IMAGINATION IN PHYSICAL EDUCATION: A COMPARATIVE STUDY OF YOUTH

IDENTITY AND BODY-SCHEMA IN ELEMENTARY SCHOOL STUDENTS

by

SHAN-HUI HSU

(Under the Direction of Jepkorir Rose Chepyator-Thomson)

ABSTRACT

Home-education, school-education and recent technology revolution are intertwined in shaping children's identity in the context of body movement and body-schema. Moreover, the notion of *imagination* in physical education emphasizes one's "body image" and "body schema," and is represented in a nature of object (i.e. body movement) and fantasized as the corporeal postural model of the body in one's Utopian visions instead of reality action. As Sepper (1996) points out, "[i]magination by its nature has as object that is not really 'there,' and in dreams and hallucinations, it takes appearances for reality" (p. 1). The imaginational context of body movement, as a social phenomenon, varies from culture to culture, from traditional to modern/postmodern society, from a local village to a global world, and from actual to virtual reality. The purpose of study was to investigate how young children, specifically in third/fourth grade children, from different ethnic groups and cultural environments construct and present their body-schema in contemporary physical education classroom. Four major ethnic populations were focused upon: Caucasian, African-American, Hispanic-American, and Asian-American. Twenty-two third and fourth graders (8 males and 14 females) from Yaya Elementary School, Georgia, the United States and Cathay Elementary School, Taipei, Taiwan participated in the

study. The methods of data collection included: 1) informal and formal interviews; 2) non-participated observation; and 3) document analysis. Data were analyzed by constant comparative method to achieve a better understanding of children's body-schema construction according to their various family and cultural backgrounds so as to increase school teacher's awareness of their different body movements and to help develop culturally responsive educational curriculum in elementary physical education. Four major themes were revealed in the study: a) father-image/mother-image and sibling-image/PE teacher-image; b) gender and sports; c) technology, body-image and the imaginary; and d) mapping cultural images. Results indicated children's imagination in body-schema/body-image was found to be largely governed by both cultural and social elements. Consequently, youth identity formation has been transformed in a multicultural/global environment where social and cultural conditions had been drastically changed.

INDEX WORDS: imagination, body movement, globalization, multicultural education, elementary school, physical education, hybridization, and technology, youth identity, body-image/body-schema

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SHAN-HUI HSU

Taipei Physical Education College, Taiwan, 1998

M.Ed., Eastern Washington University, 1999

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SHAN-HUI HSU

Major Professor:	Jepkorir Rose Chepyator-Thomson
Committee:	Bryan A. McCullick Janette R. Hill

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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CHAPTER I

INTRODUCTION

It is the creative image, vital and burgeoning, that we see before us in the work of artists, and the new reality that takes shape is not the inhuman world of the machine but the passionate world of the imagination.

-- Herbert Read (Eisner, 1979, p 34)

What is Imagination?

Imagination has been examined and theorized from different perspectives in various disciplines. *Webster's Ninth New Collegiate Dictionary* (1987) defines imagination as "creative power;" "the act or power of forming mental image of something not present to the senses or never before wholly perceived in reality; creative ability; ability to confront and deal with a problem: resourcefulness; the thinking or active mind: interest; a creation of the mind, especially: an idealized or poetic creation; fanciful or empty assumption" (p. 600). Classical philosopher, Locke, conceived imagination as the "power of the mind" refers to "simple *Ideas*… [that] exist in several combinations united together" (1690/1975, p. 164). In terms of etymology, the word "imagination," according to Jagla (1994), is "derived from the Latin word *imago*, which means an image or representation. Usually when using the verb *to imagine,* we are alluding to this root meaning of invoking an image—visualizing. Correspondingly the noun *imagination* often denotes conception or visualization of something" (pp. 27-28).

The idea of imagination has been applied to education in contemporary society with "imagination" being closely associated with the idea of "creativity." Making a exemplary study

of "playing with ideas," Barell (1980) argued that "it reflects the basic relationship between science and imagination, and more important, between imagination and all human ways of knowing and doing" (p. 3). "Playing with ideas," as Jagla argued, is "at the heart of the creative process" (1994, p. 29); it is also an exercise of visualization in mind.

Then what is body image/body schema in relation to imagination? Campbell (1995) proposed body image/body schema as "one's body that mediates perception and action" (p. 33). Similarly, Harrison, Lee and Belcher (1999) define the term *self-schemata* as "perceptions about oneself stemming from prior experiences" (p. 288). Moreover, body image, as Robertson (1974) argued, "is developed both physically and psychologically." Central to the development of body image are "experience, movement, perception and cognition" (p. 1). Apparently, the imagination of body-image/body-schema is closely related to the mediation between perception and action, whose development is affected by physical and psychological elements.

<p align="center">*Imagination in Physical Education*</p>

The notion of *imagination* in physical education emphasizes one's "body image" and "body schema," and is represented in a nature of object (i.e. body movement) and fantasized as the corporeal postural model of the body in one's Utopian visions instead of reality action. As Sepper (1996) points out, "[i]magination by its nature has as object that is not really 'there,' and in dreams and hallucinations, it takes appearances for reality" (p. 1). The imaginational context of body movement, as a social phenomenon, varies from culture to culture, from traditional to modern/postmodern society, from a local village to a global world, and from actual to virtual reality. In the context of school education, and in relation to one's cultural background (primarily family) and society, Cole (1996) suggests a frame of a "basic mediational triangle"—culture, memory, and body—that includes various social phenomena, and results in diverse forms of

learning with cultural mediation constantly changing. In the context of children, their body image/body schema, which is built on imagination in body movement, parallel diverse social phenomena that correspond to contemporary culture.

From a global perspective, *imagination* in body movement is further considered as an embodiment of utopian visions which, as Spencer (1997) expressed, "represented an ideal state of affairs for human flourishing" (¶ 2). Such utopian visions cross not only "time" but also "place." Nederveen Pieterse (2004), for example, saw "the human body as a site of global human integrations" (p. 26) and argued that "[v]isions of common humanity have been evoked in the shift from tribal to university religions" (p. 27). Further, Nederveen Pieterse (2004) claimed that under a global revolution, *imagination* in body movement has been illustrated as a contextual historical process, an uneven vision, and hybridization.

And yet, by the theory of "basic mediational triangle," Cole argued that "culture," "memory" and "body" are non-interchangeable cycle (sequence) respectively. In other words, these two paradoxical ideas may conceal the asymmetry visions, exile/mixture versus sequence/feudality. However, the asymmetry visions, in some respects, may be tied in with one another. To combine the two perspectives, one therefore may claim that *imagination* in body movement, especially in physical education, presents the utopian vision of self that fluctuates across culture, education, religion and technology, as well as, family, school, community, society and cyberspace contexts.

Statement of the Problem

Inspired by Cole's triangle theory and Nederveen Pieterse's global perspective, researchers have not only focused on the relationship between subject and environment from cultural, social, psychological and body perspectives, but they have also emphasized the

connection between global and local society. However, issues concerning traditional imagination in children's movement construction based on different ethnicity in a global society were rarely considered. As Nelson (2002) pointed out, "[c]hildren of immigrants or those from non-Western cultures are not immune to image dissatisfaction because they too are exposed to a different and sometimes conflicting set of sociocultural norms and ideals" (p. 4). Jackson's (2002) deconstruction of cultural messages of body image reveals that "physical attractiveness is internalized and serve as a personal ideal" (p. 20). She considered body images of these kind to serve as "self-evaluations of (and satisfaction with) one's own physical appearance" (2002, p. 20). Given that the task of "self-evaluation" varies cross-culturally, different ethnicities and cultures should be studied as children strive to assimilate all differences in their traditional body imagination.

Nelson (2002) informs that, "[s]ensitivity to body appearance, common among adolescents, is heightened for international students by cultural conflicts between Western values and those of their country of origin" (p. 5). Needless to say, body imagination among adolescents is significantly influenced by cultural conflicts because of maturity. These cultural conflicts among adolescents may be exacerbated by their cultural backgrounds, which are marked by different ethnicities. Similar problems may be observed in the case of children's body imagination. Smolak (2002) indicated complex elements that would influence children's construction and development of body image that include: "[g]ender, ethnicity, cross-cultural, historical, and age difference in levels of body esteem, [which] all suggest that culture and society play a major role in the construction and hence the development of body image" (p. 69). Smolak (2002) in particular, emphasized that sociocultural influences, which include parents, peers and media, impact the development of a child's body image. In other words, the
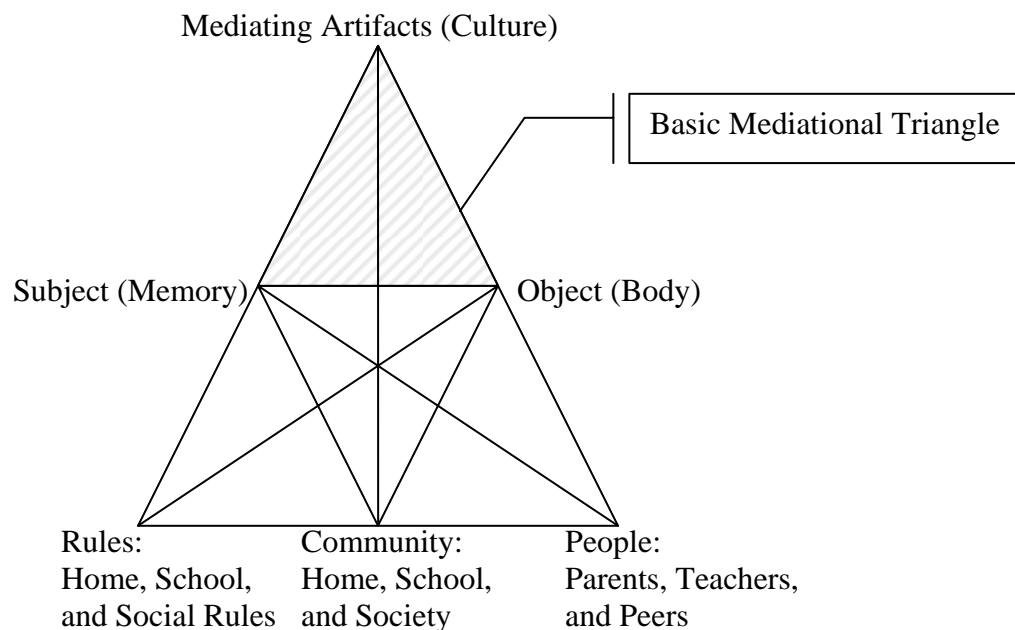
imagination in children's body movement contained a potential assimilation and hybridization. Smolak (2002) thus called for further research to focus on the possibility and even probability of "gender and ethnic group differences not only in levels of body dissatisfaction but, more importantly, in the process of body image development" (p. 72).

These research findings led to a further question: how will children from different cultural backgrounds develop their body image/body schema particularly in physical education in the face of a global society? Accordingly, the development of children's imagination in body movement encompasses two main factors: 1) outside environment of culture, ethnic background and social structure; 2) inside quality of experience, perception and cognition, and children's imagination in body movement is constantly shaped by these two major factors. In this regard, Cole's (1996) extended set of "interconnected triangles" (see Figure 1) based on his "mediational triangle" serves a perfect model, for it illustrates not only the relationship between outside environment and inside construction but also the dynamic of the construction/transformation of a child's imagination in body movement.

As in Figure 1, the top point of the triangle presents the process of a mediated action through which the subject transforms the object. This process is called an activity system only in relation to the components at the bottom of the triangle (Cole, 1996). In other words, the process from inside construction to outside environment of a child's body movement is derived from and determined by such components as "rules," "community" and "people." Moreover, the various components of an activity system, as Cole (1996) stated, do not "exist in isolation from one another; rather, they are constantly being constructed, renewed and transformed as outcome and cause of human life" (p. 141).

Figure 1. Cole's Interconnected Triangles:

Mediating Artifacts (Culture)

Basic Mediational Triangle

Subject (Memory)   Object (Body)

Rules: Community: People:
Home, School,   Home, School,   Parents, Teachers,
and Social Rules and Society   and Peers

With the illustration above, Cole placed emphasis on such elements listed on the bottom of the triangle—i.e. "social rules" (rules), "community" (community), and the "division of labor" (people)—viewed as fundamental components tied up with "human life" (Cole, 1996).

Also, Cole's conception of children's imagination in body movement brings the realization that contemporary cultural environments in physical education—for example, multicultural education and global society—deserves more attention. In a global society dominated by information technology, children's imagination in body movement is taking a new shape often characterized as the "image of mosaic." The image of the mosaic, as Nederveen Pieterse (2004) described it, "consists of fixed, discrete pieces whereas human experience, claims and postures notwithstanding, is fluid and open-ended" (p. 47). By the same token, he compared this image to "deterritorialized notions of culture such as flows and 'traveling culture'" (p. 47). In fact, it is observable that children's imagination in body movement has

gradually experienced such a "fluid and open-ended" travel through the so-called information

highways. Needless to say, the *Internet* may be regarded as a global network that allows one to

travel around without any constraints. In this regard, Calefato (2003) articulated similar concern.

In his article, "Wearing Communication," Calefato indicated the interaction between body and

telecommunication: "communication 'sticks' to the body, where it acts as both transformer and

transformed. The body allows a given communication medium to dislocate and fluctuate" (p.

163). Thus body becomes part of communication and allows information to transverse. Or to put

it another way, the exchange of information enables one's body to travel beyond places and time.

The boundary between self and others blurs and further mingles. Consequently, the study of

children's imagination in body movement should consider other elements such as social, cultural,

psychological, and technological dimensions molded by current global trend. This is also why

the study of imagination in body movement has become an innovative approach to study

children's body schema and body image in an information age.

Significance of the Study

A better understanding of children's body-schema construction according to their various

family and cultural backgrounds will increase school teacher's awareness of their different

imagination in body movement. As Morgan (1999) mentioned, "the ages of birth through eight

are more associated with developmental concerns that emerge from basic human reflexes at birth

than from grade assignments during schooling" (p. 1). Obviously, the awareness of children's

imagination in body movement, specifically from the age of birth through eight, has been tied up

with the relation between parental and school formulated education. Children's body-schema

construction, in fact, has profoundly been impacted by both distinctive educational settings:

home and school education. This study concerns the construction of imagination in children's

body movement in diverse family backgrounds in order to assist school teachers to understand different ethnic children's body schema construction in their stage of development, as well as, integrate the ideal of multicultural education in a global perspective. More significantly, imagination in children's body movement is greatly influenced by social change.

The electronic revolution has dramatically changed the social construction of society from industrialism to electricitism and from reality to virtual/cyberspace. Likewise, Kaiser (2003) argued that "[f]ashionable representations of children articulate the uneasy contradictions and ambiguities associated with identity boundaries of all kinds" (p. 158). Accordingly, teachers need to be aware of the differences in children's imagination in their body movement. Home-education, school-education and recent technology revolution are intertwined and shape children's identity in the context of body movement and body-schema. In other words, based on different cultural environments manifested in "home-education," "school-education," and "contemporary technology education," this study enhanced the understanding of identity formation process among young children in terms of their family and cultural backgrounds as their body-schema are gradually established. Central to this problem is the great impact of the diverse cultural backgrounds and drastic social changes on children's body schema construction. These efforts will also contribute to the development of multicultural education in a global society.

Purpose of the Study

Home-education, school-education and recent technology revolution are intertwined and help shape children's identity in the context of body movement and body-schema. More importantly, teachers need to be aware of the differences in children's imagination in their body movement. This study aims to bring to the teacher the awareness that both cultural differences

and social changes may influence children's body-image constructions in a physical education classroom, especially when multicultural education in a global perspective takes place. For instance, Morgan (1999) found that "[p]lay is a primary source of development in young children, and play is children's work…. Certain games commonly identified as play are pleasurable to children in the United States only when they are winning" (p. 5). "Play" has been naturally taught to young children by their parents and "games" by school teachers. From this perspective, physical education teacher seems to be a bridge that creates an effective learning environment and helps children to transform their skills of plays at home into the skills of games in school. Concurrently, technological use is also taught as a tool or as game/activity to enhance children's learning in a global society. Nevertheless, the content of "plays" and "games" may not be the same version as those that children receive from home, school and society.

Therefore, the present study was intended to examine young children from different cultural backgrounds about their body-image/body-schema construction/generation in a physical education classroom. The primary goal of the study was to investigate how young children, specifically in third/fourth grade children, from different ethnic groups and cultural environments constructed and presented their body-schema in contemporary physical education classroom. Four major ethnic populations in the Unites States were focused upon: Caucasians, African-Americans, Hispanic-Americans, and Asian-Americans. Connections between gender and culture as they influenced body-movement schema were ascertained. In order to fully explore the issue, this study was situated in schools based on the diversity and complexity of student's cultural and ethnic backgrounds: one in the United States where white children were the majority in school and society and one in Taiwan where white American children were relatively a small minority.

This study examined children's imaginations in body movement from the context of home, school and society and as connected to various cultural groups. As a result, this study attempted to assist teachers to build a better understanding of children's body-schema construction according to their various family and cultural backgrounds so as to increase school teacher's awareness of their different body movements, but it may also help to develop culturally responsive educational curriculum in elementary physical education.

The specific objective of the study was to examine the extent to which children's body imagination was influenced by cultural and social differences of home and school, and also by the Internet, in two different countries: Taiwan and the United States.

Limitations

The trustworthiness of this study is limited by the following factors: insufficient time frame, validity and reliability, and language differences.

Insufficient Time Frame

Sufficient time to collect data enriches a qualitative research study by increasing the collection of thick descriptive data that make up the findings. This study was situated in two schools in Taiwan and the United States, whose students consist of diverse and complex cultural and ethnic backgrounds; the data collection was targeted children's after school, school and Internet education. As a result, this qualitative study may be confronted with an insufficient time due to limited schedule for data collection: four weeks in Taiwan and ten weeks in the Unites States.

Validity and Reliability

Critics may express that the data is biased because they were analyzed and interpreted by one researcher. However, with the triangulation of data, as Denzin (1978b) emphasized,

researchers use a variety of data sources that include transcript, fieldnote and document to strengthen the reliability and validity of the data. The limited use of member checks may cause bias in the process of data analysis because of the children's age level. Multiple methods, such as interview, observation, and documentary analysis, were employed for data collection in the study to minimize biases in the researcher's analysis and interpretations and therefore enhance reliability and validity of the findings.

