "the Age of Feeling in-Between" ties in with the personal cultural orientation of Ambiguity Intolerance (AMB). These are explained in greater detail in the following paragraphs.

Table 8

Five Features of Emerging Adulthood Tie In With Personal Cultural Orientations

Personal Cultural Orientations (Hofstede, 2001)	Five features of emerging adulthood Arnett (2004)
Independence (IND) Individual's behavior is organized by reference to one's own internal thoughts, feelings, and actions, rather than by reference to the thoughts, feelings, and actions of others (Markus & Kitayama, 1991) **Interdependence (INT)** Focuses on attending to others, fitting in, and harmonious interdependence with others (Sharma, 2009) **Masculinity (MAS)** Represents the expression of assertiveness, self-confidence, aggression, and ambition (Schwartz & Rubel-Lifschitz, 2009) **Gender Equality (GEQ)** People perceive men and women as equal in terms of social roles, capabilities, rights, and responsibilities (Schwartz & Rubel-Lifschitz, 2009)	**The Age of Identity Exploration** Emerging adults clarify their identities when they explore the possibilities in love and work.
Independence (IND)- see above **Interdependence (INT))**- see above **Social Inequality (IEQ)** Refers to the ways in which socially defined categories of persons according to the characteristics of gender, age, class, and ethnicity are differentially positioned (Sharma, 2009) **Tradition (TRD)** Represents respect for traditional values including hard work, non-materialism, social consciousness, morality, and respect for one's heritage (Bond, 1988)	**The Age of Self-Focused** Emerging adults are free to make decisions independently.
Power (POW) Focuses on social status, respect, wealth, rights, and privileges (Hofstede, 2001) **Prudence (PRU)** Represents planning, perseverance, and future orientation (Puri, 1996)	**The Age of Instability** Emerging adults make frequent changes in their lives in term of love partners, jobs, and educational status
Risk Aversion (RSK) The extent to which people are reluctant to take risk or make risky decisions (Sharma, 2009) and the degree to which individuals feel uncomfortable with taking risks (Bontempo, Bottom, & Weber, 1997; Keh & Sun, 2008)	**The Age of Possibilities** When people have the opportunity to make dramatic changes in their lives, when hopes are high, and when optimism is almost universal

(table continues)

Personal Cultural Orientations (Hofstede, 2001)	Five features of emerging adulthood Arnett (2004)
Ambiguity Intolerance (AMB) The degree to which people can tolerate ambiguity and uncertain situations (Sharma, 2009) and the degree to which individuals feel uncomfortable when confronted with ambiguity (de Mooij & Hofstede, 2002)	**The Age of Feeling In-Between** Like an age in-between, neither adolescent nor adult, on the way to adulthood but not there yet

"The Age Of Identity Exploration" Ties In With The Personal Cultural Orientations Of

Independence (IND), Interdependence (INT), Masculinity (MAS) And Gender Equality

(GEQ)

Emerging adults clarify their identities when they explore the possibilities in love,

work, and a global perspectives (Arnett, 2000); emerging adults set the foundation of

their adult lives when they explore various possibilities for their lives in variety of areas,

and they learn more about who they are and what they want out of life during the age of

identity exploration (Arnett, 2004). The age of identity exploration ties in with the

personal cultural orientations of Independence (IND), Interdependence (INT),

Masculinity (MAS) and Gender Equality (GEQ).

Independence (IND) focuses on personal goals, attitudes, needs, and rights.

Individual's behavior is organized by reference to one's own internal thoughts, feelings,

and actions rather than by reference to the thoughts, feelings, and actions of others

(Markus & Kitayama, 1991). People place a strong value on independence, individual

freedoms, and individual achievement (Arnett, 2001). Individuals seek to maintain their

independence from others by attending to the self and by discovering and expressing their

unique inner attributes (Markus & Kitayama, 1991). Emerging adults become more independent of their parents than they were as adolescents (Arnett, 2004). However, they have not yet entered the stable adult life; they might still rely on the new relationships which they establish in college. Emerging adults might become more interdependent in the age of identity explorations in this case. Interdependence (INT) focuses on communal goals, norms, obligations, and duties, and emphasizes maintaining relationships. Interdependence also focuses on attending to others, fitting in, and harmonious interdependence with others (Sharma, 2009), and people place a strong value on cooperation, mutual support, maintaining harmonious social relationships, and contributing to the group (Arnett, 2001). Markus and Kitayama (1991) suggested that people may maintain both independent and inter dependent sense of self, and each of these may activate in different situations. Since Independence (IND) and Interdependence (INT) represent two ends of a continuum, they not only tie in with "The Age of Identity Exploration" but also tie with "The Self-focused Age." Further explanation will be elaborated in the latter paragraphs.

The masculinity (MAS) cultural orientation affects a person's self-concept; masculinity represents a preference for achievement, assertiveness, and material success (Hofstede, 2001). MAS represents the expression of assertiveness, self-confidence, aggression, and ambition (Schwartz & Rubel-Lifschitz, 2009). MAS may also relate positively with mastery and negatively with harmony (Schwartz, 1994) and human heartedness (Bond, 1988). Emerging adults have an exceptional opportunity to try out different ways of living and different options for work in the age of identity exploration

(Arnett, 2004). Emerging adults explore identity issues and self-understanding at work When they explore various work and educational possibilities (Arnett, 2004), they address the expression of achievement, material success, assertiveness, self-confidence, aggression, and ambition in this stage.

Gender Equality (GEQ) represents how people perceive men and women as equal in terms of social roles, capabilities, rights, and responsibilities (Schwartz & Rubel-Lifschitz, 2009). Emerging adults address the issue of gender equality, such as social roles, capabilities, rights, and responsibilities when they explore the area of love in the age of identity exploration. In seeking a long-term romantic partner, emerging adult inevitable address identity issues, they have to know who they are before they know what kind of person they want to commit themselves to (Arnett, 2004, 2006). They start asking themselves the following questions when they engage in a romantic relationship, (a) what are the social roles as a boy-friend/girl-friend/ man/ woman? (b) What are their capabilities as a boy-friend/girl-friend/ man/ woman? (c) What are their rights as a boy-friend/girl-friend/ man/ woman? (d) What are their responsibilities as a boy-friend/girl-friend/ man/ woman? Those questions give emerging adults a platform to think about the issue of gender equality.

"The Self-Focus Age" Ties In With The Personal Cultural Orientations Of Independence (IND), Interdependence (INT), Social Inequality (IEQ), and Tradition (TRD)

Emerging adults are free to make decisions independently in the age of self-focus. Emerging adults develop skills for daily living, gain better understanding about themselves, their beliefs, and their values in order to build a foundation for their adult

lives (Arnett, 2004). The age of self-focus ties in with the personal cultural orientations of independence (IND), interdependence (INT), social inequality (IEQ) and tradition (TRD).

Emerging adults become more independent in the age of self-focus; they have to make their own choices from the easy one such as what to have for dinner? When to come home at night? Where to go to college? Work full time? Switch majors? Break up with girl-friend/boyfriend? Many of these decisions mean clarifying in their own minds what they want, and nobody but themselves can really tell them what they want. However, they may become interdependent in different situation; for example, they might seek help or advice from their family, friends and others when they are not sure which decision they should make.

The self-focused age also ties in with the personal cultural orientations of social inequality (IEQ) and tradition (TRD). Social inequality refers to the ways in which socially defined categories of persons according to the characteristics of gender, age, class, and ethnicity are differentially positioned (Sharma, 2009). Emerging adults have few obligations and little in the way of duties and commitments to others compared with children and adolescents (Arnett & Tanner, 2006) , they have a great deal of autonomy in running their own lives, and they are developing skills with their beliefs and values (Arnett, 2004). Arnett (2006) showed that in his research that a change in social cognition seems to take place in the move from adolescence to emerging adulthood that makes emerging adults are less self-centered in the age of self-focus. Emerging adults have ability to understand and analyses when they are facing the issue of social inequality and they are able to make their own choices to react accordingly.

In addition, tradition (TRD) represents respect for traditional values including

hard work, non-materialism, social consciousness, morality, and respect for one's

heritage (Bond, 1988). Arnett (2006) showed that emerging adults are more considerate

of other people's feelings and better at understanding other's point of view in the age of

self- focus compared with adolescents(Arnett, 2006). Emerging adults recognize this

period as the one time in their lives when they do not have to answer to anyone and can

do what they want with their lives, before they enter the obligations of adult roles (Arnett,

2006). They will have more understanding if they respect traditional values including

hard work, non-materialism, social consciousness, morality, and respect for one's

heritage when they make their own decision in the age of self-focus.

"The Age Of Instability" Ties In With The Personal Cultural Orientations Of Power

(POW) And Prudence (PRU)

Emerging adults make frequent changes in their lives in terms of love partners,

jobs, and educational status in the stage of instability and they make various plans in their

daily lives; however, their plans are subject to revision during the emerging adult years

(Arnett, 2004). The age of instability ties in with the personal cultural orientations of

power (POW) and prudence (PRU). Power focuses on social status, respect, wealth,

rights, and privileges (Hofstede, 2001). High power cultures are more likely to accept a

power hierarchy, tight control, vertical top-down communication, and even

discrimination based on age, gender, hometown, family, social class, school, education

level, or job positions (Yoo & Donthu, 2005). When emerging adults face the power

struggles, such as power hierarchy, tight control, vertical top-down communication, and

discrimination at work, they might easily give up and make changes in their jobs, because they always make frequent changes in the age of instability.

Puri (1996) indicated that prudence (PRU) represents planning, perseverance, and future orientation. Arnett (2004) indicated that emerging adults may adjust their original plans according to different situation during the age of instability. An example of prudence, if they are employed after college but discover after a year or two that the current job does not satisfy them, they can revise their plans. They learn new things about themselves after the revision of their plans, and they take steps toward clarifying the kind of future they want.

"The Age Of Possibilities" Ties In With The Personal Cultural Orientation Of Risk Aversion (RSK)

Emerging adulthood is the age of possibilities in two ways: One is that emerging adulthood is a time of great optimism, of high hopes for the future, and the second is that emerging adults have left their family of origin but are not yet committed to a new network of relationships and obligations (Arnett, 2004, 2006). On the one hand, they have high hopes for the future; on the other hand, they are not yet committed to a new network of relationships after they have left their family of origin.

The age of possibilities ties in with the personal cultural orientation of risk avoidance (RSK). RSK is the extent to which people are reluctant to take risk or make risky decisions (Sharma, 2009) and the degree to which individuals feel uncomfortable with taking risks (Bontempo et al., 1997; Keh & Sun, 2008). Emerging adults might feel

uncomfortable with taking risks and they might not gain support from new relationships when they make risky decisions in the age of possibilities.

"The Age Of Feeling In-Between" Ties In With The Personal Cultural Orientation Of Ambiguity Intolerance (AMB)

The age of feeling in-between describes emerging adults who are in between the restrictions of adolescence and the responsibilities of adulthood, wherein lie the explorations and instability of emerging adulthood (Arnett, 2004). Emerging adults consider the following three criteria to be most important for becoming an adult (Arnett, 2004): (a) accept responsibility for yourself, (b) make independent decisions, and (c) become financially independent. All three criteria are gradual rather than transition events (Arnett, 2006). While emerging adults are in the process of reaching those goals, they feel in between adolescence and full adulthood (Arnett, 2004).

The age of feeling in-between ties in with the personal cultural orientation of ambiguity intolerance. Ambiguity Intolerance (AMB) is the degree to which people can tolerate ambiguity and uncertain situations (Sharma, 2009) and the degree to which individuals feel uncomfortable when confronted with ambiguity (de Mooij & Hofstede, 2002). Arnett (2004) indicated that many emerging adults are ambivalent about reaching adulthood. Emerging adults are happy to have freedom to choose what they want, and it is satisfying to be able to handle adult responsibilities competently. However, they might feel dread and reluctance to reach adulthood.

Play Benefits for Emerging Adults

Emerging adults are self-focused on identity issues and aware of their values,

attitudes, resources, and limitations in the developmental period (Gottlieb et al., 2007).

These individuals work on a variety of developmental tasks and engage in intense

identity exploration (Roisman, Masten, Coatsworth, & Tellegen, 2004; Schulenberg et

al., 2003). Building self-identity is a significant element in this developmental period.

However, establishing personal identity is a challenging task for emerging adults. Peers

have significant impact on this stage. Several authors (Edginton, Kowalski, & Randall,

2005; Miller & Robinson, 1963) have pointed out that an adolescent's peer group and

peer cultures have a powerful influence on character formation. Identity issues have long

been seen as central to adolescent development (Arnett, 2002).

In addition, Chickering and Reisser (1993) indicated that there are seven vectors

of development during the college/university years: (a) developing intellectual, social,

and physical competence; (b) managing emotions; (c) moving through autonomy toward

interdependence; (d) developing mature interpersonal relationships; (e) establishing

identity; (f) developing purpose; and (g) developing integrity. Three of the developmental

vectors (Chickering & Reisser, 1993) supported Arnett's theory: (a) managing emotions,

(b) developing mature interpersonal relationships, and (c) establishing identity.

Managing emotions is one of the major tasks in emerging adulthood development.

The process of emotional growth during emerging adulthood can be described as a dual

process. An accumulation of emotion can occur and damage individuals when they lack

the opportunity to vent such feelings, (Ellis, 1973). One of the play theories, catharsis

theory (Carr, 1934; Claparede, 1911), suggests that play is a release and provides a safe place to relieve excess energies and emotions. It helps emerging adults to manage their emotions. The catharsis effect of play interpreted these forms of relaxation to be mere drainage channels for shunting off accumulated energy (Patrick, 1916). Play is an area in which the emotions could be purged by activity and reduce the likelihood of damage (Ellis, 1973). Many recreational activities (play) must be adapted to the emotional needs of emerging adults.

Developing mature interpersonal relationships is another significant component for emerging adults. However, emerging adults' expectations for love tend to be extremely high; they are not just looking for a reliable marriage partner but also searching for a "soul mate" (Arnett, 2007). Adolescents often learn how to behave socially and morally through team activities (play). Play activities, which have a great deal of autonomy and self-government, help this age group experience adult-like behavior (Miller & Robinson, 1963).

Interactive group activities can provide a platform for emerging adults to build healthy relationships with the opposite sex, as well as build up self-image through self-planned and self-directed activities. The adolescent, in the process of becoming an adult, establishes an identity as an adult person (Miller & Robinson, 1963). Emerging adults can build self-confidence and can gradually become comfortable with the idea of being a member of a society through large group and mass activities (play).

Emerging adults attending college face a stage in which they leave a parent's house and explore a new environment at college. Personality functions effectively when

it is expanding or integrating its roles (Blatner & Blatner, 1988). Emerging adults have to play different roles in various aspects of their life. For instance, they are children in their family, they are students at school, and they are friends in different settings. Many people work and live in contexts where high levels of self-control are the norm; there tends to be a muting of emotions, and people need the opportunity to personally enact their own expressions of events and characters.

The beneficial effects of play can spread throughout the life span. Play is not only beneficial for children, but also for adults, particularly for emerging adults in various ways. Table 9 presents theories of the benefits of play and the benefits of play for emerging adults: Play (a) releases energy, emotions, and tension (Carr, 1934; Claparede, 1911; Patrick, 1916; Schiller 1875; Spencer, 1873); (b) restores energy (Lazarus, 1883); (c) prepares for adult life (Groos, 1898); (d) expresses instincts (Hall, 1906); (e) substitutes as an outlet for desires (Reaney, 1916; Robinson, 1920); (f) fits the individual's existing level of cognitive functioning (Piaget, 1952, 1961); (g) generalizes to other settings (Witt & Bishop, 1970); (h) is motivated by the need to elevate the level of arousal towards the optimal behavior (Ellis, 1973); (i) provides the experience of flow (Csikszetmihalyi, 1975,1990); (j) involves the desire to strive, excel, master, and succeed (Levy, 1978); (k) attributes the outcomes and the consequences for individuals (Rotter, 1966; Decharms,1968); (l) involves personal emotions (Blatner & Blatner, 1988; Roberts & Sutton-Smith, 1962); (m) involves social learning (Blatner & Blatner, 1988); (n) is expression (Brown, 2009; Verenikina et al., 2003; (o) reduces anxiety (Erikson,1950; Peller,1952; Waelder, 1933; Freud, 1961); (p) involves wish fulfillment, (Erikson,1950;

Peller,1952; Waelder, 1933); (q) increases productivity (Brown, 2009); and (r) contributes to happiness (Brown, 2009; Erikson,1950; Peller,1952, & Waelder,1933).

Psychoanalytic theory sees play as providing a context for expressing emotions and gaining a sense of control (Verenikina et al., 2003). Freud (1961) conceived play as providing a platform for people to reduce the anxiety of real-life interactions. Traditional psychoanalytic theory of play views play as instinct of mastery, wish fulfillment, transformation from passively to activity, and leave of absence from reality and superego (Peller, 1952; Waelder, 1933). Erikson (1950) showed how human beings continue to grow and develop beyond the resolution, and man is vulnerable to conflicts, anxieties, and guilt that may arise from an interaction between the biological needs of the organism and environmental contingencies (Levy, 1978). Therefore, there is evidence to believe that play can enhance vitality and mental health for emerging adults.

The social benefit of play means strengthening involvements and reducing alienation (Blatner & Blatner, 1988). When people engage in spontaneous, imaginative activities, it functions as an enjoyable bonding force. One of the biggest social benefits of imaginative play is that it satisfies both the need of the group and the needs of the individual (Blatner & Blatner, 1988). Galambos, Barker, and Krahn (2006) found that when social support was higher, self-esteem was also higher, and depressive symptoms and expressed anger were lower. These findings indicate that during emerging adulthood, losses in social support are connected with a shift toward lower psychological well-being, whereas gains in such support are associated with improved psychological functioning. There is evidence to believe that emerging adults can gain social support and self-esteem,

and reduce their depressive symptoms and expressed anger through play during emerging

adulthood.

Table 9

The Benefits of Play Theories and the Benefits of Play for Emerging Adults

Benefit	Spencer, 1873, Schiller, 1875	Lazarus, 1883	Groos, 1898	Hall, 1906	Carr, 1934, Claparede, 1911	Patrick, 1916	Reaney, 1916, Robinson, 1920	Waelder, 1933, Peller, 1952; Erikson, 1950	Piaget, 1952,1961	Witt & Bishop, 1970	Ellis,1950	Csikszetmihalyi, 1975,1990	Levy, 1978	Roberts & Sutton-Smith, 1962	Rotter, 1966,	Decharms,,1968	Blatner & Blatner, 1988	Veronikina et al. 2003	Freud, 1961	Brown, 2009
releases their energy , emotions and tension	X				X		X													
restores energy		X				X														
prepares for adult life			X																	
expresses their instincts				X																
substitutes outlet for desires								X												
fit s existing level of cognitive functioning									X											
generalizes to other settings										X										
is motivated by the need to elevate the level of arousal towards the											X									
is the experience of flow												X								
involves the desire to strive, excel, master, and succeed													X							
individuals attribute the outcomes and the consequences															X	X				
involves personal emotions														X			X			
involves social learning																	X			
is expression																		X	X	
reduces anxiety								X											X	
involves wish fulfillment								X												
increases productivity																				X
contributes to happiness								X												X

How Play Contributes to Emerging Adulthood

Table 10 presents how play ties in with five features of emerging adulthood. Emerging adults clarify their identities and learn more about who they are and what they want out of life; they have opportunity to try out different ways of living and different possible choices in love and work in the age of identity exploration (Arnett & Tanner, 2006). Play such as psychodrama or creative dramatic play provides a channel for emerging adults to experience roles and to express anger, triumph, heroism, and powerful, clear emotions (Blatner & Blatner, 1988). Brown (2009) mentioned that individuals are engaged in the purest expression of their humanity and the truest expression of their individuality when they play. Moreover, play makes individuals more productive and happier in everything they do (Brown, 2009). In addition, people need contact with other people to gain support and love (Maslow, 1962). Play in work involves human interaction; it should fulfill the human social need (Abramis, 1990). Play serves as a safety platform for emerging adults to explore their identity in the areas of love and work during the age of identity exploration.

Emerging adults are self-focused in the sense that they have fewer social obligations and fewer duties and commitments to others, and this leaves them with a great deal of autonomy in running their own lives (Arnett & Tanner, 2006). Emerging adults are free to make decisions independently in the age of self-focused. Play relationships serve as symbols of group membership and perform the integrative function of helping to create and maintain group solidarity at work. Not only do workers play to reduce boredom and monotony, but play also makes the job experience more enjoyable

(Wong, 2008). During play, individuals are able to try out things without threatening their physical or emotional well-being because they are just playing (Brown, 2009). These play experiences provide emerging adults with a channel to rehearse similar situations in their real lives.

In the Age of Instability, emerging adults experience an intense period of life; however, it is unstable (Arnett, 2004). They may have to revisit their plans when they experience different explorations in the areas of love and work. Emerging adults make frequent changes in their lives in terms of love partners, jobs, and educational status in the age of instability. People can gain social support and self-esteem through play (Wong, 2008). In addition, they can make new cognitive connections that find their way into their everyday lives during play (Brown, 2009). Play benefits emerging adults and provides them with support to make frequent changes during this stage.

Emerging adulthood is the stage of possibilities because it represents a chance for young people to transform their lives to a new and better direction (Arnett & Tanner, 2006). Brown stated that emerging adults create possibilities that have never existed but may exist in the future, and they can learn lessons and skills through play without being directly at risk (Brown, 2009).

Table 10

Play Ties In With Five Features of Emerging Adulthood

Five features of emerging adulthood Arnett (2004)	Play Features
The Age of Identity Exploration Emerging adults clarify their identities when they explore the possibilities in love and work.	To express emotion through play Psychodrama provides a channel for emerging adults to experience roles expressing great anger, triumph, heroic, and powerful, clear emotions (Blatner & Blatner, 1988). Play in work involves human interaction; it should fulfill the human social need (Abramis, 1990).
The Age of Self-Focus Emerging adults are free to make decisions independently.	To build relationship through play Play relationships serve as a symbol of group membership and perform the integrative function of helping to create and maintain group solidarity (Wong, 2008). In play, individuals are able to try out things without threatening their physical or emotional well-being (Brown, 2009).
The Age of Instability Emerging adults make frequent changes in their lives in term of love partners, jobs, and educational status.	To gain social support through play Emerging adults gain social support and self-esteem through play (Wong, 2008). They make new cognitive connections that find their way into their everyday lives (Brown, 2009).
The Age of Possibilities When people have the opportunity to make dramatic changes in their lives and when hopes are high and optimism is almost universal.	To create possibilities through play Emerging adults create possibilities that have not existed but may exist in the future (Brown, 2009).
The Age of Feeling In-Between Like an age in-between, neither adolescent nor adult	To help them to feel like adults through play The activities (play) have a great deal of autonomy and self-government; help them to feel like adults (Miller & Robinson, 1963).

Most emerging adults who reach the age of 18 or 19 do not feel completely adult until years later in the age of feeling in-between. Even though they become confident, make their own decisions, and are financially independent, they may feel as if they are in between adolescence and full adulthood while they are in the process of developing those qualities (Arnett & Tanner, 2006). The activities of play, which have a great deal of autonomy and self-government, help them to feel like adults (Miller & Robinson, 1963). Psychoanalytic theory views play as providing a context for expressing these emotions and gaining a sense of control (Verenikina et al., 2003).

As indicated in Figure 3, Piaget's (1962) developmental theory of play displays how "play" is a significant factor in different development stages in children between birth and 17 years of age. However, play in the area of emerging adults (18-29 years old) has not been a frequent focus of investigation and it obviously deserves more attention. Play benefits individuals who are identified as emerging adults (Abramis, 1990; Blatner & Blatner, 1988; Brown, 2009; Miller & Robinson, 1963; Wong, 2008). Figure 3 based on Piaget's (1962) developmental theories of play, adds to his hierarchy, and describes how play can benefit emerging adults. Play benefits for emerging adults (ages 18 to 29) include the opportunity to (a) express emotion, (b) build relationships, (c) gain social support, (d) create possibilities, and (e) help emerging adults to feel like adults.
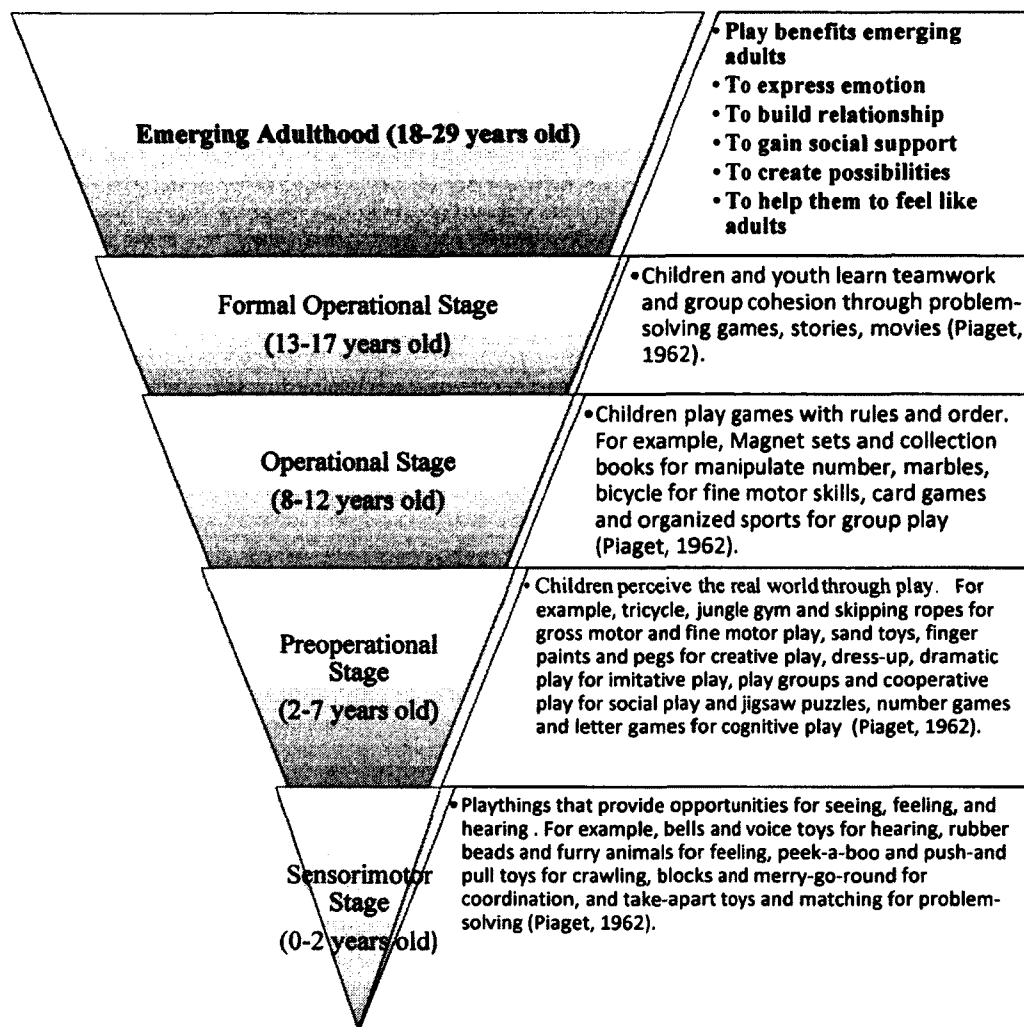
Figure 3. Developmental Stages of Play Behavior with Addition of Emerging Adulthood

Adapted from Piaget, J. (1962). *Play, dreams and imitation in childhood* (C. Cattegno & F. M. Hodgsen, Trans). New York, NY: W. W. Norton.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine play among emerging adults in the PRC, HK, and U.S. In addition, the primary problem to be investigated in this study was the relationship between the respondents' perceptions of play and their cultural orientation. Further, the study explored the relationships between respondents' perceptions of the importance of play and their cultural orientation. An exploration of respondents' frequency of play was also studied to determine whether there were relationships to ethnicity and cultural orientation. Finally, the study considered the interactive effects among perceptions of play, importance of play, cultural orientation, and ethnicity.