Language Differences

In this study, interviews and home-observations were conducted, and the various languages that the participant used produced some difficulties in understanding students' utterances in interviews. This difficulty may have influenced the accuracy of data that the researcher collected, especially when the participants used their mother tongue instead of "standard language" to communicate with their family and friends in the home setting. In addition, since the participants were at the third/fourth grade level, the researcher may have influenced the selection of the proper words while conducting interviews with them. The researcher was aware of this and she took steps to minimize the barriers as much as possible in the study. Everything was recorded and assistance from native speakers were sought when serious difficulties arose.

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Definitions of Terms

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Imagination. Locke (1690/1975) regarded imagination as "power of the mind." Imagination is also "the heart of any truly educational experience; it is not something split off from 'the basics' or disciplined thought or rational inquiry, but is the quality that can give them life and meaning" (Egan and Nadaner, 1988, p. ix).

Visualization. Visualization is derived from the noun *imagination* and corresponded with the root of visualizing, which means invoking an image (Jagla, 2004).

Body image/Body schema. Body schema is the "representation of one's body that mediates perception and action." By body schema, one is able to "locate one's bodily sensations" and to "adjust ones movements." With this regard, body schema may be a notion relevant to the idea of psychoanalysis." (Campbell, 1995, pp. 33-34)

Utopian visions. "Utopian thinking plays a vital role in human imagination" (Goldberg, 2003, p. 204). Utopian vision, as an "object" of imagination, does not really exist in reality, but it often takes its shape in "dreams and hallucinations." (Sepper, 1996, p. 1).

Multicultural Education. Multicultural education has been recognized by Lesko and Bloom (2000) as "pedagogy of articulation and risk" (p. 255). It demands students and teachers to understand their surrounding environments. Their interaction with the environment is producing interpretations closely related to the interpretations of others; also their interactions with the environment reflect particular conditions of their shared environment.

Globalization. Globalization, as Nederveen Pieterse (2004) defines it, "is an objective, empirical process of increasing economic and political connectivity"; it is also "a subjective process unfolding in consciousness as the collective awareness of growing global interconnectedness" (p. 16). Globalization consists of various specific globalizing projects and shapes global conditions.

Cultural difference. Three perspectives on cultural difference: 1) cultural differetialism or lasting difference is immutable; 2) cultural convergence or rowing sameness is the earliest forms of universalism; and 3) cultural hybridization or ongoing mixing is a postmodern sensibility of traveling culture (Nederveen Pieterse, 2004).

CHAPTER II

REVIEW OF THE LITERATURE

Culture is the collectivity of one's social make-up that consists of customs, institutions and values (Cole, 1996). A child's imagination is tied up with his/her cultural elements—home, school and society. These three cultural elements play vital roles in shaping and developing a child's indigenous imagination—specifically, body movement and body-schema/body-image. Indigenous imagination, which develops further into a conception of a body, is derived from one's memory as connected to culture. Synnott (1993) argued that "the creation and learning of the body as a social phenomenon varies from culture to culture… even within 'our own' culture" (p. 4). As Cole (1996) argues, the relationships among culture, memory and body concern "the process of constructive remembering" (p. 58). Memory represents one's knowledge as "assimilated through one's operation constitutes the schemas upon which the universal process of reconstructive remembering operates" (p. 58). Body is symbolized by "the self" constituted by memories. To put it briefly, the three elements—culture, memory and body—and perspectives form a triangle in which "culture" serves as a medium that bridges "memory" and "body."

In the "mediational triangle" theory, Cole emphasized the "cultural (mediated)" functions, which links subject and environment (subject and object, response and stimulus, and so on) through "the vertex of the triangle (artifacts)" (p. 119). Culture becomes a medium in the process of body-schema construction. Gallagher (1995) expressed similar opinion by pointing out that the "body schema as a postural model of the body that actively modifies 'the impressions produced by incoming sensory impulses in such a way that the final sensations of position or of

locality rise into consciousness charged with a relation to something that has gone before'" (p. 227). Here, culture functions as mediation. Cultural backgrounds thus become indispensable to our understanding of children's body-schema imagination and vital to the development of multicultural education in a global age. Therefore, this chapter presents a review of the literature concerning 1) body-image/body-schema, 2) utopian visions, 3) body, power, globalization and hybridization, 4) body, cultural hybridization/Multiculturalism, 5) body and technology, and 6) the process of imagination in physical education.

Body Image/Body Schema

Imagination plays a vital role for children in their construction of body-image/body-schema before actual physical representation. As to the relationship between body image and body schema, according to Gallagher (1995), body image is considered to be synonymous with such terms as "body concept" and "body scheme"; the terms like "body schema", "body image", "body concept", "body perception", and "body image schema" were also used interchangeably. Based on the definition of *body schema*, Robertson (1974) briefly pointed out that the body schema is the "anatomical construction and how the different body segments interrelate in motion" (p. 8). Similarly, Gallagher (1995) expressed body schema to be a postural model of the body that interrelates with something that has been experienced before. More specifically, Gorman (1969) regarded body schema as "a unity of outer and inner experience"; that is to say, "a more or less conscious integratation of sensations, perceptions, conceptions, affects, memories and images of the body from its surface (inward) to its depths, and from its surface (outward) to the limits of the cosmos" (p. 8). In sum, the concept of "body schema" has been recognized as an exercise of imagination based on one's "outer" and "inner" experience. Seen in this context, when a child imagines a running posture in his/her mind, it is a "body schema" that appears in

his/her mind in the meanwhile and produces those running postural models on which the child relies on. Apparently, "body schema" functions in conjunction with *experience* and *imagination* in his/her construction of utopian visions.

The idea of "body image," according to Thomas and Thomas (2002), concerns "sociocultural, neurocognitive, psychodynamic, cognitive-behavioral, information-processing, and [in connection to] feminist viewpoints… body image experiences in relation to gender, sexual orientation, race/ethnicity, and important physical characteristics, including adiposity, muscularity, athleticism, and disfiguring congenital conditions" (p. xvi) are important to know. From a similar perspective, Morris and Whiting (1971) regarded body image as an overall concept of one's body in relation to varied environments. In other words, body image is represented as the way of one's visualized reflection that heavily depended on varying ingredients from varied environments. Through body images, the individual is able to "integrate and interpret one's responses to the demands of the environment within which one lives" (Robertson, 1974, pp. 8-9).

Gorman (1969) recognized body image as "not only a representation of the intimate and public activities of the body but also [an] exist[ence] within the mind as a concept that affects every bodily action" (p. 3). Gorman took Freud's study of "father-image" as an example. The term of "father-image" was defined by Freud as "the feelings and ideas in the unconscious which are attached to the concept of father" (Gorman, 1969, p. 5). Moreover, Freud found that the appearance of the father-image was constantly accompanied by the mother-image and embedded in an image of the family. Therefore, the term of "father-image" has been explored and extended to be "mother-image" and broadly "family-image" while the concept is created in the unconscious, rather than in the conscious (Gorman, 1969). As far as the development of a child's

body image is concerned, Freud's study might be relevant to the following example. When a child starts to imitate his/her parents' postural movement and style of speaking through watching and listening day by day during parental education, the concept of *family-image* is gradually revealed and reflected in a child's daily life unconsciously. By the same token, when a child enters school education, his/her body image may be shifted from the concept of *family-image* to *family-school-image* since a child no longer spends all day with his/her parents.

Furthermore, Freud's study of *father-image, mother-image,* and *family-image* may be applied to the previous discussion of body image regarding varied environments. The relationship between the two sets of ideas about body image (Freud's idea of *father-image*, *mother-image*, and *family-image* and visualized reflective body image from Robertson, Thomas & Thomas, and Morris and Whiting) can be concluded to be significant and positive and also to be parallel to each other. That is to say, when one's body image/body schema is gradually constructed/modified by outer and inner experiences through one's imagination as influenced by varied factors such as sociocultural change, different gender, sexual orientation, race/ethnicity, and important physical characteristics, Freud's study of the changing image of one's body image (*father-image*, *mother-image*, and *family-image*) is imperceptibly and unconsciously molded and represented in such different contexts. Yet, "the changing image" may not be created/molded immediately when one starts to transfer his/her body image from one environment to another (i.e. from home to school) because Freud's study of the changing image is more focused on the unconscious than on such outer influences as parents, teachers and peers. And yet, Freud's follower Jung (1916), replaced such a "complex" by the idea of "image" as follows:

> Here I purposely give preference to the term Imago rather than to the expression
> 'complex.' In order by the choice of this terminology to invest this psychological

condition which I include under Imago with living independence in the psychical

hierarchy, that is to say, as with that autonomy, which from a large experience I have

claimed as the essential peculiarity of the emotional complex (p. 55).

Also in his study, Gorman supplied several examples to augment the statement above: for

example, the "Presidential image" and the image of the cinema star, the operatic idol, the

professional basketball player, or a major league first baseman (1969).

In addition, Robertson (1974) cited an example from Ebersole, Kephart and Ebersole's

study. They proved that when a child deals with the environment, the child "must have a stable

point of reference from which to organize his impressions [experiences], so that some kind of

order can be imposed for construction of a coherent totality of the world" (p. 10). Therefore, the

construction of a child's body image is heavily influenced by his/her *parents-image* in the

indigenous environment — home. Later on, when a child enters school, his/her body image will

be gradually shifted and nestled on a proper and acceptable *school-family-image* construction in

school environment.

Harrison, Lee, and Belcher (1999) conducted a similar study which applied a conceptual

framework, *self-schemata*, to represent sport and physical activity related abilities. They (1999)

regarded the framework of *self-schemata* as something derived from the frequent self-

evaluations of previous self and others' behaviors; it is in fact "perceptions about oneself

stemming from prior experiences" (p. 288). In other words, they viewed the process of *self-

schemata* as the self processing of summarizing, explaining past behavior, and guiding future

behavior in order to organize and provide a frame of reference for the individual and a specific

guide for one's social behavior. Therefore, this perspective of *self-schemata* could be seen as the

psychological consequences of such social forces as gender, sexual-orientation, ethnicity and

sociocultural change (Harrison, Lee, & Belcher 1999). Many researchers have focused on the

different terms of *body image* in an individual with varied environments. All the different terms

of *body image* not only shifted an individual's image constructive processing but also provided a

backup system for future references and guides as well (Harrison, Lee, & Belcher 1999).

Utopian Visions

Imagination in body movement is further viewed as an embodiment of utopian visions in

a global age. Broadly, the term Utopian, according to *the American Heritage College dictionary*,

means "proposing impracticably ideal schemes" (1997, p. 1487). Similarly, Wegner (2002)

defined *Utopia* as a continuous exchange of imaginary communities between "spaces" and

"boundaries." He also states that the Utopia's imaginary community is "not only a way of

imagining subjectivity but also a way of imagining space" (2002, p. xvii). Etymologically, the

root of *u-topian* (no-where), according to Wegner's definition, "bears out, precisely to the degree

that they make somewhere possible, offering a mechanism by which people will invent anew the

communities as well as the places they inhabit" (2002, pp. xvi-xvii). In fact, as Rothstein (2003)

told us, various visions of utopias have been presented in different eras. For example, Thomas

Moore understood the utopian vision as "no place" in the sixteenth century, and in the

seventeenth century, the notion of messianism presents a close relative to Utopianism. Later on,

the philosopher, Karl Popper placed emphasis on its sociopolitical association by arguing that

Utopias provide a standard to judge political and social achievements (Rothstein, 2003; Wegner,

2002). Furthermore, Rothstein pointed out a fundamental element in the Utopian vision:

"[a]lmost any utopia seems to make one very clear demand: obey…. The more perfect the utopia,

the more stringent must be the controls" (2003, p. 7). Undoubtedly, recent technology

development and global cultural interaction have great impact on the vision of Utopian

(Rothstein, 2003). In sum, although various visions appear in different historical contexts, the utopian visions can be viewed as something that basically existed in-between 'reality' (construed via an epistemology of the given) and the imaginary 'other' of the reality.

Goldberg (2003) acknowledges the vital role of utopian thinking in human imagination. Based on an observation of Internet activities, Spencer (1997) considered that utopian visions "represented an ideal state of affairs for human flourishing" (¶ 2). Likewise, Sepper describes Utopian vision as an "object" of imagination, which does not really exist in reality, rather, it often takes its shape in "dreams and hallucinations" (1996). In an age of information technology, such utopian visions cross not only "time" but also "place." Nederveen Pieterse (2004), for example, saw "the human body as a site of global human integrations" (p. 26) and argued that "[v]isions of common humanity have been evoked in the shift from tribal to university religions" (p. 27). Further, Nederveen Pieterse (2004) claimed that under a global revolution, *imagination* in body movement has been illustrated as a contextual historical process, an uneven vision and hybridization.

In addition to new ways to view utopian visions in an age of information technology, Rothstein (2003) noted that technology has been the most important realm of repository for utopian energies as well as a tool that helped the art of transforming society through invention. For example, media technology, telecommunication and cyberspace/virtual reality have led to a drastic social change driven by a kind of utopianism—from metal to flesh (Rothstein, 2003). With regard to the idea of imagination in body movement, the utopian vision presented a novel notion: as Rothstein claims, "virtual reality promises to break down the physical restraints of body and mind" (2003, p. 16). In one way, information technology, mainly the Internet, could possibly separate our 'minds' from our social association and further, "detracts from our

responsibility to learn how to live together in a diverse, complex democracy" (Gurak, 1997, ¶ 3).

And in another way, as Marchall McLuhan argued, media, as an extension of the body, turned a

tribal to a universal community with the notion of reason and order (Rothstein, 2003). Taking

music as the utopian dream for an example, Rothstein expressed that while music is played, the

listener automatically involves in his/her vision of utopia; that is to say, "[v]isions of utopia are

coded within the music itself" (2003, p. 24). By the same token, when a child accesses the virtual

reality on the Internet, the visions of utopia is also revealed and encoded in the cyberspace itself.

Such the cyberspace itself corresponded with Turkle's (1995) study of identity in the age of the

Internet. She convinced that online technology now "links millions of people in new spaces that

are changing the way we think, the nature of our sexuality, the form of our communities, our

very identities" (1995, p. 9).

In the field of education, Slattery (1995) argued that Utopian visions are the focus of

egalitarian ideals and democratic citizenship of the postmodern curriculum. He claimed that "the

postmodern utopia offered here is not the perfect world of apocalyptic and idealistic dreams,

rather it is a vision of hope, justice, compassion, *phronesis*, community, inclusiveness and

dialogue" (1995, p. 205). Speaking of the so-called American dream, Slattery recognized that it

has been "very difficult for African American and other people of color as a group to realize"

(1995, p. 193). Taking a postmodern or poststructural perspective, Stanley (1992) proposed an

idea similar to the *Curriculum for Utopia*, in proposing that totalizing critiques, metanarratives,

or any other appeals to objective knowledge or transcendental values shall no longer be applied

to the design for future curriculum.

In an information technology age, the utopian visions cross not only "time" but also

"place" in such virtual reality. No matter how derived from various historical contexts or

hybridized societies, utopian thinking not only plays the vital role in human imagination (Goldberg, 2003) but also expands the imaginative horizons of human potentialities (Marty, 2003).

Body, Power, Globalization and Hybridization

Alone with the economic and technological development, our society has entered a newly historical phase of globalization. Transnational companies and telecommunication have intensified the transnational economic, cultural and political practices, which have brought citizens around the world closer. As Nederveen Piesterse (2004) put it, globalization "is an objective, empirical process of increasing economic and political connectivity… [Moreover, it is an activity of mind] a subjective process unfolding in consciousness as the collective awareness of growing global interconnectedness" (p. 16). We have situated the formation of body image/schema in a social milieu, where a child discovers and constructs their visions of the body based on their different cultural backgrounds. Shilling (1993) has emphasized the importance of a society in relation to the imagination of a body: "human bodies are taken up and transformed as a result of living in society…. [That is] the mind and body as inextricably linked as a result of the mind's location within body" (p. 13). Then our concern is: how does the construction of body image/schema mean in a global age? To put it clearly, how do children respond to the global society in their imagination in body movement? The question is meaningful only when the imagination in body movement is recognized as both physical practice and mind exercise situated in a social milieu. In order to frame this question in such a context, the following discussion introduces Michel Faucault's ideas of "docile bodies" and Catherine Bell's "ritualized body," as well as their relationship to the politics of power in a global age.

Docile Bodies and Ritualized Body

Both Foucault (1979) and Bell (1990) have placed the body at the core of their respective analyses of the 'interaction order' and disciplinary systems. Foucault (1979) in particular, described the relation between different disciplines and the utility of the body:

What was then being formed was a policy of coercions that act upon the body, a calculated manipulation of its elements, its gestures, its behavior. The human body was entering a machinery of power that explores it, breaks it down and rearranges it. A "political anatomy," which was also a "mechanics of power," was being born; it defined how one may have a hold over others' bodies, not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines. Thus, discipline produces subjected and practiced bodies, "docile" bodies. (p. 138)

In the modern world of control, docile bodies are produced through various disciplines based on different purposes. Campbell (1994) addressed this well: the body has been "transformed culturally into more subtle, internalized control emerging from the very practices and knowledge existing within the community at one time, what is termed an 'episteme'" (p. 126). Such a process of transformation was in fact a process of "normalization," and the process of normalization, according to Foucault (1977a), was obviously performed through "discipline fixes; it arrests or regulates movement; it clears up confusion" (p. 219). In other words, the mechanism of power regulates the docile body as "a part of the wider network of disciplines that cohere toward specific purpose" (Campbell, 1994, p. 128).

In a similar manner, Bell (1990) presented the idea of "ritualized body," viewed as a product of communication of one body with others in a particular sociocultural context.

Moreover, a ritualized body is aware of its relations to other bodies (p. 304). Also, Bell (1990) considered the idea of "ritual" to be a powerful ideological arena as well as "symbolic images and gestures to serve as that exercise a particularly persuasive effect on the participants' sense of identity and social reality" (p. 299). Therefore, the body is an embodiment of a "social person." The image of the body was no longer "the mere physical instrument of the mind"; rather, a "more complex and irreducible [sociocultural] phenomenon" (Bell, 1990, p. 300).

Drawing on Foucault, Bourdieu, and Comaroff's ideas concerning the relation between discipline and the utility of body, Bell (1990) elaborated on the meaning of the body in a postmodern world. She placed emphasis on its social function, arguing that "the body" is a mediation to connect the self with the world: "It is the medium for the internalization and reproduction of social values and for the simultaneous constitution of both the self and the world of social relations" (Bell, 1990, p. 301). More significantly, the internalization and reproduction of social values was closely associated with the formation of body image/schema. Bell (1990) remarked, "the mediation of the body is a 'dialectic of objectification and embodiment' involving schema that pass 'from practice to practice' without becoming explicit either in personal consciousness or social discourse" (pp. 301-302). In fact, her precursor Bourdieu (1977) stated the mechanism of the formation of the ritualized body:

> It is in the dialectical relationship between the body and a space structured according to mythico-ritual oppositions that one finds the form par excellence of the structural apprenticeship which leads to the em-bodying of the structures of the world, that is, the appropriating by the world of a body thus enabled to appropriate the world. (p. 89)

Through constant negotiation with the space, the body was able to establish appropriate the world and establish a relationship with it. Such a mechanism sustained the idea that "the self"

and "the world of social relations" are seen not only as directly connected but simultaneously as indirectly connected through a medium constituted of "the body."

The Body and Power

It should be noted that Foucault's *docile bodies* and Bell's *ritualized body* have been expressed as regimes of *power relation*. In the previous discussion, Foucault's "docile bodies," produced by disciplines, implied a map of control and dominance. Likewise, Bell's "ritualized body," as a medium of internalization and reproduction of social values, was recognized in an intimate relationship with the world. As one may question: what map of power-relation does "docile bodies" represent and the internalization of social values render? As far as the body imagination is concerned, Bevir (1999) indicated the regime of bio-power, articulating that power "requires individuals to internalize various ideals and norms so that they both regarded an external body to be concerned with their good, and strive to regulate themselves in accord with the dictates of that external body" (p. 350). Also, citing Foucault's theory of bio-power, Bell (1990) proposed that "'meticulous rituals of power' produce a body that internalizes and reproduces the schemes that localized power" (p. 306). That is to say, power relations are ritually constructed by such transformed body in space. In sum, the relation between power and the body is the creation of the social body molded as an autonomous local sphere for the internalized social forces (power) (Bell, 1990).

Body, Time/Space and Power

Bartky (1998) relates the map of power relation to the body's time and space and indicates that "the body's time, in these regimes of power, is as rigidly controlled as its space" (1998, p. 26). In this regard, Foucault (1979) has presented his famous concept of "surveillance" that forces body conforming to the rules of the space and time:,

8:45 entrance of the monitor, 8:52 the monitor's summons, 8:56 entrance of the children

and prayer, 9:00 the children go to their benches, 9:04 first slate, 9:08 end of dictation,

9:12 second slate, etc. (p. 150)

Borrowing Foucault's "surveillance" concept, Bartky (1998) proposed that the factory whistle

and the school bell represent a division of time in order to regulate the various activities of the

day" (p. 26). Given the "ritualized body" termed by Bell, the techniques, called technologies or

strategies of power, can be recognized as something "fixed in 'rituals' that generate the body as

the 'space' where minute and local social practices are linked, or put in relation, to the large-

scale organization of power" (p. 306).

It is in such a map of power relation that we can understand that the body performance

and power relation are tied up with the cultural order and the conditions of everyday life

(Comaroff, 1985). In this regard, Comaroff offered two examples, indicating that the body is

symbolized by the cultural order in different conditions of social rites:

In precolonial rites, the social body was ritually constituted in the image of the

hegemonic cultural order, with native classifications of gender, space, and time inscribed

in mnemonic form in the human body. In the postcolonial ritual practices of the Zionist

churches, on the other hand, within the context of competing ritual formulations by other

churches and competing forms of social practices by the nonreligious, [there was an]

attempt to construct a social body that is a metonym of the social world—a body repaired

and refashioned through rites of healing and thus invested with schemes to "repair" an

aberrant social order…. The post colonial ritualized body is a subversive one, struggling

to appropriate and control key symbols. (Bell, 1990, p. 308)

By the same token, an anthropologist, Mary Douglas, remarked that the body was a receptor of social meaning and represented a social phenomenon (1966, 1970). Similarly, Shilling (1993) pointed out that the meaning and function of body in contemporary society has changed in the second half of the twentieth century; that is to say, the body performs itself as a machine in such an advanced capitalist society in which consumption becomes its primary culture.

Body, Globalization and Hybridization

One is aware that that current society has been an advanced capitalist and a global one in the second half of the twentieth century. Then how is the image of the body to be formed in such a society as consuming culture has become central element that dominates the performance of the modern/postmodern self. In this regard, Shilling (1993) noted that in postmodern/global social systems, individuals exposed themselves "irrespective of their social location," which remarked an increasing environmental and technology risk" (p. 73). In other words, current society signals a tendency that the body is "to be globalized" (Shilling, 1993, p. 73). Nederveen Pieterse's (2004) study has placed focus on the relation between globalization and human integration, and indicated that globalization as human integration "belongs to a deep dynamic in which shifting civilization centers are but the front stage of history against a backdrop of much older and ongoing intercultural traffic" (p. 25). Nederveen Pieterse's study presented recognition of a different dynamic of human integration as a response to the coming of a global age. Clark (1997) addressed the prominent qualities of current global life in contrast to decades ago: 1) "the volume of materials moved is larger"; 2) "the speeds with which they are moved are faster"; and 3) "the diversity of materials (matter, energy, information) moved is greater" (p. 16). With regard to human integration in the globalizing process, Nederveen Piesterse (2004) argued that the human body as a site of global human integration usually refers to the phenomenon of cultural

diffusion. Indeed, the spread of diseases, foodstuffs, eating habits, forms of mobility, military

technologies, music, movies and advertising, clothing and fashions along with mass media have

helped the human body to allow for interethnic mingling and crisscrossing of gene pools and

physiological features in contemporary globalization. In this regard, Nederveen Piesterse (2004)

described in detail the following:

> Forms of mobility (horse, saddle, bit, chariot, ship, compass, bicycle, automobile,
>
> airplane) have further affected human motion. Military technologies have shaped the
>
> logics and logistics of conquest, the diffusion of rhythms and music, movies, and
>
> advertising has influenced sensory experiences, aesthetics, form of intimacy, and ways of
>
> experiencing the body…. The global spread of mass media and advertising dominated by
>
> western images has affected local beauty standards, fostering practices of skin bleaching
>
> in various part of the South. (pp. 26-27)

In sum, from the perspective of the integration of a "globalized" body, globalization is a cultural

hybridization event. Profoundly or superficially, human integration, as Nederveen Piesterse

described it, "is being reflected and refracted in the changing experience of our bodies and those

of others" (2004, p. 27).

Regarding the process of hybridization, Robertson (1992) expresses that contemporary

globalization is also reference to "cultural and subjective matters" and engages *awareness* of the

global human condition and a global consciousness. From this perspective, globalization not only

means the reinforcement of but also intertwines with localism, as often expressed in such a

phrase as "thinking globally, acting locally" (Nederveen Piesterse, 2004). The tandem phrase

"think globally, act locally" operates such dynamics of relation between local and global,

provoking minorities into the "global valorization of particular identities" or a "universalization

of particularism" (Nederveen Piesterse, 2004). Borrowing what Bakhtin (1968) has termed as hybridization, Nederveen Piesterse states that "hybridization refers to sites, such as fairs, that bring together the exotic and the familiar, villagers and townspeople, performers and observers" (2004, p. 72). Therefore, the event of hybridization is a mixture of both local and global phenomena, and the mixture of phenomena have been gradually reflected and refracted in a *mélange* of human body. Nederveen Piesterse (2004) offers an example of migration mélange in his study. He studied second generation immigrants in the United States and found that second generation immigrants performs a mixed cultural traits, a mixture of a home culture and language and an outdoor culture, as in the combination "Muslim in the daytime, disco in the evening" (Nederveen Piesterse, 2004, p.73). So is in the sphere of sport, as in one case study of a female athlete, a Taiwanese female athlete that displays ambivalent and hybridized self-images; local, traditional cultural heritage mingled with foreign materials and ideologies in her body images, an ambiguous mixture of the local and the exotic. In fact, hybridity, as "intercultural brokers," has become "a familiar and ambivalent trope" in such a global society where our bodies are situated (Nederveen Piesterse, 2004; Bhabha, 1990).

In short, the power-relation of the body, as experienced and expressed in the process of globalization and cultural hybridization, is a long-term, uneven, and paradoxical process. And yet, human body as a site of global human integration is crucial to understand the mixture of phenomena (hybridization) and to display the tensional power relation between hybridization (internalizes and reproduces the schemes as time) and globalization (human body as space).

Body and Cultural Hybridization/Multiculturalism

Body and Culture

From the cultural perspective, Sault (1994) viewed the body image to be one's experience and understanding of the body. Thus, no objective physical body can be perceived in exactly the same as from all cultures; moreover, "the body itself is a cultural creation" (Sault, 1994, p. 13). In Saul's eyes, measurement in the process of perception in terms of body image has become a means of "cultural construction" (Sault, 1994). In other words, the notion of indigenous imagination, derived from one's body image that resides in a particular culture, which will further develops into a conception of a body is paramount to understand. Synnott (1993) articulated a similar conversation: the creation and learning of the body as a social phenomenon varies from culture to culture; and yet, it is situated in "our own culture" (p. 4).

Cole's Mediational Triangle Theory

A psychologist, Cole (1996) presents his mediational triangle theory regarding the relationships among culture, memory (self) and body, in which the formation of body image is a "process of constructive remembering" (p. 58). The idea of culture, according to Cole, consists of one's social environment that includes customs, institutions and values. Memory, for Cole, is one's knowledge as "assimilated through one's operation" and schema upon which "the universal process of reconstructive remembering operates" (p. 58). Central to Cole's mediational triangle theory is the idea that culture serves as a medium that bridges "memory" (self) and "body."

Culture thus becomes a medium in the process of body-schema construction. As one can see in Cole's "mediational triangle," the cultural (mediated) function is emphasized. It links subject and environment (subject and object, response and stimulus, and so on) through "the

vertex of the triangle (artifacts)" (p. 119). In this regard, Gallagher (1995) described the process

of functional "mediation" through culture: "body schema as a postural model of the body that

actively modifies 'the impressions produced by incoming sensory impulses in such a way that

the final sensations of position or of locality rise into consciousness charged with a relation to

something that has gone before'" (p. 227). Here, culture functions as mediation. Cultural

background has therefore become indispensable to our understanding of children's body-schema

imagination and vital to the development of multicultural education in a global age.

Furthermore, Cole's (1996) extended set of "interconnected triangles" (see Figure 1)

based on his "mediational triangle" further illustrates not only the relationship between outside

environment and inside construction but also the dynamic of the construction/transformation of a

child's imagination in body movement. Undoubtedly, Cole's conception of children's

imagination in body movement brings the awareness that contemporary cultural environments in

physical education—for example, multiculturalism—deserves more attention.

Multiculturalism

In fact, multiculturalism in education has been widely discussed and emphasized. As

Shaw (2001) claimed, multiculturalism "promotes equal opportunity to learn for all students,

cultural pluralism, and respect for those who differ from the mainstream, and it has the potential

to become Education that is multicultural and Social Reconstructionist" (p. 48). Likewise, Apple

(2000) pointed out that multiculturalism in education was the "fact that schooling has become an

especially contested site for defining one's identity" (p. 85). In addition, Lesko and Bloom (2000)

argued that multicultural education could be called a "pedagogy of articulation and risk" that

demands of students and teachers the understanding of their involvement in the world: "their

involvement in producing interpretations that are always in relation to the interpretations of

others and their involvement in concrete actions that follow from particular renditions of their

shared world" (pp. 255-256). Therefore, multiculturalism in education represents the framework

of a social reconstruction—i.e. one's identity and one's different cultural involvement in the

world.

Cultural Hybridization

With emphasis on cultural difference, Nederveen Pieterse's (2004) argued that each

culture presents a "paradigm" indicating "different politics of multiculturalism" (p. 56). In fact,

the idea of cultural difference has been expressed as *open* site where one learns and shares

beliefs freely (Nederveen Pieterse, 2004). Furthermore, hybridization "serves a purpose based on

the assumption of *difference* between the categories, forms, beliefs, that go into the mixture"

(Nederveen Pieterse, 2004, p. 77). That is to say, the idea of cultural hybridization characterizes

the *different* cultural mixture as global mélange (Nederveen Pieterse, 2004). Nederveen Pieterse

(2004) presented the process of cultural hybridization with two ongoing stages: culture 1 and

culture 2. Culture 1 indicates the essential territorial culture that stemmed from a learning

process (localized); in contrast, Culture 2 is viewed a wider understanding of culture as a

translocal learning process and as a general human *software* (Nederveen Pieterse, 2004).

Although the two stages remain separable, they are intermingled. Nederveen Pieterse (2004)

described their interaction as follows:

> Culture 2 finds expression in Culture 1; cultures are the vehicles of culture…. Culture 2
>
> or translocal culture is not without place (there is no culture without place), but is
>
> involves an *outward looking* sense of place, whereas culture 1 is based on an *inward*
>
> *looking* sense of place. (pp. 78-79)

Therefore, the notion of cultural hybridization is the process of "localized" culture as an *inward looking* sense of place transforming into "a global (*outward looking*) sense of place" (Nederveen Pieterse, 2004). As found in my research on Taiwan's college female athlete identity, a cultural hybridization, combined with the local and the global, come into play in their formation of female athlete identity, in their process of becoming of a female athlete.

Body and Technology

Technology, especially information, has seen a rapid increase in society in recent decades and has impacted greatly our lives. The term technology now has been associated with such terms as "pedagogy, connectivity, multimodality, and interdisciplinarity" (Luke, 2003). In a global age, information technology continues to innovate and create a regime of "virtual reality" that allows the humankind to travel virtually anywhere anytime without limitations. As one might say, our global society has entered the domain of dominant of virtual world by virtue of information technology. As Luke (2003) remarked, information technology—mostly computer-related—became a "matrix" that generates "moral, intellectual, and institutional panic and critique as well as powerful evangelical discourses about their capacity to revolutionise thinking, everyday life, and, of course, the practices of education" (p. 397). In this information era, technology is no longer a tool or subordinate subject added to curricula; in contrast, it has in fact transformed the world into a diverse, multiple, fluxional and global virtual hyperspace. Needless to say, technology has played an essential part in school curriculum and teaching. Specifically, Luke (2003) wrote, school curriculum and teaching tended to "be defined in terms of mastery of and engagement with dominant modes of information, whether of spoken language and gesture, inscription and print, or visual image" (p. 397). Then, how do children compose their body image in such learning environment permeated by technology?

Fortunati, Katz, and Riccini's (2003) have extended their research on the relation of the human body to technology and art. Taking fashion, viewed as an extension of the physical body to the aesthetic body, for instance, they discovered that technology has actually begun to enter the "space" of the physical body. The penetration of technology into the body can be observed from the relation between human imagination and body action (Fortunati, 2003). In this digital and mobile age, the innovation of technology has transformed our world into an "an imaginary hyperspace," where people exchange information freely. In such an environment, imagination and action has always been interrelated in humankinds' attempt to make the body match the machine, and vice versa (Fortunati, 2003). For example, as Fortunati (2003) expressed, human imagination has created a particular family of monstrous figures, such as the automaton, golem, android and robot. And these figures represent not only the common experience of the body as a fundamental technological tool, but also human's specific envy, wish and desire to be filled by these figures (Fortunati, 2003).
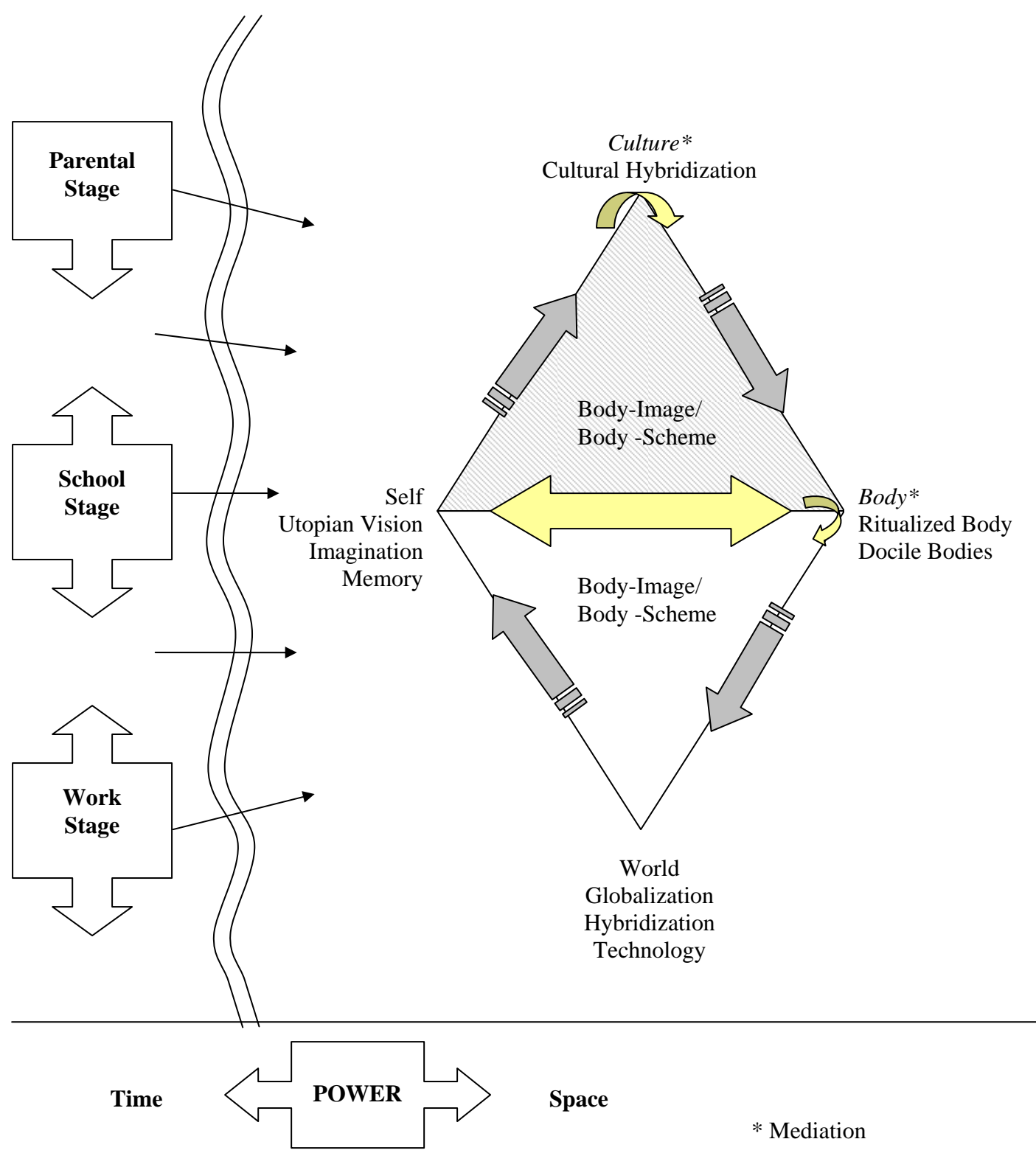
Furthermore, Longo (2003) proposed two related evolutions—"bio-cultural"/"bio-technological" and "*homo technologicus*"—to describe the transformation of human body in the information age. Particularly, bio-technological evolution expressed the human-machine symbionts that connect each other and form "a sort of global (cognitive) organism heralded by the internet"; *homo technologicus* not simply means "*homo sapiens plus technology*" but rather "*homo sapiens transformed by technology*" (Longo, 2003, p. 23). That is to say, humans have been undergoing a new kind of evolution in a new environment of information, symbols, communication and virtuality (Longo, 2003). Such bio-technological evolution also reminds of Nederveen Pieterse's (2004) ideas of technology and biotechnology; according Nederveen Pieterse, "[b]iotechnology opens up the perspective of 'merged evolution,' in the sense of the

merger of the evolutionary streams of genetics, cultural evolution and information technology,

through the matrix of cultural evolution and information technologies" (p. 81). In other words,

the two intertwined evolutions created a virtual connectivity that transformed the human body to

a consequence in which body became an *object* and consequently lost its personal characteristics

as sacred guardian of our identity (Longo, 2003).