This chapter presents the methodology applied in this study and contains the following sections: (a) research design, (b) study subjects, (c) instrumentation, (d) procedures for collecting data, and (e) statistical methodology and data analysis. The first section defines the basic research design of this study; the second section includes information about the study subjects; the third section provides detailed information for each of the six main sections of the instrument; the fourth section contains the procedures for collecting data in three different universities, and the fifth section presents the statistical procedures of Factor Analysis, Pearson correlation, and ANOVA used to analyze the survey results.

Research Design

The current study used a descriptive research design and was non-experimental in nature. Research participants completed self-report instruments designed to measure their perception of play, criteria for the transition to adulthood, personal cultural orientations, and frequency of play. Demographic information was also obtained for each participant through a researcher-designed questionnaire.

Study Subjects

Subjects for this study were young adults attending college in the PRC, HK and U.S. The PRC and the U.S. were selected because of their diversity and global importance (Chiu, Jao, & Wu, 1987). Hong Kong was selected because it represents a combination of both Western and Eastern values. Because the countries represent substantially different backgrounds based on their cultural orientations, this study focused on a mix of Eastern and Western cultures, individualism and collectivism. American society evolved out of Western legal, educational, and political systems, and the United States is a country that epitomizes technological development. For example, college students in United States who attend college have 2 years before they have to make a definite decision about a major, and they can always change their minds even after they declare a major (Arnett, 2004).

Eastern society has legal, educational, and political systems that greatly contrast with those of the United States, and the PRC is a country that is technologically underdeveloped. Data on value orientations in the PRC since 1949 is scarce (Lai & Lam, 1986). However, because the PRC is now a country that desires to become part of the

international economic community, understanding its value system is becoming increasingly important. For example, college students in Chinese culture are strongly discouraged from changing their majors throughout their college years.

As a British colony, HK functioned within a legal and educational environment comparable to that of the U.S. (Bond & King, 1985). However, approximately 97% of its population is composed of Cantonese-speaking natives who adhere to traditional Chinese cultural patterns (Jarvie & Agassi, 1969). As such, HK is environmentally (e.g., economically and legally) comparable to the U.S. and culturally comparable to the PRC.

This cross-cultural comparative study investigates three comparable subject groups: American emerging adults majoring in physical education, recreation and leisure studies at the University of Northern Iowa in the U.S., Chinese emerging adults majoring in physical education and leisure studies at Zhejiang University in the PRC, and Chinese emerging adults majoring leisure studies and recreation management at the Community College of City University in HK.

The participants were all emerging adults who were enrolled in a college recreation and leisure course during the 2010-2011 academic years. The rationale behind the selection of these three groups was that these groups represent college students in American culture (U.S. college students), Chinese culture (Chinese college students), and a multi-culture (college students in Hong Kong). Their shared educational experiences served as the basis for comparison of patterns of play in different contexts. The author chose these countries because they represent significant differences in national cultural dimensions (Hofstede, 2001).

Permission to conduct the study was obtained from the University of Northern Iowa (UNI) Institutional Review Board. Participants were provided with written informed consent prior to participation in the study.

<u>Instrumentation</u>

The primary research instrument in the present study was a self-report questionnaire that was divided into six main sections: (a) perceptions of play, (b) attitudes toward play, (c) frequency of play, (d) personal cultural orientation, (e) criteria for reaching adulthood, and (f) demographics. Appendix A provides detailed information for each of the six main sections of the instrument.

The first section of the questionnaire asks study subjects about their perceptions of play and is based on selected play characteristics found in the literature (Cordes & Ibrahim, 1996; Frank, 1963; Godbey & Parker, 1976; Heintzman et al., 1994; Huizinga, 1949; Jensen, 1977; Kelly, 2000; Kraus, 1998; MacLean et al., 1985; Miller & Robinson, 1963; Nash, 1965; Sapora & Mitchell, 1973); five attributes of playfulness scales (Glynn & Webster, 1992); and six categories based on the similarity and content of Wong's research (Wong, 2008). To supplement the study subjects' notions of play activities, open-ended questions sought to examine their views on play activities.

The second section is designed to assess the attitudes toward play of the study subjects and asks study subjects why play is important to their lives. This section is based on eight play theories offered by Carr (1934), Claparede (1911), Csikszetmihalyi (1975, 1990), Erikson (1950), Groos (1898, 1901), Hall (1906), Lazarus (1883), Peller (1952), Roberts and Sutton-Smith (1962), Spencer (1873), Schiller (1875), Waelder (1933) and

five features of emerging adults provide by Arnett (2002) including (a) The Age of Identity Exploration, (b) The Age of Self-Focus, (c) The Age of Instability, (d) The Age of Possibilities, and (e) The Age of Feeling In-Between.

The third section asks study subjects about their frequency of play. The fourth section of the questionnaire is based on Hofstede's personal cultural orientations research (2001) and seeks information on the study subjects' personal cultural orientations in order to determine if such a value perspective has a relationship with overall attitudes toward play and use of play. The fifth section explores the study subjects' criteria for reaching adulthood, which was adapted from Arnett (1994, 1997, 1998, & 2003). There are 14 items in this section, and participants were asked to "indicate whether you think the following must be achieved before a person can be considered to be an adult." The sixth section consists of demographic questions (e.g., gender, age, number of siblings, college credit classification) to further understand the characteristics of the study sample.

Back translation was used to ensure the accuracy of translation. Back translation (Brislin, 1970) is usually used to establish linguistic equivalences. Back translation is translating an original research to another language and having someone else translate it back to the original. If the back-translated version is the same as the original, they are considered equivalent (Kong, 2006).

A pilot study is a small experiment designed to test logistics and gather information prior to a larger study in order to improve the latter's quality and efficiency (Lancaster, Dodd & Williamson, 2004).

Procedures for Collecting Data

Participants were recruited by cooperating academic staff of Zhejiang University, Community College of City University, and the University of Northern Iowa. Cooperating academic staff explained the purpose of the study and highlighted the instructions for completing the questionnaire before distributing the informed consent and questionnaire to prospective participants. The informed consent stated the purpose of the study, indicated that participation was voluntary, and gave assurance that confidentiality of the data would be maintained. In addition, cooperating academic staff were given assurance that participation would have no impact on students' grades and would not affect their status at Zhejiang University, Community College of City University, and the University of Northern Iowa.

Participants could choose not to be involved in the study at any time. Students who chose not to participate returned the blank questionnaire to the cooperating academic staff and were assured that there would be no negative impact on their grade even though they were not responding to the questionnaire. All participants were instructed to place the informed consent documents in a labeled box. Then the cooperating academic staff distributed the questionnaires to those students who agreed to serve as research participants in the study.

Reliability and Validity

A pilot study was conducted to test logistics and gather information prior to conducting a larger study to establish the validity of the instrument. An exploratory factor analysis, specifically a principal component analysis with a direct oblique rotation, was

used to establish the construct validity of perception of play and play's importance. Back translation was employed to ensure the consistency of meaning and accuracy (Brislin, 1970) to establish face validity. To measure reliability, Cronbach's alpha was calculated for the perceptions of play, play's importance, and personal cultural orientation.

<div align="center">Statistical Methodology and Data Analysis</div>

Descriptive statistics, including means, frequency distributions, and standard deviations, were used to summarize respondent characteristics. They included (a) the respondents' perceptions of play, (b) the respondents' perceptions of play's importance, and (c) the respondents' criteria for reaching adulthood. Then, three statistical methods were used to analyze the data: Factor Analysis, Pearson correlation, and ANOVA.

SPSS (Version 19) software was used for data analysis and the following statistical procedures were conducted:

1. Factor Analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables (DeCoster, 1998). An exploratory factor analysis, specifically a principal components analysis with a direct oblique rotation, was used to establish the construct validity of the instruments. Principal components analysis derives a relatively small number of components that can account for the variability found in a relatively large number of measures. This procedure also is called data reduction (DeCoster, 1998). Principal components analysis is usually the preferred method of factor extraction, especially when the focus of an analysis searching for underlying structure is truly exploratory. Its goal is to extract the

maximum variance from a data set, resulting in a few orthogonal
(uncorrelated) components (Mertler & Vannatta, 2005). Using oblique
rotation, the pattern matrix is examined for factor/item loadings, and the factor
correlation matrix reveals any correlation between the factors (Costello &
Osborne, 2005). Factor analysis was used to reduce the factors of respondents'
perceptions of play and respondents' importance of play.

2. Pearson correlation is used to indicate the strength of the liner association
between two variables and is abbreviated as r (Glass & Hopkins, 1996). The
value or the Pearson correlation coefficient can range from $+1$ to -1, with a
value of 0 indicating no linear relationship. The sign of the coefficient
indicates the direction of the relationship. The absolute value of a correlation
indicates the strength of the association, with larger absolute values indicating
stronger relationships (Vaske, 2008). Hypothesis 1a: to test the null hypothesis
that there is no statistically significant relationship between respondents'
perceptions of play and their cultural orientation, a Pearson correlation was
calculated; Hypothesis 1c: to test the null hypothesis that there is no
statistically significant relationship between respondents' perceptions of play
and their perception of the importance of play, a Pearson correlation was
calculated; Hypothesis 2b: to test the null hypothesis that there is no
statistically significant relationship between respondents' perception of the
importance of play and their frequency of play, a Pearson correlation was
calculated; Hypothesis 3: to test the null hypothesis that there is no

statistically significant relationship between respondents' frequency of play, their countries, and personal cultural orientation, a Pearson correlation was calculated; Hypothesis 4b: to test the null hypothesis that there is no statistically significant relationship between respondents' criteria for reaching adulthood and father's educational attainment, marital status, and parenthood status, a Pearson correlation was calculated;

3. Analysis of variance (ANOVA) specifically tested the significant difference between means. Hypothesis 1b: to test the null hypothesis that there is no statistically significant difference between respondents' perceptions of play, their countries, and the number of siblings, an ANOVA was calculated; Hypothesis 1d: to test the null hypothesis that there is no statistically significant difference between respondents' perceptions of play, the importance of play, personal cultural orientation, and their countries, an ANOVA was calculated; Hypothesis 2a: to test the null hypothesis that there is no statistically significant difference between respondents' perceptions of the importance of play, personal cultural orientation, and their countries, an ANOVA was calculated; Hypothesis 4a: to test the null hypothesis that there is no statistically significant difference between the respondents' criteria for reaching adulthood and their countries, an ANOVA was calculated.

4. A chi square (X^2) statistic is used to investigate whether the observed pattern of events differs significantly from what might have been expected by chance alone (Brace, Kemp, & Snelgar, 2009). The chi square statistic compares the

counts of categorical responses between two (or more) independent groups

whose distributions of categorical variables differ from one another.

Hypothesis 4a: to test the null hypothesis that there is no statistically

significant difference between respondents' criteria for reaching emerging

adulthood and countries, chi-square was calculated; Hypothesis 4b: to test the

null hypothesis that there is no statistically significant relationship between

respondents' criteria for reaching emerging adulthood, marital status, and

parenthood status, chi-square was calculated.

5. Independent t-test is used to test for the difference between two independent

groups on the means of a continuous variable (Brace et al., 2009). Hypothesis

5: to test the null hypothesis that there is no statistically significant difference

between perceptions of play, play's importance, and gender, independent t-test

was calculated.

CHAPTER 4

ANALYSIS AND RESULTS

The purpose of this study was to examine play among emerging adults in the

U.S., PRC, and HK. The primary purpose of this study was to investigate the relationship

between the respondents' perceptions of play and their cultural orientation. The study

also explored the relationship between respondents' perceptions of play's importance and

their cultural orientation. Respondents' frequency of play was also studied to determine

whether there were relationships between frequency of play, countries, and cultural

orientation. Finally, the study considered the interactive effects among perceptions of

play, play's importance, cultural orientation, and countries. The study was organized as a

non-experimental research design.

The results of this study are presented in this chapter in the following sections:

(a) the return of the data, (b) the demographic characteristics of the study population, (c)

the respondents' perceptions of play, (d) the respondents' perceptions of play's

importance, (e) the respondents' definitions of playful activities, (f) the respondents'

personal cultural orientations, (g) the respondents' perceptions regarding criteria for

reaching adulthood, and (h) a summary section condensing the findings for each of the

hypothesis statements.

Return of Data

All respondents completed a questionnaire consisting of (a) perceptions of play,

(b) play's importance, (c) frequency of play, (d) personal cultural orientation, (e) criteria

for reaching adulthood, and (f) demographics. The data for the study were collected during spring 2011.

As shown in Tables 11 and 12, a total of 322 questionnaires were distributed and 301 were returned for an overall return rate of 93.4%. Subjects for this study were young adults attending college in the U.S., PRC, and HK. The PRC and the U.S. were selected because of their diversity and global importance (Chiu et al.,1987). HK was selected because it represents a combination of both Western and Eastern values. Because the countries represent substantially different backgrounds based on their cultural orientations, this study focused on a mix of Eastern and Western cultures, individualism and collectivism.

The questionnaires were distributed to respondents at three different universities. In HK, 92 traditional Chinese questionnaires were distributed at City University of HK; 92 questionnaires were completed, yielding a 100% return rate. In PRC, 70 simplified Chinese questionnaires were distributed at Zhejiang University; 70 questionnaires were completed, yielding a 100% return rate. In the U.S., 160 English questionnaires were distributed at the University of Northern Iowa; 139 questionnaires were completed, yielding an 87% return rate.

The participants were all emerging adults who were enrolled in a college recreation and leisure course during the 2010-2011 academic years. Because the questionnaires were distributed and completed in classroom settings in each institution, most of the students showed an interest in completing and returning the questionnaire before they left their classrooms, which helps to explain the high return rate. Less than

one third (30.6 %) of the study participants were from HK, nearly half (46.2 %) were

from the U.S., and 23.3 % were from the PRC.

Table 11

Return Rate from HK, PRC, and U.S.

Location	Questionnaires distributed	Questionnaires returned	%
HK	92	92	100.0
PRC	70	70	100.0
US	160	139	87.0

Table 12

Percentage of Study Subjects from HK, PRC, and U.S.

Location	Frequencies	%
HK	92	30.56
PRC	70	23.26
U.S.	139	46.18

Demographic Characteristics of the Study Population

The majority of survey respondents were male (59.1%). About 5 percent of the

respondents were ages 25-29, 28.6% were ages 22-24, 24.3% were ages 21, 26.6 % were

ages 20, and 11.6% were ages 18-19. More than half (60.5%) of the respondents reported

having no siblings or having one or two siblings, 35.2% had three to eight siblings. The

majority of the survey respondents from HK (46%) and the PRC (39.3%) had one sibling,

and the majority of survey respondents from the U.S. (62.3%) had three to eight siblings.

Table 13 provides the number of siblings for respondents by country.

Table 13

Number and Percentage of Respondents' Siblings by Country

Number of Siblings	HK Valid %	HK Cumulative %	PRC Valid %	PRC Cumulative %	U.S. Valid %	U.S. Cumulative %
0	12.3	12.3	37.7	37.7	0.7	0.7
1	46.0	58.3	39.3	77.0	6.5	7.2
2	26.9	85.2	11.4	88.4	30.4	37.6
3-8	14.6	99.8	9.8	98.2	62.3	99.9

As illustrated in Table 14, 4% of respondents were married and 94.4% were not

married. For father's level of educational attainment, nearly 46.5% of the respondents

reported high school or less, 20.3% reported some college, and 21.6% reported college

degree or higher. For mother's level of educational attainment, 46.2% of the respondents

reported high school or less, 17.9% reported some college, and 23.3% reported college degree or higher.

Only 2.3% of the respondents had children, and 96.0% reported not having children. Approximately 82% of respondents were undergraduate students, including 30.2% associate's degree students, and 51.8% undergraduate degree students, and 14.6% of respondents were graduate students. Regarding academic major, 30.6% of the respondents were majoring in leisure and tourism, 23.9% were majoring in physical education, and 19.3% were majoring in leisure. Respondents who reported holding a part-time job (59.8%) were more than those who reported not holding a part-time job (37.2%). Reported ethnicity was 52.5% Chinese, 42.2% White, and 4% other. Demographic data are summarized in Table 14.

Table 14

Demographic Characteristics of All Respondents (N = 301)

Variables	Frequencies	%
Gender		
Female	120	39.9
Male	178	59.1
Age		
18-19	35	11.6
20	80	26.6
21	73	24.3
22-24	86	28.6
25-29	15	5.0
average age: 21.45		
Number of Siblings		
0	35	11.6
1	74	24.6
2	73	24.3
3-8	106	35.2
average number of siblings: 2.11		
Marital Status		
Yes	12	4.0
No	284	94.4
Father's Educational Attainment		
High School or Less	140	46.5
Some College	61	20.3
College or more	65	21.6
Don't know	27	9.0
Mother's Educational Attainment		
High School or Less	139	46.2
Some College	54	17.9
College or more	70	23.3
Don't know	30	10.0
Parenthood		
Yes	7	2.3
No	289	96.0

(table continues)

Variables	Frequencies	%
University Enrollment Status		
Associate degree student	92	30.2
Undergraduate student	156	51.8
Graduate student	44	14.6
Major Area of Study		
Leisure	58	19.3
Leisure and Tourism	92	30.6
Physical Education	72	23.9
Job Status (part-time job)		
Yes	180	59.8
No	112	37.2
Ethnicity		
White	127	42.2
Chinese	158	52.5
Black or African American	5	1.7
Hispanic or Latino	3	1.0
Filipino	1	0.3
Korean	3	1.0

Validation and Construction of the Instruments

A pilot study is a common method for testing the validity and accuracy of an

instrument (Sproull, 2004). The major purpose of a pilot study is to determine initial data

for the primary outcome measure to test logistics and gather information prior to

conducting a larger study in order to improve the latter's quality and efficiency

(Lancaster, Dodd & Williamson, 2004; Ross et al., 2000). The pilot study for this

questionnaire explored college students' concept of play and perceptions of their current

life style, which were based on Hofstede (2001) and Arnett (1994, 1997, 1998, & 2003).

Eighteen college students majoring in social work at the University of Northern Iowa, male and female, completed the 101-item questionnaire describing aspects of the concept of play. The pilot data included demographic factors and perceptions of play, play's importance, frequency of play, and personal cultural orientation. Pilot testing involved conducting a preliminary test of data collection tools and procedures to identify and eliminate problems. The researcher made corrective changes before collecting data from the larger target population. The changes included the following: (a) on the first page, the question was changed to "Based on your perception, what type of activities are you currently engaged in when you play?; (b) in section 2, a 7-point scale was added; (d) on question 2 in section 3, 1-2 hours were added; (e) number of siblings was added including self in section 6; and (f) in section 6, added the question, "Do you think you have enough money to spend for playful activities in your leisure time?"

Back translation was used to ensure the accuracy of translation. Back translation involves translating a document to another language and having someone else translates it back to the original. If the back-translated version is the same as the original, the documents are considered equivalent (Kong, 2006). The questionnaire for this study was constructed in English. The researcher translated the questionnaire to simplified Chinese (for PRC) and traditional Chinese (for HK); a graduate from the Department of Translation at Zhejiang University, the PRC, translated the survey back to the original.

Reliability of the Instrument

Reliability ensures the consistency of responses to a set of questions designed to measure a concept. Cronbach's alpha estimates the internal consistency of items in a scale (Cronbach, 1951). Cronbach's alpha was computed for each of the personal cultural orientations using the Statistical Package for Social Science 19.0 program (see Table 15).

The reliability estimate for the instrument based on the factor analysis for the 40-item instrument was .81. The reliability scores on the individual scales of the survey instrument ranged from .62 (MAS-Masculinity) to .81 (RSK-risk aversion). Nunnally (1978) indicated that scores of .7 or .8 should raise no objections, .4 would not be acceptable, and .9 and above would raise the question of possible similarity among the items. Coefficients ranging from .70 to .90 would normally be considered as acceptable. However, in practice, lower limits have been set as acceptable by researchers, especially in the field of leisure (Jackson, 1993). In this study, reliability analyses showed that the scales for RSK, IEQ, AMB, POW, INT, IND, and MAS had acceptable levels of internal consistency: .81 for RSK (Risk aversion) with a mean of 16.33 and a standard deviation of 5.40; .79 for IEQ (Social inequality) with a mean of 16.74 and a standard deviation of 5.57; .79 for AMB (Ambiguity intolerance) with a mean of 20.09 and a standard deviation of 4.62; .78 for POW (Power) with a mean of 19.12 and a standard deviation of 4.66; .73 for INT (Interdependence) with a mean of 24.09 and a standard deviation of 2.96; .68 for IND (Independence) with a mean of 22.17 and a standard deviation of 3.65; .62 for MAS (Masculinity) with a mean of 19.15 and a standard deviation of 4.03.

RSK (Risk aversion), IEQ (Social inequality), AMB (Ambiguity intolerance),

POW (Power), INT (Interdependence), IND (independence) and MAS (Masculinity)

were considered relatively stable in this population. However, TRD (Tradition), PRU

(Prudence), and GEQ (Gender equality) were not considered stable in this population.

The Cronbach's alpha mean scores and standard deviations for personal cultural

orientation are shown in Table 15.

Table 15

Comparison of Reliabilities by Personal Cultural Orientation (Cronbach's Alpha)

Personal Cultural Orientations	Cronbach's alpha	mean	VAR	SD
RSK (Risk aversion)	.81	16.33	29.19	5.40
IEQ (Social inequality)	.79	16.74	31.11	5.57
AMB (Ambiguity intolerance)	.79	20.09	21.38	4.62
POW (Power)	.78	19.12	21.72	4.66
INT (Interdependence)	.73	24.09	8.76	2.96
IND (Independence)	.68	22.17	13.33	3.65
MAS (Masculinity)	.62	19.15	16.27	4.03
TRD (Tradition)	.48	22.64	29.21	5.40
PRU (Prudence)	.35	22.95	25.15	5.01
GEQ (Gender equality)	.34	23.62	30.88	5.55

<u>Respondents' Perceptions of Play</u>

This section of Chapter 4 reports on the results for respondents' perceptions of play in the following order: (a) primary descriptors of respondents' perceptions of play; (b) the respondents' perceptions of play and their cultural orientation; (c) the differences between perceptions of play, countries, and number of siblings; (d) the relationships between the respondents' perceptions of play and play's importance; (e) the respondents' perceptions of the adequacy of financial resources to support their playful activities during leisure time; and (f) interactions between perceptions of play, play's importance, cultural orientation, and countries.

<u>Primary Descriptors of Respondents' Perceptions of Play</u>

To understand respondents' perceptions of play, the questionnaire asked study subjects about their perceptions of play based on selected play characteristics found in the literature (Cordes & Ibrahim, 1996; Frank, 1963; Godbey & Parker, 1976; Heintzman et al., 1994; Huizinga, 1949; Jensen, 1977; Kelly, 2000; Kraus, 1998; MacLean et al., 1985; Miller & Robinson, 1963; Nash, 1965; Sapora & Mitchell, 1961); five attributes of playfulness scales (Glynn & Webster, 1992); and six categories based on the similarity and content of Wong's research (Wong, 2008). Table 16 shows that the top five variables for perceptions of play were voluntary (M=6.29), enjoyment (M=6.23), fun (M=6.17), activity (5.90), and relationship building (5.78). Intrinsic motivation (M=4.95), learning (M=4.87), spontaneous (M=4.94), and silliness (M=3.47) had the lowest mean scores.

Table 16

Frequencies for Perception of Play

Variables	Coding								Mean
Very strongly agree	7	6	5	4	3	2	1	Not at all	
Voluntary	55.5	25.1	13.7	4.3	1.3			Not Voluntary	6.29
Enjoyment	57.9	24.6	8.4	5.1	1.0	1.7	1.3	Not Enjoyment	6.23
Fun	59.1	20.1	8.4	6.4	2.0	2.7	1.0	Not Fun	6.17
Activity	45.1	24.7	13.6	11.2	3.4	1.4	0.7	Not Activity	5.90
Relationship building	40.1	28.1	13.7	11.0	2.7	3.7	0.7	Not Relationship building	5.78
Free time	33.1	32.8	12.4	15.1	2.7	1.7	2.3	Not Free time	5.64
Self-development	28.2	33.2	17.1	14.4	3.4	2.0	1.7	Not Self-development	5.56
Relaxation	29.3	25.9	22.9	11.4	6.7	3.0	0.7	Not Relaxation	5.48
Interpersonal	23.6	31.3	23.6	14.8	4.0	1.3	1.3	Not Interpersonal	5.46
Expressive	25.8	29.8	17.8	16.8	5.0	1.7	3.0	Not Expressive	5.38
Recreation/sport	30.4	20.3	18.2	23.2	3.0	2.7	2.0	Not Recreation/sport	5.35
Creative	26.4	27.4	17.1	19.4	4.7	2.7	2.3	Not Creative	5.34
Life understanding	23.7	28.1	20.7	16.6	5.4	2.7	2.7	Not Life understanding	5.29
Intrinsic motivation	22.9	22.6	15.2	20.2	9.8	4.0	5.4	Not Intrinsic motivation	4.95
Spontaneous	20.1	15.1	20.4	33.1	7.0	3.7	0.7	Not Spontaneous	4.94
Learning	21.1	21.5	17.1	21.5	7.4	5.4	6.0	Not Learning	4.87
Silliness	9.1	17.1	13.5	23.3	10.5	12.2	24.3	Not Silliness	3.47

Factor Analysis of Respondent's Perceptions of Play

An exploratory factor analysis, specifically a principal components analysis with a direct oblique rotation, was used to establish the construct validity of perception of play. Table 17 shows the results of the factor analysis. Each construct was divided into sub-categories that showed eigenvalues greater than one (Kaiser, 1960). The examination of scree plot was used to determine the appropriate number of components to retain and interpret (Mertler & Vannatta, 2005). Four components with an eigenvalue of greater than 1.0 were found; the scree plot also indicated four components.