Moreover, by suggesting the idea of "global village," Patton (2002) presented our new

world as "an imaginary hyperspace." Through the global news, entertainment, information media,

and especially the Internet, people around the world are exchanging their social and cultural

similarity and difference" (Patton, 2002). The digital communication by virtue of information

technology has created a "global village" that has shaped the "virtual" world. Within this

"virtual" world, the transmission of information decomposed the traditional learning

environments, communication methods and relationships. As a result, pedagogy has become an

unbounded hyperspace that has relied heavily on visualization and mobility. Virtual reality,

remarked Longo (2003), "not only produces "a communicative, perceptive and functional

diffusion of the body," but also "extends the body spatially in unprecedented ways and allows it

to occupy the whole planet" (p. 26). Seen in this light, virtual reality has extended the body by

erasing it: one travels everywhere virtual without moving one's body physical from a time-space

location that is necessary for the body to perceive, and consequently to exist (Longo, 2003).

As the idea of global village tended to imply the unity of the world, some on the other

hand, emphasized the diversity and complexity of a global society. Longo (2003), for example,

argued that "information technology introduces drastic simplifications and mediations" and "tend

to abolish distinctions and nuances in this diverse and complex landscape" (p. 27). With a similar

Figure 2. The process of Imagination in body movement:

Culture*
Cultural Hybridization

Body-Image/
Body -Scheme

Self
Utopian Vision
Imagination
Memory

Body-Image/
Body -Scheme

Body*
Ritualized Body
Docile Bodies

**Parental
Stage**

**School
Stage**

**Work
Stage**

World
Globalization
Hybridization
Technology

Time   **POWER**   **Space**

* Mediation

concern, Sault (1994) proposed that technology should be used as tool to help "translate conflict and pain into a hierarchy of mind over body" (p. 178).

At last, in a global society dominated by information, children's imagination in body movement, therefore, is taking a new shape often characterized as the "image of mosaic." The image of the mosaic, as Nederveen Pieterse (2004) described it, "consists of fixed, discrete pieces whereas human experience, claims and postures notwithstanding, is fluid and open-ended" (p. 47). By the same token, he compared this image to "deterritorialized notions of culture such as flows and 'traveling culture'" (p. 47). In fact, it is observable that children's imagination in body movement has gradually experienced such a "fluid and open-ended" travel through the so-called information highways.

The Process of Imagination in Physical Education

Baudelaire (1962) claimed that "[i]magination created the world" (p. 321). Such phrase contained such ingredients that included social and cultural environment, experience, the body, the self, body-image/body-schema, and even the "reality" of the cyber world. Based on previous discussions, I would like to illustrate the process of imagination in body movement through Finger 2.

Figure 2 consists of two mediational triangular processes: Cole's mediational triangle theory and Bell's ritualized body composition. In Cole's triangle (above), culture is presented as mediation for the formation of body image. Bell's ritualized body signifies a site where sociopolitical context is embodied. Several factors that included utopian visions, cultural and sociopolitical contexts, individual experience and the virtual reality shaped by information technology have been taken into consideration with regard to the formation and transformation of the body. Central to such a formation of body are power relations and social contexts. As a

result, what imagination in body movement experienced is not a fixed, stable identity; rather, a "fluid and open-ended" travel practice in a virtual reality created and sustained by information technology.

With this regard, Gimlin's (2002) research on aerobics supplied an example showing the Figure 2's idea of the process of imagination in physical education. Gimlin (2002) discovered that women attend aerobics not only to shape their bodies but also to negotiate their identities:

> Individuals monitor appearance to present particular images to the outside world. Like most women, participants in these classes fail to satisfy the currently popular "idealised images of youth, health, fitness, and beauty. In response to their culturally constructed physical imperfection, the class members attend aerobics to shape their bodies, but, even more improve, they also use aerobics to negotiate acceptable identities. That is whether or not they meet ideal standards of beauty, participants are able, through aerobics, to neutralize the moral meanings ascribed to the bodies. (p. 56)

These young females found their body shape unacceptable, compared to the idealized ones, and decided to reshape their body through exercise. In this particular case, culture is absolute the mediation of the construction of the body-image, as expressed in the "currently popular idealised images of youth, health, fitness, and beauty." Furthermore, the body itself was also the site of the transmission of personal experience and socio-cultural elements. For instance, their "culturally constructed physical imperfection" of body-image implied the rupture between their self-body images and idealized body images. Then, when they noticed the unbalanced relation between their body shapes and popular images, they used their bodies as a mediation (to attend aerobic classes) to negotiate such disequilibrium. Moreover, these activities (attending aerobic classes), as Gimlin (2002) claimed, produced 'docile' bodies, as a 'sign of submission' to gender

oppression and a mark separating women from each other" (p. 52). Consequently, this process of formation and transformation of body shape was also an internalized negotiation of acceptable identity. In Gimlin's aerobics study, the participants were females at their college or work stages from New York. That is to say, they were situated in a particular time and space, and consequently, their body-power relation and identity have to be expressed in such time-space configuration.

Summary of the Literature Review

The present literature review concerned issues that included: 1) body-image/body-schema, 2) utopian visions, 3) body, power, globalization and hybridization, 4) body, cultural hybridization/Multiculturalism, 5) body and technology, and 6) the process of imagination in physical education. The concept of body schema was recognized as an exercise of imagination based on one's "outer" and "inner" experience, while body image is represented as the way of one's visualized reflection that heavily depended on varying ingredients from varied environments. In particular, researchers have focused on the framework of *self-schemata*, viewed as something derived from the frequent self-evaluations of previous self and others' behaviors (Harrison, Lee, & Belcher, 1999). In short, the process of constructing body schema/body image could be seen as the psychological configurations influenced by social forces such as gender, sexual-orientation, ethnicity and sociocultural changes. Such a process of construction, however, is indispensable to utopian visions, virtual frameworks in mind, vital to the construction of an existence of human imagination. Being "objects" of imagination and often taking shapes in dreams and hallucinations, utopian visions have become of great significance in this information age. The utopian visions crossed both "time" and "place" in virtual reality sustained by the Internet, expanding the imaginative horizons of human potentialities (Marty, 2003).

If the transnational economic, cultural and political practices, intensified by transnational companies and telecommunication, have actually brought the world a new age of globalization, how do children respond to the global society in their imagination in body movement? With this regard, Michel Faucault's ideas of "docile bodies" and Catherine Bell's "ritualized body" provided a useful framework for the understanding of the politics of body-power relation in a global age, especially the imagination in body movement, which was recognized as both physical practice and mind exercise situated in a social milieu. It has been noted that Foucault's *docile bodies* and Bell's *ritualized body* were expressed as the regimes of *power relation*. Foucault's "docile bodies," produced by disciplines, implied a map of control and dominance; by the same token, Bell's "ritualized body," as a medium of internalization and reproduction of social values, was recognized in an intimate relationship with the world. In other words, power relation was ritually constructed by the body transformed in a given time and space. In the same sense, the body-power relation could be seen as the creation of the social body molded as an autonomous local sphere for the internalized social forces and power (Bell, 1990).

In an information age, the body is "globalized" since in postmodern/global social systems, individuals exposed themselves to such reality "irrespective of their social location" (Shilling, 1993, p. 73). Clark (1997) has pointed out the prominent qualities of current global life—larger in material volume, faster in movement, and greater in material diversity. The globalizing process is also the reinforcement of localism, and thus an event of hybridization of both local and global phenomena. In fact, human body as a site of global human integration usually refers to the phenomenon of cultural diffusion. From this perspective, globalization is in fact a cultural hybridization event, and the mixture of phenomena manifests itself in a *mélange* of human body. Culture, as in Cole's mediationla triangle theory, was recognized as medium that bridged

memory (self) and body in the process of body-schema construction. Cultural hybridization, as an immediate product of globalization, further complicates the body image formation process. Each culture presented a different "paradigm" that governes the "politics of multiculturalism (Nederveen Piesterse, 2004).

Information technology has created a regime of "virtual reality" that allows the humankind to travel virtually anywhere anytime without limits. In addition, in education technology is no longer a tool or subordinate subject to curricula; in contrast, it has in fact transformed the classroom into a diverse, multiple, fluxional and global virtual hyperspace. Also, the extensive use of technology has actually reshaped the image of body in that the humankind attempts to make the body match the machine, and vice versa. Human imagination has created particular figures that represent the common experience of the body as a fundamental technological tool, in addition to human's specific envy, wish and desire, and these figures, in turn, took over common definitions of body image. In other words, human beings have been undergoing a new kind of evolution in a new environment of information, symbols, communication and virtuality. Virtuality extended the body by erasing it; the body traveled virtually without changing temporal and spatial locus of the physical body. More profoundly, technology introduced the diversity and complexity of a global society, and accordingly, children would travel as flows and "deterritorized" notions of culture that traversed in the "fluid and open-ended" virtual world that technology has provided.

Several ingredients were taken into consideration for the children's imagination in body movement; they included social and cultural environment, experience, the body, the self, body-image/body-schema, and even the "reality" of the cyber world. To situate the formation of body in a body-power relation and social context, imagination in body movement, as a result,

experienced a "fluid and open-ended" travel practice in a virtual reality created and sustained by

information technology, rather than a fixed, stable identity in a specific socio-cultural context.

CHAPTER III

METHODOLOGY

Indigenous imagination includes a conception of a body as derived from one's culture.

Children's imagination in body movement is influenced by cultural aspects of home, school and

society, which, in turn, shapes indigenous imagination of body movement and body-

schema/body-image. Synnott (1993) argued that "the creation and learning of the body as a

social phenomenon varies from culture to culture (p. 4), with imagination, seen as "power of the

mind," being considered to be closely related to the idea of ritualized body. A ritualized body is a

"body aware of a privileged contrast with respect to other bodies"; that is, body-schemes that can

"shift a variety of sociocultural situations into ones that the ritualized body can dominate in some

way" (Bell, 1990, p. 304). In fact, both the "power of the mind" and "the ritualized body" are

intertwined in the construction of children's social bodies in terms of body movement. The

primary purpose of this study is to investigate how third grade children from different cultural

backgrounds construct and present their body movement/social body in a physical education

classroom. In order to explore such an issue thoroughly, a comparative study among four

different ethnic groups were examined in two different cultural environments with the same

educational system.

Setting

The study consisted of two different cultural environments with the same educational

system: one elementary in the State of Georgia (Yaya Elementary School) and one American

School in Taipei, Taiwan (Marina Academy-Cathay Campus). Specifically, this study focused on

the diversity and complexity of student's cultural and ethnic backgrounds: one in the United States where American white children remain the majority in school and society and one in Taiwan where white American children are relatively a small minority. Both schools share a similar educational system—accredited either by the Western Association of Schools and Colleges or by the Southern Association of Colleges and Schools. However, both schools are different in terms of social-economic status and belief system—Marina Academy-Cathay Campus is a private Christ-centered school and Yaya Elementary School is a public school without any religious affiliation. In particular, these two Schools have similar physical education curriculum, computer and recess, and almost the same length of time each day and each week.

Participants

Four major ethnic populations in the Unites States were represented: Caucasian, African-American, Hispanic-American, and Asian-American, also males and females were part of the study. According to Morgan (1999), children go through stages of development, which are much more evident in K-8 than later years in 9-12 schooling. Through informal interviews, several elementary physical education teachers expressed that children in third grade level always had to make the transition from home to school education. The curriculum was designed for K-2 level and functioned as a connective bridge between home and school, and was more focused on introduction of fundamental movement activities. The curriculum in third grade level emphasized competency in foundational skill themes. In others words, there was noticeable transition from home education to school education in children's development at the third grade level. In addition, Stangor and Ruble (1987) mentioned that children in the ages of three and seven developed "gender constancy" to understand sexual permanents over time and situations. Thus, children, specifically in the age of eight, are able to recognize and define dominant gender

orientation, as well as, the characteristics of male and female. In order to have a better

understanding of children's cultural backgrounds in relation to their movement performance and

behaviors as they demonstrate their body movements in the elementary physical education,

twenty-two third and fourth grades participant volunteers—8 boys and 14 girls from each ethnic

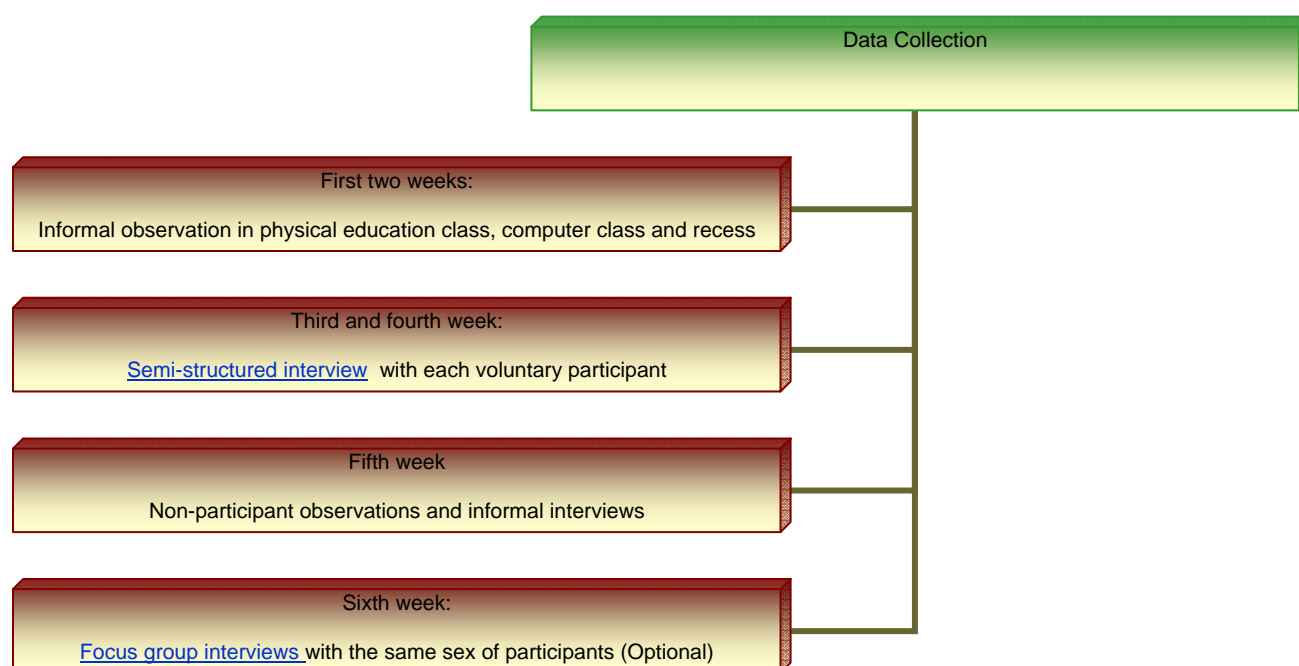groups in both countries were selected. Case and purposeful sampling was also used to assist

with focal point of the study (Patton, 2002).

Procedures

Participants were recruited from elementary schools in Georgia, USA and Taipei, Taiwan

as permitted by authorities in each country. To ensure racial diversity, four different ethnic

groups of participants were recruited from a wide range of both elementary schools, specifically

in third/fourth grade level. Eight boys and fourteen girls from each ethnic group in third/fourth

grade level were selected in the study from each elementary school. Participants' parents or

guardians were asked to sign two copies of the attached consent forms (Appendix A) before the

conduction of the research study. The researcher explained the procedures that were used in the

study. After the researcher was granted permission, the researcher collected data in authorized

elementary schools for six weeks (see Table 1). During the first week, the researcher had an

informal observation to allow for familiarity with the participants in Schools and homes for

purpose of minimizing bias, and to allow the participants to be familiar with the researcher.

Afterward, the researcher conducted a semi-structured interview with each participant in order to

understand participant's basic background and information about his/her favorite sport, TV

channel and video games.

Furthermore, the researcher conducted unstructured focus group interviews with the same

sex of participants, so that participants can share and discuss selected themes together as they did

in other subject's class in the final week of data collection. The researcher conducted non-participant observations in two different settings: 1) school observation in participant's physical education class, playground, and computer room; 2) after school observation. Thus, the research design not only helped the researcher to maintain the natural environment setting but also reduced outside factors of influences on the participants.

Table 1. Data Collection Procedure:

Data Collection
First two weeks: Informal observation in physical education class, computer class and recess
Third and fourth week: Semi-structured interview with each voluntary participant
Fifth week Non-participant observations and informal interviews
Sixth week: Focus group interviews with the same sex of participants (Optional)

Instrumentation

Qualitative research is a design for researchers to study social and cultural phenomena in the natural setting of a society. As Preissle (2002) stated, "[q]ualitative research is a loosely defined category of research designs or models, all of which elicit verbal, visual, tactile, olfactory and gustatory data in the form of descriptive narratives like field notes, recordings or other transcriptions from audio- and videotapes, and other written records and pictures or films" (¶ 1). In terms of its nature, qualitative research is also called "interpretive research, naturalistic

research, phenomenological research and descriptive research" (¶ 1). Qualitative research

therefore involves a variety of research technique skills.

Crotty (1998) pointed out four basic questions regarding the process of conducting a

qualitative research: 1) "what *methods* do we propose to use?" 2) "what *methodology* governs

our choice and use of methods?" 3) "what *theoretical perspective* lies behind the methodology in

question?" And 4) "what *epistemology* informs this theoretical perspective?" (p. 2) Accordingly,

methods indicate "the techniques or procedures used to gather and analyse data related to some

research question or hypothesis" (p. 3); *methodology* involves "the strategy, plan of action,

process or design lying behind the choice and use of particular methods and linking the choice

and use of methods to the desired outcomes" (p. 3); theoretical perspective means "the

philosophical stance informing the methodology and thus providing a context for the process and

grounding its logic and criteria" (p. 3); and *epistemology* concerns "the theory of knowledge

embedded in the theoretical perspective and thereby in the methodology" (p. 3). These four

elements, according to Crotty (1998), not only shape a triangle from a narrow top of

epistemology to a wide bottom of *methods*, but they also tie right in with each other. With an

emphasis on *methods*, what follows will address such research techniques as interview,

observation, and documentary analysis that were used to investigate the concept of imagination

of body movement among children in diverse ethnic backgrounds.

Interview

This technique employs face-to-face encounters between the researcher and informants and

is directed toward understanding informants' perspectives on their lives, experiences or

situations as expressed in their own words. Taylor and Bogdan (1998) argued that "interview is

the 'favored digging tool' of social research" (p. 87). Interview techniques not only rely largely

on verbal accounts to learn about social life but also display the research data more representative. In other words, interview techniques put more emphasis on verbal communication; that is, utilized in situations specifically arranged for a specific research purpose, interviews rely extensively on verbal accounts of how participants act and what they feel (Taylor & Bogdan, 1998). Two different interview techniques were conducted in the study: semi-structured interview and unstructured focus group interview.

     Semi-structure Interviews.   This type of interview allows participants to answer more on their own terms than the standardized interview permits, although it still provides a greater structure for comparability over that of the focused interview. May (1997) argued that the "interviewer should not only be aware of the content of the interview, but also be able to record the nature of the interview and the way in which they asked the questions" (pp. 111-112). The researcher should be aware that this type of interview "involves the implementation of a number of predetermined questions and/or special topics and it is located somewhere between the extremes of structured and unstructured interviews" (Berg, 1995, p. 33). In sum, the semi-structured research design not only elicits information untainted by the context of the interview but also records the most salient behaviors from his/her interviewee. As the interview protocol indicates (see Appendix B), a sequence of questions allows participants to talk about the image they have conceived related to their favorite sports, TV channels, and games freely. The use of semi-structured interview design in the study is that it provides a greater degree of freedom for the interviewer and a need to understand the context and content of the interview.

     Unstructured or Focus Interviews.   Sometimes, unstructured interviews are also called "informal" and "unstandardized" interviews. This type of technique is often combined with participant observation and fieldwork. It offers more "flexibility" and "the meaning discovery"

(May, 1997). According to Fontana and Frey (1994), unstructured interviews present an interviewer-respondent interaction that contain a "human-to-human relation with the respondent and the desire to understand rather than to explain" (p. 366). In other words, unstructured interviews focus on the relation and interaction between interviewer and interviewee with an intention of the interviewer to understand and get familiar with his/her interviewee.

During the focus group interviews, the researcher asked participants to take their favorite photographs and find their favorite sports images from Internet. Participants then were asked to show their photographs to a group of participants and discuss about how and what they constructed those photographs and images (See Appendix C). The unstructured interviews emphasize an understanding of "what" and "how" of the participant's ideal (thoughts) and behaviors rather than explaining "why." According to Fontana and Frey (1994), seven elements were often used while conducting informal interviews: accessing the setting, understanding the language and culture of the respondents, deciding on how to present oneself, locating an informant, gaining trust, establishing rapport and collecting empirical materials. Therefore, when the researchers conduct informal interviews, they will need to be aware of such seven elements while getting into the participants' group, being familiar with their cultures and languages, deciding the researchers' role, knowing someone as insider from the group studied, gaining trust from the participants, understanding them and establishing rapport, and writing (recording) and analyzing fieldnotes regularly and promptly.

Observation

Non-participant observational technique indicates that the observers does not directly get involved and interact with the observed group, they only spend time with them for collecting data based on their observations. This technique contains two levels of degree: "complete

observer" and "observer-as-participant." In some way, the technique of "complete observer" is the opposite extreme from that of "complete participant." In other words, the researcher observes the events of a group without participating in activities. A group of subjects may, or may not, become aware of the fact that they are being observed (Fraenkel and Wallen, 1996).

Non-participant observational technique has both advantages and disadvantages. One advantage is that non-participant observation permits more accurate observations since it allows more control over the environment. Most weaknesses of non-participant observation involve research ethics since various researchers may reach different conclusion due to different situations. Knowing that the researcher will not participate in any activities, participants may not act normal as they usually do. That may affect the accuracy of the data. Validity and reliability are important factors at this point. The most common types of non-participant observation that the researcher uses are "naturalistic observation," "simulations," and "case studies" (Fraenkel and Wallen, 1996).

In order to have a better understanding of children's imagination in body movement, the observation technique was also used in four different settings: after school, school gym, student's playground and computer game room.

Document Analysis

Generally, document analysis include five segments: "acoustic and visual recordings," "field notes," "research diary," "documentation sheets," and "transcription" (Flick, 2002). All these five segments were collected through either interviews or observations. As May (1997) argued, document analysis "allowed comparisons to be made between the observer's interpretations of events and those recorded in documents relating to those events" (p. 157). In other words, document analysis presented itself as a comparative interpretation of the data itself.

Acoustic and Visual Recordings.   This segment of document analysis used recording devices, such as tape and video recorders, while conducting observations and interviews. Flick (2002) stated that "[u]sing machine [recording devices] for recording makes the documentation of data independent of perspectives" (p. 167). Recording devices thus make possible the documentary data independently and beneficially. However, it is arguable that recording devices are after all not natural and realistic recordings because the devices may infect and limit the individual's response and behavior. Therefore, when employing acoustic and visual recordings as document analysis, the researchers should be aware that whether the participant is comfortable with these recording machines and that such "bias" as the participant's behavior and response may take place.

Field Notes.   Field notes contains four types of notes for documentation: "Condensed," "Expanded," "Journal," and "Analysis and Interpretation" field notes (Glaser and Strauss 1967; Spradley 1980; Flick 2002; DeMarrais Forthcoming). Specifically, "condensed" field notes mean that the researcher condenses the multitude of activities and interactions that take place in the field by recording in single words, sentences and quotations from conversations (DeMarrais, Forthcoming). Thus, this type of field notes is usually handwritten. "Expanded" field notes rely on one's sensory perception—sight, hearing, smell, taste and touch—in making these records; they are usually the impressions from either interviews or observations and field contacts (Flick, 2002). Yet, it is essential for the researcher to expand his/her condensed field notes and put them onto computer files for easier analysis later (DeMarrais, Forthcoming). Spradley (1980) suggested the idea of "concrete principle" for both condensed and expanded field notes. This principle indicates an attempt to record descriptions of actions in specific, concrete low-inference detail (DeMarrais, Forthcoming). Then, "journal" field notes and diaries record the whole

process during the course of the research with dated entries, fore example, experiences, ideas, fears, mistakes, confusions, breakthroughs and problems that arise during fieldwork (Flick, 2002, p. 170). At last, "analysis and interpretation" of field notes start immediately after the field contacts and continue until the study finishes (Flick, 2002, p. 170). Often combined with "journal" field notes, this type of field notes includes one's generalization, interpretations, insight, and analysis (DeMarrais, Forthcoming). In sum, these four types of field notes record different parts and dimensions of the research and contribute to one "narrative study" that includes actor/actress, narrator, environmental setting and particular event.

Research Diary. This segment of document analysis is used especially for when more than one researcher is involved. This is necessary because, as Flick (2002) argued, "there is a need for documentation of, and reflection on, the ongoing research process in order to increase the comparability of the empirical proceedings and focuses in the individual notes" (p. 170). Recently, two methods of documentation have been employed in the qualitative research study: research diaries written by participants and Strauss' memos for developing a grounded theory. These two methods of documentation, according to Flick (2002), are "not only an end in itself or additional knowledge but also serves in the reflection on the research process" (p. 170). In other words, the segment of research diary relies heavily on the techniques of comparability with, and reflection on, the continually research process.

Documentation Sheets. Generally, this segment of research technique, according to Flick (2002), is used for conducting interviews that involve several interviewers or frequent change of locations. In order to prevent the influences of outside factors, documentation sheets are employed. For example, when several interviewers conduct interviews, research questions should concretely be listed on these sheets, such as date, place, duration, interviewer, gender of

interviewee, professional field of interviewee, and peculiarities of the interview (Flick, 2002).

Thus, documentation sheets not only help the researcher to prevent the outside bias, but they also

contain explicit additional contextual information.

Transcription. The segment of transcription is to transcribe what the researcher

has recorded from the record devices, directly. Especially in an interview, transcription,

according to Flick (2002), "seems more reasonable to transcribe only as much and only as

exactly as is required by the research question" (p. 171). Moreover, as Bruce (1992) stated, a

transcription system is a general criteria that provide these four conveniences—easy to write,

easy to read, easy to learn, and easy to search—for the transcriber, the analyst and the researcher.

Similarly, a transcription system is an over-exact transcription of data to support the researcher's

interpretation and investigation. Consequently, two rules emerge from transcription: 1)

transcribing statements, turn taking, breaks and ends of sentences; and 2) check of the transcript

against the recording the anonymization of data (names and temporal references) (Flick, 2002).

Content Analysis

One may argue that content analysis is a quantitatively oriented technique, for

standardized measurements are used. In content analysis, according to Manning and Sullum-

Swan (1994), "metrically defined units" were applied to "characterize and compare documents"

(p. 464). Similarly, Berelson (1952) argued that content analysis consisted of "objective,"

"systematic," and "quantitative." Yet, Berg (2001) stated that concerns over quantification in

content analysis tend to emphasize "the procedure of analysis," rather than the "character of the

data available" (p. 241). In other words, content analysis can be the combination of both

quantitative and qualitative methods that emphasize not only the systematic analysis of

procedure but also the data characteristics. Berg (2001) addressed this type of analysis well:

"researchers examine artifacts of social communication [in content analysis]. Typically, these are written documents or transcriptions of recorded verbal communications. Broadly defined, content analysis is 'any technique for making inferences by systematically and objectively identifying special characteristics of messages'" (p. 240). Digital photographs, videotape, or any item that can be made into text are also considered in content analysis. For the criteria of selection used in any given content analysis, Berg (2001) noted, it "must be sufficiently exhaustive to account for each variation of message content and must be rigidly and consistently applied so that other researchers or readers, looking at the same messages, would obtain the same or comparable results" (pp. 240-241).

This present study asked participants to take and select their favorite photographs and images, making them into "text" that explain how and what they selected those photographs and images. In so doing, the researcher was able to analyze content and find its sequence based on participants' information.

<center>The Constant Comparative Analysis</center>

"Qualitative comparative analysis" was adopted and focused on making comparisons to generate explanation from fieldnotes, interview transcripts and documents (Patton, 2002). By using qualitative comparative analysis, the two stages of within-case and cross-case analysis were used "to build a general explanation that fits each of the individual cases, even though the cases varied in their details" (Yin, 1994, p. 112). As for validity and reliability, triangulation and long-term observation were also used.

Two kinds of data displays were involved in the study: 1) *within-case display* and 2) *cross-case display*. According to Shank, "[d]ata displays allow us to see those patterns, find the variables, and map out possible relationships" (2002, p. 137). In other words, the process of

organizing data allows the researcher easier to make meanings out of data. These displays of data analysis not only dealt with "exploring and describing the data—analytic text" but also allowed the researcher to explain, order and predict the data beyond exploration and description—*causal modeling* and *causal networks* (Miles and Huberman, 1994).

Within-Case Display

Within-case display is an ongoing process of sorting out the order found within a given case. Two different strategies were taken into consideration in this process of data analysis: context chart and a case dynamics matrix and causal network (Shank, 2002).

Context chart. It contains a series of key behaviors observed within the case. Such key behaviors allow the researcher to create a network showing the impact of these context factors on the behaviors. As long as the research displays the factors that he/she has known, the researcher would be able to create easily a systematic understanding (Shank, 2002) and build a general explanation (Yin, 1994).

A case dynamics matrix and causal network. A case dynamics matrix is similar to a map of the changes that occurred within the case and seen as outcomes of certain forces or efforts; a causal network is a visual map of cause-effect states. Both of these tools can be used to make predications and build explanations that fit each individual case (Shank, 2002).

Cross-case Display

As Shank (2002) indicates, this display allows the research to dig into the particular and historical character of cases. This type of data analysis, moreover, is the level of case-to-case comparison instead of analyzing within the case. The idea of cross-case display is to collect and organize all the individual cases in order to allow the research to have a better understanding of each data case and offer a proper explanation for each individual case. Two steps similar to

within-case display were also used: 1) *exploration and description displays*; and 2) *ordering and explanation displays*.

      Exploration and description displays.   In this first set of cross-case analysis, the researches analyzed and ranked each individual case by order (high, medium, low) in order to treat each case as a source of data. After ranking each case, the researcher grouped the same level of cases together and saw patterns within each ranking group as well as patterns across groups (Shank, 2002).

      Ordering and explanation displays.   This step of cross-case analysis consists of two different methods—case ordered effects matrix and case-ordered predictor-outcome matrix. The former one is to find out the sorts of effects that the cases reveals; the latter method is to look at the cases as being effects of some prior casual system (Shank, 2002).

<div align="center">

Researcher's Subjectivity Statement

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      In order to clarify my position as a researcher, it is necessary to delineate my background and some of the perspectives that I bring in to the research. I am an international student from Taiwan and have been in the United States for more than six years. The physical education curriculum design I learned from Taiwan is very different from that of the United States. My imagination of physical movement based on my experiences at my elementary school in Taiwan was mostly related to sports activities, such as basketball, kickball, dodge ball, field hockey and track and field. In contrast, the child's imagination of body movement at the elementary school in the United States seemed to emphasize fundamental body development, such as skipping, jogging, jumping, tossing and catching, and body awareness. Moreover, I found that cultural influences—ethnicity, home and school, for example—would be a significant issue to shape a child's body-image/body-schema in his/her body movement. Since I am a Taiwanese female and

studying in the United States, I was able to conduct a comparative research under the direction of my major professor and the children from Taiwan and the United States.

Throughout my graduate studies I have focused on my study on elementary school children. I also have had experience in supervising pre-service physical education teachers when they taught elementary children, as well as observed elementary children's performances in the gym. Those experiences brought me to locate my study at the imagination of body movement. My interest in children's imagination of body movement reflects my experiences during first year of study in the United States. I was struggling to perform what the teacher asked because I didn't learn them before. For example, when the teacher asked me to imitate a chicken, I found the image of my body movement was different from other peers' movements. So what draws me to this area of research, which may help not only children from different ethnic groups, who might struggle but also physical education teachers, from both Taiwan and the United States, who have an better understanding of a child's imagination in his/her body movement in physical education class.

Researcher's biases and assumptions were also taken into consideration in the study. Merriam (1998) indicates that it is important to provide triangulation as well as subjectivity statement while conducting a qualitative research. First, I believe that cultural influences that include ethnicity, home school and society are intertwined with a child's imagination of body movement. Second, the Internet-based virtual world reshapes a child's imagination in body movement as well as his/her identity formation. Finally, my personal experiences in both Taiwan and the United States provide me significant access and focus on behaviors, perspectives and insights related to happenings in the research settings.

Research Limitations

According to Merriam (1998), "the investigator as human instrument is limited by being human—that is, mistakes are made, opportunities are missed, personal biases interfere. Human instruments are as fallible as any other research instrument" (p. 20). Her concern is that the researcher being a primary instrument of data collection and analysis needs to be conscious of his/her biases and assumptions and the impact on the research process. In order to avoid my personal biases and assumptions, the research was designed to have an unstructured open-ended interview with children and long-term observations between school and after school settings. Moreover, the findings from this study are not meant to be viewed as generalizable to other settings or populations.

A qualitative research method was used in the study. The method of picture taking activity and focused group interviews were not addressed in the study for two independent reasons: due to the limited age level of students and the confidential issues. During the one/two weeks of taking picture activity, the students were very excited about taking their own pictures both in the school and at home. Nevertheless, all the pictures taken either by themselves or by their family members involved family members, school peers and in addition to the student participants. In regard to the method of focused group interview, the students were unable to express their thoughts fully due to the hierarchical power relations among students of different ethnic origins. The interaction among different ethnic groups' students became involved in an interaction of power relations: African-American male student seemed to dominate the whole conversation and expressed himself as a major character while students of other ethnic origins were playing different roles in the states' School during the focused group interview. However, the power relation preformed differently while the female group was conducted. It seemed that

Caucasian female student was leading the conversation at all times, and then Asian-American, African-American, and Hispanic-American. In addition, the comparison study between the Schools in the United States and Taiwan was unable to be made because the focused group interviews for male and female students in Taiwan's School were conducted altogether. Methods of photo taking and focused group interview for diverse ethnic groups may be a limitation to the study design. These methods may be more appropriate and suitable for older children and for singular ethnic group than the case in the present study.

CHAPTER IV

ANALYSIS OF THE DATA

Overview

This chapter presents the thoughts, beliefs, perspectives, points of view and behaviors

regarding children's imagination of body movements. The children ranged in age between eight

and nine and were from different cultural and ethnic groups, but were from the same educational

system of elementary school. The present study's purpose was to examine young children from

different cultural backgrounds in terms of construction of their body-image/body-schema in a

physical education classroom. In order to provide school teachers with information about

children's body-image/body-schema construction as influences children's learning, studies need

to be conducted for the purpose of understanding different body movements of children and

developing culturally responsive educational curriculum in elementary physical education. The

purpose of the study was to examine the extent to which children's body imagination is

influenced by cultural and social difference of home and school, as well as by the Internet

technology, TV media and video game, in two different countries, Taiwan and the United States.

Twenty-two third and fourth grade children (14 females and 8 males) volunteered for the

study from Marina Academic-Cathay Campus, Taipei, Taiwan and Yaya Elementary School,

Georgia, United States. All of the participants had one and follow-up interviews and each was

involved in one picture taking activity. Information from non-participant observation and

document analysis were used to enhance the accuracy of the data. The study took four to ten

weeks to complete. All participants were recruited from six classes of third graders at Yaya

elementary school in the United States and two classes of third and fourth graders at Marina Academic-Cathay Campus in Taiwan.

The research question concerned "how children from different cultural backgrounds develop their body-image/body-schema, particularly in physical education in the face of a global society." Data collection centered on children's body imagination of their body movements in Schools and after School programs as well as on meanings as related to various cultural and ethnic groups. Data were transcribed, analyzed and compared inductively to determine emergent themes and commonalities.