Table 17

Principal Component Analysis with a Direct Oblique Rotation for Perception of Play

	Component			
	1. Intrinsic goal/outcome benefits	2. Intrinsic non goal/outcom e benefits	3. Relationship non goal/outcome benefits	4. Relationship goal/outcome benefits
Life understanding	**.748**	.170	-.015	-.092
Creative	**.740**	.065	-.206	-.328
Learning	**.729**	-.091	.204	-.229
Expressive	**.636**	.006	-.153	-.131
Intrinsic motivation	**.541**	.230	.097	.091
Enjoyment	**.511**	.275	-.491	-.401
Self-development	**.435**	.274	-.074	-.336
Free time	**.433**	.366	-.346	-.127
Relaxation	.006	**.708**	-.338	-.301
Voluntary	.047	**.694**	-.033	-.125
Spontaneous	.111	**.583**	.152	-.132
Fun	.331	**.577**	-.115	-.364
Interpersonal	.281	.071	**-.683**	-.278
Silliness	.214	.023	**.637**	-.109
Relationship building	.226	.123	-.300	**-.715**
Recreation, sport	.112	.332	-.096	**-.659**
Activity	.111	.210	.308	**-.655**

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

As indicated in Table 18, factor analysis was conducted to determine respondents' perception of play; underlying structure existed for measures on the following 17

variables, including (a) voluntary, (b) intrinsic motivation, (c) activity, (d) learning, (e) recreation, (f) life understanding, (g) relationship building, (h) free time, (i) spontaneous, (j) expressive, (k) fun, (l) creative, (m) silliness, (n) enjoyment, (o) relaxation, (p) interpersonal, and (q) self-development. Principal components analysis was conducted utilizing a direct oblique rotation. The initial analysis retained only one component. Four criteria were used to determine the appropriate number of components to retain: eigenvalue, variance, scree plot, and residuals. Criteria indicated retaining four components.

After rotation, positive loadings for Component 1, "Intrinsic goal/outcome benefits," included (a) life understanding, (b) creative, (c) learning, (d) expressive, (e) intrinsic motivation, (f) enjoyment, (g) self-development, and (h) free time. Component 2, "Intrinsic non goal/outcome benefits," included (a) relaxation, (b) voluntary, (c) spontaneous, and (d) fun. Component 3, "Relationship non goal/outcome benefits," included (a) interpersonal and (b) silliness. Component 4, "Relationship goal/outcome benefits" included (a) relationship building, (b) recreation/ sports, and (c) activities (see Table 18). Comrey (1973) suggested that loadings in excess of .71 were considered excellent, .63 very good, .55 good, .45 fair, and .32 poor. Thus, items with a factor loading less than .40 were deleted (Tabachnick & Fidell, 1989). The item with the highest loading was life understanding, and the play scales of creative, learning, and expression (alpha=.76) had an acceptable level of internal consistency.

Table 18

Component Loadings and Reliability of the Play Scale

Compondent Loadings	Loading
Component 1: Intrinsic goal/outcome benefits (alpha=.76)	
Life understanding	.748
Creative	.740
Learning	.729
Expression	.636
Intrinsic motivation	.541
Enjoyment	.511
Self-development	.435
Free time	.433
Component 2: Intrinsic non-goal/outcome benefits (alpha=.58)	
Relaxation	.708
Voluntary	.694
Spontaneous	.583
Fun	.577
Component 3: Relationship non-goal/outcome benefits (alpha=-.45)	
Interpersonal	.683
Silliness	.637
Component 4: Relationship goal/outcome benefits (alpha=.52)	
Relationship building	.715
Recreation/sport	.659
Activity	.655

Four factors were determined to test hypotheses through a principal components

analysis with a direct oblique rotation: (a) intrinsic goal/outcome benefits; (b) intrinsic

non-goal/outcome benefits; (c) relationship non-goal/outcome benefits; and (d)

relationship goal/outcome benefits. The mean, median, and standard deviations for each

of the four categories are reported in Table 19. The mean scores ranged from 8.92 to

43.30, with creativity, expression, and learning showing the highest mean score and

interpersonal the lowest mean score. The standard deviations ranged from 7.32 to 2.10,

with creativity, expression, and learning showing the highest standard deviation and

interpersonal the lowest standard deviation.

Table 19

Descriptive Statistics for Perception of Play

Variables	Mean	Median	SD
Intrinsic goal/outcome benefits	43.30	45.0	7.32
Intrinsic non goal/outcome benefits	22.89	23.0	3.44
Relationship non-goal/outcome benefits	17.08	18.00	2.99
Relationship goal/outcome benefits	8.92	9.00	2.10

<u>Types of Activities When All Respondents Engaged in Play</u>

To supplement the respondents' perception of play, open-ended questions

examined their views on types of play activities. The first question asked, "Based on your

perception of play, what type of activities are you currently engaged in when you play?

Team sports, individual sports, and social activities were the main activities reported by

all respondents when they currently engaged in play. Team sports were reported by 143

respondents (26.4 %), 74 respondents (13.7 %) reported individual sports; and 72

respondents (13.3%) reported engaging in social activities (socialization, team activities)

when they currently engaged in play. Table 20 shows the types of activities that all

respondents engaged in during play.

Table 20

Types of Activities When All Respondents Engaged in Play

	N	%
Team sports	143	26.4
Individual sports	74	13.7
Social activities	72	13.3
Card games	48	8.9
Entertainment	40	7.4
Outdoor	40	7.4
Others	36	6.7
Relax	33	6.1
Art	26	4.8
Travel	14	2.6
Play with children	8	1.5
Shop and eat	7	1.3
Total	541	100.0

Table 21 shows the types of activities by country when respondents currently engaged in play. Ninety-two respondents from the U.S. (31.18 %), 27 respondents from HK (22.68 %), and 26 respondents from the PRC (23.00 %) reported team sports as the activity they engaged in during play. The second and third activities reported by

respondents from the U.S. were individual sports (21.69 %) and social activities (12.20). Both team sports and social activities involved other people, whereas individual sports did not involve other people. The second and third most frequent activities reported by respondents from HK were social activities (21.84 %) and card games (13.44 %). All three activities involved other people.

The second and third activities reported by respondents from the PRC were entertainment (10.61 %) and art (10.61 %). Given that we do not know if entertainment (TV, movies, computers, video games), and art (art, music, craft, dance, reading, photography, and drawing) were activities that involved other people, we cannot conclude that respondents from PRC were involved or were not involved with other people when they engaged in these activities.

Table 21

Types of Activities by Country When Respondents Engaged in Play

	U.S. (N)	%	HK (N)	%	PRC (N)	%
Team sports	92	31.18	27	22.68	26	23.00
Individual sports	64	21.69	5	4.20	5	4.42
Social activities	36	12.20	26	21.84	10	8.84
Outdoor	28	9.49	6	5.04	6	5.30
Card games	24	8.13	16	13.44	8	7.07
Entertainment	21	7.11	7	5.88	12	10.61
Relax	12	4.06	11	9.24	10	8.84
Art	10	3.38	5	4.20	12	10.61
Play with children	7	2.37	-		1	
Shop and eat	1		1		5	4.42
Travel	-		3	2.52	11	9.73
Others			12	10.08	7	6.19
Total	295		119		113	

Most Prominently Reported Activities All Respondents

Liked To Do When They Play

The second open-ended question asked respondents to "Name the top three activities you currently like to do when you play." As illustrated in Table 22, 168 respondents (26.8 %) indicated team sports as the Number 1 activity they currently liked to do during play, 106 respondents (16.9 %) reported individual sports as the Number 2 activity they liked to do during play, and 85 respondents (13.6 %) reported entertainment as the Number 3 activity they liked to do during play.

Table 22

Activities All Respondents Liked To Do When They Play

	N	%
Team sports	168	26.8
Individual sports	106	16.9
Entertainment	85	13.6
Art	64	10.2
Outdoor	53	8.5
Social activities	53	8.5
Card games	44	7.0
Shop and eat	30	4.8
Travel	15	2.3
Play with children	5	0.8
Relax	4	0.6
Total	627	100.0

Team sports and individual sports were the top two activities that all respondents reported they engaged in and that they liked to do when they play. Social activities were the third most preferred activity when respondents engaged in play whereas entertainment was the third activity they liked to do when they play. The three activities

all respondents currently engaged in and the top three activities all respondents currently

liked to do when they play are shown in Tables 23 and 24.

Table 23

Three Activities When All Respondents Engaged in Play

	Activity 1	Activity 2	Activity 3
Overall	Team sports	Individual sports	Social activities

Table 24

Top Three Activities All Respondents Liked To Do When They Play

	Activity 1	Activity 2	Activity 3
Overall	Team sports	Individual sports	Entertainment

There was some variation in activities by country (see Table 25). Respondents in

the U.S., the PRC, and HK all indicated that team sports were the Number 1 activity they

engaged in during play. Eighty-four respondents from the U.S. (27.09 %), 45 respondents

from HK (23.30 %), and 39 respondents from that PRC (26.0 %) indicated that team

sports were the Number 1 activity they currently engaged in during play.

As indicated in Table 25, 73 respondents from the U.S. (23.54 %) reported

individual sports and 36 respondents (9.35 %) reported outdoor activities as the second

and third activities they currently liked to do when they play. Forty respondents from HK

(20.07%) reported entertainment and 31 respondents (16.06 %) reported art as the second

and third activities they liked to do when they play. Moreover, 21 respondents from PRC

(14.0 %) reported art and 14 respondents (9.3 %) reported travel as the second and third

activities they liked to do when they play.

Table 25

Top Three Activities by Country Respondents Liked To Do When They Play

	U.S.(N)	%	HK (N)	%	PRC (N)	%
Team sports	84	27.09	45	23.30	39	26
Individual sports	73	23.54	23	11.90	10	6.6
Outdoor activities	36	11.61	7	3.62	10	6.6
Entertainment	30	9.67	40	20.70	15	10
Social activities	29	9.35	13	6.73	11	7.3
Card games	26	8.38	12	6.21	6	4.0
Art	12	3.87	31	16.06	21	14.0
Others	11	3.54	5	2.59	10	6.6
Relax	4	1.29	-		-	
Play with children	3		-		2	1.3
Shop and eat	2		16	8.29	12	8.0
Travel	-		1		14	9.3
Total	310		193		150	

As illustrated in Tables 26 and 27, team sports and individual sports were the top two activities that respondents from the U.S. engaged in during play and were also the top two activities they currently liked to do during play. However, social activities were

reported by respondents in the U.S. as the Number 3 activity they engaged in during play whereas outdoor activities were the Number 3 activity they liked to do when they play.

Respondents in the U.S., the PRC, and HK indicated team sports as the Number 1 activity they engaged in during play and were also the Number 1 activity they currently liked to do when they play. In addition, the top three activities when respondents in the PRC currently engaged in play (team sports, entertainment, and art) were the same as the top three activities respondents in HK currently liked to do when they play.

Table 26

Three Activities by Country When Respondents Engaged in Play

Country	Activity 1	Activity 2	Activity 3
U.S.	Team sports	Individual sports	Social activities
HK	Team sports	Social activities	Card games
PRC	Team sports	Entertainment	Art

Table 27

Top Three Activities by Country Respondents Currently Liked To Do When They Play

Country	Activity 1	Activity 2	Activity 3
U.S.	Team sports	Individual sports	Outdoor activities
HK	Team sports	Entertainment	Art
PRC	Team sports	Art	Travel

Respondents' Perception of Play's Importance

To understand why play was important to the respondents' lives, these results

were based on research by Holmes (2001); eight play theories offered by Spencer (1873),

Schiller (1875), Groos (1898, 1901), Lazarus (1883), Hall (1906), Claparede (1911), Carr

(1934), Roberts & Sutton-Smith (1962), Csikszetmihalyi (1975, 1990), Waelder (1933),

Peller (1952), and Erikson (1950); and five features of emerging adults provided by

Arnett (2002), including (a) the Age of Identity Exploration, (b) the Age of Self-Focus,

(c) the Age of Instability, (d) the Age of Possibilities, and (e) the Age of Feeling In-

Between.

As shown in Table 28, based on the mean scores and interpretation of the

percentages of extremely important and important, the top five reasons that play was

important to the respondents were socialization, relaxation, challenge skill and ability,

express emotions, and expend energy.

Table 28

Frequencies for Play's Importance

Variables	Extremely Important %	Important %	Somewhat Important %	Neither %	Somewhat Unimportant %	Unimportant %	Extremely Unimportant %	Mean
Socialization	34.3	49.5	14.1	1.3	0.3		0.3	6.15
Educational	15.5	32.1	42.2	5.7	3.7	0.3	0.3	5.48
Development	22.0	34.5	31.1	7.4	4.1	0.7	0.3	5.59
Relaxation	43.1	39.3	14.6	2.7				6.21
Expend energy	30.4	34.5	25.0	6.4	3.0	0.3	0.3	5.80
Express Emotions	31.6	39.1	22.4	5.1	1.3			6.19
Moral Development	17.8	30.3	33.3	12.5	4.4	1.0	0.7	5.39
Creativity	16.8	36.2	31.5	9.1	4.7	1.7		5.46
Exercise	31.2	25.1	23.7	12.9	5.8	0.7	0.3	5.81
Role play	13.2	29.4	30.7	15.5	7.4	2.7	1.0	5.13
Develop mature interpersonal relationships	19.5	40.1	29.3	8.1	3.0			5.65
Establish identity	25.9	37.4	27.6	6.4	2.0	0.3	0.3	5.76
Challenge skill and ability	37.5	35.8	20.5	4.8	1.4			6.03

A two-way analysis of variance was conducted to investigate the difference between the importance of play and the respondents' countries. The ANOVA results, presented in Table 29, show a significant difference between exercise, challenge skill, expend energy, establish identity, and moral development, and the respondents' countries.

There was a significant difference between respondents' countries and the variables of exercise (F (2, 292) =60.96, p <.000*), challenge skill (F (2, 290) =11.96, p <.000*), expend energy (F (2, 292) =18.45, p <.000*), establish identity (F (2, 294) =6.75, p <.001*), and moral development (F (2, 294) =15.36, p <.000*). Respondents from the U.S. were significantly different from HK respondents and PRC respondents at the .001 level.

There was no significant difference between respondents' countries and the variables of (a) socialization, (b) educational, (c) development, (d) relaxation, (e) express emotions, (f) creativity, (g) role play, and (h) interpersonal.

Table 29

Importance of Play and Respondents' Countries

Variables	HK	PRC	U.S.	df	F	Sig
Exercise						
N	91	65	139	2		
Mean	4.96	4.94	6.33	292	60.96	.000*
SD	1.25	1.22	.84			
Challenge skill						
N	91	64	138	2		
Mean	5.86	5.70	6.30	290	11.96	.000*
SD	.90	1.03	.86			
Expend energy						
N	92	67	136	2		
Mean	5.66	5.31	6.18	292	18.45	.000*
SD	1.08	1.23	.78			
Establish identity						
N	91	67	139	2		
Mean	5.54	5.60	5.99	294	6.75	.001*
SD	1.06	1.10	.92			
Moral development						
N	92	67	138	2		
Mean	5.03	5.78	5.09	294	15.36	.000*
SD	1.26	1.24	.93			
Socialization						
N	92	66	139	2		
Mean	6.05	6.06	6.25	294	2.23	.109
SD	.71	.83	.81			
Educational						
N	92	66	138	2		
Mean	5.25	5.55	5.59	293	3.49	.032
SD	1.10	1.02	.90			
Development						
N	91	66	139	2		
Mean	5.36	5.73	5.68	293	2.96	.053
SD	.94	1.23	1.00			
Relaxation						
N	90	67	137	2		
Mean	6.38	6.16	6.17	291	2.20	.112
SD	.72	.89	.78			
Express emotions						
N	89	67	138	2		
Mean	6.16	5.94	5.82	291	3.64	.027
SD	.78	1.08	.92			

(table continues)

Variables	HK	PRC	US	df	F	Sig
Creativity						
N	92	67	139	2		
Mean	5.28	5.36	5.63	295	3.13	.045
SD	1.08	1.27	1.04			
Role play						
N	92	65	139	2		
Mean	5.05	5.03	5.23	293	.76	.465
SD	1.32	1.31	1.26			
Interpersonal						
N	92	66	139	2		
Mean	5.43	5.64	5.80	294	3.87	.022
SD	1.08	.92	.91			

* Respondents from the U.S. significantly differed from respondents from HK and PRC.

Factor Analysis of Play's Importance

As shown in Table 30, a factor analysis was conducted to determine respondents'

perceptions of play's importance; underlying structure existed for measures on the

following thirteen variables: (a) socialization, (b) educational, (c) development, (d)

relaxation, (e) express emotions, (f) expend energy, (g) moral development, (h) creativity,

(i) exercise, (j) role play, (k) develop mature interpersonal relationship, (l) establish

identity, and (m) challenge skill and ability. Principal components analysis was

conducted utilizing a direct oblique rotation. The initial analysis retained only one

component. Four criteria were used to determine the appropriate number of components

to retain: eigenvalue, variance, scree plot, and residuals. The criteria indicated that four

components should be investigated.

Table 30

Principal Component Analysis with a Direct Oblique Rotation of Play's Importance

	Factor loadings			
	1. Development and socialization	2. Relaxation	3. Establish identity	4. Expression
Educational	**.821**	-.019	-.368	.198
Development	**.759**	.153	-.445	.122
Moral development	**.751**	-.118	-.435	.034
Creativity	**.668**	.026	-.236	-.174
Socialization	**.576**	.406	-.289	.215
Relaxation	.233	**.775**	-.264	.196
Exercise	.310	**-.567**	-.296	.105
Establish identity	.451	.101	**-.815**	.046
Challenge skill	.237	-.069	**-.810**	.255
Interpersonal	.530	.216	**-.689**	-.328
Role play	.448	.128	**-.511**	-.461
Express emotions	.177	.198	-.173	**.546**
Expend energy	.333	-.041	-.449	**.478**

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

After rotation, Component 1 items, "development and socialization," included educational, development, moral development, creativity, and socialization. Component 2, "relaxation," included relaxation, and negative loading included exercise. Component 3, "establish identity," included establish identity, challenge skill, interpersonal, and role play. Component 4 included express emotions and expend energy. Items with the highest loadings were educational and the second highest loadings were establish identity.

Moreover, reliability analyses showed that the scales of development and socialization

(alpha=.78) and establish identity (alpha=.72) had acceptable levels of internal

consistency as illustrated in Table 31.

Table 31

Component Loadings of Play's Importance

Component Loading	Loading
Component 1: Development and socialization (alpha=.78)	
Educational	.821
Development	.759
Moral development	.751
Creativity	.668
Socialization	.576
Component 2: Relaxation (alpha=.02)	
Relaxation	.775
Exercise	-.567
Component 3: Establish identity (alpha=.72)	
Establish identity	-.815
Challenge skill	-.810
Interpersonal	-.689
Role play	-.511
Component 4: Expression (alpha=.47)	
Express emotions	.546
Expend energy	.478

The mean, median, and standard deviations for each of the four categories are reported in Table 32. The mean scores ranged from 12.01 to 28.10 with "development and socialization" showing the highest mean score and "relaxation" the lowest mean score. The standard deviations ranged from 2.36 to 4.82 with "expression" having the highest standard deviation and "establish identity" the lowest standard deviation.

Table 32

Descriptive Statistics of Play's Importance

Variables	Mean	Median	SD
Development and socialization	28.10	28.00	3.80
Relaxation	12.01	12.00	3.84
Establish identity	17.47	18.00	2.36
Expression	17.10	17.00	4.82

Personal Cultural Orientations

The results in this section, which are based on Hofstede's personal cultural orientations research (2001), provide information on the respondents' personal cultural orientations to determine if the values perspective had a relationship with overall attitudes toward play and use of play. The mean, median, and standard deviations for each of the 10 categories are reported in Table 33. The mean scores ranged from 16.32 to 24.08 with interdependence (INT) having the highest mean score and risk aversion (RSK) the lowest

mean score. The standard deviations ranged from 2.96 to 5.57 with social inequality

(IEQ) having the highest standard deviation and interdependence (INT) the lowest

standard deviation.

Table 33

Descriptive Statistics for Personal Cultural Orientations

Variables	Mean	Median	SD
Interdependence (INT)	24.08	25.00	2.96
Gender Equality(GEQ)	23.62	24.00	5.55
Prudence(PRU)	22.94	23.00	5.01
Tradition(TRD)	22.64	23.00	5.40
Independence (IND)	22.17	23.00	3.65
Ambiguity Intolerance (AMB)	20.09	21.00	4.62
Masculinity (MAS)	19.14	19.00	4.03
Power (POW)	19.12	20.00	4.66
Social Inequality (IEQ)	16.74	17.00	5.57
Risk Aversion (RSK)	16.32	16.00	5.40

As shown in Table 34, 77.4% of the respondents indicated that they sometimes had enough money to spend for playful activities in their leisure time, 15.6% always had enough money to spend for playful activities, and 4.7% of the respondents never had enough money to spend for playful activities in their leisure time. More than half of the respondents (59.8%) reported having a part-time job and 37.2% reported not having a part-time job.

Table 34

Respondents' Perception of Fiscal Resources to Play

Enough money	Frequencies	Percent
Sometimes	233	77.4
Always	47	15.6
Never	14	4.7
Part-time job		
Yes	180	59.8
No	223	37.2

Hypothesis Testing

Hypothesis 1a: There is no statistically significant relationship between respondents' perceptions of play and their personal cultural orientation.

To determine whether there was a relationship between respondents' perceptions of play and their cultural orientation, Pearson's product-moment correlation coefficients were calculated between perceptions of play scores and the respondents' cultural orientation. The correlation coefficient is reported as a decimal number between -1.00 and 1.00. A high positive correlation ranges from .95 to .87; a low positive correlation ranges from .23 to .20. No systematic relationship ranges from .02 to -.03, a low negative correlation ranges from -2.1 to -1.9, and a high negative correlation ranges from -.92 to -.93 (Cohen & Cohen, 1983).

As shown in Table 35, Intrinsic goal/outcome benefits had a positive relationship with seven areas of personal cultural orientation, including interdependence- INT (r=.360, p<.01), tradition-TRD (r=.231, p<.01), independence-IND (r=.215, p<.01), gender equality-GEQ (r=. 201, p<.01), and prudence-PRU(r= .147, p<.05). In addition, Intrinsic goal/outcome benefits had a negative correlation with risk aversion-RSK (r=-.239, p<.01) and social inequality-IEQ (r=-.351, p<.01).

Intrinsic goal/outcome benefits suggested that play was correlated with four areas of personal cultural orientation, including interdependence- INT (r=.187, p<.01), tradition-TRD (r=.131, p<.01), independence-IND (r=.152, p<.01), and masculinity-MAS (r=.141, p<.05).

Relationship non-goal/outcome benefits had a relationship with five areas of personal cultural orientation, including a positive correlation with interdependence- INT (r=.164, *p*<.01), tradition-TRD (r=.151, *p*<.01), and independence-IND (r=.136, *p*<.05), and a negative correlation with risk aversion-RSK (r=-.152, *p*<.01) and social inequality-IEQ (r=-.360, *p*<.01). Relationship goal/outcome benefits had a relationship with three areas of personal cultural orientation, including interdependence- INT (r=.198, *p*<.01), tradition-TRD (r=.123, *p*<.05), and masculinity-MAS (r=.124, *p*<.05).

Respondents who perceived play as intrinsic goal/outcome benefits, intrinsic non goal/outcome benefits, and relationship non-goal/outcome benefits reported (a) attending to others, fitting in, and having a harmonious interdependence with others (interdependence) (Sharma, 2009); (b) respecting traditional values including hard work, non-materialism, social consciousness, morality, and respect for one's heritage (tradition) (Bond, 1988); and (c) focusing on one's internal thoughts, feelings, and actions, rather than by reference to the thoughts, feelings, and actions of others (independence) (Markus & Kitayama, 1991).

Respondents who perceived play as intrinsic goal/outcome benefits and intrinsic non goal/outcome benefit reported (a) being willing to take risks or make risky decisions (risk aversion), and (b) accepting social inequality in which socially defined categories of persons according to the characteristics of gender, age, class, and ethnicity are differentially positioned (social inequality). Moreover, respondents who perceived play as intrinsic goal/outcome benefits and intrinsic goal/outcome benefit reported focusing on the expression of assertiveness, self-confidence, aggression, and ambition (masculinity)

(Schwartz & Rubel-Lifschitz, 2009). There was no relationship between any of perceptions of play and power (POW) and ambiguity intolerance (AMB). Thus, the results of the correlation coefficients analysis rejected Hypothesis 1a.

Table 35

Correlation Coefficients Matrix among Perceptions of Play and Personal Cultural Orientations

		Intrinsic goal/ outcome benefits	Intrinsic non goal/outcome benefits	Relationship non-goal/outcome benefits	Relationship goal/outcome benefits	M
		M=43.30	M=22.89	M=17.08	M=8.92	
Interdependence-INT	Pearson Correlation	.360(**)	.187(**)	.164(**)	.198(**)	24.08
	Sig. (2-tailed)	.000	.001	.005	.001	
Tradition-TRD	Pearson Correlation	.231(**)	.131(*)	.151(**)	.123(*)	22.64
	Sig. (2-tailed)	.000	.025	.010	.037	
Independence-IND	Pearson Correlation	.215(**)	.152(**)	.136(*)	.085	22.17
	Sig. (2-tailed)	.000	.009	.020	.147	
Gender Equality-GEQ	Pearson Correlation	.201(**)	.067	.115	.063	23.62
	Sig. (2-tailed)	.001	.258	.050	.287	
Prudence-PRU	Pearson Correlation	.147(*)	.025	.003	-.033	22.94
	Sig. (2-tailed)	.013	.670	.962	.578	
Masculinity-MAS	Pearson Correlation	-.027	.141(*)	-.050	.124(*)	19.14
	Sig. (2-tailed)	.651	.017	.396	.035	
Risk Aversion-RSK	Pearson Correlation	-.239(**)	-.085	-.152(**)	-.027	16.32
	Sig. (2-tailed)	.000	.145	.009	.646	
Social Inequality-IEQ	Pearson Correlation	-.351(**)	-.001	-.360(**)	-.059	16.74
	Sig. (2-tailed)	.000	.980	.000	.317	
Power-POW	Pearson Correlation	-.023	-.015	.078	.073	19.12
	Sig. (2-tailed)	.693	.804	.183	.216	
Ambiguity Intolerance-AMB	Pearson Correlation Sig. (2-tailed)	-.082	-.030	-.103	-.046	20.09
		.166	.615	.079	.438	

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Hypothesis 1b: There is no statistically significant difference between respondents' perceptions of play, their countries, and the number of siblings.

Hypothesis 1b was tested by performing an ANOVA analysis as shown in Table 36. The analysis indicated that there was a statistically significant difference between countries and some areas of perceptions of play, including (a) intrinsic goal/outcome benefits, (F (2) =17.86, $p<.01$); (b) relationship non-goal/outcome benefits, (F (2) =20.40, $p<.01$); and (c) Relationship goal/outcome benefits, (F (2) =42.11, $p<.01$). Respondents from the U.S. were significantly different from the HK and PRC respondents at the .001 level. Respondents from the PRC were significantly different from the HK and U.S. respondents at the .001 level. However, there was no statistically significant difference between perception of play and number of siblings. Thus, the results of the ANOVA analysis rejected Hypothesis 1b.