Patten's (2002) and Yin's (1994) idea of "qualitative comparative analysis" was used, involving two stages: within-case and cross-case analyses. Both were adopted to make comparisons and to generate explanatory themes that fit most of the individual cases in the study. Four stages of data analysis were used. First, the initial one/two-week non-participant observations were completed at three environments: physical education classrooms, computer labs and playgrounds. The observations were used to provide a better understanding of the different geographic locations and cultural settings. Second, the first interview data were transcribed and analyzed. Third, the data from interviews, fieldnotes and documents were transcribed and placed into categories and tentative themes. For example, the data were analyzed and categorized based on males and females from Taiwan and the United States, and also based on after school, school and technology as consistent with the participants' cultural backgrounds. Fourth, comparisons among the data and general explanations that represented each of the individual cases were made.

Geographic Location and Demographic Information

Geographic Location and the School Structure

Initial data were collected during the first/second week's observations and informal interviews were conducted at the two Schools, as shown in Table 1. Geographically, Marina Academy-Cathay Campus is located in the metropolis of Taipei, Taiwan, and Yaya Elementary School is located in rural Georgia, the United States. Both schools shared a similar educational system but were different in terms of social-economic status and belief systems. While Marina Academy-Cathay Campus is a private Christ-centered school, Yaya Elementary School is a public school without any religious affiliation. However, Marina Academy-Cathay Campus and Yaya Elementary School were accredited either by the Western Association of Schools and Colleges or by the Southern Association of Colleges and Schools. As for their physical education curriculum, computer and recess in particular, it seemed that both schools had similar resources with almost the same length of time in each week or day.

For example, third and fourth graders were combined during physical education classes and recess at Marina Academy-Cathay Campus, and further, half of third and fourth graders took a physical education class and the other half took a Chinese language class. In other words, physical education and language were scheduled at the same time period, and children took these two classes alternatively every two days. Yet, all the third and fourth graders shared the same period of recess, 20-minute each in the morning and afternoon. As for the computer subject, it depended on each home teacher because no computer teacher offered it at Marina Academy-Cathay Campus. The home teachers had to teach the computer subject on their own. In comparison, Yaya Elementary School had six third grade classes and each third grade class was scheduled to have two physical education classes and one computer class each week with a 30-

minute recess everyday. Additionally, computer teachers were available at Yaya Elementary

School.

In short, as shown in Table 2, both schools had almost the same schedule of physical

education, computer and recess, even though their geographic location and school structure were

entirely different from each other.

Table 2. Geographic Location & School Structure:

	Location	School System	Target Grade	P.E. Class/week	Computer/ week	Recess/day
Marina Academy – Cathay Campus	Taipei, Taiwan (metropolis)	K-9 (Private)	3rd and 4th	80-120 minutes	45 minutes (various)	40 minutes
Yaya Elementary School	Georgia, US (rural setting)	K-5 (Public)	3rd	80 minutes	45 minutes	30 minutes

Demographic Population

Both schools' populations were different; Yaya Elementary School's population is almost

three times that of Marina Academy-Cathay Campus' students, as shown in Table 2. Based on

the school report, the majority of ethnic groups at Marina Academy-Cathay Campus are Asian

children and the majority of group at Yaya Elementary School are White children. Due to that

fact that current student enrollment at Marina Academy-Cathay Campus was categorized by

students' passport, I was unable to provide accurate percentage of majority Asian children's

population in the school; however, based on the student passport percentage, 63.25 percent of

children held U.S. passport in the school, as shown in Figure 3, and were mainly of Taiwanese-

American heritage; only a small number of children were white and none of them were African-

American at Marina Academy-Cathay Campus. In contrast, at Yaya Elementary School, three

fourth of student population were white (76.19%); and only one fourth of students were non-

white (23.81%), including Asian, Black, Hispanic and Multiracial individuals, as shown in Figure 3.

The study focused on third and fourth grade children at Marina Academy-Cathay Campus and only third grade children at Yaya Elementary School and included forty-nine (Female = 40.82% and Male = 59.18%) third and fourth graders from Marina Academy-Cathay Campus and one-hundred and seven (Female = 58.88% and Male = 41.12%) third graders from Yaya Elementary School, as shown in Table 3. Female children were less than male's in Taiwan's School, but in the United States' School, the contrary was true. Interestingly, the percentage of minority population (which meant non-Asian in Marina Academy-Cathay Campus and non-White in Yaya School) from both schools were 20.41% and 23.36% respectively, which were about the same, as shown in Table 3.

Race

The participants were from diverse racial and ethnic backgrounds. As shown in Table 4, ten participants (7 female and 3 male) volunteered to participate in the study at Marina Academy-Cathay Campus in Taipei, Taiwan; twelve students (7 female and 5 male) were involved in the study from Yaya Elementary School in Georgia, United States. Six different ethnic groups were represented as shown in the Table 4. Specifically, the participants from Marina Academy-Cathay Campus included four Asians (two were born US citizens and yet never lived in the United States, one was born in Korea, and another female was born and used to live in the United States), three Caucasians (two were born in the United States and have lived in Taiwan for at least 7 years, and one was born in Hong Kong and used to live in the United States), one Taiwanese-American (American father and Taiwanese mother), and two Indians (both of them were born in India and live in Taiwan). Likewise, the participants at Yaya

Table 3. Demographic Population

	School Population	The Percentage of Target Grade	The Percentage of Target Grade Female	The Percentage of Target Grade Male	The Percentage of Minority population
Marina Academy – Cathay Campus	234 (Majority: Asian)	49 (20.94%)	20 (40.82% & 8.55%)	29 (59.18% & 12.39%)	10 (20.41% & 4.27%)
Yaya Elementary School	672 (Majority: White)	107 (15.92%)	63 (58.88% & 9.38%)	44 (41.12% & 6.54%)	25 (23.36% & 3.72%)

Figure 3. The Schools' Population Distribution

Marina Academy –Cathay Campus

4% 3% 3% 2% 2% 9% 12% 65%

USA • CANADA
AUSTRALIA • NEW ZEALAND
INDIA • PHILIPPINES
OTHER • KOREA

Yaya Elementary School School Report

12% 4% 6% 1% 77%

WHITE • ASIAN • BLACK • HISPANIC • MULTIRACIAL
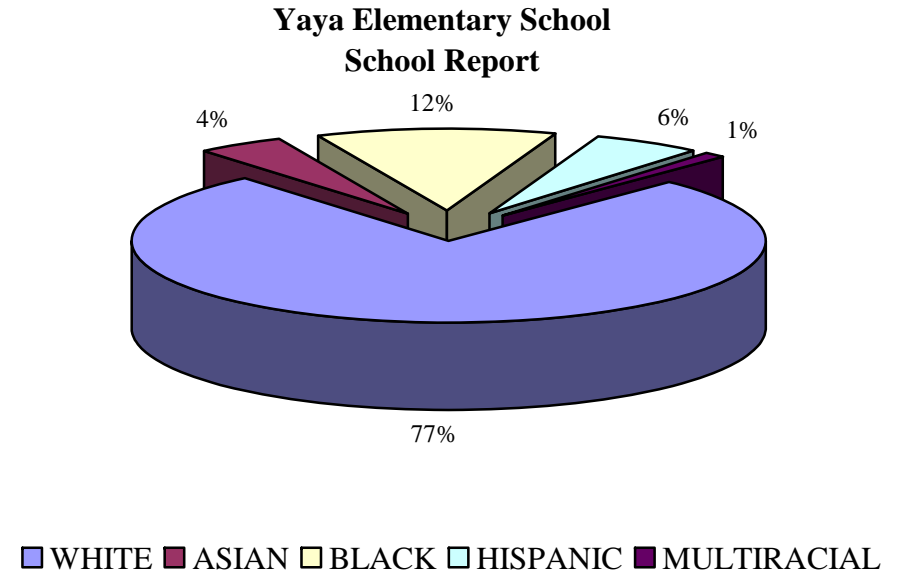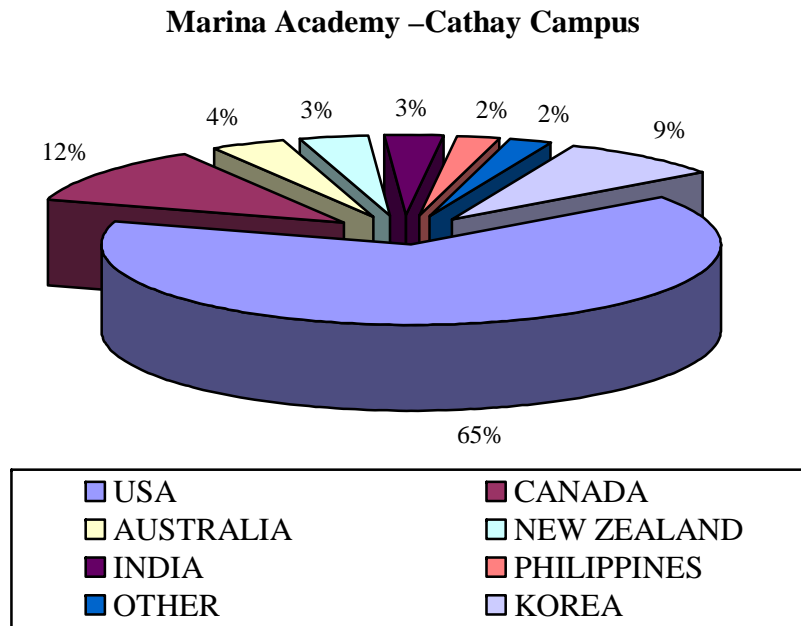
Elementary School included two Asian-Americans (the female and male were born in the United States and the male spoke Mongo language at home), two African-Americans, four Hispanic-Americans (two female students were born in Mexico and spoke Spanish at home, another female student was born in the United States, and one male student was born in Columbia and spoke Spanish at home), three Caucasians and one multiracial male (father is from Dominican Republic and mother is from Italy). Diverse ethnic backgrounds were represented and very rich information were collected from the interviews, observations and documents; the data were analyzed and compared inductively to determine emergent themes and commonalities, which are presented in the next section.

Table 4. Race of Participants:

	Asian	Black	Hispanic	White	Multi-racial	Indian	Total
Marina Academy– Cathay Campus	4 (3F:1M)	0	0	3 (3F)	1 (1M)	2 (1F:1M)	10
Yaya Elementary School	2 (1F:1M)	2 (1F: 1M)	4 (3F:1M)	3 (2F:1M)	1 (1M)	0	12

Findings

The purpose of the study was to examine the extent to which children's body imagination was influenced by cultural and social differences of home and school, and also by the Internet in two different countries. The findings consist of themes derived from formal and informal interviews, observations and participants' documents. Use of analytic induction revealed four major themes: a) father-image/mother-image and sibling-image/PE teacher-image; b) gender and sports; c) technology, body-image and imaginary; and d) mapping cultural images. Each theme included interview data derived from a variety of sources, including home, school, media and Internet experiences, as well as from observation data.

Father-image/Mother-image and Sibling-image/PE teacher-image

This theme revealed how cultural differences shaped children's imaginations. Responses to the first two interview questions were compared within-case, such as each interview question's response, and cross-case, such as with other participants in the same school and from different schools. And further data were collected to examine the extent to which home and school cultures influenced children's body movement imagination. Participants described their favorite persons listed in Table 5. They are categorized according to gender and ethnic differences.

Based on each participant's thirty to sixty minutes of interview's transcript, those who have the same sibling and family structures tended to refer to the same favorite person in their family. In the Table 5, five types of sibling and family structures were classified in the study: 1) father-image/Only Child; 2) synthesized image/first child; 3) unknown-image/parents separation involves sibling separation; and 4) sibling-image/presence of an older brother, a sister or both in the family. Sibling and family structures revealed different images of children's favorite persons in sports, which influenced his/her sport selection and body imagination in his/her body movement indirectly. (See Diagram 1.)

Diagram 1. The relationship among sibling and family structures, children's body imagination, and children's body movement:

Sibling and Family Structures
(Cultural Mediator: Favorite Person)

Children's Body
Imagination

Children's Body
Movement
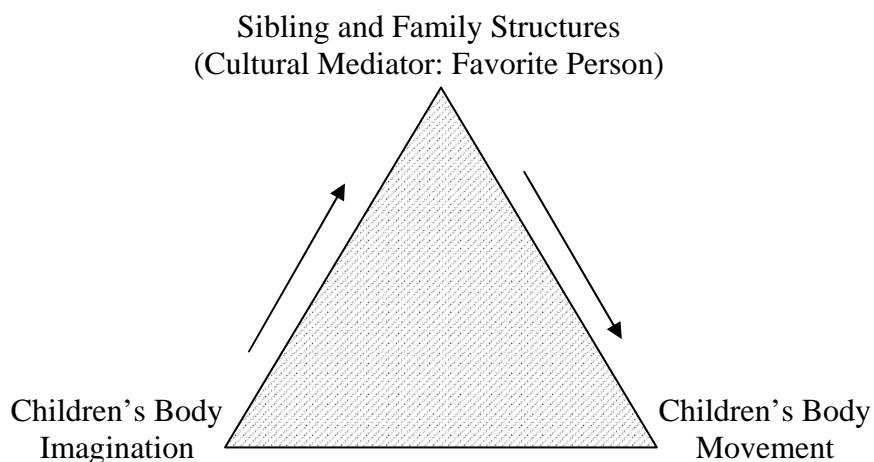
1) Father-image/Only Child. In this theme, the children had no sibling. In both Taiwan and the United States, Lucy at Yaya School and Sarah at Cathay School were the only ones in their families. The image of their favorite person in sport is related to their father-image and family-image respectively. Below is a typical conversation that the researcher had with Lucy, a White female student at Yaya Elementary School:

Interviewer: Why do you like swimming?

Lucy: because I love swimming and my dad plays with me in the pool. I know that.

Interviewer: So, you know how to swim and your dad teaches you how to swim when you were very young, right? Do you still swim now? ((Observer Comment (OC): I tried to guide her to recall her memory of swimming with her dad.))

Lucy: um…Because he likes all, like a little swim,…, like almost everyday we go there and he teaches me how to jump off the diving floor and so, all that.

Interviewer: how many styles of swimming do you know?

Lucy: uh…I don't know.

Interviewer: Like freestyle, or backstroke…

Lucy: I can do the backstroke.

Interviewer: How about your dad?

Lucy: He can do almost like everything.

Interviewer: Did he teach you how to do it?

Lucy: ((OC: she nodded her head and it meant yes.))

Interviewers: How about your mom?

Lucy: she don't do nothing. She just lay down in the pool. (Lucy, Female Caucasian, Interview)

Table 5. Sibling and Family Structure:

Gender Ethnicity:	Marina Academy-Cathay Campus in Taipei, Taiwan		Yaya Elementary School in Georgia, USA	
	Male	**Female**	**Male**	**Female**
Asian	-1 sister	-1 brother & 1 sister; -1 sister; -1 brother	- 1 brother & 1 sister	- 1 brother & 2 sisters
Black	**Not applicable**	**Not applicable**	- ***3 sisters & 1 brother	- 2 sisters & 1 brother
Hispanic	**Not applicable**	**Not applicable**	- 1 brother & 1 older	- 3 brothers & 2 sisters; - 1 sister & 4 brothers; - **1 brother & 1 sister
White	**Not applicable**	-3 brothers & 2 sisters; -1 sister; -1 brother & 2 sisters	- ***1 brother	- **Two sisters; - *none
Indian	- 1 sister	- *none	**Not applicable**	**Not applicable**
Multiracial	- 1 brother & 1 sister	**Not applicable**	- **1 sister	**Not applicable**

* He/she is only child at his/her family.
** He/she is the first child.
***His/her parents were separated so did his/her sibling.

Lucy's conversation showed that her father was the dominant figure that inspired her to select swimming as her favorite sport, as expressed in her interview (one sets the picture that her body movement imagination involving swimming movement as connected to her father). Meanwhile, her image of her mother about swimming was someone who laid by the pool and did nothing. Of course, this conversation was simply a small part of the dialogue showing how the father-image has been taken into a consideration when the Lucy talked about her imagination of swimming physical activity. Interestingly enough, similar description was provided through Sarah's interview at Cathay School in Taiwan:

Interviewer: What is your favorite sport?

Sarah: My favorite sport has many kinds.

Interviewer: Can you name them?

Sarah: Racing, playing kickball, I like all kinds of sports. But, I don't like golf because I never get into the main sport.

Interviewer: Any particular sport that you like?

Sarah: Swimming.

Interviewer: How about yoga?

Sarah: Yoga, I hate it. My mom do[es] yoga because I never stand straight, I always stand bended, and my Mom said that "you stay straight or you have to do yoga?" and I said "o.k. I stay straight."

Interviewer: But, your mom likes yoga.

Sarah: I do sometimes when my mom do[es]. [But,] maybe not many times.

Interviewer: You don't like it? ((OC: I was shocked when she mentioned that she doesn't like yoga at all. So, I confirmed it with her again and asked her the reason why she didn't like it.))

Sarah: Yeap, I hate it.

Interviewer: Why?

Sarah: I just like to do which one I know and I don't want to do other kind.

Interviewer: How about your father? ((OC: since she told me that she doesn't like her mom's sport, I was curious about her father's sport.))

Sarah: He did sport. He got playing soccer.

Interviewer: Do you like soccer?

Sarah: Yeap, I do.

Interviewer: That's why, you like kick ball. ((OC: I tried to connect it to what the mentioning at in the beginning of the conversation and guide her to develop it a little bit further.))

Sarah: Yeap, it's kind of kicking and running. That's my favorite sport. My favorite sports are soccer and kick ball.

Interviewer: It's similar movement, right? ((OC: I tried to confirm those two sports had the same skills that she learned from her father.))

Sarah: Yeap. Because soccer is kicking and kickball is [also] kicking. All the soccer, you have to run and kick to other base and also kickball, you have to kick and run to other base.

Interviewer: So, did you play soccer with your father?

Sarah: Yeap.

Interviewer: In the park or...?

Sarah: In the park. At night, sometimes, we played at home, but my mom, she didn't because she will break everything. Because my father is super-high... (Sarah, Female Indian, Interview)

In the dialogue in Sarah's interview, her favorite sport and father-image are closely connected in comparison to her mother's and father's sports. She selected the sport that she felt comfortable and confident to play with her family at home and peers in school.

Both Lucy's and Sarah's conversations offered a clear father-image when they expressed their favorite sports. In this type of sibling and family structure, the child tended to heavily adopt the father-image as a mediator and then transform his/her imagination of favorite physical activity into his/her body movement.