Table 36

ANOVA *Differences between Perceptions of Play, Countries, and Number of Siblings*

Source	Dependent variable	df	MS	F	sig
Countries	Intrinsic goal/outcome benefits	2	788.171	17.866	.000*
Countries	Relationship non-goal/outcome benefits	2	67.845	20.400	.000*
Countries	Relationship goal/outcome benefits	2	42.115	4.791	.009**
Countries	Intrinsic non goal/outcome benefits	2	21.812	1.832	.162
Number of siblings	Intrinsic goal/outcome benefits	1	4.540	.103	.749
Number of siblings	Intrinsic non goal/outcome benefits	1	21.865	1.836	.177
Number of siblings	Relationship non-goal/outcome benefits	1	7.868	2.366	.125
Number of siblings	Relationship goal/outcome benefits	1	1.563	.178	.674

* Respondents from the U.S. significantly differ from the HK and PRC respondents
** Respondents from the PRC significantly differ from the HK and U.S. respondents

Hypothesis 1c: There is no statistically significant relationship between respondents' perceptions of play and their perception of play's importance.

Hypothesis 1c was tested by performing a correlation coefficients analysis as shown in Table 37. The results indicated that intrinsic goal/outcome benefits had a relationship with four areas of play's importance, including (a) development and social, (b) relaxation, (c) establish identity, and (d) expression. Intrinsic goal/outcome benefits had a weak positive correlation with development and social, (r=.306, p<.01), relaxation (r=.166, p<.01), establish identity (r=.339, p<.01), and expression (r=.204, p<.01). Intrinsic non goal/outcome benefits had a positive correlation with (a) development and social (r=-.210, p<.01), (b) establish identity (r=-.235, p<.01), and (c) expression (r=-.239, p<.01). Relationship non-goal/outcome benefits had positive correlation with (a) development and social (r=.210, p<.01), (b) relaxation (r=.122, p<.01), and (c) establish identity (r=.206, p<.01). Relationship goal/outcome benefits had a positive correlation with (a) development and social (r=-.236, p<.01), (b) relaxation (r=.130, p<.05), (c) establish identity (r=.239, p<.01), and (d) expression (r=.218, p<.01).

Respondents perceived play as (a) intrinsic goal/outcome benefits and (b) relationship goal/outcome benefits, while they indicated the importance of play (a) for development and socialization, (b) for relaxation, (c) to establish identity, and (d) for expression. Thus, the results of the ANOVA analysis rejected Hypothesis 1c.

Table 37

Relationships between Perceptions of Play and Perceptions of Play's Importance

		Intrinsic goal/outcome benefits	Intrinsic non-goal/outcome benefits	Relationship non-goal/outcome benefits	Relationship goal/outcome benefits
		M=43.30	M=22.89	M=17.08	M=8.92
Development and socialization M= 28.10	Pearson Correlation	.306**	.210**	.210**	.236**
	Sig. (2-tailed)	.000	.000	.000	.000
Relaxation M=12.01	Pearson Correlation	.166**	.089	.122*	.130*
	Sig. (2-tailed)	.005	.132	.040	.029
Establish identity M=17.47	Pearson Correlation	.339**	.235**	.206**	.239**
	Sig. (2-tailed)	.000	.000	.000	.000
Expression M=17.10	Pearson Correlation	.204**	.239**	.080	.218**
	Sig. (2-tailed)	.001	.000	.175	.000

Hypothesis 1d: There is no statistically significant difference between respondents' perceptions of play, play's importance, their personal cultural orientation, and their countries.

Hypothesis 1d was tested by an ANOVA analysis as shown in Table 38. There was a significant difference between counties and (a) interdependence-INT, (F (2, 296)

=16.54, p <.001); (b) equality-IEQ, (F (2, 297) =91.14, p <.001); (c) ambiguity intolerance-AMB, (F (293) =11.16, p <.001); (d) intrinsic goal/outcome benefits, (F (2, 286) =29.44, p <.001); and (e) relationship non-goal/outcome benefits, (F (2, 292) =38.81, p <.001). Respondents from the U.S. differed significantly from the HK and PRC respondents at the .001 level.

ANOVA results showed a significant difference between countries and prudence-PRU (F (2, 293) =4.85, p <.008). Respondents from the U.S. differed significantly from the HK respondents at the .001 level. There was a significant difference between countries and independence-IND, (F (2, 296) =18.93, p <.000). Respondents from HK differed significantly from the PRC and U.S. respondents at the .001 level.

There was a significant difference between countries and gender equality-GEQ, (F (2, 293) =6.67, p <.001). Respondents from the PRC differed significantly from the U.S. respondents at the .001 level. There was a significant difference between countries and risk aversion-RSK, (F (2, 295) =9.25, p <.000) and relationship goal/outcome benefits (F (2, 289) =7.85, p <.001). Respondents from the PRC differed significantly from the HK and the U.S. respondents at the .001 level.

There was no significant difference between respondents' perception of play, their countries, and the personal cultural orientations of masculinity (MAS) and power (POW). Thus, the results of the ANOVA analysis rejected Hypothesis 1d.

Table 38

ANOVA for Perceptions of Play, Personal Cultural Orientation, and Countries

Variables	HK	PRC	U.S.	df	F	Sig
Intrinsic goal/outcome benefits						
N	89	64	136			
Mean	40.70	40.12	46.50	2		
SD	6.72	8.81	5.41	286	29.44	.001*
Relationship non-goal/outcome benefits						
N	88	70	137			
Mean	8.14	7.90	9.95	2		
SD	1.71	2.05	1.88	292	38.81	.001*
Relationship goal/outcome benefits						
N	88	70	134			
Mean	17.36	15.89	17.52	2		
SD	3.03	3.00	2.80	289	7.85	.001****
Intrinsic non-goal/outcome benefits						
N	90	70	136			
Mean	22.53	23.41	22.86	2		
SD	3.72	3.82	3.01	293	1.30	.274
INT						
N	92	68	139			
Mean	23.09	23.38	25.08	2		
SD	3.05	3.18	2.44	296	16.54	.001*
IEQ						
N	92	69	139			
Mean	20.09	19.71	13.05	2		
SD	3.34	3.56	5.30	297	91.14	.001*
AMB						
N	92	65	139			
Mean	17.59	21.00	18.79	2		
SD	5.11	3.97	4.93	293	11.16	.000*
PRU						
N	92	65	139			
Mean	21.78	22.70	23.83	2		
SD	3.72	3.66	6.05	293	4.85	.008**
IND						
N	91	69	139			
Mean	20.31	22.85	23.05	2		
SD	4.29	3.10	2.95	296	18.98	.001***
GEQ						
N	92	65	139	2		
Mean	23.07	21.93	24.77	293	6.67	.001****
SD	8.05	3.11	3.03			

(table continues)

Variables		HK	PRC	US	df	F	Sig
RSK							
	N	92	67	139			
	Mean	17.59	17.49	14.92	2		
	SD	5.11	4.51	5.66	295	9.25	.001*****
TRD							
	N	92	65	139			
	Mean	21.63	21.76	23.71	2		
	SD	3.88	4.16	6.50	283	5.37	.015
MAS							
	N	92	65	138			
	Mean	19.44	19.55	18.76	2		
	SD	4.02	4.66	3.70	292	1.21	.298
POW							
	N	92	68	139			
	Mean	19.08	23.38	25.08	2		
	SD	3.96	3.18	2.44	295	1.08	.340

* Respondents from the U.S. significantly differ from the HK and PRC respondents
** Respondents from the U.S. significantly differ from the HK respondents
*** Respondents from HK significantly differ from the PRC and U.S. respondents
**** Respondents from the PRC significantly differ from the US respondents
***** Respondents from the PRC significantly differ from the HK and U.S. respondents

Hypothesis 2: There is no statistically significant difference between respondents'

perceptions of play's importance and their countries.

Hypothesis 2 was tested by an ANOVA analysis as shown in Table 39. The one-

way analysis of variance was conducted to investigate play's importance in the countries

of respondents. There was a significant difference between countries and the importance

of play for development and socialization, (F (2, 289) =7.65, p <.001), for relaxation, (F

(2, 289) =7.11, p <.001), and to establish identity, (F (2, 289) =10.61, p <.000).

Respondents from the U.S. differed significantly from HK and PRC respondents at the

.001 level.

The ANOVA analysis indicated no significant difference between countries and the importance of play to express emotions. Results revealed that development and socialization, relaxation, and establish identity were significantly different between countries and play's importance. Thus, the results of the ANOVA analysis rejected Hypothesis 2.

Table 39

ANOVA –Play's Importance and Countries

Variables	HK	PRC	US	df	F	Sig
Development and socialization						
N	91	64	137			
Mean	26.97	27.92	28.93	2		
SD	3.84	4.16	3.40	289	7.65	.001*
Relaxation						
N	89	65	138			
Mean	11.32	11.10	12.89	2		
SD	1.36	1.67	5.23	289	7.11	.001*
Establish identity						
N	90	64	138			
Mean	16.81	17.01	18.12	2		
SD	2.49	2.39	2.08	289	10.61	.000*
Express emotions						
N	89	65	136			
Mean	16.87	16.23	17.67	2		
SD	2.24	2.59	6.53	287	2.13	.120

* Respondents from the U.S. significantly differ from the HK and PRC respondents

Hypothesis 3: There is no statistically significant relationship between respondents' frequency of play, their countries, and their personal cultural orientation.

Hypothesis 3 was tested by performing a correlation coefficients analysis as shown in Table 40. The results indicated that how often participants participated in playful activities had a positive correlation with social inequality-IEQ ($r=.248, p<.01$), ambiguity intolerance-AMB ($r=.126, p<.05$), and risk aversion-RSK, ($r=.154, p<.01$). How often participants participated in playful activities had a negative correlation with interdependence- INT ($r= -.213, p<.01$), prudence- PRU ($r= -.167, p<.01$), and tradition- TRD ($r= -.133, p<.01$).

Country had a positive correlation with social inequality-IEQ ($r=.538, p<.01$), risk aversion-RSK ($r=.213, p<.01$), and ambiguity intolerance-AMB ($r=.221, p<.01$). Respondents who accepted social equality, tolerated ambiguity, and were not willing to take risks spent more days participating in playful activities. However, country had a negative correlation with interdependence (INT) ($r=-.265, p<.01$), gender equality-GEQ ($r=-.207, p<.01$), tradition- TRD ($r= -.163, p<.01$), and prudence- PRU ($r= -.118, p<.01$). Respondents who attended to others, perceived men and women as equal, respected traditional values, and were involved in planning, perseverance, and future orientation spent fewer days participating in playful activities.

The analysis indicated that there was a statistically significant relationship between frequency of play and personal cultural orientation. Thus, the results of the correlation coefficients analysis rejected Hypothesis 3.

Table 40

Correlations between Frequency of Play and Personal Cultural Orientations

		How often	How many hours	M
How often	Pearson Correlation			
	Sig. (2-tailed)			
How many hours	Pearson Correlation	.219**		
	Sig. (2-tailed)	.000		
Social Equality-IEQ	Pearson Correlation	.248**	-.046	16.74
	Sig. (2-tailed)	.000	.429	
Ambiguity Intolerance-AMB	Pearson Correlation	.126*	.005	20.09
	Sig. (2-tailed)	.030	.937	
Interdependence- INT	Pearson Correlation	-.213**	-.050	24.08
	Sig. (2-tailed)	.000	.399	
Prudence-PRU	Pearson Correlation	-.167**	-.038	22.94
	Sig. (2-tailed)	.004	.522	
Risk Aversion-RSK	Pearson Correlation	.154**	.065	16.32
	Sig. (2-tailed)	.008	.271	
Tradition-TRD	Pearson Correlation	-.133*	.057	22.64
	Sig. (2-tailed)	.022	.331	
Gender Equality-GEQ	Pearson Correlation	-.088	.014	23.62
	Sig. (2-tailed)	.130	.816	
Independence-IND	Pearson Correlation	-.074	.100	22.17
	Sig. (2-tailed)	.202	.087	
Masculinity-MAS	Pearson Correlation	.045	.061	19.14
	Sig. (2-tailed)	.439	.303	
Power-POW	Pearson Correlation	-.036	.045	19.12
	Sig. (2-tailed)	.543	.441	

Hypothesis 4a. There is no statistically significant difference between the respondents' criteria for reaching adulthood and their countries.

Hypothesis 4a was tested using a chi-square analysis as shown in Table 41. The majority of respondents in HK, PRC, and U.S. indicated that good control over emotions $(\chi^2(2) = 9.947, p > .007)$ was the top criterion for reaching adulthood. The second criterion, if a woman, was being biologically capable of bearing children, $(\chi^2(4) = 20.049, p > .001)$, and the third criterion was settling into a long-term career, $(\chi^2(4) = 28.067, p > .001)$.

There was no statistically significant difference between countries and (a) accept responsibility, (b) decide on personal beliefs, (c) become less self-oriented, (d) become employed full-time, (e) avoid illegal drugs, (f) avoid crimes, (g) if a man, being biologically capable of fathering children, (h) reaching 18, (i) reaching 21, (j) if a woman, capable of running a household, and (k) if a man, capable of running a household. Thus, the results of the correlation coefficients analysis rejected Hypothesis 4a.

Table 41

Chi-Square–Criteria for Reaching Emerging Adulthood and Countries

Criteria for reaching emerging adulthood	HK Yes	No	PRC Yes	No	U.S. Yes	No (%)	value	df	Sig
Good control over emotions	91.3	8.7	86.8	13.2	76.1	23.9	9.947	2	.007*
Settle into a long-term career	72.5	27.5	70.1	28.4	43.5	56.5	28.067	4	.000*
If a woman, biologically capable of bearing children	76.9	23.1	83.1	16.9	53.9	46.1	20.049	2	.000*
Accept responsibility	96.7	3.3	97.0	3.0	99.3	.7	2.201	2	.333
Decide on personal beliefs	78.3	21.7	88.1	11.9	83.9	16.1	2.778	2	.249
Become less self-oriented	87.0	13.0	89.6	10.4	87.0	13.0	.321	2	.852
Become employed full-time	66.3	33.7	66.2	33.8	56.5	43.5	2.969	2	.227
Avoid illegal drugs	92.3	7.7	92.5	7.5	83.3	16.7	5.816	2	.055
Avoid crimes	90.1	9.9	91.2	8.8	93.5	6.5	.903	2	.637
If a man, biologically capable of fathering children	70.9	29.1	80.3	19.7	62.6	37.4	6.328	2	.42
Reaching 18	77.8	22.2	68.3	31.7	60.7	39.3	7.183	2	.028
Reaching 21	56.0	44.0	70.3	29.7	59.6	40.4	3.348	2	.188
If a woman, capable of running a household	75.8	24.2	80.4	19.6	72.2	27.8	1.382	2	.501
If a man, capable of running a household	80.0	20.0	76.3	23.7	76.3	23.7	.457	2	.796

Hypothesis 4b. There is no statistically significant relationship between respondents' criteria for reaching adulthood, father's educational attainment, marital status, and parenthood status.

Hypothesis 4b was tested using a chi-square analysis as shown in Table 42. There was no statistically significant relationship between respondents' criteria for reaching adulthood, marital status, and parenthood status.

Table 42

Relationship between Respondents' Criteria for Reaching Adulthood, and Marital Status and Parenthood Status

Variables	Marital status (%)					Parenthood (%)				
	Yes	No	value	df	Sig	Yes	No	value	df	Sig
Accept responsibility	4.2	95.8	.262	1	.609	2.4	97.6	.150	1	.699
Yes	.0	100.0				.0	100.0			
No										
Decide on personal beliefs										
Yes	3.7	96.3	.009	1	.924	2.1	97.9	.662	1	.416
No	4.0	96.0				4.0	96.0			
Good control over emotions										
Yes	4.1	95.9	.001	1	.974	1.6	98.4	3.395	1	.065
No	4.0	96.0				6.0	94.0			
Become less self-oriented										
Yes	3.9	96.1	.130	1	.719	2.3	97.7	.027	1	.870
No	2.7	97.3				2.8	97.2			
Become employed full-time										
Yes	3.9	96.1	.055	1	.814	1.7	98.3	1.019	1	.313
No	4.4	95.6				3.5	96.5			

(table continues)

Variables	Marital status (%)					Parenthood (%)				
	Yes	No	value	df	Sig	Yes	No	value	df	Sig
Settle into a long-term career										
Yes	1.8	98.2	4.733	2	.094	1.8	98.2	.742	2	.690
No	6.7	93.3				3.3	96.7			
Avoid illegal drugs										
Yes	3.9	96.1	.091	1	.763	2.3	97.7	.049	1	.825
No	2.9	97.1				2.9	97.1			
Avoid crimes										
Yes	4.5	95.5	1.116	1	.291	2.6	97.4	.611	1	.434
No	.0	100.0				.0	100.0			
If a woman, biologically capable of bearing children										
Yes	3.4	96.6	1.050[a]	1	.305	2.2	97.8	.437	1	.509
No	6.1	93.9				3.7	96.3			
If a man, biologically capable of fathering children										
Yes	3.1	96.9	1.201	1	.273	1.6	98.4	2.370	1	.124
No	6.0	94.0				4.8	95.2			
Reaching 18										
Yes	3.7	96.3	.020	1	.889	2.1	97.9	.360	1	.549
No	3.3	96.7				3.3	96.7			
Reaching 21										
Yes	3.5	96.5	.691	1	.406	1.2	98.8	3.190	1	.074
No	5.6	94.4				4.6	95.4			
If a woman, capable of running a household										
Yes	4.1	95.9	.026	1	.871	2.6	97.4	.055	1	.815
No	4.6	95.4				3.1	96.9			
If a man, capable of running a household										
Yes	3.8	96.2	.131	1	.718	2.4	97.6	.132	1	.716
No	4.8	95.2				3.2	96.8			

As shown in Table 43, Hypothesis 4b was also tested using a chi-square analysis.

The relationship between respondents' criteria for reaching emerging adulthood and

father's educational attainment was significant: χ^2 (6) = 15.452, p > .017*. There was an

association between respondents' fathers graduating from high school and respondents

indicating that settling into a long-term career is a criterion for reaching emerging

adulthood. There was also an association between father's having a college degree or

more and respondents indicating that settling into a long-term career was not a criterion

for reaching emerging adulthood.

Table 43

Relationship between Respondents' Criteria for Reaching Emerging Adulthood and
Father's Educational Attainment

Variables	high school (%)	some college (%)	college or more (%)	don't know (%)	value	df	Sig
Settle into a long-term career							
Yes	53.0	20.2	15.5	11.3	15.452	6	.017*
No	39.2	22.5	32.5	5.8			
Accept responsibility							
Yes	46.8	21.5	22.5	9.2	2.225	3	.527
No	66.7	.0	16.7	16.7			
Decide on personal beliefs							
Yes	44.4	22.2	24.7	8.8	6.490	3	.090
No	62.0	16.0	12.0	10.0			
Good control over emotions							
Yes	49.8	21.0	20.2	9.1	4.940	3	.176
No	35.4	20.8	33.3	10.4			
Become less self-oriented							
Yes	46.1	21.7	22.8	9.4	2.065	3	.559
No	58.3	16.7	19.4	5.6			

(table continues)

Variables	high school (%)	some college (%)	college or more (%)	don't know (%)	value	df	Sig
Become employed full-time							
Yes	48.3	21.3	18.5	11.8	6.205	3	.102
No	46.0	20.4	28.3	5.3			
Avoid illegal drugs							
Yes	48.2	20.4	22.7	8.6	1.231	3	.746
No	41.2	26.5	20.6	11.8			
Avoid crimes							
Yes	47.6	20.6	22.5	9.4	.029	3	.999
No	47.8	21.7	21.7	8.7			
If a woman, biologically capable of bearing children							
Yes	53.1	17.5	18.1	11.3	10.896	3	.012
No	35.4	26.8	30.5	7.3			
If a man, biologically capable of fathering children							
Yes	49.5	18.8	22.6	9.1	2.783	3	.426
No	41.2	27.1	23.5	8.2			
Reaching 18							
Yes	47.3	18.6	22.9	11.2	4.653	3	.199
No	46.7	27.8	20.0	5.6			
Reaching 21							
Yes	46.1	18.6	26.3	9.0	3.984	3	.263
No	48.2	26.4	19.1	6.4			
If a woman, capable of running a household							
Yes	50.5	17.7	21.4	10.4	4.318	3	.229
No	40.0	29.2	21.5	9.2			
If a man, capable of running a household							
Yes	49.8	18.8	22.7	8.7	5.277	3	.153
No	36.1	31.1	24.6	8.2			

Hypothesis 5. There are no statistically significant differences between perceptions of play, play's importance, and personal cultural orientation and gender.

Hypothesis 5 was tested using an independent t-test analysis as shown in Table 44. The independent t-test analysis indicated that there were significant gender differences in Intrinsic goal/outcome benefits (F (284) =5.75, p<.017). The mean score of female respondents was higher than for male respondents. More females perceived intrinsic goal/outcome benefits. Female respondents were more (a) focused on social status, respect, wealth, rights, and privileges; (b) unwilling to take risks; and (c) tolerant of ambiguity and uncertain situations than were male respondents. More male respondents than female respondents reported that development and socialization and establishing identity were factors in play's importance.

There were no gender differences with independence (IND), interdependence (INT), social inequality (IEQ), masculinity (MAS), gender equality (GEQ), tradition (TRD), and prudence (PRU). Thus, the results of the independent t-test analysis rejected Hypothesis 5.

Table 44

Independence T-Test for Perceptions of Play, Play's Importance, Personal Cultural Orientations and Gender

Factors	Male		Female		df	F	t-values	Sig
	M	SD	M	SD				
Ambiguity Intolerance (AMB)	19.10	4.63	21.61	4.23	291	1.07	4.70	.000*
Risk Aversion (RSK)	15.46	5.56	17.53	4.93	293	2.62	3.29	.001*
Establish identity	17.79	2.33	16.98	2.31	287	.00	-2.90	.004*
Development and socialization	28.60	3.87	27.39	3.62	287	.46	-2.67	.008*
Intrinsic goal/outcome benefits	43.20	7.92	43.46	6.34	284	5.75	.294	.017*
Power (POW)	18.69	4.90	19.75	4.22	293	4.33	1.91	.056*
Intrinsic non goal/outcome benefits	22.90	3.44	22.87	3.49	291	.00	-.069	.994
Relationship non-goal/outcome benefits	9.14	1.97	8.64	2.25	290	1.08	-2.03	.300
Relationship goal/outcome benefits	17.12	3.05	17.01	2.93	287	1.87	-2.95	.172
Relaxation	12.33	4.82	11.55	1.42	287	.73	-1.70	.090
Expression	11.85	1.53	11.67	1.68	286	2.5	-.95	.343
Independence (IND)	22.40	3.39	21.83	4.01	294	3.16	-1.30	.193
Interdependence (INT)	24.19	2.76	24.03	3.12	294	.66	-.47	.635
Social Inequality (IEQ)	16.43	5.62	17.21	5.57	295	.01	1.17	.242
Masculinity (MAS)	19.08	3.84	19.21	4.31	290	2.18	.26	.794
Gender Equality (GEQ)	23.51	6.66	23.88	3.25	291	.85	.55	.579
Tradition (TRD)	22.96	6.26	22.27	3.71	291	1.32	-1.0	.284
Prudence (PRU)	22.97	5.81	22.95	3.52	291	.97	-.03	.974

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to examine play among emerging adults in the

U.S., PRC, and HK. The primary problem investigated was the relationship between the

respondents' perceptions of play and their personal cultural orientation. Further, the study

explored the relationships between respondents' perceptions of play's importance and

their personal cultural orientation. This chapter presents an overview of the study and the

important conclusions drawn from the data presented in Chapter 4. It provides a

discussion of implications and recommendations for further research.

Summary of Methodology

Descriptive statistics, including means, frequency distributions, and standard

deviations, were used to summarize respondent characteristics. These characteristics

included (a) emerging adults' perceptions of play, (b) emerging adults' perceptions of

play's importance, (c) benefits of play for emerging adults, (d) personal cultural

orientations, (e) comparison of definitions of play between emerging adults in the U.S.,

HK, and PRC, and (f) the respondents' criteria for reaching adulthood. Five statistical

methods were used to analyze the data: factor analysis, Pearson correlation, ANOVA,

chi-square, and independent-t-test. Table 46 summarizes the research procedures.

Table 45

Summary of Major Elements of Research Procedures

Procedural Element	Description of Elements
Sampling	322 questionnaires were distributed
Response Rate	Overall 301 respondents were received (93.4%) 92 questionnaires were completed in HK (100%) 70 questionnaires were completed in the PRC (100%) 160 questionnaires were completed in the U.S. (87%)
Instrumentation	(a) Perceptions of play (Cordes & Ibrahim, 1996; Frank, 1963; (b) Glynn & Webster, 1992; Godbey & Parker, 1976; Heintzman et al., 1994; Huizinga, 1949; Jensen, 1977; Kelly, 2000; Kraus, 1998; MacLean et al., 1985; Miller & Robinson, 1963; Nash, 1965; Sapora & Mitchell, 1973; Wong, 2008) (c) Play's importance (Spencer, 1873; Schiller, 1875; Groos, 1898, 1901; Lazarus, 1883; Hall, 1906; Claparede,1911; Carr, 1934; Roberts & Sutton-Smith, 1962; Csikszetmihalyi, 1975/1990; Waelder, 1933; Peller, 1952; & Erikson,1950) (d) Frequencies of play. (e) Personal cultural orientation (Hofstede, 2001) (f) Criteria for reaching adulthood (Arnett, 1994, 1997, 1998, 2003) (g) Demographics
Collection of Data	American emerging adults majoring in physical education, recreation and leisure studies at the University of Northern Iowa in the U.S., Chinese emerging adults majoring in physical education and leisure studies at Zhejiang University in the PRC, and Chinese emerging adults majoring leisure studies and recreation management at the Community College of City University in HK participated in this study. Participants were recruited by cooperating academic staff of Zhejiang University, the Chinese University of Hong Kong, and the University of Northern Iowa. The PRC and the U.S. were selected because of their diversity and global importance and Hong Kong was selected because it represents a combination of both Western and Eastern values. Cooperating academic staff explained the purpose of the study and highlighted the instructions for completing the questionnaire before distributing the informed consent and questionnaire to prospective participants. The informed consent document stated the purpose of the study, indicated that participation was voluntary, and gave assurance that confidentiality of the data would be maintained.

(table continues)

Procedural Element	Description of Elements
	Cooperating academic staff also gave assurance that participation would have no impact on students' grades and would not affect their status at Zhejiang University, the Chinese University of Hong Kong, or the University of Northern Iowa.
Analysis of Data	The researcher used SPSS 19.0 for Windows to analyze the collected data.

Summary of Results

Written questionnaires were distributed to 322 respondents. A total of 301 completed instruments were returned, which yielded a 93.4 % response rate. The mean age of respondents was 21.45. The respondents' ages ranged from 18-29 years old. Data were collected from students who were enrolled in physical education, recreation, and leisure courses during the 2010-2011 academic years at the University of Northern Iowa in the U.S. (n=139), Zhejiang University in the PRC(n=70), and the Community College of City University of Hong Kong in HK(n=92).

Table 46 presents a summary of hypotheses tested in this study. This will be followed by a more in depth presentation of findings of the results of hypothesis testing. They included: (a) there is a statistically significant relationship between respondents' perceptions of play and their personal cultural orientation, (b) there is a statistically significant difference between respondents' perceptions of play, countries, and number of siblings, (c) there is a statistically significant relationship between respondents'

perceptions of play and their perception of play's importance, (d) there is a statistically significant difference between the interaction of respondents' perceptions of play, play's importance, personal cultural orientation, and countries, (e) there is a statistically significant relationship between respondents' perception of play's importance and their frequency of play, (f) there is a statistically significant difference between respondents' frequency of play, countries, and personal cultural orientation, (g) there is a statistically significant association between the respondents' criteria for reaching adulthood and countries, (h) there is a statistically significant difference between perceptions of play, play's importance, and personal cultural orientation and gender. In addition, hypothesis 4b has been partly rejected because there is no statistically significant association between respondents' criteria for reaching adulthood and marital status, and parenthood status. However, there is a statistically significant association between respondents' criteria for reaching adulthood and their father's educational attainment.

Table 46

Summary of Hypothesized Findings

1a	There is no statistically significant relationship between respondents' perceptions of play and their personal cultural orientation.	Rejected
1b	There is no statistically significant difference between respondents' perceptions of play, countries, and number of siblings.	Rejected
1c	There is no statistically significant relationship between respondents' perceptions of play and their perception of play's importance.	Rejected
1d	There is no statistically significant difference between the interaction of respondents' perceptions of play, play's importance, personal cultural orientation, and countries.	Rejected
2	There is no statistically significant relationship between respondents' perception of play's importance and their frequency of play.	Rejected
3	There is no statistically significant difference between respondents' frequency of play, countries, and personal cultural orientation.	Rejected
4a	There is no statistically significant association between the respondents' criteria for reaching adulthood and countries.	Rejected
4b	There is no statistically significant association between respondents' criteria for reaching adulthood, their father's educational attainment, marital status, and parenthood status.	Partly rejected
5	There is no statistically significant difference between perceptions of play, play's importance, and personal cultural orientation and gender.	Rejected

Research Question 1

Hypothesis 1a: There is no statistically significant relationship between respondents' perceptions of play and their personal cultural orientation.

The results of this study illustrated that emerging adults who perceived play as (a) intrinsic goal/outcome benefits, (b) intrinsic non-goal/outcome benefits, (c) relationship non-goal/outcome benefits, and (d) relationship non-goal/outcome benefits were more attentive to others (interdependence; Sharma, 2009) and respectful of traditional values (traditional; Bond, 1988). Emerging adults who were attentive to others (INT) may enjoy harmonious interactions with others; therefore, they perceived play as relationship goal/outcome benefits, relationship non-goal/outcome benefits, intrinsic goal/outcome benefits, and intrinsic non-goal/outcome benefits. These four categories of perception of play are based on selected play characteristics found in the literature (Cordes & Ibrahim, 1996; Frank, 1963; Godbey & Parker, 1976; Heintzman et al., 1994; Huizinga, 1949; Jensen, 1977; Kelly, 2000; Kraus, 1998; MacLean et al., 1985; Miller & Robinson, 1963; Nash, 1965; Sapora & Mitchell, 1973); five attributes of playfulness scales (Glynn & Webster, 1992); and six categories based on the similarity and content of Wong's research (Wong, 2008). Emerging adults who were respectful of traditional values (TRD) may agree with and respect all of the characteristics of play.

Emerging adults who perceived play as (a) intrinsic goal/outcome benefits, (b) intrinsic non-goal/outcome benefits, and (c) relationship non-goal/outcome benefits were focused on their own internal thoughts (independence; Markus & Kitayama, 1991). Emerging adults who are focused on their personal goals, attitudes, needs, and rights

place a strong value on independence, individual freedom and individual achievement (Arnett, 2001). They may not perceive play as relationship building; therefore they do not perceive play as relationship goal/outcome benefits.

Emerging adults who perceived play as intrinsic goal/outcome benefits were accept gender equality (gender equality; Schwartz & Rubel-Lifschitz, 2009) and were focused on planning and future orientation (prudence; Puri, 1996). Emerging adults who were accept gender equality, perceived men and women as equal in terms of social roles, capabilities, rights, and responsibilities (Schwartz & Rubel-Lifschitz, 2009), they may not perceive men and women have certain characteristics for gender, they perceived play as lifer understanding, learning, intrinsic motivation, self-development, and expressive; therefore, they perceived play as intrinsic goal/outcome benefits. Emerging adults who were focused on planning and future orientation perceived play has their own purpose, it is not meaningless, and play may benefits us in different areas, therefore, they perceived play as intrinsic goal/outcome benefits.

Emerging adults who perceived play as (a) intrinsic non goal/outcome benefits, and (b) relationship goal/outcome benefits were more focused on achievement and assertiveness (masculinity; Hofstede, 2001). Emerging adults who were focused on achievement, assertiveness, achievement, success, acquisition of moneys and not caring for others, they are more self-focused and have a great deal of autonomy in running their own lives, they perceived play as life-understanding, intrinsic motivation, self-development and enjoyment, in addition, they perceived play as relationship building,

recreation, sport, and activity; therefore, they perceived play as intrinsic goal/outcome benefits and relationship goal/outcome benefits.

Emerging adults who perceived play as (a) intrinsic goal/outcome benefits and (b) relationship non-goal/outcome benefits were more willing to take risks (risk aversion; Bontempo et al., 1997, Keh & Sun, 2008; Sharma, 2009) and did not accept social inequality (social inequality; Sharma, 2009). Emerging adults who were willing to take risks may be willing to try new things in play and might also enjoy the process of trial and error, so they perceived play as life understanding, learning, and self-development. In addition, emerging adults who were willing to take risks may not care about being silly; therefore, they perceived play as intrinsic goal/outcome benefits and relationship non-goal/outcome benefits. Emerging adults who did not accept social inequality respect people who have equal status in society; therefore, they perceived play as life understanding, learning, and self-development. Furthermore, emerging adults who did not accept social inequality may enjoy the time interacting with people in play; therefore, they perceived play as intrinsic goal/outcome benefits and relationship non-goal/outcome benefits.

Prior to this study, there have been no studies utilizing Hofstede's personal cultural orientations research (2001) to identify emerging adults' perception of play. Hofstede (2001) only used a personal cultural orientations scale to explore cross-cultural differences in consumer behavior. Play is often part of an adaptive package of cultural elements that are used by members of different societies in various ways. Play as subjective experience that is adaptive is a concept that has yet to be addressed from a

cross-cultural perspective. Research has paid little attention to the perception of play in different cultures, and there are limited studies of cross-cultural comparisons of play and its components in the PRC, Hong Kong, and U.S. When researchers consider individuals' perceptions of play in future cross-cultural studies, it is important to apply Hofstede's personal cultural orientations (2001) to explore the relationship between their perception of play and their personal cultural orientations.

Hypothesis 1b: There is no statistically significant difference between respondents' perceptions of play, their countries, and the number of siblings.

Respondents from the U.S. differed significantly from the HK and PRC respondents on perceptions of play as (a) intrinsic goal/outcome benefits, and (b) relationship non-goal/outcome benefits. The mean score for U.S. respondents was higher than for the HK and PRC respondents on (a) intrinsic goal/outcome benefits, and (b) relationship non-goal/outcome benefits. Emerging adults in the PRC and HK had the same results, but they differed from the U.S. respondents.

Previous research has indicated that Chinese and Americans have different interpretations about the concept of one's self. Chinese focus on self-control and pay little attention to control of others while Americans tend to be in charge of their lives (Nisbett, 2003, Oyserman, Coon, & Kemmelmeier, 2002). In support of this notion, U.S. respondents from the present study differed significantly from the PRC and HK respondents on self-development, life understanding and learning. Moreover, Chinese enjoy unity in order to maintain a harmonious social network with their family, friends, and neighbors, and they are interdependent. In addition, Confucian doctrine in Chinese

culture places great importance on constraining the self, controlling emotions, and putting the needs and interests of the family before one's own and Chinese are not encouraged to express their feeling and emotion (Nisbett, 2003, Sharma, 2009). However, American cultures tend to give priority to independence and self-expression. This may explain why U.S. respondents differ from PRC and HK respondents on the expressive element. Nisbett (2003) indicated that Americans seek to be liberated, free from constraints and desire to be in charge their own lives. In contrast, Chinese have a greater concern regarding unity and feel an obligation to maintain a harmonious social network. Curiosity is one of main characteristics in Greek philosophy and this concept builds the foundation of belief in logic or senses. U.S. respondents have more freedom to enjoy themselves, engage in experiences that are intrinsically motivating and to explore creativity than respondents from either HK or PRC.

Respondents from the PRC differed significantly from the HK and U.S. respondents. The mean score for PRC respondents was lower than for HK and U.S. respondents on relationship goal/outcome benefits. However, there was no statistically significant difference between perception of play and number of siblings. This finding illustrated that the number of siblings was not a factor affecting the respondents' perceptions of play.

Previous research studies did indicate the difference between Chinese and Americans (Bellah et al., 1985; Kim, 2009; Nisbett, 2003; Oyserman et al., 2002; Schwartz et al., 2001; Sharma, 2009). Easterners view family as having interrelated members and they are accepting of hierarchy and group control. Easterners are concerned

about the feelings of other to maintain harmony in an interdependent world. In contrast,

Westerners view family as a collection of persons with attributes that are independent of

any connections with others and they emphasize equality for personal action. Westerners

are more concerned with knowing themselves and are prepared to sacrifice harmony for

fairness and dialogue often resulting in offering conflicting views of the world. The ways

PRC and HK respondents interact with people are different from U.S. respondents. And

Wong (2008) indicated that the word "silliness" translates into Chinese concepts for

credulous, gullible, naive, flighty, humorous, wanton, aimless, capricious, shallow,

flippant, unimportant, trivial, and inane. It explains why respondents from the U.S.

differed significantly from the HK and PRC respondents on interpersonal and silliness.

Hypothesis 1c: There is no statistically significant relationship between

respondents' perceptions of play and their perception of play's importance.

These findings indicated that both perception of play and play's importance have

a relationship to one another; however, there is no statistically significant relationship

between the perception of play as intrinsic goal/outcome benefits and play's importance

for relaxation, and there is no statistically significant relationship between the perception

of play as relationship non-goal/outcome benefits and play's importance for expression.

Respondents who perceive play as intrinsic non goal/outcome benefits (relaxation,

voluntary, spontaneous and fun) have no relationship with respondents who indicated

play's importance for relaxation (relaxation and exercise). Respondents who perceive

play as relationship non-goal/outcome benefits (interpersonal and silliness) have no

relationship with respondents who indicated play's importance for expression (express

emotions and expend energy). This finding indicated that respondents who perceive play as intrinsic non goal/outcome benefits (relaxation, voluntary, spontaneous and fun) might not indicate play's importance for relaxation. Respondents who perceive play as relationship non goal/outcome benefits (interpersonal and silliness) might not indicate play's importance for expression. There were no previous studies that looked at whether there is relationship between perception of play and play's importance. To further understand the cause-and-effect relationship between these two areas, path analysis should be applied in future studies to determine the effects of perceptions of play and play's importance. Mertlet and Vannatta (2005) indicated that path analysis begins with the researcher developing a diagram with arrows connecting variables and describing the causal flow, or the direction of the cause and effect. Path analysis is a simple model that estimates direct and indirect causal effects.

Hypothesis 1d: There is no statistically significant difference between respondents' perceptions of play, personal cultural orientation, and their countries.

The mean score for U.S. respondents was higher than for the HK and PRC respondents on perceptions of play as (a) intrinsic goal/outcome benefits, (b) relationship non-goal/outcome benefits, and (c) relationship goal/outcome benefits, and on personal cultural orientations of (a) interdependence-INT, (b) prudence-PRU, (c) independence-IND, and (d) gender equality-GEQ. The mean scores for U.S. respondents were higher than for the HK and PRC respondents on perceptions of play, because many Western definitions of play have been offered in research, and Western play theories have been established for more than 100 years. Emerging adults from the U.S. may have had more

understanding about play than emerging adults from HK and PRC. U.S. respondents had higher mean scores than the HK and PRC respondents on interdependence-INT. This finding is not consistent with Nisbett's research (2003). Nisbett (2003) indicated that Chinese are interdependent; they focus on attending to others, fitting in, obligations, and duties, and Americans tend to be in charge their lives.

Although the mean scores of U.S. respondents were slightly higher than those of the HK and PRC respondents on Prudence (PRU), we cannot conclude that U.S. respondents had more planning, perseverance, and future orientation than HK and PRC respondents. Respondents from the U.S. were more independent (IND) than the respondents from HK. Previous research has indicated that American cultures tend to give priority to independence and self-expression (Nisbett, 2003; Triandis, 1995).

Respondents from the U.S. perceived men and women as equal in terms of social roles, capabilities, rights, and responsibilities. However, in Chinese culture, the family is viewed as having interrelated members and the father is the authority figure. Respondents from the PRC might think that the male's status is higher than the female's status.

The mean score for PRC respondents was higher than for the HK and U.S. respondents on personal cultural orientations of ambiguity intolerance-AMB. Ambiguity intolerance refers to inability to tolerate ambiguity and uncertain situations. This finding is consistent with Nisbett (2003). In Chinese culture, Confucian doctrine places great importance on constraining the self, controlling emotions, and putting the needs and interests of the family before one's own (Nisbett, 2003). Chinese can tolerate ambiguity and uncertain situations more easily than Americans.

The mean score for HK and PRC respondents was higher than for the U.S. respondents on personal cultural orientations of social inequality-IEQ, and the mean score for HK and PRC respondents was higher than for the U.S. respondents on personal cultural orientations of risk aversion-RSK. Emerging adults have a great deal of autonomy in running their own lives and developing skills with their beliefs and values on social equality. However, Chinese enjoy unity in order to maintain a harmonious social network with their family, friends, and neighbors and with Chinese philosophy (Taoism, Confucianism, and Buddhism; Nisbett, 2003). They might sacrifice the values of social equality in order to maintain harmony. Chinese emerging adults have more obligations and duties toward others, and they enjoy unity in order to maintain a harmonious social network with their family. This might explain why the respondents from HK and PRC were not willing to take risks.

There was no significant difference between perception of play, countries, and the personal cultural orientations of masculinity (MAS) and power (POW). Previous research indicated that cross-cultural and comparative research has endeavored to explore and explain cultural similarities and differences (Hofstede, 1980). Future research may include Hofstede's personal cultural orientations scale to evaluate emerging adult's perceptions of play.

Research Question 2

Hypothesis 2: There is no statistically significant difference between respondents' perceptions of play's importance and their countries.

Respondents from the U.S. differed significantly from the HK and PRC respondents on play's importance (a) for development and socialization (educational, development, morale development, creativity and socialization), (b) for relaxation (relaxation and exercise), and (c) to establish identity (establish identity, challenge skill, interpersonal and role play). The mean score for U.S. respondents was higher than for HK and PRC respondents. Western play theories have been developed over the past 100 years and many definitions of play have been offered in research in Western culture. U.S. respondents have more understanding about play; therefore, they view play's importance (a) for development and socialization, (b) for relaxation, and (c) to establish identity more than HK and PRC respondents. There was no study involved in the literature review that looked at emerging adults' perception of the importance of play.

No scales were found in the literature review that looked at emerging adults' perception of the importance of play. Future research may include the scale of "Attitudes toward play—Why is play important to you?" to evaluate emerging adults' perception of the importance of play.

Research Question 3

Hypothesis 3: There is no statistically significant relationship between respondents' frequency of play, their countries, and their personal cultural orientation.

The results indicated that how often participants participated in playful activities was associated positively with personal cultural orientations of (a) social inequality-IEQ, (b) ambiguity intolerance-AMB, and (c) risk aversion-RSK; and negatively associated with (a) interdependence- INT, (b) prudence- PRU, and (c) tradition- TRD.

Countries (HK, PRC, and U.S.) were positively associated with (a) social inequality-IEQ, (b) risk aversion-RSK, (c) ambiguity intolerance-AMB, and were negatively associated with (a) interdependence (INT), (b) gender equality-GEQ, (c) tradition- TRD, and (d) prudence- PRU. In other words, the more days that the respondents participated in playful activities, the more they accepted social equality, tolerated ambiguity, and were not willing to take risks. The fewer days that respondents participated in playful activities, the more they reported attending to others, perceiving men and women as equal, respecting traditional values, and being involved in planning, perseverance, and future orientation. As previously indicated, Hofstede (2001) only used a personal cultural orientations scale to explore cross-cultural differences in studies focused on consumer behavior. A personal cultural orientations scale should be used in other areas; future research may include a personal cultural orientations scale to measure the respondents' frequency of play in the context of cross-cultural studies.

Research Question 4

Hypothesis 4a. There is no statistically significant association between the respondents' criteria for reaching adulthood and their countries.

The majority of respondents in HK, the PRC and the U.S. indicated that having good control over emotions was the top criterion for reaching adulthood. The second criterion was, for a woman, being biologically capable of bearing children, and the third criterion was settling into a long-term career. All of the respondents reported the same criteria for reaching adulthood.

These findings are partly associated with Nelson et al.'s study (2004), which indicated that Chinese emerging adults tended to focus on three criteria for becoming an adult: (a) accepting responsibility for the consequences of one's actions, (b) learning always to have good control of one's emotions, and (c) becoming financially independent from one's parents. However, the results of this study did not support previous research indicating that (a) good control over emotions (b) for a woman, being biologically capable of bearing children, and (c) settling into a long-term career were the top three criteria for reaching adulthood. Emerging adults tend to (a) accept responsibility for one's self, (b) become capable of making independent decisions, and (c) become financially independent (Arnett, 1997, 1998, 2003), and these are the three main criteria for adulthood that have appeared repeatedly in the studies of young people's conceptions of adulthood (Arnett, 1994, 1997, 1998, 2000, 2001; Crockett, 2000; Greene, Wheatley, & Aldava, 1992; Scheer & Palkovitz, 1995).

The results indicated that emerging adults in the current study had different criteria for becoming an adult. Emerging adults may change their criteria for becoming an adult from time to time. Criteria for becoming an adult may not generalize to all emerging adults in the U.S., HK, and PRC. Researchers in future studies have to consider that different target groups might have different criteria for becoming an adult.

Hypothesis 4b. There is no statistically significant association between respondents' criteria for reaching adulthood, father's educational attainment, marital status, and parenthood status.

There was no statistically significant association between respondents' criteria for reaching adulthood, marital status, and parenthood status. The association between criteria for reaching adulthood and father's educational attainment was significant. Respondents whose fathers graduated from high school indicated that settling into a long-term career was a criterion for reaching adulthood. Respondents whose fathers completed college or more indicated that settling into a long-term career was not a criterion for reaching adulthood. Emerging adults tend to focus on becoming financially independent from one's parents (Arnett, 1997, 1998, 2003) for becoming an adult. Respondents whose fathers graduated from high school might have pressure to find a long-term career to support their family; on the other hand, respondents whose fathers completed college or more have more freedom to explore themselves in the age of emerging adulthood. It explains the result.

No studies were found in the literature review that looked at the association between father's educational attainment and criteria for reaching adulthood. Future research may include father's educational attainment as one of the factors when considering criteria for reaching adulthood.

Research Question 5

Hypothesis 5: There is no statistically significant difference between perceptions of play, play's importance, personal cultural orientations, and gender.

The independent t-test analysis indicated there were significant gender differences in the perception of play as creativity, expression, and learning. The mean score for female respondents was higher than for male respondents. More females perceived play

as intrinsic goal/outcome benefits. Female respondents were more (a) focused on social status, respect, wealth, rights, and privileges; (b) unwilling to take risks; and (c) tolerant of ambiguity and uncertain situations than were male respondents. More male than female respondents reported play's importance for development and socialization and to establish identity. No previous studies looked at gender differences between perceptions of play, play's importance, and personal cultural orientations. Future research may include gender as one of the factors when considering the difference between perceptions of play, play's importance, and personal cultural orientations

Discussions and Implications

Chapter 4 presented findings of this research study. Six major findings resulted from this investigation and included (a) emerging adults' perceptions of play, (b) emerging adults' perceptions of play's importance, (c) benefits of play for emerging adults, \ (d) personal cultural orientations, (e) comparison of definitions of play between emerging adults in U.S., HK, and PRC: Chinese definitions of play, and (f) Chinese emerging adults' perception of play activities and the top three activities they liked to do when they play. A discussion of the implications of these major findings of this study follows.

Emerging Adults' Perceptions of Play

Emerging adults reported voluntary (M=6.29), enjoyment (M=6.23), fun (M=6.17), activity (5.90), and relationship building (5.78) as the top five variables for perceptions of play. These findings are consistent with Fromberg (2005), Wong (2008), Ellis (1973), Groos (1898), Huizinga (1949), and Godbey and Parker (1976). Fromberg

(2005) stated that play is a voluntary activity, and Wong (2008) indicated in her study that enjoyment was reported as the most frequently cited definition of play. According to Ellis (1973), the "pleasure principle" motivates much of children's play. The results of the current study demonstrated that enjoyment (happiness, joy) and fun were the most frequently cited perceptions of play. These findings matched the definitions of play by Groos (1898) and Huizinga (1949). Play has been defined as an activity that individuals engage in for pleasure (Godbey & Parker, 1976; Groos, 1898; Huizinga, 1949).

The means for perceptions of play as intrinsic motivation (M=4.95), learning (M=4.87), and spontaneous (M=4.94) were below acceptable levels. These findings are consistent with Csikszetmihalyi (1975/1990), Witt and Bishop (1970), and Roberts and Sutton-Smith, (1962). Csikszetmihalyi (1975/1990) indicated that play is voluntary or autotelic, and Witt and Bishop (1970) maintained that any learned play behavior will be generalized to other settings and behaviors by the participants. Roberts and Sutton-Smith (1962) suggested that play offers the participants an opportunity to experience and learn behaviors in a safe environment.

Silliness had the lowest mean score (M=3.47) among of perceptions of play. This finding is consistent with Wong (2008). Wong indicated that the word "silliness" translates into Chinese concepts for credulous, gullible, naive, flighty, humorous, wanton, aimless, capricious, shallow, flippant, unimportant, trivial, and inane. Emerging adults who clarify their identity in the age of identity exploration (Arnett, 2004) may not like to use "silliness" to describe themselves.

As shown in Figure 4, emerging adults identified perceptions of play within four

categories: (a) intrinsic goal/outcome benefits (life understanding, creative, learning,

expressive, intrinsic motivation, enjoyment, self-development, and free time), (b)

intrinsic non goal/outcome benefits (relaxation, voluntary, spontaneous, and fun), (c)

relationship non-goal/outcome benefits (interpersonal and silliness), and (d) relationship

goal/outcome benefits (relationship building, recreation/sports, and activities).

Emerging adults who perceived play as (a) intrinsic goal/outcome benefits and (b)

relationship non-goal/outcome benefits were willing to take risks (risk aversion) and were

accepting of social inequality in which socially defined categories of persons according to

the characteristics of gender, age, class, and ethnicity are differentially positioned (social

inequality). Moreover, emerging adults who perceived play as intrinsic goal/outcome

benefits relationship goal/outcome benefits focused on the expression of assertiveness,

self-confidence, aggression, and ambition (masculinity; Schwartz & Rubel-Lifschitz,
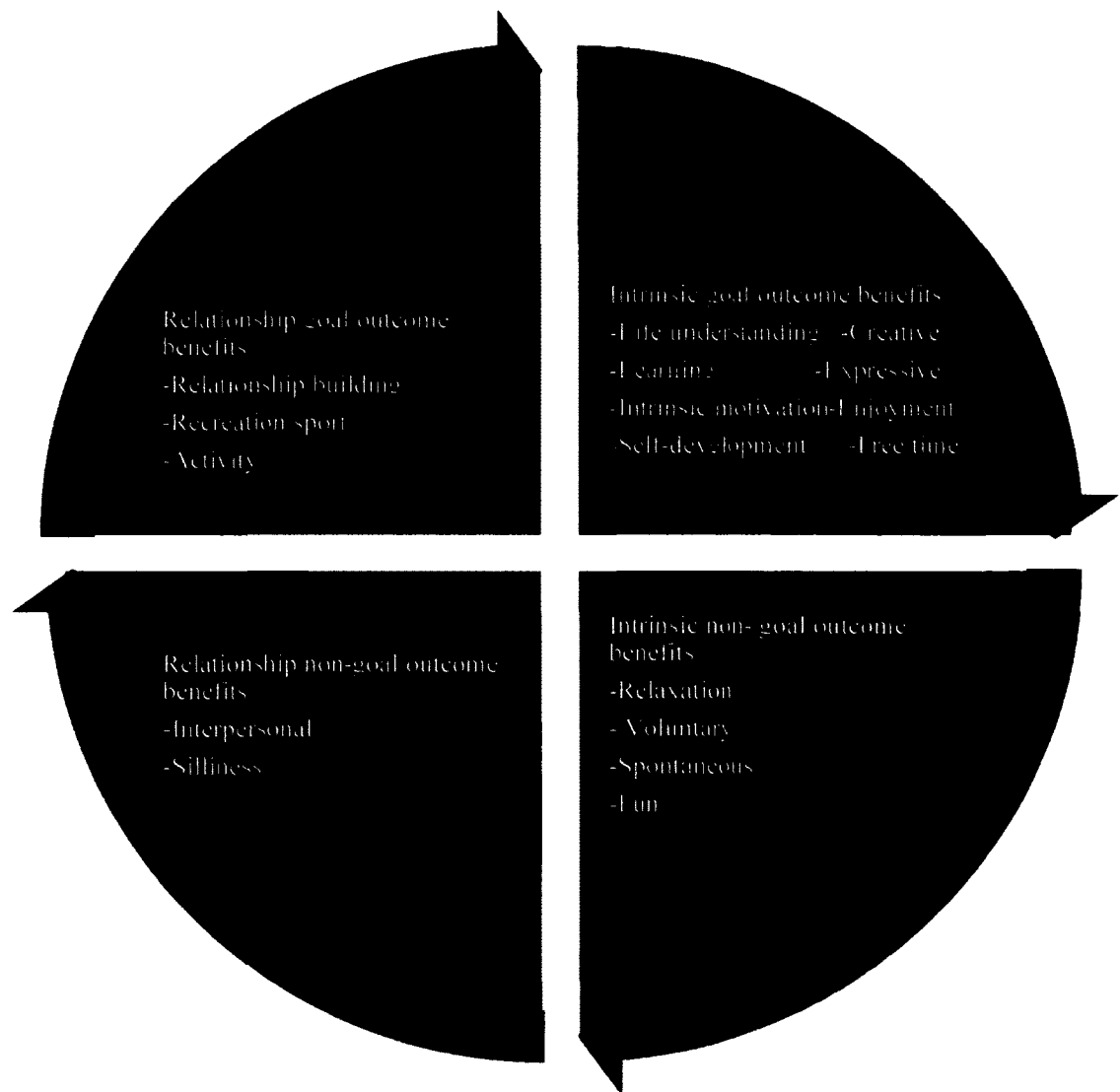
2009).