2) Synthesized image/First child. Three participants (two female and one male) were from Yaya Elementary School in the United States and from different cultural backgrounds represent this theme. Each individual seemed to present a different favorite person in sport. Furthermore, some of their favorite persons overlapped each other and seemed to present a "synthesized-image." Karen, for example, talked about her favorite sport at home in the following manner:

Interviewer: what do you play at home usually?

Karen: That I played, I played babies, teachers. Well, actually, sometimes, I am a teacher not my sister. She doesn't know how. She's just in the kindergarten. I teach her.

Interviewer: So, you teach?

Karen: yup,

Interviewer: you are a teacher?

Karen: yup. (Karen, Female Caucasian, Interview)

Similar to one of the fieldnotes that I observed in her physical education class, she seemed to be a teaching assistant when her mother was a substitute physical education teacher on that day:

Karen's mother is a substitute physical education teacher this morning, because Mrs. Robinson had a doctor's appointment. Basically, she just taught the lesson following Mrs. Robinson's note in today's physical education. However, Karen seemed to be very excited about seeing her mother in the gym. In today's class, Karen was very active and seemed to be her mother's assistant. She helped her mother to clean the equipment and manage the class. At the end of class, her mother lined girls and boys up into two lines and shot the hoop in school side of gym. At the same time, Karen seemed to show her confidence and act like a professional shooter. She bounced the basketball several times and used two hands to aim and shoot the hoop and her movement was very similar to her mother's shooting demonstration. (Karen, Female Caucasian, Fieldnotes, 10/18/2004)

The mother-image corresponded to Karen's body-imagination. Moreover, her body image in terms of playing basketball was confirmed in her interview dialogue. She said, "I like to shoot hoop" and "I like to play that. Mostly, I like to play with my family because they know how I am picky and how/what things I like and stuff" (Karen, Interview). According to her dialogue, the "picky" thing that she mentioned above was her way of shooting, such as two hands shooting and dribbling five or six times before shooting, which she demonstrated in class. Those "things" she mentioned, as revealed in the interview fieldnotes, were influenced by her parents, in particular, her mother.

The second example, a Hispanic-American female student, Julia, also identified a mother-/physical education teacher-image as her favorite person. The result was similar to Karen's case; however, some of her responses indicated a rather different approach regarding her mother-image. For instance, Julia indicated that she didn't have any favorite sport, but she liked jumping jacks the most in gym. Moreover, she liked to play doggy with her younger brother and sister at home. In her case, she did not like to play any sport because she did not know how to play even though her father played some sports. Mother-image seemed to dominate in her case because her mother did not play any sport either.

> Interviewer: …did your father, your dad, play soccer sometimes?
>
> Julia: ((OC: she used her body language and nodded her head.))
>
> Interviewer: He did! So, did you play with him or?
>
> Julia: ((OC: she used her body language and shook her head.))
>
> Interviewer: No! Why? You don't like it?
>
> Julia: ((OC: she kept silent. It seemed that she did not know how to describe it and showed that she did not like it))
>
> Interviewer: No! How about your mom? ((OC: I tried to figure out why she did not like soccer at this point, so I continued to ask her question in related to her mother.))
>
> Julia: She doesn't play. (Julia, Female Hispanic-American, Interview)

In addition, the role of physical education teacher, Mrs. Robinson, was an important factor that helped her to choose her favorite "activities" because all her responses related to "physical" activities were directly from Mrs. Robinson's activities, such as jumping jacks, jump rope, hula-hoop hopscotch, and running around (physical education influence).

The final example presented in this sub-theme was also the first child in the family. Mike is a multiracial individual in that his father is from Dominican Republic and his mother's family is from Italy. Both of his parents played soccer. Mike's mother mentioned in the informal interview in YMCA that she was a soccer coach and Mike's father was a soccer player before (Mike's mother, informal interview fieldnotes in YMCA). Accordingly, Mike mentioned in his interview conversation that he also liked soccer the most because he got to run around and kick the ball. Father-image was mainly taken and served as Mike's favorite person in sport at this point. It seemed that his family was acting very "athletic" and therefore he got involved into all kinds of sport activities, such as basketball, karate, baseball, soccer and swimming, as Mike expressed in his interview conversation:

Interviewer: … What is your favorite sport or game that you played in the PE or at home? The sport or game you like the most.

Mike: The sport I like the most?

Interviewer: Yes.

Mike: nm…Soccer, because you get to run around and kick the ball.

Interviewer: nm...Who teaches you?

Mike: My dad.

Interviewer: Your dad played soccer? ((OC: He nodded his head.)) Really! Everyday? You played with him everyday or sometimes?

Mike: Sometimes and sometimes he has work to do.

Interviewer: Oh...But, the most of time you play with him?

Mike: ((OC: He nodded his head.))

Interviewer: When did you...I meant how old were you when you started to play soccer?

Mike: Um...I think... I've been to play for four years. So, I started it when I was four.

Interviewer: Can you beat your father?

Mike: Yes! ((OC: he was very excited to response it and used his body language—nodded his head.))

Interviewer: Wow...How about your sister?

Mike: Oh yeap. She only played, played, different two years. (Mike, Multiracial male student, Interview)

In the dialogue with Mike, I found that when such a family as Mike's was involved so deeply in sporting matters, the child in such a family would be inspired and tended to transfer the "family-image" into to his/her imagination of body movement activity. No matter what types of sibling or family structure there would be, family-image primarily influences a child's imagination of body-image in movement.

There was no way to determine what certain sibling and family structure in the study would induce certain favorite person as the dominant figure/image in sport; however, the first child in the family, as the data show above, tended to imitate either his/her parents or physical education teacher in school. But when a physical education teacher-image was adopted, it might indicate that his/her family did not get involved in sporting matters so much.

3) Unknown-image/Parents separation involves sibling separation. Interestingly enough, no favorite person was found in this type of sibling and family structure. As shown in Table 4, two participants from Yaya Elementary School in the United States fit this structure. One of them, Jerry, was an African-American male student who lived with one of his older sisters and mother; the other student Alex was a Caucasian male student who lived with his mother alone. In Jerry's interview conversation, he showed that his older sister seemed to carry a

role of his mother: she took him to participate at all of the after school activities, including

swimming, karate, soccer and tennis; however, it seemed that Jerry didn't refer to any "favorite

person" in his interview. The only person that he mentioned in his interview was himself. Below

is a response from Jerry's interview:

> Interviewer: …So, you like to play soccer. Did you learn to play soccer when you were
>
> very young?
>
> Jerry: I just watched people play.
>
> Interviewer: Did you learn it by yourself?
>
> Jerry: Yes, ma'am.
>
> Interviewer: Do your parents play with you? I mean soccer?
>
> Jerry: No, ma'am. I just watched on TV.
>
> Interviewer: O.k. but, why did you decide to play soccer? There are other sports that you
>
> can play, right?
>
> Jerry: Because I thought that it is easy.
>
> Interviewer: Soccer is easy? No? ((OC: I was shocked when he told me soccer was a easy
>
> sport to play and he learned by himself.))
>
> Jerry: It's easy.
>
> Interviewer: So, when you played, did you feel that is was easy?
>
> Jerry: ((OC: He nodded his head.))
>
> Interviewer: So, how did you play soccer, do you know certain techniques? ((OC: Again,
>
> I tried to confirm and ask him to provide the specific skill that he can do when he played
>
> soccer.))
>
> Jerry: I just tried to confuse my opponent. (Jerry, Male African-American, Interview)

For Jerry, observing people to play sports and watching relative sports TV program were important ways for him to learn the sport.

Likewise, Alex gave a similar statement to Jerry's in his interview dialogue. Although it might not seem as an exact response as Jerry's, the dialogue might show that there was no any favorite person existed for him in this sport activity. He provided an example in the following:

Interviewer: Why do you like karate?

Alex: I don't know because I like karate.

Interviewer: You know karate? Who teaches you?

Alex: Nobody teaches me. I just know it and I know a little bit of karate.

Interviewer: Why? How did you know?

Alex: Uhm...((OC: he probably meant don't know.))

Interviewer: when you watched or ... ((OC: I rephrased my sentence and tried to guide him to find the answer. But, he was interrupted when I asked him.))

Alex: No! There is no how! I know how to block anyway. It's easy.

Interviewer: oh...really. ((OC: I got shocked when he told me karate was easy.))

Alex: All it goes like that. ((OC: He tried to wave his hands up and show me the blocking form)) When they tried to punch you, and you just tried to block it.

Interviewer: oh...I see. So, when you play karate, anyone play with you?

Alex: no.

Interviewer: no! You played by yourself? ((OC: He just nodded his head directly.)) (Alex, Caucasian Male, Interview)

Both Alex's and Jerry's dialogues demonstrated a strong and yet different message from other categories. When they expressed their ways of learning sports, they tended to express that they

not only learned it by their own but also played it by themselves. Moreover, they all attempted to convince that learning sports was a very easy matter. In other words, this type of sibling and family structure might reveal a different pattern from other sub-themes; that was, the child's imagination in body movement was derived from "something else," neither family-image nor physical education teacher-image.

4) Sibling-image/presence of an older brother, a sister or both in the family. Most of the participants in both Schools had an older brother, older sister, or both in their families. Perhaps the most fascinating finding in this theme was that most of the participants in the study all identified his/her favorite person in sport as his/her older brother or older sister. In other words, the sibling-image emerged in connection to the family structure. Moreover, this image may have helped most of the participants not only to select their favorite sports but also to perform their body movements. Andrew from Cathay School in Taiwan offered a statement that indicated his older brother to be his role model in his interview conversation:

Interviewer: Can you tell me why you like it?

Andrew: I like almost anything that my brother plays.

Interviewer: So, your brother is your role model?

Andrew: Yeap! Anytime when I copy him or something because every time when I gone to Internet or be there. I just score and I cannot use exhibiting. He is very angry but he cannot help it.

Interviewer: How about your sister?

Andrew: My sister?

Interviewer: Did you play with her sometimes?

Andrew: No! Well, she goes out and plays with some of our neighbors but none of our neighbors right now are here. They all went to like Europe, America, Thailand and stuff like that…(Andrew, Multiracial Male, Interview)

Tom, an Asian-American male from Yaya Elementary School, in the United States, provided evidence in terms of involvement in sport with his older sister in the following dialogue:

Tom: I like to swim.

Interviewer: You like to swim?

Tom: um…swimming.

Interviewer: ok. Who teaches you how to swim?

Tom: my Sister.

Interviewer: O.k. your older sister teaches you how to swim?

Tom: um.. ((OC: um = yes.))

Interviewer: Was she good?

Tom: um... ((OC: um = yes.))

Interviewer: Really?

Tom: She is good, man. ((OC: he raised his voice and tried to tell me that his sister was very good at swimming.)) Anyway, she got [to] the diving room [spot] and Bo-Bo..((OC: I think he meant his older sister went to the diving board and jump into the water.))

(Andrew, Asian-American Male, Interview)

This type of sibling and family structure appeared to be a new approach toward a child's imagination in his/her body movement which was no longer dominated by the father-/mother-image, but shifted into his/her older brother-and-sister-image.

In summary, this type of sibling and family structure revealed a new pattern of child's imagination in his/her body movement, which not only helped him/her to identify and select his/her favorite sport but also to provide a new point of view that would urge us to re-examine the influences of home, school and culture as well. However, such a tendency might vary according to different ethnic origin and gender, which the following theme reveals.

Gender and Sports

The data of the participants from both Schools seemed to reveal a pattern that reflected issues of culture and gender differences; in other words, their picks of pictures displayed a mixture of "interior" and "exterior" imagination in sport, which reflected their current cultural and social contexts. Based on the data analysis of the third and sixth interview questions, as shown in Table 5 and 6, the participants demonstrated various selections of favorite sports and favorite sports pictures. Two major issues that emerged are anchored under the theme of gender and sports: 1) favorite sports picks as influenced by cultural and environmental picks and 2) picture selections as reflective of gender point of view.

1) Favorite sports as cultural (environmental) picks. The data were coded and categorized into different columns based on gender and cultural backgrounds of students in two Schools: Cathay, Taiwan and Yaya, United States. Data for question number three are presented as consistent with participants' responses (See Table 6). Data indicate gender and culture to influence selection of favorite sports. In the case of Yaya Elementary School, male and female participants selected similar favorite sports, which were soccer and basketball; however, as shown in the Table 6, there were also different sport activities among male and female students: male children liked football, baseball, and running the most while female children picked gymnastics, cheerleading, volleyball, riding bike and jumping jacks as their favorite sports

Table 6. Interview Report

	Academy-Cathay Campus in Taipei, Taiwan		Yaya Elementary School in Georgia, USA	
Gender	Male	Female	Male	Female
Q3: What is your favorite sport/game?	Soccer/ Kickball Basketball/ Badminton/ Dodge ball/	Basketball/ Soccer/ Kickball Dodge ball/ Badminton/ Swimming	Football/ Basketball/ Soccer/ Baseball/ Running	Jumping Jacks/ Soccer/ Basketball/ Cheerleading/ Gymnastics/ Volleyball/ Riding Bike
Q4: What is your favorite TV sport program/ channel?	Basketball (NBA)/ Football/ Soccer/ Swimming/ Ice-skate	Ping-pong/ Gymnastics/ Swimming/ Basketball (NBA)/ Soccer/ Baseball/ Football	Soccer/ Football/ ESPN news/ Basketball (NBA)/ Hockey	Gymnastics/ Basketball/ Baseball/ Soccer
Q5: What is your favorite video sport game that you play on play station, game boys, and so on...?	- Online game: runescape.com, flashplayer.com - Xbox: NBA - Computer: Car racing, Fighting Math	- Online game: miniclip.com kids.yam.com puzzle games runescape - Xbox, PSII, Game boys: Pokemon - Computer: ChexQuest Swimming Math NBA	- PSII & Game Cues: Football NFL Fighting - Computer: Football, Tennis Soccer	- PSII & Game boys: Basketball, Soccer, Car racing, Donkey Kong Count Trip, Pac-man, Pokemon - Computer: Winnie pool, Math, Baseball, Bowling, Cinderella,

activities. In sharp contrast, the participants at Cathay School in Taiwan offered a unique phenomenon, which was that male and female students showed no obvious difference in their selection of their favorite sport activities because both chose basketball, soccer/ kickball, dodge ball and badminton. Basically, there was no difference between male and female in their favorite sport picks in Cathay School. Nevertheless, as an insider researcher who grew up in Taiwan, I would jump to the conclusion that this unique phenomenon was primarily affected by cultural context in that the sporting environment outside campus was very limited and students tended to use school facilities to play sports. In fact, most of the participants in Cathay School expressed that they didn't play sport at home due to the limited sporting environment in Taipei, Taiwan. They spent much of their time playing with either their friends or their siblings in the park, and mostly in Taipei American School (TAS). Such a realization led to the understanding that the school's setting and facilities influenced students' selection of their favorite sports. The facility in Cathay's playground, as shown in Figure 4, was different from Yaya School's playground design (See Figure 5.). To put it more precisely, the two playgrounds presented rather different functions in practice. Two examples from the both Schools' recess fieldnotes might explain this.

The recess observation fieldnotes seemed to explain the reason why the participants in Cathay School tended to present similar opinions of their sport picks. Below is an extract taken from one day of recess observation fieldnotes, which provided a good example in regard to the influence of the environment on children's favorite sports:

> In the beginning of recess, Andrew, Jenny, Helen and other kids discussed, and then divided into a group of two teams to play kickball in one half side of a soccer field. Jenny and Andrew were on the same team and on the defense side, and Helen was on the opposite team and on the offense side. It seemed that Jenny was very excited about

waiting for the kicker to kick the ball to her because she was in the short stop position. She got into her ready position, bent her knee and leaned upper body forward when the kicker prepared to run to kick the ball. At the same time, Andrew was a first baseman… Leon was shooting hoop by himself on the other half of soccer field. He seemed that he enjoyed shooting the hoop by himself and watched other kids' play… Emmy, Brittany, Linda, and other girls played relay race around another side of roofed soccer field. They divided the group into two teams and raced with each other. Emmy and Linda were in one group and Brittany partnered with a Caucasian girl. They were really having fun in the relay race… Sarah played the monkey bar around by herself in the corner. She seemed to flip over the monkey bar from one side to another side over and over again… John played the slide in the slide area with other boys… (Recess observation fieldnote, Cathay School, 12/09/2005)

In Cathay School, the playground provided equipment and facility—including soccer (fields), basketball (courts), hopscotch, monkey bar, slide, chair swings, see-saw, and dodge ball areas of play—in a way in which students could choose what they wanted to play and who they wanted to play with in the fields.