Figure 4. Emerging Adults' Perceptions of Play

Emerging Adults' Perceptions of Play's Importance

Emerging adults perceived play as important (a) for exercise (restore energy), (b) to challenge skill and ability (to experiment with new actions and new challenge voluntarily), (c) to expend energy (release energy), (d) to establish identity (to learn more

about them), and (e) for moral development (to engage in social learning). These findings are consistent with the theories of play offered by Lazarus (1883), Roberts and Sutton-Smith (1962), Carr (1934), Claparede (1911), Schiller (1875), Spencer (1873), and Arnett (2004, 2006). Lazarus (1883) indicated that play is used to restore energy (for exercise) and defined play as the result of the individual's need to overcome a deficit of energy. Roberts and Sutton-Smith (1962) suggested that play offers participants an opportunity to experience and learn behaviors in a safe environment (to challenge skill and ability). Carr (1934), Claparede (1911), Schiller (1875), and Spencer (1873) indicated that play is a safety valve to release excess energies and emotions (to expend energy).

Findings have shown that play helps emerging adults build identity during adolescent development. Arnett (2002) indicated that identity issues have long been seen as central to adolescent development (to establish identity). Blatner and Blatner (1988) indicated that people engage in social learning through play, and the social benefits of include strengthening involvements and reducing alienation (for moral development).

Figure 5 illustrates that emerging adults in this study perceived play's importance within four categories: (a) for development and socialization (educational, development, moral development, creativity, and socialization), (b) for relaxation (relaxation and exercise), (c) to establish identity (establish identity, challenge skill, interpersonal, and role play, and (d) for expression (express emotions and expend energy).
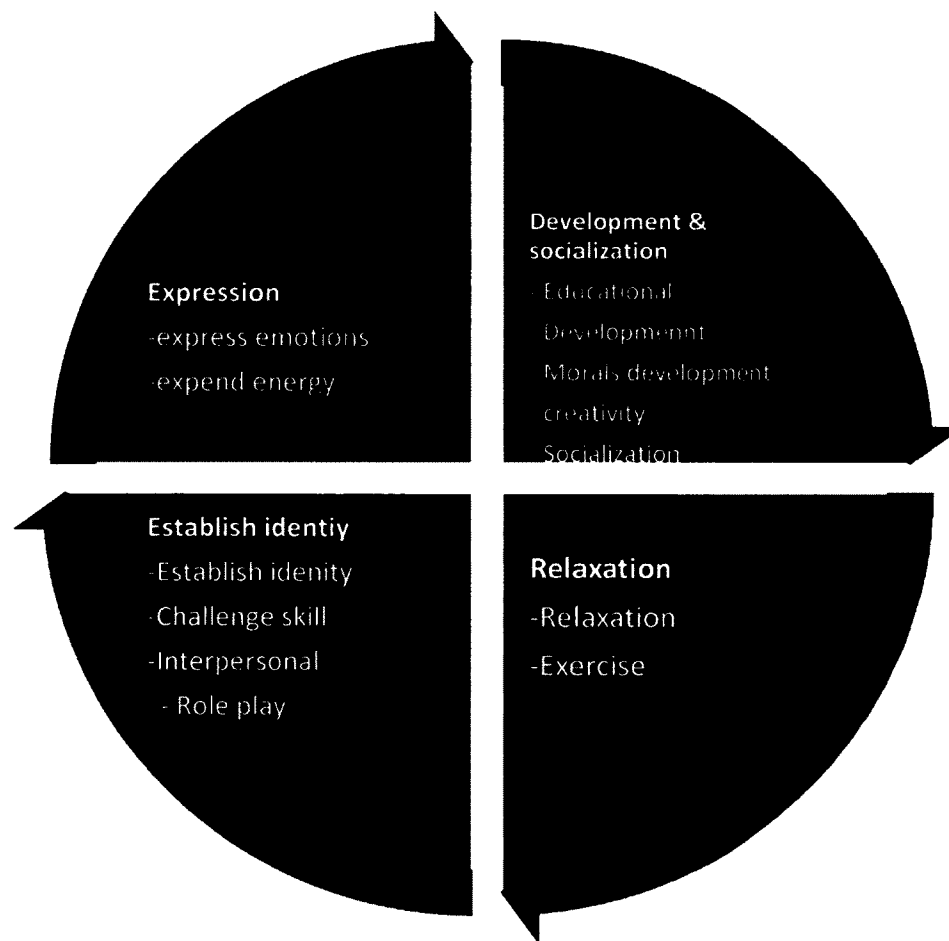
Figure 5. Respondents' Perceptions of Play's Importance

Benefits of Play for Emerging Adults

There has been a great deal of research on emerging adulthood (Arnett, 1994,

1995, 1997, 1998, 2000, 2001, 2003, 2004, 2006, 2007). However, little research has

connected emerging adulthood and play. The following section will highlight significant

findings and considerations regarding the benefits of play for emerging adults. More than

half of the respondents indicated that play was important and extremely important in their lives (a) for socialization (83.8%), (b) for relaxation (82.4%), (c) to challenge skill and ability (73.3%), (d) to express emotion (70.7%), (e) to expend energy (64.9%), (f) to establish identity (63.3%), (g) to develop mature interpersonal relationships (59.3%), and (h) for development (to prepare for adult life) (56.5%) as illustrated in Table 47. Exercise (56.3%), creativity (53.0%), moral development (48.1%), educational (47.6%), and role play (42.6%) were relatively unimportant. No studies were found in the literature review that viewed at how play benefits emerging adults.

Socialization

Previous research has indicated that young adults gain social support and self-esteem through play (Blatner & Blatner, 1988; Brown, 2009; Galambos et al., 2006; Wong, 2008). Emerging adults can gain social support and self-esteem, and reduce their symptoms of depression and expressed anger, through play during emerging adulthood. Engaging in spontaneous, imaginative activities, functions as an enjoyable bonding force. One of the biggest social benefits of imaginative play is that it satisfies both the needs of the group and the needs of the individual (Blatner & Blatner, 1988). Galambos et al., (2006) found that when social support was higher, self-esteem was also higher, and depressive symptoms and expressed anger were lower. In addition, individuals could make new cognitive connections that were incorporated into their everyday lives during play (Brown, 2009).

Relaxation

Previous research studies did indicate that young adults release their energy through play (Ellis, 1973; Miller & Robinson, 1963; and Patrick, 1916). There is a crucial need for recreation that encourages people to relax from tension (Miller & Robinson, 1963). Patrick (1916) indicated that play stems from a need for relaxation. Patrick defined play by juxtaposing it to work: fun versus seriousness, intrinsic versus extrinsic motivation, and process oriented versus goal oriented. Adults have an important psychic need for relaxation from nervous tension and strain and for escape from the pressures and demands of economic and domestic life (Miller & Robinson, 1963). Patrick viewed the role of play and sports as restorative and a necessary recuperation from work (Ellis, 1973).

Challenge Skill and Ability

Previous research in emerging adulthood indicated that emerging adulthood is the stage of possibilities because it represents a chance for young people to transform their lives to a new and better direction (Arnett & Tanner, 2006). Brown (2009) stated that young adults create possibilities that have not yet existed but may exist in the future, and they can learn lessons and skills through play without being directly at risk. Csikszetmihayli (1990) indicated that play is the experience of flow in a setting or frame of action where the activity is perceived to be voluntary or autotelic. Flow activities allow people to experiment with new actions and new challenges.

Express Emotion

Previous research studies did indicate that young adults express emotion through play (Blatner & Blatner, 1988; Brown, 2009; Carr, 1934; Claparede, 1911; Ellis, 1973; Freud, 1961; Verenikina et al., 2003). Play provides a safe place for emerging adults to relieve excess energies, manage their emotions, and reduce the likelihood of damage (Brown, 2009; Carr, 1934; Claparede, 1911; Ellis, 1973). Play such as psychodrama or creative dramatic play provides a channel for emerging adults to experience roles and to express their anger, and to experience triumph, heroism, and powerful, clear emotions (Blatner & Blatner, 1988). Psychoanalytic theory sees play as providing a context for expressing emotions and gaining a sense of control (Verenikina et al., 2003). Freud (1961) conceived play as providing a platform for people to reduce the anxiety of real-life interactions.

Expend Energy

Previous research has indicated that young adults expend energy through play (Labouvie-Vief, 2006; Patrick, 1916; Schulenberg et al., 2003; Spencer, 1873 & Schiller, 1875). Spencer (1873) and Schiller (1875) indicated that play activity occurs because the organism has energy stored up or left over from work activity. They contended that humans have a finite amount of energy that is used mainly for work and survival. When the amount of extra energy stored up reaches the supercharged stage, there is a literal "blowing off of steam." Play activities are due to an inner need to use those bodily organs that are over-rested or under-worked (Patrick, 1916). Emerging adults release their energy through play, as indicated by Labouvie-Vief (2006). Emerging adulthood might

be thought of as a crisis, and the transition to adulthood is marked by a series of

psychological changes such as increased emotional regulation as well as changes in roles

(Schulenberg et al., 2003). Emerging adults can release energy and release their stress

through play.

Establish Identity

Previous research studies did indicate that emerging adults gain social support and

self-esteem through play (Wong, 2008). Emerging adults are self-focused, in the sense

that they have fewer social obligations and fewer duties and commitments to others,

leaving them with a great deal of autonomy in running their own lives (Arnett & Tanner,

2006). The adolescent, in the process of becoming an adult, establishes an identity as an

individual (Miller & Robinson, 1963). Emerging adults can build self-confidence and

gradually become comfortable with the idea of being a member of a society through large

group and mass activities involving play. Play serves as a safety platform for emerging

adults to gain social support and self-esteem and to explore their identity in the areas of

love and work in the stage of identity exploration.

Develop Mature Interpersonal Relationships

Previous research has indicated that young adults develop mature interpersonal

relationship, gain support and love through play (Brown, 2009; Maslow, 1962; Wong,

2008). Play provides a platform for emerging adults to build healthy relationships with

the opposite sex, as well as to build up self-image through self-planned and self-directed

activities. In addition, people need contact with other people to gain support and love

(Maslow, 1962). Wong (2008) indicated that play relationships serve as a symbol of

group membership and perform the integrative function of helping to create and maintain group solidarity. Emerging adults are free to make decisions independently in the age of self-focus. During play, individuals can try out activities without threatening their physical or emotional well-being because they are just playing (Brown, 2009). These play experiences provide emerging adults a channel to rehearse similar situations in their real lives.

Development

Previous research has shown that play is providing a context for expressing these emotions and gaining a sense of control (Verenikina et al., 2003). Most emerging adults who reach the age of 18 or 19 are in the age of feeling in-between and do not feel completely adult until years later. Even though they become confident, make their own decisions, and are financially independent, they may feel as if they are in between adolescence and full adulthood while they are in the process of developing those qualities (Arnett & Tanner, 2006). The activities of play, which provide them with a great deal of autonomy and self-government, help them to feel like adults (Miller & Robinson, 1963).

However, exercise, creativity, moral development, education, and role play are relatively unimportant to emerging adults. Emerging adults might think play only benefits children for exercise, creativity, moral development, education, and role play. Scholars have noted only that play benefits children's lives in aspects such as (a) exercise-restoration of energy (Lazarus, 1883), (b) creativity- play is creation (Jensen, 1977), (c) moral development-social learning in a safe environment (Roberts & Sutton-Smith, 1962), (d) education- the support of cognitive functioning (Piaget, 1952, 1962), and (e)

role play-reduce the anxiety of real-life interactions (Waelder, 1933; Peller, 1952; Erikson, 1950).

Piaget (1952, 1962) offered a perspective on the development of individuals by defining play as the act of bending reality to fit a person's existing level of cognitive functioning. However, play not only benefits children and youth, but also benefits individuals who are identified as emerging adults. The results of the current study indicated that the benefits of play for emerging adults consistent with the following studies, include (a) socialization (Blatner & Blatner, 1988; Brown, 2009; Galambos, 2006; Barker, & Krahn 2006; Wong, 2008), (b) relaxation (Ellis, 1973; Patrick, 1916; Miller & Robinson, 1963), (c) challenge skill and ability (Arnett & Tanner, 2006; Brown, 2009, Csikszetmihayli, 1975), (d) express emotion (Blatner & Blatner, 1988; Brown, 2009; Carr, 1934; Claparede, 1911; Ellis, 1973; Freud 1961; Verenikina et al., 2003), (e) expend energy (Patrick, 1916; Spencer, 1873; Schiller, 1875), (f) establish identity (Arnett & Tanner, 2006; Miller & Robinson, 1963; Wong, 2008), (g) develop mature interpersonal relationships (Brown, 2009; Maslow, 1962; Wong, 2008), and (h) development (Miller & Robinson, 1963; Verenikina et al., 2003). Figure 6 illustrates how play contributes to emerging adulthood at the developmental stages of play behavior based on Piaget's (1962) developmental theories of play, adds to his hierarchy, and describes how play can benefit emerging adults. This significant finding has continued to build the body of knowledge related to developmental theories of play.

Table 47

Benefits of Play for Emerging Adults

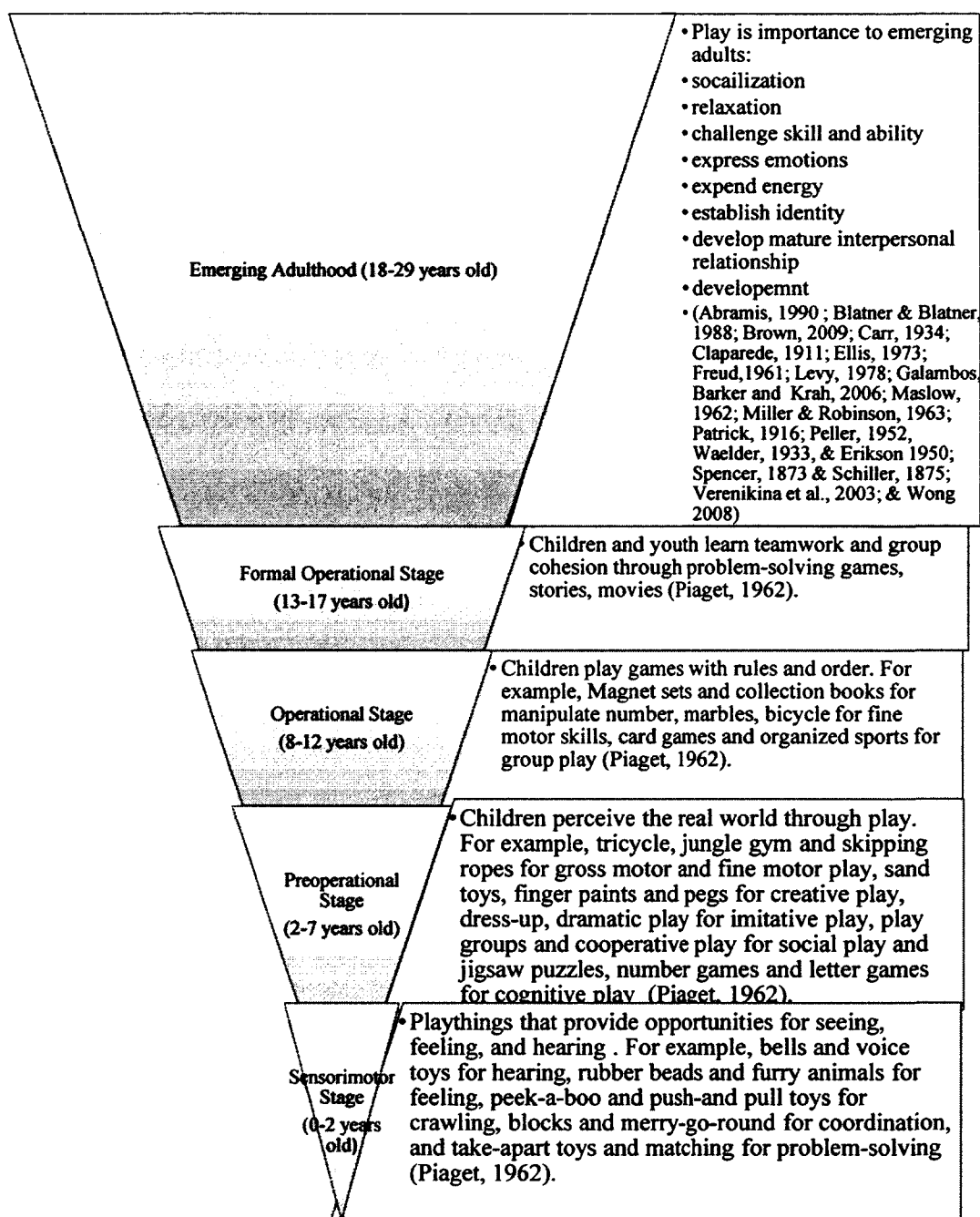|	
Socialization	Emerging adults gain social support, self-esteem and new cognitive connections through play and play provides them with support to make frequent changes during emerging adulthood (Blatner & Blatner, 1988; Brown, 2009; Galambos, Barker, & Krahn 2006; Wong, 2008).
Relaxation	Play satisfies emerging adults' need for relaxation from nervous tension and strain, escape from the pressures and demands of economic and domestic life (Ellis, 1973; Patrick, 1916; Miller & Robinson, 1963).
Challenge skill and ability	Play provides platform to transform their lives to a new and better direction and create possibilities, learn lessons and skills without being directly at risk for emerging adults. It also allows people to experiment with new actions and new challenges (Arnett & Tanner, 2006; Brown, 2009, Csikszetmihayli, 1975).
Express emotion	Play provides a safe place to relieve excess energies, manage their emotions, reduce the likelihood of damage, express great anger, triumph, heroism, and powerful, clear emotions, experience happiness, and reduce the anxiety of real-life interactions for emerging adults (Brown, 2009; Blatner & Blatner, 1988; Carr, 1934; Claparede, 1911; Ellis, 1973; Freud 1961; Verenikina et al., 2003).
Expend energy	Play provides a place for emerging adults to release their left over energy for emerging adults (Patrick, 1916; Spencer, 1873; Schiller, 1875).
Establish identity	Play serves as a safety platform for emerging adults to gain social support and self-esteem and to explore their identity in the area of love and work in the age of identity exploration (Arnett & Tanner, 2006; Miller & Robinson, 1963; Wong, 2008).
Develop mature interpersonal relationship	Play provides a platform for emerging adults to build healthy relationships with people, as well as build up self-image, and try out things without threatening their physical or emotional well-being in play (Brown, 2009; Maslow, 1962; Wong, 2008).
Development	Play provides place to express their emotion, gain a sense of control, and experience self-government for emerging adults (Miller & Robinson, 1963; Verenikina et al., 2003).

Emerging Adulthood (18-29 years old)

- Play is importance to emerging adults:
- socailization
- relaxation
- challenge skill and ability
- express emotions
- expend energy
- establish identity
- develop mature interpersonal relationship
- developemnt
- (Abramis, 1990 ; Blatner & Blatner, 1988; Brown, 2009; Carr, 1934; Claparede, 1911; Ellis, 1973; Freud,1961; Levy, 1978; Galambos, Barker and Krah, 2006; Maslow, 1962; Miller & Robinson, 1963; Patrick, 1916; Peller, 1952, Waelder, 1933, & Erikson 1950; Spencer, 1873 & Schiller, 1875; Verenikina et al., 2003; & Wong 2008)

Formal Operational Stage (13-17 years old)

- Children and youth learn teamwork and group cohesion through problem-solving games, stories, movies (Piaget, 1962).

Operational Stage (8-12 years old)

- Children play games with rules and order. For example, Magnet sets and collection books for manipulate number, marbles, bicycle for fine motor skills, card games and organized sports for group play (Piaget, 1962).

Preoperational Stage (2-7 years old)

- Children perceive the real world through play. For example, tricycle, jungle gym and skipping ropes for gross motor and fine motor play, sand toys, finger paints and pegs for creative play, dress-up, dramatic play for imitative play, play groups and cooperative play for social play and jigsaw puzzles, number games and letter games for cognitive play (Piaget, 1962).

Sensorimotor Stage (0-2 years old)

- Playthings that provide opportunities for seeing, feeling, and hearing . For example, bells and voice toys for hearing, rubber beads and furry animals for feeling, peek-a-boo and push-and pull toys for crawling, blocks and merry-go-round for coordination, and take-apart toys and matching for problem-solving (Piaget, 1962).

Figure 6. Developmental Stages of Play Behavior with Addition of Emerging Adulthood

Adapted from Piaget, J. (1962). *Play, dreams and imitation in childhood* (C. Cattegno & F. M. Hodgsen, Trans). New York, NY: W. W. Norton.

Personal Cultural Orientations

This study demonstrated that personal cultural orientations have significant effects on perceptions of play. Emerging adults who perceived play as intrinsic goal/outcome benefits, intrinsic non-goal/outcome benefits, and relationship non-goal/outcome benefits reported (a) attending to others, fitting in, and living in harmonious interdependence with others (INT); (b) respecting the traditional values of hard work, non-materialism, social consciousness, morality, and respect for one's heritage (TRD); and (c) focusing on their own internal thoughts, feelings, and actions, rather than on the thoughts, feelings, and actions of others (IND). In addition, respondents who perceived play as intrinsic goal/outcome benefits (a) were willing to take risks or make risky decisions (RSK) and (b) accepted social inequality in which socially defined categories of persons according to the characteristics of gender, age, class, and ethnicity are differentially positioned (IEQ). Moreover, respondents who perceived play as intrinsic goal/outcome benefits and relationship goal/outcome benefits focused on the expression of assertiveness, self-confidence, aggression, and ambition (MAS).

Emerging adults who accepted social equality, tolerated ambiguity, and were not willing to take risks spent more days participating in playful activities. Respondents who attended to others, perceived men and women as equal, respected traditional values, and were involved in planning, perseverance, and future orientation spent fewer days participating in playful activities. Moreover, more females than males perceived play as intrinsic goal/outcome benefits. Female emerging adults were (a) more focused on social status, respect, wealth, rights, and privileges (POW), (b) unwilling to take risks (RSK),

and (c) tolerant of ambiguity and uncertain situations (AMB) than were male

respondents. On the other hand, more males than females indicated play's importance (a)

for development and socialization (educational, development, moral development,

creativity and socialization) and (b) to establish identity (establish identity, challenge

skill, interpersonal and role play).

<div align="center">

Comparison of Definitions of Play between Emerging Adults
in U.S., HK, and PRC: Chinese Definitions of Play

</div>

Emerging adults from the U.S., HK and PRC perceived play as (a) intrinsic

goal/outcome benefits, (b) relationship non-goal/outcome benefits, and (c) relationship

goal/outcome benefits. This result is consistent with Cordes and Ibrahim (1996), Frank

(1963), Glynn and Webster (1992), Heintzman et al. (1994), Jensen (1977), Kelly (2000),

Kraus (1998), Miller and Robinson (1963), Nash (1965), and Sapora and Mitchell (1973).

However, respondents from the U.S. significantly differed from the HK and PRC

respondents on intrinsic goal/outcome benefits and relationship non-goal/outcome

benefits, and the mean scores for U.S. respondents were higher than for the HK and PRC

respondents. Respondents from thePRC significantly differ from the HK and U.S.

respondents on relationship goal/outcome benefits, and the mean scores for PRC

respondents was lower than for the HK and U.S. respondents. Table 48 illustrates

Comparison of Definitions of Play between Emerging Adults in the U.S., HK, and PRC.

Figure 7 illustrates that emerging adults from the PRC were significantly different

from the HK and U.S. emerging adults on perceptions of play as (a) intrinsic

goal/outcome benefits, (b) relationship non-goal/outcome benefits, and (c) relationship goal/outcome benefits.

Emerging adults from the U.S., HK, and PRC perceived play's importance (a) for development and socialization, (b) for relaxation, and (c) to establish identity. This result is consistent with Csikszetmihalyi (1975, 1990), Erikson (1950), Groos (1898, 1901), Hall (1906), Peller (1952), Lazarus (1883), Roberts and Sutton-Smith (1962), and Waelder (1933). However, respondents from the U.S. significantly differed from the HK and PRC respondents. The mean scores for the U.S. respondents were higher than for the HK and PRC respondents. Figure 8 illustrates that emerging adults in HK and PRC were significantly different from U.S. emerging adults on play's importance (a) for development and socialization, (b) for relaxation, and (c) to establish identity.

All mean scores for U.S. respondents were higher than for the HK and PRC respondents on perception of play and play's importance. The reason may be that many Western definitions of play have been offered in the literature, and Western play theories have been established for more than 100 years. Emerging adults from the U.S. may have more understanding about play than emerging adults from the HK and PRC. Further research is needed to promote play in Chinese culture and to gain a greater understanding of Chinese definitions of play.

Table 48

Comparison of Definitions of Play between Emerging Adults in the U.S., HK, and PRC

	U.S.	HK	PRC
Perception of Play	1. Intrinsic goal/outcome benefits * - life understanding - creative - learning - expression - intrinsic motivation - enjoyment - self-development - free-time M=46.5 2. Relationship non-goal/outcome benefits * - interpersonal - silliness M=9.95 3. Relationship goal/outcome benefits ** - relationship building - recreation/sport - activity M=17.52	1. Intrinsic goal/outcome benefits * - life understanding - creative - learning - expression - intrinsic motivation - enjoyment - self-development - free-time M=40.7 2. Relationship non-goal/outcome benefits * - interpersonal - silliness M=8.14 3. Relationship goal/outcome benefits ** - relationship building - recreation/sport - activity M=17.36	1. Intrinsic goal/outcome benefits * - life understanding - creative - learning - expression - intrinsic motivation - enjoyment - self-development - free-time M=40.12 2. Relationship non-goal/outcome benefits * - interpersonal - silliness M=7.90 3. Relationship goal/outcome benefits ** - relationship building - recreation/sport - activity M=15.89
Types of Activities	1.Team sports 2.Individual sports 3.Social activities	1.Team sports 2.Social activities 3.Card games	1.Team sports 2.Entertainment 3.Art
Top 3 activities	1.Team sports 2.Individual sports 3.Outdoor activities	1.Team sports 2.Entertainment 3.Art	1.Team sports 2.Art 3.Travel
Importance of Play	1.Development and socialization* - educational - development - moral development - creativity - socialization M=28.93 2.Relaxation* - relaxation - exercise M=12.89 3.Establish identity* - establish identity - interpersonal - role play M=18.12	1.Development and socialization* - educational - development - moral development - creativity - socialization M=26.97 2.Relaxation* - relaxation - exercise M=11.32 3.Establish identity* - establish identity - interpersonal - role play M=16.81	1.Development and socialization* - educational - development - moral development - creativity - socialization M=27.92 2.Relaxation* - relaxation - exercise M=11.10 3.Establish identity* - establish identity - interpersonal - role play M=17.01

* Respondents from U.S. significantly differ from the HK and PRC respondents
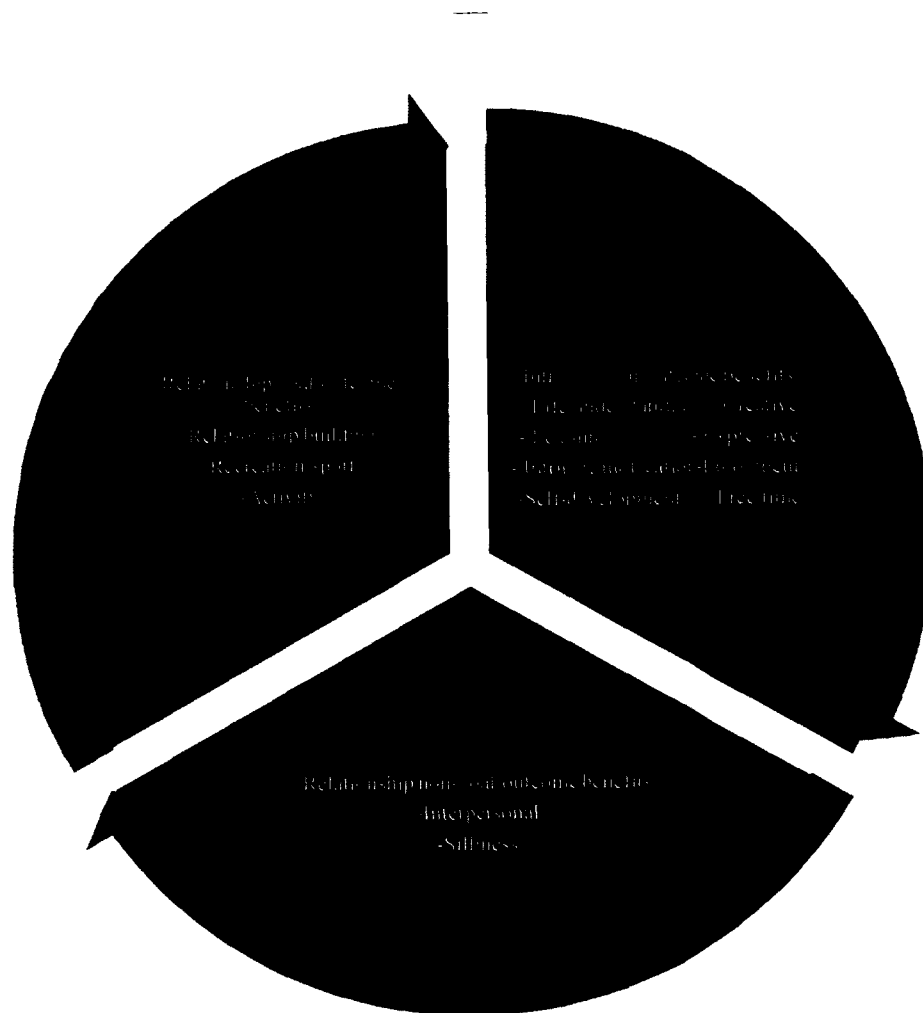** Respondents from PRC significantly differ from the HK and U.S. respondents

Figure 7. Emerging Adults in PRC Differed Significantly from the HK and U.S. Respondents On Perceptions of Play As Intrinsic Goal/Outcome Benefits, Relationship Non-Goal/Outcome Benefits, And Relationship Goal/Outcome benefits.
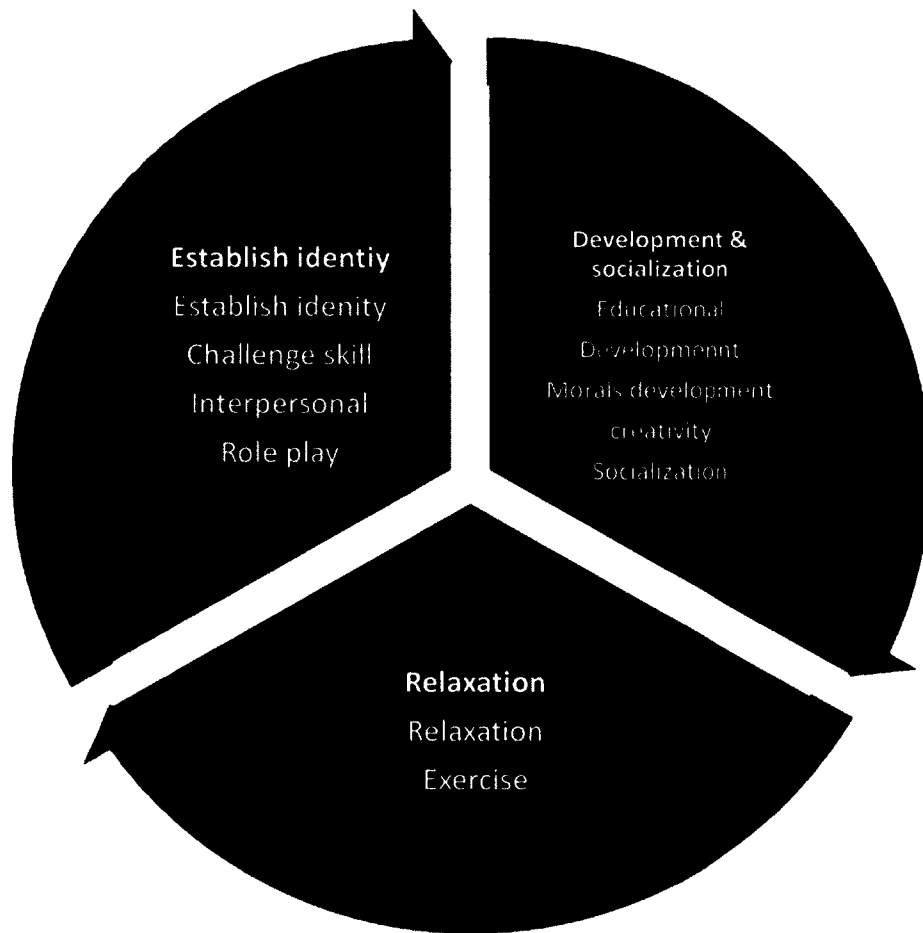
Figure 8. Emerging Adults In HK and PRC Differed Significantly from U.S. Emerging Adults On Play's Importance for Development And Socialization, Relaxation, And To Establish Identity.

Chinese Emerging Adults' Perception of Play Activities and the Top Three Activities They Liked To Do When They Play

      To understand emerging adults' perception of play and the activities they engaged in during play, open-ended questions asked respondents to list the activities they engaged in during play and the top three activities they liked to do when they play. Table 49 indicated that emerging adults in HK perceived team sports, social activities (hang out with friends, socializing, human contract, gathering with friends or family), and card games (such as board games, games, fun, and mahjong) as the activities they engaged in during play. Emerging adults in HK indicated that all activities they engaged in during play involved other people (team sports, social activities, and card games). Emerging adults in the PRC perceived team sports, entertainment (TV, movie, computer, video games), and travel as the activities they engaged in during play. Emerging adults in the PRC did not indicate whether entertainment and travel involved other people; therefore we cannot conclude that the activities emerging adults in PRC engaged in during play did or did not involve other people. Table 50 indicated that team sports was the Number 1 activity that emerging adults in PRC and HK engaged in during play. Emerging adults in HK indicated that entertainment was the Number 2 activity and art was the Number 3 activity they engaged in during play. Emerging adults in the PRC indicated that art was the Number 2 activity and travel was the Number 3 activity they engaged in during play.

Table 49

Activities When Emerging Adults Engaged in Play in HK and PRC

Place	Activity 1	Activity 2	Activity 3
HK	Team sports	Social activities	Card games
PRC	Team sports	Entertainment	Art

Table 50

Top Three Activities Emerging Adults in HK and PRC Liked To Do When They Play

Place	Number 1 activity	Number 2 activity	Number 3 activity
HK	Team sports	Entertainment	Art
PRC	Team sports	Art	Travel

Recommendations for Future Research

Results of the current study extend the body of knowledge of Chinese definitions of play and the benefits of play for emerging adults. Also, these findings demonstrate the differences between Chinese emerging adults and Americans of similar age. The following recommendations should be taken into consideration when interpreting the results of this study.

1. The study sample, drawn from three universities in the U.S., PRC, and HK, is not representative of all emerging adults. These findings should be verified with samples that include emerging adults who are non-college students and those who attend college but have different majors from the respondents in this study.

2. A large sample size would be recommended for future studies involving perception of play, play's importance, and personal cultural orientations. A large sample usually increases the degree to which the sample population approximates the qualities and characteristics of the general population (Leedy, & Ormrod, 2001). This allows the general population to use the data more easily for everyday practice thus incorporating play programs for emerging adults in curriculum.

3. Chinese definitions of play were identified, which highlighted (a) emerging adults' perception of play, (b) Chinese emerging adults' perception of play activities and the top three activities they engaged in during play, and (c) emerging adults' perception of play's importance. These significant findings extend the literature and body of knowledge related to Chinese definitions of play. Additional research is needed to gain more understanding of Chinese definitions of play.

4. The benefits of play for emerging adults were also identified in this study. As individuals grow emotionally, morally, and intellectually, society has come to expect individuals to work more and play less; therefore, they are often made to feel guilty for playing (Brown & Vaughan, 2009). The devaluing of play seems to play a significant role in modern culture. As Vandenberg and Kielhofner (1982) noted, modern Western culture views adult play as juvenile. Play is seen as nonproductive because, from the economic point of view, it is a waste of time. Further research is needed in order to fully understand the benefits of play for emerging adults in different countries.

5. The findings indicated that both perception of play and play's importance have a relationship to one another. To further understand the cause-and-effect relationship between these two areas, path analysis should be applied in future studies to determine the effects of perceptions of play and play's importance.

<p align="center">Conclusions</p>

Play was important for emerging adults in this study for the following reasons: (a) for socialization, (b) for relaxation, (c) to challenge skill and ability, (d) to express emotion, (e) to expend energy, (f) to establish identity, (g) to develop mature interpersonal relationships, and (h) for development.

This study demonstrated that personal cultural orientations have significant effects on perceptions of play and play's importance. Moreover, more females than males perceived play as creativity, expression, and learning. Female emerging adults were: (a) more focused on social status, respect, wealth, rights, and privileges (POW); (b)

unwilling to take risks (RSK); and (c) tolerant of ambiguity and uncertain situations (AMB) than were male respondents.

This research found that emerging adults identified perceptions of play within four categories: (a) intrinsic goal/outcome benefits, (b) relationship non-goal/outcome benefits, and (c) relationship non-goal/outcome benefits. Emerging adults perceived play's importance within four categories: (a) for development and socialization, (b) for relaxation, and (c) to establish identity. Emerging adults in HK perceived team sports, social activities, and card games as the activities they engaged in during play. Emerging adults in HK indicated that all activities they engaged in during play involved other people. In addition, emerging adults in the PRC perceived team sports, entertainment, and travel as the activities they engaged in during play. Furthermore, emerging adults in U.S. perceived team sports, individual sports, and social activities as the activities they engaged in during play. The activities emerging adults in the PRC and U.S. engaged in during play may or may not involve other people. Emerging adults from the U.S. have more understanding about play than emerging adults from HK and the PRC because many Western definitions of play have been offered in research, and Western play theories have been established for more than 100 years. The results of this study have added to the body of knowledge related to Chinese definitions of play. This study identified Chinese perceptions of play, play's importance, perception of play activities, and the top three activities they liked to do when they play. The study suggests the need for additional research to gain a greater understanding of Chinese definitions of play.

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APPENDIX A

COLLEGE STUDENT'S CONCEPT OF PLAY

WITH THEIR CURRENT LIFE STYLE

College Students Concept of Play with Their Current Life Style

The purpose of this survey is to understand how you perceive play, the importance of play, general use of play, personal cultural orientation, and your criteria for reaching adulthood. It will probably take 15 - 20 minutes.

Please define your perception of play by placing a check ☑ in the space near the adjective which you think is more descriptive of your perception.

Play is......								
Not Intrinsic motive	O	O	O	O	O	O	O	Intrinsic motive
Not learning	O	O	O	O	O	O	O	Learning
Not life understanding	O	O	O	O	O	O	O	Life understanding
Not Free time	O	O	O	O	O	O	O	Free time
Not Expressive	O	O	O	O	O	O	O	Expressive
Not Creative	O	O	O	O	O	O	O	Creative
Not Enjoyment	O	O	O	O	O	O	O	Enjoyment
Not interpersonal	O	O	O	O	O	O	O	Interpersonal

1. Base on your perception of play, what type of activities are you currently engaged in when you play?

_____

_____

2.Name the top 3 activities you currently like to do when you play

_____

_____

Please indicate how the following factors are important to you when you engaged in play (Please check ☑ the best choice)

Play is important in my life because:	Extremely Important	Important	Somewhat Important	Neither	Somewhat Unimportant	Unimportant	Extremely Unimportant
Educational (To Learn)	O	O	O	O	O	O	O
Relaxation (To releases tension)	O	O	O	O	O	O	O
Express Emotions (To release emotion and moods)	O	O	O	O	O	O	O
Creativity	O	O	O	O	O	O	O
Role play (To reduce the anxiety of real-life interactions)	O	O	O	O	O	O	O
Establish identity (To learn about themselves)	O	O	O	O	O	O	O
Other:	O	O	O	O	O	O	O

1. In the past 2 weeks, please indicate how often you participated in playful activities (Check (☑) one)

____Everyday   ____Once a week

____Every other day   ____Never

____2 times/week

2. During a typical day, how many hours do you devote to playful activities (Check (☑) one)

____8 hours   ____1-2 hours

____5-7 hours   ____Less than one hour

____3-4 hours   ____None

Indicate your level of agreement with each of the following statements; please ☑ once for each statement

	Strongly Agree	Agree	Somewhat Agree	No opinion	Somewhat	Disagree	Strongly
I would rather depend on myself than others	O	O	O	O	O	O	O
I rely on myself most of the time, rarely on others	O	O	O	O	O	O	O
The well-being of my group members is important for me	O	O	O	O	O	O	O
It is my duty to take care of my family members, whatever it takes	O	O	O	O	O	O	O
I easily conform to the wishes of someone in a higher position than mine.	O	O	O	O	O	O	O
I tend to follow orders without asking any questions.	O	O	O	O	O	O	O
A person's social status reflects his or her place in the society	O	O	O	O	O	O	O
It is difficult to interact with people from different social status than mine	O	O	O	O	O	O	O
I tend to avoid talking to strangers	O	O	O	O	O	O	O
I would not describe myself as a risk-taker	O	O	O	O	O	O	O

Section 4: Personal Cultural Orientations (Scale Items) Indicate your level of agreement with each of the following statements; please ☑ once for each statement	Strongly Agree	Agree	Somewhat Agree	No opinion	Somewhat Disagree	Disagree	Strongly Disagree
I find it difficult to function without clear directions and instructions	O	O	O	O	O	O	O
I tend to get anxious easily when I don't know an outcome	O	O	O	O	O	O	O
Women are generally more caring than men	O	O	O	O	O	O	O
Men are generally more ambitious than women	O	O	O	O	O	O	O
It is ok for men to be emotional sometimes	O	O	O	O	O	O	O
Men can be as caring as women	O	O	O	O	O	O	O
I am proud of my culture	O	O	O	O	O	O	O
I value a strong link to my past	O	O	O	O	O	O	O
I believe in planning for the long term	O	O	O	O	O	O	O
I am willing to give up today's fun for success in the future	O	O	O	O	O	O	O

Please indicate whether you think the following <u>must be achieved</u> before you consider(ed) yourself as an "adult" (Please check ☑ the best choice)

Criteria Necessary for Adulthood?	yes	no
Decide on personal beliefs and values independently of parents or other influences	○	○
Become less self-oriented, develop greater consideration for others	○	○
Settle into a long-term career	○	○
Avoid committing petty crimes like vandalism and shoplifting	○	○
If a man, biologically capable of fathering children	○	○
Reach age twenty-one	○	○
If a man, capable of running a household	○	○

1. I am____Female____ Male (Check (☑) one)

2. I am ____ years old

3. Number of siblings including self: ____ in my family

4. I am currently married (Check (☑) one)
____yes ____ no

5. My father's educational attainment (Check (☑) one)
___high school or less, ___some college,
___ college or more, ___ don't know

6. My mother's educational attainment (Check (☑) one)
___high school or less, ___some college,
___ college or more, ___ don't know

7. I have child/children (Check (☑) one)
____ yes____no

8. Do you think that you have reached adulthood?
(Check (☑) one) ____yes ____ no

9. Do you think you have enough money to spend for playful activities in your leisure time? (Check (☑) one)
____always ____ sometimes____never

10. I am currently a: (Check (☑) one)
___Undergrad Student ____ Graduate Student,

majoring in:_____

11. I am currently have part-time job:
(Check (☑) one) ____yes ____ no

12. Ethnicity (Check (☑) one) that best describes you
____White
____Black or African American
____American Indian or Alaskan Native
____Native Hawaiian or Pacific Islander
____Hispanic or Latino

____Filipino
____Japanese
____Korean
____Vietnamese
____Chinese
____Other (please specify)_____

Thank you for taking the time to fill out this survey!!!

請說明當你玩(Play)的時侯,下列項目對你的重要程度(請在最佳答案內填上☑)

玩(Play)對我生命重要的程度,因為:	非常重要	重要	稍微重要	兩者皆不是	稍微不重要	不重要	非常不重要
教育 (學習)	○	○	○	○	○	○	○
鬆弛 (釋放緊張)	○	○	○	○	○	○	○
表達情緒(釋放情緒及心情)	○	○	○	○	○	○	○
創意	○	○	○	○	○	○	○
角色扮演(減輕在真實世界中人際關係帶來的焦慮)	○	○	○	○	○	○	○
建立身份(了解自己)	○	○	○	○	○	○	○
其他:	○	○	○	○	○	○	○

1. 在過去兩週內,請說明你多久參與玩的活動(playful activities) (以☑表示)

____每天   ____一星期一次

____每隔一天   ____從不

____每星期兩次

2. 在平日裡,你有多少個小時用來參與玩的活動(playful activities) (以☑表示)

____八個小時   ____一至二個小時

____五至七個小時   ____少於一個小時

____三至四個小時   ____沒有

請以 ☑ 表明你對以下每一項陳述同意的程度

	非常同意	同意	稍微同意	無意見	稍微不同意	不同意	非常不同意
我寧願依賴自己過於依賴他人	O	O	O	O	O	O	O
我大部份時候依賴自己,很少依賴他人	O	O	O	O	O	O	O
我群體的福利對我重要	O	O	O	O	O	O	O
照顧家庭成員是我的責任,無論這需要付上什麼代價	O	O	O	O	O	O	O
我很容易服從上級的意願	O	O	O	O	O	O	O
我傾向服從指示而不問理由	O	O	O	O	O	O	O
個人的社會地位反映他/她在社會上的位置	O	O	O	O	O	O	O
與不同社會地位人士互動是困難的	O	O	O	O	O	O	O
我傾向避免與陌生人交談	O	O	O	O	O	O	O
我不會以冒險家來形容自己	O	O	O	O	O	O	O

第四部份:個人文化定位 請以☑表明你對以下每一項陳述同意的程度	非常同意	同意	稍微同意	無意見	稍微不同意	不同意	非常不同意
我發覺沒有清楚的方向及指示是很難運作的	○	○	○	○	○	○	○
當我不知道結果時,我容易傾向焦慮	○	○	○	○	○	○	○
女性通常比男性有愛心	○	○	○	○	○	○	○
男性通常比女性有野心	○	○	○	○	○	○	○
男性有時候情緒化是可以接受的	○	○	○	○	○	○	○
男性可以像女性般有愛心	○	○	○	○	○	○	○
我為我的文化而驕傲	○	○	○	○	○	○	○
我重視我的過去	○	○	○	○	○	○	○
我相信長遠的計劃	○	○	○	○	○	○	○
我願意放棄今天的娛樂去換取明天的成功	○	○	○	○	○	○	○

請說明你考慮自己是成人之前,是否必須達到以下條件 (以☑表示你的最佳答案)

達到成人必需的準則	是	否
獨立決定個人的信念及價值,不被父母或其他人影響	◯	◯
變成較少自我中心,多為他人設想	◯	◯
安頓於長遠的職業	◯	◯
避免觸犯輕微的罪行如破壞和偷竊	◯	◯
假如是男性,生理上有能力生育	◯	◯
年滿21歲	◯	◯
假如是男性,有能力持家	◯	◯

1. 我是____ 女性____ Male 男性(以☑表示)

2. 我今年____歲

3. 兄弟姊妹數目: 我家有____ 兄弟姊妹(不包括自己)

4. 我現在已婚(以☑表示)____是 ____否

5. 我父親的學歷(以☑表示)
____高中或以下, ____學院,
____學院或以上, ____不知道

6. 我母親的學歷(以☑表示)
____高中或以下, ____學院,
____學院或以上, ____不知道

7. 我有孩子(以☑表示))____有 ____沒有

8. 你認為自己已成年 (以☑表示)____是 ____否

9. 我現在是(以☑表示)
____學士學生____研究生, 主修:____

10. 你認為你在休閒時間有足夠的金錢花費在玩的活動? (以☑表示)
____經常____ 有時____ 從不

11. 我現在有兼職工作____ 有____ 無

12. 種族(以☑表示)
____ 中國人
____ 菲律賓人
____ 日本人
____ 韓國人
____ 越南人
____其他亞洲人
____其他(請列明):____

多謝閣下抽出寶貴時間填寫問卷

大学生在目前生活方式下,对玩(Play)概念的研究

此问卷的目的是了解你对玩(Play)的理解,玩(Play)的重要性,玩(Play)的普遍使用,个人文化导向及达到成人的准则,需时 15-20 分钟

请在最贴近的形容词空格内以☑表达你对玩(Play)的观感

玩(Play)是......								
不是内在动机	○	○	○	○	○	○	○	内在动机
不是学习	○	○	○	○	○	○	○	学习
不是生活的理解	○	○	○	○	○	○	○	生活的理解
不是自由时间	○	○	○	○	○	○	○	自由时间
不是表达	○	○	○	○	○	○	○	表达
不是创意	○	○	○	○	○	○	○	创意
不是享受	○	○	○	○	○	○	○	享受
不是人际关系	○	○	○	○	○	○	○	人际关系

1.根据你对玩(Play)的理解,当你玩时,你会参与什么类型的活动?

_____

_____

2. 当你最近玩的时候, 你最喜欢做什么活动? 请列出你最喜欢的首三项

_____

_____

请说明当你玩(Play)的时候,下列项目对你的重要程度(请在最佳答案内填上☑)

玩(Play)对我生命重要的程度,因为:	非常重要	重要	稍微重要	两者皆不是	稍微不重要	不重要	非常不重要
教育 (学习)	○	○	○	○	○	○	○
松弛 (释放紧张)	○	○	○	○	○	○	○
表达情绪(释放情绪及心情)	○	○	○	○	○	○	○
创意	○	○	○	○	○	○	○
角色扮演(减轻在真实世界中人际关系带来的焦虑)	○	○	○	○	○	○	○
建立身份(了解自己)	○	○	○	○	○	○	○
其它:	○	○	○	○	○	○	○

1. 在过去两周内,请说明你多久参与玩的活动 (playful activities) (以☑表示)

____每天   ____一星期一次
____每隔一天   ____从不
____每星期两次

2. 在平日里,你有多少个小时用来参与玩的活动 (playful activities) (以☑表示)

____八个小时   ____一至二个小时
____五至七个小时   ____少于一个小时
____三至四个小时   ____没有

请以 ☑ 表明你对以下每一项陈述同意的程度

	非常同意	同意	稍微同意	无意见	稍微不同意	不同意	非常不同意
我宁愿依赖自己过于依赖他人	○	○	○	○	○	○	○
我大部份时候依赖自己,很少依赖他人	○	○	○	○	○	○	○
我群体的福利对我重要	○	○	○	○	○	○	○
照顾家庭成员是我的责任,无论这需要付上什么代价	○	○	○	○	○	○	○
我很容易服从上级的意愿	○	○	○	○	○	○	○
我倾向服从指示而不问理由	○	○	○	○	○	○	○
个人的社会地位反映他/她在社会上的位置	○	○	○	○	○	○	○
与不同社会地位人士互动是困难的	○	○	○	○	○	○	○
我倾向避免与陌生人交谈	○	○	○	○	○	○	○
我不会以冒险家来形容自己	○	○	○	○	○	○	○

第四部份:个人文化定位 请以☑表明你对以下每一项陈述同意的程度	非常同意	同意	稍微同意	无意见	稍微不同意	不同意	非常不同意
我发觉没有清楚的方向及指示是很难运作的	○	○	○	○	○	○	○
当我不知道结果时,我容易倾向焦虑	○	○	○	○	○	○	○
女性通常比男性有爱心	○	○	○	○	○	○	○
男性通常比女性有野心	○	○	○	○	○	○	○
男性有时候情绪化是可以接受的	○	○	○	○	○	○	○
男性可以像女性般有爱心	○	○	○	○	○	○	○
我为我的文化而骄傲	○	○	○	○	○	○	○
我重视我的过去	○	○	○	○	○	○	○
我相信长远的计划	○	○	○	○	○	○	○
我愿意放弃今天的娱乐去换取明天的成功	○	○	○	○	○	○	○

请说明你考虑自己是成人之前,是否必须达到以下条件 (以 ☑ 表示你的最佳答案)

达到成人必需的准则	是	否
独立决定个人的信念及价值,不被父母或其他人影响	○	○
变成较少自我中心,多为他人设想	○	○
安顿于长远的职业	○	○
避免触犯轻微的罪行 （例如：破坏和偷窃）	○	○
假如是男性,生理上有能力生育	○	○
年满21岁	○	○
假如是男性,有能力持家	○	○

1.我是____ 女性____ Male 男性(以 ☑ 表示)

2.我今年____岁

3. 兄弟姐妹数目:我家有____ 兄弟姐妹(不包括自己)

4.我现在已婚(以 ☑ 表示)____是 ____否

5.我父亲的学历(以 ☑ 表示)
____高中或以下, ____学院,
____学院或以上, ____不知道

6.我母亲的学历(以 ☑ 表示)
____高中或以下, ____学院,
____学院或以上, ____不知道

7. 我有孩子(以 ☑ 表示))____有 ____没有

8. 你认为自己已成年 (以 ☑ 表示)____是 ____否

9. 我现在是(以 ☑ 表示)
____学士学生____研究生,主修:_____

10. 你认为你在休闲时间有足够的金钱花费在玩的活动? (以 ☑ 表示)
____经常____ 有时____ 从不

11. 我现在有兼职工作____ 有____ 无

12. 种族(以 ☑ 表示)
_____中国人
_____菲律宾人
_____日本人
_____韩国人
_____越南人
_____其它亚洲人
_____其它(请列明):_____

多谢阁下抽出宝贵时间填写问卷

APPENDIX B

UNIVERSITY OF NORTHERN IOWA IRB

Office Use Only: Protocol # __10-0254__

University of Northern Iowa
Standard Application for Human Participants Review

Note: Before completing application, investigators must consult guidance at:
http://www.uni.edu/osp/irb Always check website to download current forms.
All items must be completed and the form must be typed or printed electronically. Submit 2 hard copies to the
Human Participants Review Committee, Office of Sponsored Programs, 213 East Bartlett, mail code 0394

Title of proposal:	ATTITUDES AND THE MEANINGS OF PLAY: A CROSS CULTURAL INVESTIGATION AMONG EMERGING ADULTS IN THE PEOPLE'S REPUBLIC OF CHINA, HONG KONG AND UNITED STATES
Name of (PI) Principal Investigator(s):	Winnie, Wing-Sze Wong

PI Status: ☐ Faculty   ☐ Undergraduate Student   ☒ Graduate Student   ☐ Staff   ☐ Non-UNI

Project Type: ☐ Faculty/Staff Research   ☒ Thesis/Dissertation   ☐ Other-specify:

PI Department:	HPELS	PI Phone:	3196105097	PI email:	winnieplay@gmail.com
PI Address or Mail Code:	3128, Alameda Street, Cedar Falls, IA 50613				
Faculty Advisor Mail Code:		Advisor Phone:	3192732840	Advisor Email:	christopher.edginton@uni.edu
Source of Funding:					
Project dates: Beginning	2/2011	Through	12/2011		

All key personnel and Advisor (if applicable) must be listed and must complete IRB training/certification in
Human Participants Protections. Attach a copy of the certificate, if not already on file *in the IRB office.*

Principal Investigator		Certificate Attached ☐	On File ☒
Co-Investigator(s)		Certificate(s) Attached ☐	On File ☐
Faculty Advisor		Certificate Attached ☐	On File ☐
Other Key Personnel:	_____(name)	Certificate Attached ☐	On File ☐
Other Key Personnel:	_____(name)	Certificate Attached ☐	On File ☐

**SIGNATURES: The undersigned acknowledge that: 1. this application represents an accurate and
complete description of the proposed research; 2. the research will be conducted in compliance with the
recommendations of and only after approval has been received the UNI IRB. The PI is responsible for
reporting any adverse events or problems to the IRB, for requesting prior IRB approval for modifications,
and for requesting continuing review and approval.**

Principal Investigator:	Winnie Wing Sze Wong		4/11/2011
	TYPED NAME	SIGNATURE	DATE
Co-Investigator(s):			
	TYPED NAME	SIGNATURE	DATE

Faculty Advisor (required for all student projects):   Christopher R. Edginton   4/11/2011

                                TYPED NAME   SIGNATURE   DATE

Committee Use Only

EXEMPT FROM CONTINUING REVIEW ☐   EXPEDITED APPROVAL ☐   FULL BOARD APPROVAL ☐

REVIEW COMMITTEE SIGNATURE _____ DATE _____

Period of approval: Effective_____ through_____

A. PURPOSE OF RESEARCH.

Explain 1) why this research is important and what the primary purposes are, 2) what question(s) or hypotheses this activity is designed to answer, and 3) whether and how the results will be used or disseminated to others.

1) Research Questions: The primary problem to be investigated in this study is the relationship between perceptions of play and the respondents' cultural orientation (individual or collective). Further, the study will explore the relationships between respondents' perceptions of play and their cultural orientation (individual or collective). In addition, the study will examine the relationships between selected elements such as barriers to and reasons for engaging in play. An exploration of perceptions of play, importance of play, and frequency of play will also be studied to determine whether there are relationships to selected demographic variables such as ethnicity, educational level, gender, age, and domicile. Finally, the study will consider the interactive effects among perceptions of play, and cultural orientation, nationality, and demographic variables.

1. What are the respondents' perceptions of play?
    1a. What are the relationship between respondents' perceptions of play and their cultural orientation?
    1b. What are the differences between respondents' perceptions of play, ethnicity, and number of sibling?
    1c. What are the relationship between respondents' perceptions of play and their perception of importance for play?
    1d. What are the interaction between respondents' perceptions of play, importance for play, and respondents' cultural orientation, and ethnicity?
2. What are the respondents' perceptions of importance for play?
    2a. What are the differences between respondents' perceptions of importance for play, ethnicity, and cultural orientation?
    2b. What are the relationship between respondents' perception of importance for play and their frequency of play?
3. What are the relationship between respondents' frequency of play, ethnicity and their cultural orientation?
4. What are the respondents' criteria for reaching adulthood?
    4a. What are differences between the respondents' criteria for reaching adulthood and ethnicity?
    4b. What are the relationship between respondents' criteria for reaching adulthood and their father's educational attainment, marital status, and parenthood status?

Hypotheses
The following hypotheses are stated in null forms, for the purpose of statistical analyses
1a.There is no statistical significant difference between the relationship of respondents' perceptions of play and their cultural orientation;
1b.There is no statistical significant difference between respondents' perceptions of play, ethnicity, and number of sibling;
1c.There is no statistical significant difference between respondents' perceptions of play and their perception of importance for play;
2a.There is no statistical significant difference between respondents' perceptions of importance for play, ethnicity, and cultural orientation;
2b. There is no statistical significant difference between the relationship of respondents' perception of importance for play and their frequency of play;
3. There is no statistical significant difference between respondents' frequency of play, ethnicity and their cultural orientation;
4a. There is no statistical significant difference between the respondents' criteria for reaching adulthood and ethnicity;

4b. There is no statistical significant difference between respondents' criteria for reaching adulthood and their father's educational attainment, marital status, and parenthood status.

1) NA

B. RESEARCH PROCEDURES INVOLVED.

Provide a step-by-step description of all study procedures (e.g., where and how these procedures will take place, presentation of materials, description of activity required, topic of questionnaire or interview). Provide this information for each phase of the study (pilot, screening, intervention and follow-up). Attach questionnaires, interview questions/topic areas, scales, and/or examples of materials to be presented to participants.

Participants will be recruited by cooperating academic staff of Zhejiang University, the Chinese University of Hong Kong, and the University of Northern Iowa. Cooperating academic staff will explain the purpose of the study and highlight the instructions for completing the questionnaire before distributing the informed consent and questionnaire to prospective participants. The informed consent states the purpose of the study, indicates that participation is voluntary, and gives assurance that confidentiality of the data will be maintained. In addition, staff will give assurance that participation will have no impact on students' grades and will not affect their status at Zhejiang University, Hong Kong University Space in Hong Kong, the Chinese University of Hong Kong, and the University of Northern Iowa.

Participants can choose not to be involved in the study at any time. Students who choose not to participate will return the blank questionnaire to the cooperating academic staff and will be assured that there will be no negative impact on their grade even though they are not responding to the questionnaire. All participants will be instructed to place the informed consent documents in a labeled box. Then, the cooperating academic staff will distribute the questionnaires to those students who agree to serve as research participants in the study.

C. DECEPTION.

If any deception or withholding of complete information is required for this activity: a) explain why this is necessary and b) explain if, how, when, and by whom participants will be debriefed. Attach debriefing script.

D. PARTICIPANTS.

1. Approximately how many participants will you need to complete this study?

   Number 294   Age Range(s) 18-29

2. What characteristics (inclusion criteria) must participants have to be in this study? (Answer for each participant group, if different.)

   For this study, the subjects are emerging adults from The People's Republic of China, Hong Kong, and United States of America. The People's Republic of China and United States of America were selected because of their diversity and importance to the world (Chiu, Jao, & Wu, 1987). Hong Kong was selected because it is a combination of both western and eastern values. Because countries represent substantially different backgrounds, based on their personal cultural orientation, this study will be an interesting mix of Eastern and Western cultures, individualism and collectivism.

   This cross-cultural comparative study investigates three comparable subject groups: American emerging adults majoring in physical education, recreation and leisure studies at the University of Northern Iowa in the United States, Chinese emerging adults majoring in physical education and leisure studies at Zhejiang University in the PRC, and Chinese emerging adults majoring leisure studies and recreation management at the Chinese University of Hong Kong in Hong Kong.

The participants are all emerging adults who are enroll in a college leisure/ recreation/ physical education course. The rationale behind the selection of these three groups is that these three groups represented the college students in American culture (American college students), Chinese culture (Chinese college students) and multi-culture (college students in Hong Kong). Their shared educational experiences would serve as the basis for comparison of patterns of play in different contexts. The author chose these countries as they represent significant differences in the national cultural dimensions (Hofstede 2001).

Following table further explain the detail of study subjects:

Zhejiang University in People Republic of China (PRC)	The Chinese University of Hong Kong in Hong Kong	University of Northern Iowa in United States
	24 leisure high diploma	
50 PE undergraduate	24 leisure undergraduate	50 leisure undergraduate 50 PE undergraduate
20 leisure graduate		20 leisure graduate 20 PE graduate
70	48	140

3. Describe how you will recruit your participants and who will be directly involved in the recruitment. Key personnel directly responsible for recruitment and collection of data must complete human participant protection training. Attach all recruiting advertisements, flyers, contact letters, telephone contact protocols, web site template, PSPM description, etc. that you will use to recruit participants. If you plan to contact them verbally, in person or over the telephone, you must provide a script of what will be said.

Note: Recruitment materials, whether written or oral, should include at least: a) purpose of the research; b) general description of what the research will entail; and c) your contact information if individuals are interested in participating in the research.

Study subjects will be recruiting from 1) undergraduate students majoring in physical education at Zhejiang University in PRC; 2) graduate students majoring in leisure studies at Zhejiang University in PRC; 3) associate degree students majoring in leisure and tourism management at City University of Hong Kong in Hong Kong, 4) undergraduate students majoring in leisure studies at Hong Kong University Space in Hong Kong; 5) undergraduate students majoring in physical education at University of Northern Iowa in United States; 6) undergraduate students majoring in leisure studies at University of Northern Iowa in United States; 7) graduate students majoring in physical education at University of Northern Iowa in United States; 8) graduate students majoring in leisure studies at University of Northern Iowa in United States.

Dr.Lijun Zhou, Associate professor at the department of Physical Education, Zhejiang University in PRC, Dr. Billy Ho, program leader of leisure and tourism management from City University of Hong Kong and Mr. Kenny Yuen, instructor of Hong Kong University Space in Hong Kong will co-ordinate the survey. Virginia Chan will be the person conduct the survey in Hong Kong. They will allocate the survey to the students and they will use the introductory script (Chinese version) and make sure the students understand the purpose of this study. Students will be invited to complete a written consent with an instruction for completion, which clearly indicates all information collected will be confidential and participants have the right to withdraw from the study any time.

Principal Investigator (PI) will co-ordinate the survey at University of Northern Iowa in United States. PI will allocate the survey to the students and she will use the introductory script and make sure the students understand the purpose of this study. Students will be invited to complete a written consent with an instruction for completion, which clearly indicates all information collected will be confidential and participants have the right to withdraw from the study any time.

4. How will you protect participants' privacy during recruitment? Note: This question does not pertain to the confidentiality of the data; rather it relates to protecting privacy in the recruitment process when recruitment may involve risks to potential participants. Individual and indirect methods of contacting potential participants assist in protecting privacy.

All personal information collected in this study is confidential .There is no request for putting their name on any instruments.

5. Explain what steps you will take during the recruitment process to minimize potential undue influence, coercion, or the appearance of coercion. What is your relationship to the potential participants? If participants are employees, students, clients, or patients of the PI or any key personnel, please describe how undue influence or coercion will be mitigated.

Participation will be completely voluntary. Participants are free to withdraw from participation at any time, and by doing so, participants will not be penalized. Everyone will be given a survey and a copy of informed consent to protect participants from feeling social pressure to complete the survey. Participants will be asked to return their surveys in a large manila envelope. Those who do not wish to complete the survey may return their forms without the research collaborators or other participants knowing who participated.

PI has no relationship with potential participants. Information obtained during this study which could identify the participants will be kept confidential. Only the researcher and major advisors can assess the information collected. The summarized findings, with no identifying information, will be published in the completed thesis. All original questionnaires will be destroyed after the closure of the study.

6. Will you give compensation or reimbursement to participants in the form of gifts, payments, services without charge, or course credit? If course credit is provided, please provide a listing of the research alternatives and the amount of credit given for participation and alternatives.

☒ No ☐ Yes If yes, explain:

7. Where will the study procedures be carried out? If any procedures occur off-campus, who is involved in conducting that research? Attach copies of IRB approvals or letters of cooperation from non-UNI research sites if procedures will be carried out elsewhere. (Letters of cooperation are required from all schools where data collection will take place, including Price Lab School.)

☐ On campus   ☐ Off campus   ☒ Both on- and off-campus

8. Do offsite research collaborators involved in participant recruitment or data collection have human participants protections training? Note: Individuals serving as a "conduit" for the researcher (i.e., reading a recruitment script developed by the researcher and not in a supervisory or evaluative role with participants) are not considered key personnel and human participants training is not required.

☐ No   ☒ Yes   ☐ Don't know   ☐ Not applicable

E. RISKS AND BENEFITS.

1. All research carries some social, economic, psychological, or physical risk. Describe the nature and degree of risk of possible injury, stress, discomfort, invasion of privacy, and other side effects from all study procedures, activities, and devices (standard and experimental), interviews and questionnaires. Include psychosocial, emotional and political risks as well as physical risks.

There are no foreseeable risks to participation beyond those encountered in day-to-day life.

2. Explain what steps you will take to minimize risks of harm and to protect participants' confidentiality, rights and welfare. (If you will include protected groups of participants which include minors, fetuses in utero, prisoners, pregnant women, or cognitively impaired or economically or educationally disadvantaged participants, please identify the group(s) and answer this question for each group.)

They have the right to withdraw from the study anytime, and the information collected will be installed in a secure server with no personally identifying information.

3. Study procedures often have the potential to lead to the unintended discovery of a participant's personal medical, psychological, and/or psycho-social conditions that could be considered to be a risk for that participant. Examples might include disease, genetic predispositions, suicidal behavior, substance use difficulties, interpersonal problems, legal problems or other private information. How will you handle such discoveries in a sensitive way if they occur?

Such discoveries are not expected since the questionnaire does not request sensitive personal data. If for some reason an individual provides the PI with sensitive information, the PI will keep the information confidential.

4. Describe the anticipated benefits of this research for individual participants. If none, state "None."

None

5. Describe the anticipated benefits of this research for the field or society, and explain how the benefits outweigh the risks.

The purpose of this study is to examine play among emerging adults in the PRC, Hong Kong, and the United States. Most of the studies about play have been developed in Western cultures and less attention has been paid to adopting a more comprehensive perspective in the field of Chinese play research. This comparative study provides an opportunity to understand how individualism and collectivism factors affect emerging adults' attitudes toward play in Western and Chinese cultures. It will open the door for understanding the study of adult play in the Chinese context. The reason for conducting comparative research is to study the effects of cultural factors on play behavior.

F. CONFIDENTIALITY OF RESEARCH DATA.

1. Will you record any participant identifiers? (Direct personal identifiers include information such as name, address, telephone number, social security number, identification number, medical record number, license number, photographs, biometric information, etc. Indirect personal identifiers include information such as race, gender, age, zip code, IP address, major, etc.)

☒ No ☐ Yes If yes, explain a) why recording identifiers is necessary and b) what methods you will use to maintain confidentiality of the data (e.g., separating the identifiers from the other data; assigning a code number to each participant to which only the research team has access; encrypting the data files; use of passwords and firewalls, and/or destroying tapes after transcription is complete and using pseudonyms.) Also explain, c) who will have access to the research data other than members of the research team, (e.g., sponsors, advisers, government agencies) and d) how long you intend to keep the data.

2. After data collection is complete, will you retain a link between study code numbers and direct identifiers?

☒ No ☐ Yes   If yes, explain why this is necessary and for how long you will keep this link.

3. Do you anticipate using any data (information, interview data, etc.) from this study for other studies in the future?

☐ No ☒ Yes If yes, explain and **include this information in the consent form.**

G. ADDITIONAL INFORMATION.

1. Will you access participants' medical, academic, or other personal <u>records</u> for screening purposes or data collection during this study? Note: A record means any information recorded in any way, including handwritten, print, computer media, video or audio tape, film, photographs, microfilm, or microfiche that is directly related to a participant.

☒ No ☐ Yes. If yes, specify types of records, what information you will take from the records and how you will use them. **Permission for such access must be included in the consent form.**

2. Will you make sound or video recordings or photographs of study participants?

☒ No ☐ Yes.   If yes, explain what type of recordings you will make, how long you will keep them, and if anyone other than the members of the research team will be able to see them. **A statement regarding the utilization of photographs or recordings must be included in the consent information.**

H. CONSENT FORMS/PROCESS (Check all that apply.)

☒ **Written Consent** - <u>Attach</u> a copy of all consent and assent forms.

☐ **Oral Consent** - Provide a) <u>justification</u> for not obtaining written consent, and b) a <u>script</u> for seeking oral consent and/or assent.

☐ **Elements of Consent Provided via Letter or Electronic Display** – Provide a) <u>justification</u> for not obtaining written consent, and b) the <u>text</u> for the letter of consent or the electronic display.)

☐ **Waiver of Consent** Provide a written justification of waiver of consent process. Note that waiver of consent is extremely rare and would only be granted if the consent process itself posed a greater risk to participants than did participation in the research.

APPENDIX C

CONSENT FORM

UNIVERSITY OF NORTHERN IOWA
HUMAN PARTICIPANTS REVIEW
INFORMED CONSENT

Project Title: ATTITUDES AND THE MEANINGS OF PLAY: A CROSS CULTURAL INVESTIGATION AMONG EMERGING ADULTS IN THE PEOPLE'S REPUBLIC OF CHINA, HONG KONG AND UNITED STATES

Name of Investigator: Winnie, Wing-Sze Wong

Invitation to Participate: You are invited to participate in a research project conducted by Winnie, Wing-Sze Wong, and a doctoral student at the University of Northern Iowa. The following information is provided to help you made an informed decision about whether or not to participate. The first page of the survey describes the project and your rights.

Nature and Purpose: The purpose of this study is to examine play among emerging adults in the PRC, Hong Kong, and the United States.

Explanation of Procedures: A self-reporting questionnaire will be distributed for participants to answer and return at the beginning of this class. It will probably take 15 - 20 minutes. Participation is completely voluntary. Participants need to complete a questionnaire with five different sections, it include: (a) Perceptions of play, (b) attitudes toward play, (c) general use of play, (d) personal cultural orientation, (e) criteria for the transition to adulthood, and (f) a researcher-designed demographic questions.

Discomfort and Risks: There are no foreseeable risks to you beyond those encountered in day-to-day life.

Benefits and Compensation: You will receive no direct benefits or compensation for participation in the research.

Confidentiality: We will not be asking for your name. Information obtained during this study which could identify you will be kept confidential. Only the researcher and major advisors can assess the information collected. The summarized findings, with no identifying information, will be published in the completed thesis. All original questionnaires will be destroyed after the closure of the study. Do not put your name on the paper and when complete, place the survey, complete or incomplete, in one of the boxes located near the room exits.

Right to Refuse or Withdraw: Participation will be completely voluntary and you will not receive additional credit for participating in the research project. You can decline to answer any questions that you do not feel comfortable answering. You are free to withdraw from participation at any time, and by doing so, you will not be penalized and your grades will not be negatively affected if you choose not to participate.

Questions: If you have questions about the study or desire information in the future regarding your participation or the study generally, welcome to contact Winnie Wing-Sze Wong at 319-610-5097 or via email: winnieplay@gmail.com, the project investigator's faculty advisor Dr. Christopher R. Edginton at the School of HPELS, University of Northern Iowa christopher.edginton@uni.edu You can also contact the office of the Human Participants Coordinator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

Agreement:

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this study. By completing the attached survey I am agreeing to participate in this research and I acknowledge that I am 18 years of age or older.

Please do not include your name anywhere on the survey or this document.

美國北愛爾華大學
同意書

計劃題目：
玩的態度及含義：在中國人民共和國，香港及美國新興成人的跨文化考察

研究員姓名：
Winnie Wing-Sze Wong 王詠詩

邀請參與者：
Winnie Wing-Sze Wong,王詠詩是美國北愛爾華大學休閒，青年及人文服務學系的博士研究生，邀請
閣下參與此研究計劃。以下資料將會為閣下提供資料，讓閣下決定參與與否。

性質及目的：
此研究的目的是調查在中華人民共和國，香港及美國新興成年人對玩(Play)的理解。

程序解釋：
參與者將獲分派自我描述問卷，並於課堂前回答及交回，需時 15 至 20 分鐘。參與為自願性，參與
者有權隨時退出而將不會受到任何處分。參與者需要完成問卷調查內的 6 個部份，包括：(1) 玩的理
解，(2) 對玩的態度，(3) 遊戲的普遍使用， (4) 個人文化定位，(5) 達至成人的準則，及 (6) 人口統
計資料。

不適及風險：
研究沒有為參與者遇到的日常生活帶來可預見的風險。

利益及補償：
參與者將不會因為參與此研究而得到額外的利益或補償。

保密：
研究的所得資料將會保密，只有研究員及其主要顧問可以獲取資料。調查結果撮要沒有鑑別資料，
研究將會刊登為博士論文及日後有機會在會議中發佈。所有原本問卷將會在研究結束後銷毀。

拒絕及退出權利：
參與者的參與是完全自願性，將不會因為參與此研究而得到額外的利益或補償，參與者可隨時退出
而將不會受到任何處分。

查詢：
參加者如有任何有關研究的查詢，有關參與或研究的資料要求，歡迎致電 319-610-5097 或電郵
winnieplay@gmail.com 與 Winnie Wong 王詠詩，美國北愛爾華大學 University of Northern Iowa 休閒
青年及人文服務學系 Dr. Chris Edginton 聯絡。 活動調查員學系顧問 christopher.edginton@uni.edu 你
亦可致電美國北愛爾華大學 University of Northern Iowa 人類參與者協調員 Human Participants
Coordinator 319-273-6148，解答有關研究參加者的權利及參加者的檢閱過程。

協議：
我完全明白我參與這個項目的性質以及可能產生的風險。 本人同意參與這項研究。 透過填寫所附的
調查，我是 18 歲或以上並同意參與本研究。

請不要在本文件任何地方包含你的名字。

美国北爱尔华大学
同意书

计划题目:
玩的态度及含义: 在中国人民共和国，香港及美国新兴成人的跨文化考察

研究员姓名:
Winnie Wing-Sze Wong 王咏诗

邀请参与者:
Winnie Wing-Sze Wong,王咏诗是美国北爱尔华大学休闲，青年及人文服务学系的博士研究生，邀请阁下参与此研究计划。以下资料将会为阁下提供资料，让阁下决定参与与否。

性质及目的:
此研究的目的是调查在中华人民共和国，香港及美国新兴成年人对玩(Play)的理解。

程序解释:
参与者将获分派自我描述问卷，并于课堂前回答及交回，需时 15 至 20 分钟。参与为自愿性，参与者有权随时退出而将不会受到任何处分。参与者需要完成问卷调查内的 6 个部份，包括:(1) 玩的理解, (2) 对玩的态度，(3) 游戏的普遍使用， (4) 个人文化定位，(5) 达至成人的准则，及 (6) 人口统计资料。

不适及风险:
研究没有为参与者遇到的日常生活带来可预见的风险。

利益及补偿:
参与者将不会因为参与此研究而得到额外的利益或补偿。

保密:
研究的所得数据将会保密，只有研究员及其主要顾问可以获取数据。调查结果撮要没有鉴别资料，研究将会刊登为博士论文及日后有机会在会议中发布。所有原本问卷将会在研究结束后销毁。

拒绝及退出权利:
参与者的参与是完全自愿性，将不会因为参与此研究而得到额外的利益或补偿，参与者可随时退出而将不会受到任何处分。

查询:
参加者如有任何有关研究的查询，有关参与或研究的资料要求，欢迎致电 319-610-5097 或电邮 winnieplay@gmail.com 与 Winnie Wong 王咏诗，美国北爱尔华大学 University of Northern Iowa 休闲青年及人文服务学系 Dr. Chris Edginton 联络。 活动调查员学系顾问 christopher.edginton@uni.edu 你亦可致电美国北爱尔华大学 University of Northern Iowa 人类参与者协调员 Human Participants Coordinator 319-273-6148，解答有关研究参加者的权利及参加者的检阅过程。

协议:
我完全明白我参与这个项目的性质以及可能产生的风险。本人同意参与这项研究。透过填写所附的调查，我是 18 岁或以上并同意参与本研究。

请不要在本文件任何地方包含你的名字。

APPENDIX D

INTRODUCTORY SCRIPT

Introductory script

Good morning / afternoon everyone. I am a doctoral student of the School of Health, Physical Education, and Leisure Service at University of Northern Iowa. I am going to study the thesis about the meaning and perceived importance of play and the title is "ATTITUDES AND THE MEANINGS OF PLAY: A CROSS CULTURAL INVESTIGATION AMONG EMERGING ADULTS IN PEOPLE'S REPUBLIC OF CHINA, HONG KONG AND UNITED STATES". The purpose of this study is to examine play among emerging adults in the PRC, Hong Kong, and the United States.

There are no foreseeable risks to participation beyond those encountered in day-to-day life. You will receive no direct benefits or compensation for participation in the research. Information obtained during this study which could identify the participants will be kept confidential. Winnie Wong and major advisors can assess the information only. The summarized findings, with no identifying information, will be publishing in the completed dissertation and it might present at conference in the future. All original survey will be destroyed after the closure of the study.

Your participation is completely voluntary. You can decline to answer any questions that you do not feel comfortable answering You are free to withdraw from participation at any time, and by doing so, you will not be penalized. The survey is anonymous and completely voluntary. I will not be asking for your name. Do not put your name on the paper and when complete, place the survey, complete or incomplete, in one of the boxes located near the room exits. The first page of the survey describes the project and their rights.

If you participate in this study, you will receive a package of survey including a written consent form. You need to complete a survey with six different sections: (a) perceptions of play, (b) attitudes toward play, (c) general use of play, (d) personal cultural orientation, (e) criteria for reaching adulthood, and (f) demographic questions. The survey requires about 15 to 20 minutes completing. It will be great if you can complete the questionnaire before you leave the classroom.

Thank you for your attention!

介紹稿

　　各位，你好。 Winnie 王詠詩是美國北愛爾華大學休閒，青年及人文服務學系的博士研究生。她的研究是有關對玩(Play)的理解及玩(Play)的重要性，題目為"玩的態度及含義: 在中國人民共和國，香港及美國新興成人的跨文化考察"。此研究的目的是調查在中華人民共和國，香港及美國新興成年人對玩(Play)的理解。

　　研究將不會為參與者遇到的日常生活帶來可預見的風險，你將不會因為參與此研究而得到額外的利益或補償。研究的所得資料將會絕對保密，只有winnie wong 及其主要顧問可以獲取資料。調查結果撮要沒有資料鑑別，研究將會刊登為博士論文及日後有機會在會議中發佈。所有原本問卷將會在研究結束後銷毀。為確保保密守則，請不要寫下你的名字。

　　你的參與是完全自願性，你可隨時退出而將不會受到任何處分。假若你參與此研究，你將會收到一份問卷包，包括此同意表格。你將會完成 6 個部份，(1) 玩的理解，(2) 對玩的態度，(3) 遊戲的普遍使用， (4) 個人文化定位，(5) 達至成人的準則，及 (6) 人口統計資料。調查大約需要 15 至 20 分鐘完成，請你於離開課室前完成此問卷。

　　謝謝!