Compared with Yaya Elementary School, the equipment setup in the playground was different from Cathay School, because there were chair swings, baseball court, slide, monkey bar and performance stage. One recess observation tells the difference:

In today's recess, Mike was playing sliding baseball in front of a group of people. He was always running in between the baseball and the cheerleading areas, and tried to interrupt other students while they were playing. So, some of the girls, such as Nana, chased him

Figure 4: Marina Academy-Cathay Campus Playground
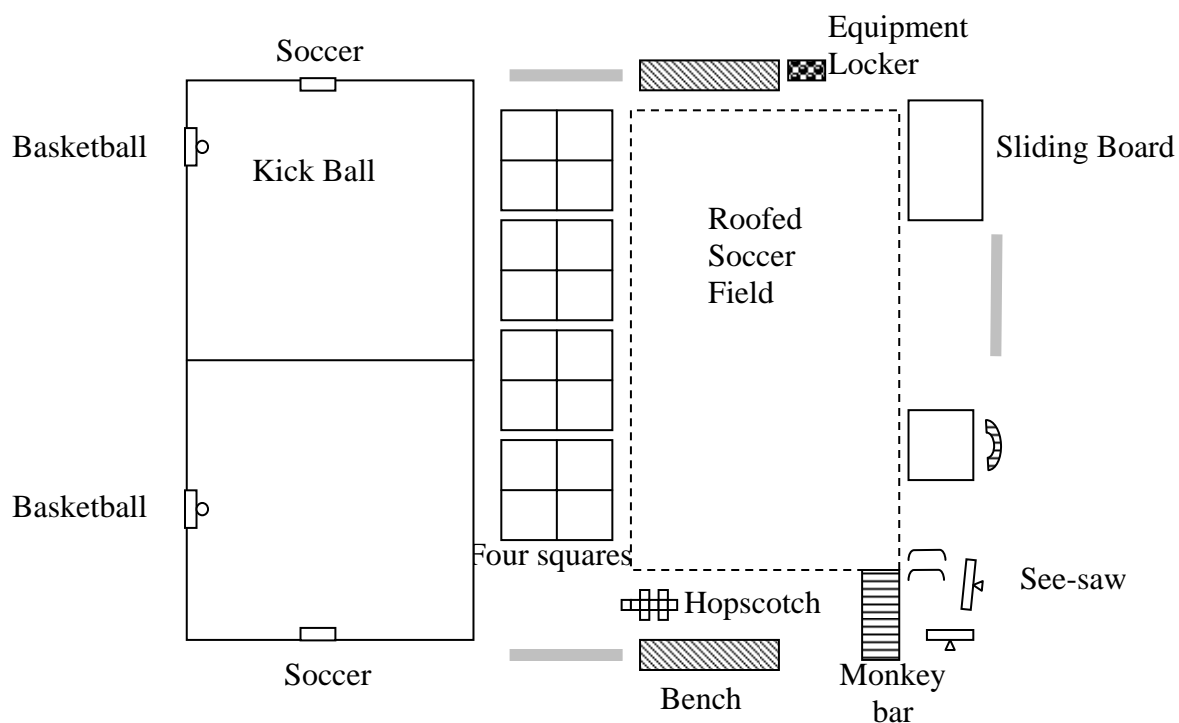
Figure 5: Yaya Elementary School Playground
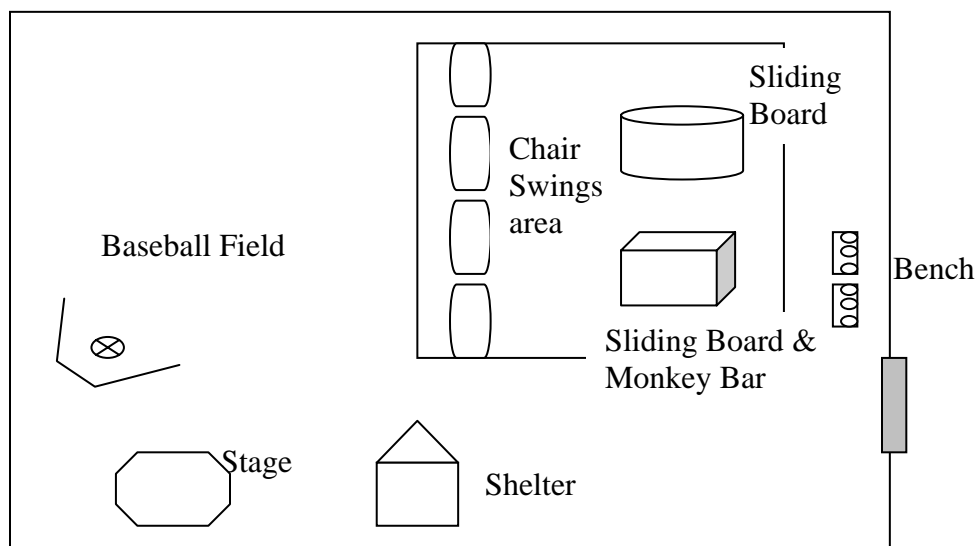
and tried to make him move away from either the baseball area, cheerleading area or the shelter. ((OC: he seemed to be a clown and grasped all students' attentions all the time.)) Jerry was playing in the slide house. And, he was recruiting people to join him and "taking off." ((OC: Jerry seemed to call particular group of friends, African-American students, to join him and "take off" to jump from top to the ground.)) At the same time, Marry was also in the slide house and played monkey bar, and slid with other group of students. Laurel was playing a cheerleading slogan with one of her friends in the chair swings area. And, she seemed not afraid of the heights if compared with other students. She swung as high as she could. But, Nana was playing the swing beside Laurel. She was a little bit scared to swing very high as she expressed to me today; Nana seemed to play all the equipments in the playground with one of her friends, Cherry. On the other side of playground, a group of girls, including Stacey, practiced cheerleading pose in the stage area…. (Recess observation fieldnotes, Yaya School, 10/28/2004)

From the above observation notes, one may conclude that the activities that students played at Yaya School were different from those that students were involved at Cathay School. One may also conclude that the former didn't provide the sport or play equipment to the students so that they could play such activities as chasing, cheerleading, swing, sliding, watching and talking, while the latter school, Yaya, offered the sports equipment for students to be involved in such activities as basketball, soccer ball and dodge ball. In such an environment, students were able to practice sport activities and skills that they learned from physical education classes, including kicking, passing, shooting, catching and racing, among many others.

As a result, the similarity of favorite sport selections regardless of gender between male and female students at Cathay School tended to erase the gender difference (in which case culture or environment might be a key factor), and therefore, there was no clear separation between male and female sports selections in the different cultural School contexts. However, one question might be raised: how and where should the issue of gender difference be clearly identified and emphasized in the favorite sport selections of the students in the two cultural contexts of the Schools. This question concerns how student would differ or be similar in their selections of favorite pictures. Subsequent paragraphs address this question.

   2) Gender influenced picture selections.   Participants were asked to select their favorite pictures from forty-five pictures shown in an eleven-slide PowerPoint presentation, question number 6 in the interview. As shown in Table 7, forty-one out of forty-five (91.11%) were picked by all twenty-two participants. However, 32 pictures (71.11%) were picked by 12 of Yaya School's participants; 37 pictures (82.22%) were selected by ten Cathay School's students. Moreover, in both Schools, participants' top three popular pictures selected were picture number 23, karate (54.55%), picture number 3, swimming (50%), and picture number 13, slide swimming (40.9%), as shown in Table 7. However, both Schools presented different picture selections and rankings. The top three pictures from the participants at Yaya School were #23 karate (66.67%), #3 swimming (58.33%), and #6 basketball (50%) and at Cathay School were #13 slide swimming (50%), #27 gymnastics (50%), and #35 float swimming (50%). Furthermore, the percentage attributed to each individual picture suggested pictures picked by Yaya's participants follow as a high-low percentage of children's picture selections while those by Cathay's data showed an equal weight of picture selections.

Since one of the top three pictures in Cathay School's data, #27 gymnastics, was chosen by five female students, in order to avoid the limited numbers of male participants in the study, picture selections of male and female was also categorized by the gender grouping. For example, male participants liked the picture #23 karate (75%) the most, and then #3 swimming (50%), #7 baseball pitching (50%), #19 hockey (50%), #28 soccer (50%), and #33 skateboard (50%) about equal weight in the latter five picture selections. In comparison, female students picked picture #27 gymnastics (57%) the most and then #3 swimming (50%), #6 basketball (43%), #13 slide swimming (43%), #23 karate (43%), and #24 jump rope (43%) in the ordering selection (See Table 7 and Table 8).
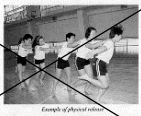
Table 7. Comparison Table of Picture Selection

Both Schools: Yaya & Cathay Elementary School (22 students)					
Total selected pictures	41 pictures out of 45 (91.11%)				
Top three pictures	Karate		Swimming		Slide swimming
	54.55%		50%		40.9%
Yaya School (12 students)			Cathay School (10 Students)		
Total selected pictures	32 pictures out of 45 (71.11%)			37 pictures out of 45 (82.22%)		
Top three pictures	Karate	Swimming	Basketball	Slide Swimming	Gymnastics*	Float swimming
	66.67%	58.33%	50%	50%	50%	50%
Male (8 students)			Female (14 students)		
Total selected pictures	23 pictures out of 45 (51.11%)			34 pictures out of 45 (75.55%)		
Top three pictures	Karate	Swimming	Baseball Pitching	Gymnastics	Swimming	Basketball
	75%	50%	50%	57%	50%	43%

* Only chosen by female

In terms of gender and in regard to the picture selections, female students tended to select those that suggested the "feminine" quality of beauty: jumping motion, family involvement, gymnastics, little kids' involvement, and cartoon picture, and for male students, their selection of pictures seemed to suggest "masculine" quality: fighting, the motion of shooting, pitching,

Table 8. Picture Selection:

1.	*TW 2.	2 3.	USA 4.
5.	6.	7.	TW 8.
*TW 9.	10.	Female 11.	*TW 12.
3 13.	Female 14.	15.	*USA 16.
17.	*TW 18.	Male 19.	Female 20.
*TW 21.	TW 22.	1 23.	Female 24.
25.	*TW 26.	Female 27.	28.
Female 29.	30.	31.	*TW 32.
33.	34.	35.	Female 36.
37.	38.	39.	40.
41.	42.	Female 43.	USA 44.	USA 45.

* Only chosen by female

kicking, batting, and actual setting of photo. Specifically, as shown in Table 8 female students

picked a number of pictures, including #2 tennis kids, #9 family hiking, #11 cartoon cartwheel,

#12 family basketball, #14 floor gymnastics, #16 mini-golf, #18 family picture with cheerleading

football, #20 family soccer, #24 cartoon jump rope, #29 cartoon running, and #32 cartoon

dancing. In contrast, male students selected movements corresponding to certain sports,

including #4 golf swing, #8 baseball pitching, #19 scoring ice hockey, #22 baseball batting and

#28 kicking soccer.

It may be concluded from the observation of the participants' selection of favorite sports

and pictures that, generally, they followed cultural environmental views, and were influenced by

gender perspectives. Three conclusions were made concerning this theme. First, both Cathay and

Yaya Schools, situated in different cultural contexts, seemed to portray a paradoxical

phenomenon because male and female favorite sports were picked based on the limited

environmental cultural contexts. Second, swimming and karate were the two most popular

activities that participants selected from both Schools, based on those forty-five pictures

provided in Table 8.

In this case, however, gender did not appear as a salient factor among girl students in

their selections, although they did highlight a different "inner" pattern of picture selection from

boys'. Third, the data of the participants from both Schools seemed to show that culture and

gender differences, as revealed from their picks of favorite sports and pictures, functioned

together thereby displaying a mixture of "interior" and "exterior" imagination in sport according

to their current cultural and social contexts.

Technology, Body-image and the Imaginary

The influence of media, virtualized games (video games) and the Internet innovations have profoundly shaped and continue to shape children's imagination and creation in terms of body movement. The data from Yaya Elementary School and Cathay School revealed the fact that multiple role-plays dominated the children's imagination. The data were categorized and compared as shown in Table 6. (see p. 80) In this section, three questions in the interview were asked and the answers were compared within-and-cross-cases in order to trace the flow of a child's imagination in the two different cultural School contexts. Each participant from both Schools was asked three types of questions: 1) what is your favorite TV sport program/channel that you watch on TV; 2) what is your favorite video sport game that you play on play station, game boy, etc.; and 3) close your eyes and imagine that you are playing (your favorite sport) in the gym. Imagine the pictures you have in your mind when you are playing (your favorite sport)(10 sec.); then, open your eyes and draw (your favorite sport) picture that just showed in your mind.

The data presented contain rich and thick descriptions. Three issues are discussed in the following sub-themes: 1) media; 2) virtualized game creation and the Internet innovation/revolution; and 3) the "becoming" (ongoing) imaginary.

1) TV Media. Comparisons and contrasts of data made between male and female students, different ethnicities and the Schools helped not only to identify the issues of body movement images in the TV media but also clarify the meanings of the body images constructed. Two major comparisons between male and female students from two different cultural School contexts are addressed in this sub-theme. Most important, the data in this sub-theme showed that male and female students seemed to represent different approaches towards sports media.

Most males' favorite sport TV programs included basketball (NBA), football and soccer, as shown in Table 6. They reported watching sport games either with their fathers and brothers or by themselves at home on most occasions. However, two male participants rarely watched either sports program or TV at home: Tom from Yaya School, and Andrew from Cathay School.

Three examples were used to compare sports involvement in the media. First Mike at Yaya School, he came from a very athletic family background and explained things that he perceived from the sport media as revealed in the following conversation:

Interviewer: … What is your favorite TV sport channel or program when you watched at home? ((OC: I couldn't finish my sentence and he was very excited and responded to me.))

Mike: ESPN news.

Interviewer: ESPN news? ((OC: I was surprised when he told me that he watched ESPN news.))

Mike: He nodded his head.

Interviewer: Why?

Mike: Because I like to see what's happening, [by] going to sports.

Interviewer: oh...What did you see last night? Watch? ((OC: I tried to confirm that he understood the ESPN news because sometimes I cannot understand it at all.))

Mike: that. The Yankee is coming back. Next year, the Yankee is ganna have different people and that the cowboy is switching coaches.

Interviewer: oh...Did you watch it with your dad or by yourself? ((OC: I tried to clarify whether his dad watched with him and told him to watch the news.))

Mike: By myself.

Interviewer: um…why do you like ESPN news?

Mike: because it informs you about ...

Interviewer: but, who taught you to watch the news?

Mike: I don't know. I just started to watch it. When I...I started one day, and then I just get started to watch it.

Interviewer: When? ((OC: I interrupted him.)) Really!! And, you understand all of it. ((OC: He nodded his head.)) Wow! ((OC: I was impressed when he nodded his head because ESPN news includes lots of information about sports, and in order to understand the sports news, the kid needs to know certain knowledge about the sport.)) O.k. the ESPN talked about the basketball and baseball, right?

Mike: basketball, baseball, football...all of that ((OC: at the same time, he nodded his head and tried to list all the sports that he watched from ESPN news.)) (Mike, Multiracial Male, Yaya School, Interview)

In such a dialogue, Mike not only enjoyed watching the ESPN news alone, but he also understood that this type of TV program functioned to keep him updated about all types of sports news. Specifically, Mike expressed his sentiment on certain sport teams that he supported as follows:

Interviewer: I see. So, you watched ESPN (news). ((OC: I tried to repeat what he mentioned to me.)) Any game did you watch?

Mike: um..I watched basketball game ...and.

Interviewer: NBA?

Mike: Yes!

Interviewer: Which team did you support? You like?

Mike: New York, Knicks.

Interviewer: Knicks? Oh...o.k. so, they are from...I meant the "Knicks" is from... ((OC: I was unable to pick up what he mentioned "knicks" because I don't know anything about the team's name.))

Mike: New York.

Interviewer: New York. o.k. I see. and, how about baseball?

Mike: New York, Yankees.

Interviewer: Why do you like New York? ((OC: I asked him this question because he tended to like one state.))

Mike: I don't know!!

Interviewer: Everything is from New York, right?

Mike: Yes. ((OC: He laughed at that because he found that it is true that he only likes New York's teams.)

Interviewer: How about the Braves? (I tried to give him some other teams' name and let him pick.) Do you like Braves?

Mike: Yankees is [won] Braves. ((OC: I think he tried to make the statement that Yankees' team is stronger than Braves' team.))

Interviewer: O.k. how about soccer?

Mike: New York/New Jersey match starts.

Interviewer: Oh...they did have soccer in New York?

Mike: mnmnm…(((OC: nmnmnm = yes)) (Mike, Multiracial Male, Yaya School, Interview)

It seemed that Mike favored all sport teams from New York, including basketball, baseball and soccer. Moreover, he was very knowledgeable about all sports and teams' rankings and conditions. In contrast, Tom was one of the male students who did not watch sports TV programs; he seemed to know nothing about sports and showed no interest in sports news and sports knowledge:

Interviewer: …Any sport game that you watch?

Tom: No. I don't watch sport.

Interviewer: You don't watch sports?

Tom: uhm.. ((OC: meant no.))

Interviewer: You don't like sports?

Tom: In the TV, I don't.

Interviewer: In the TV, you don't?

Tom: um..

Interviewer: Why?

Tom: oh…I don't want to see [a male]. That will cancel my great shows. ((OC: he seemed to express that he didn't like the sports program because it caused him to miss his favorite shows.))

Interviewer: Did you watch Olympics Games?

Tom: What?

Interviewer: The Olympics games, do you remember?

Tom: [teddy] game?

Interviewer: Olympic...

Tom: After 3 o'clock.

Interviewer: uh? ((OC: I was confused when he said "after 3 o'clock."))

Tom: At 3 o'clock, they start.

Interviewer: What's that?

Tom: um…what's that again? ((OC: He was confused about the question that I asked him.))

Interviewer: Olympic.

Tom: What's Olympic?

Interviewer: the game like international. A lot of people they're running during the summer... ((OC: I tried to recall his memory.))

Tom: uhm...((OC: it meant that he didn't know about the Olympic games))

Based on the interview, he seemed to express his dislike of sports matters as showed on TV and indicated that he disliked TV sport programs because they would take away the time and chances to watch his other favorite TV programs. In addition, he had no knowledge about Olympics games, nor even the name itself. Additionally, in the continuing conversation, Tom also remarked on his, and his parents', experience in watching sport programs, which indicated his family involvement in sports media:

Interviewer: o.k. Now, you don't watch sport game? ((OC: I tried to make it again that he didn't watch any sports games at home.))

Tom: Nope.

Interviewer: Like football or...

Tom: I don't watch football.

Interviewer: Basketball?

Tom: Basketball is too tired, man. I was...basketball started at...I don't know. And Football started at... I don't know too many.

Interviewer: How about your dad? Did he watch some games?

Tom: He watched football, and soccer, basketball.

Interviewer: but, you don't like them.

Tom: Hopefully not.

Interviewer: How about your mom?

Tom: nope.

Interviewer: Nope!

Tom: she always skips them. (Tom, Asian-American Male, Yaya School, Interview)

In contrast, Mike and Tom presented two extremely different experiences and attitudes regarding TV sport programs. Nevertheless, another respondent, Andrew in Cathay School, expressed that he did not have a TV at home because of his parents' concern; however, when he went to his grandparents' home, he would just watch CNN and HBO channel due to the language issue (because of Mandarin TV program and doesn't know Mandarin language):

Interviewer: What's your favorite sports TV program that you watched at home?

Andrew: I don't have TV.

Interviewer: Oh, you don't watch TV.

Andrew: No, my mom and dad, they don't like to watch... but, when I watched TV, I turn it to different channel because sometimes this channel is good and the other channel is bad. So, I started from that channel and that channel is over then I will go see which channel next...

Interviewer: So, you are researching around?

Andrew: Yeap

Interviewer: So, did you watch any sports game?

Andrew: No! I don't watch game because when I go to my grandpa and grandma's, that's all Chinese TV and some types of games.

Interviewer: Oh, really?

Andrew: Yap! I only watched like CNN and HBO.

Interviewer: How about your dad?

Andrew: No, he doesn't watch TV. (Andrew, Multiracial male, Cathay School, Interview)

In the study, Mike, Tom and Andrew indeed articulated different patterns of male participants' personal habits, family cultures and the knowledge of sports media. Correspondingly, the comparison between female participants appeared to present a bit different experiences in viewing TV sports programs from male students. Below is an example from Cherry at Yaya School who expressed her experience in watching sport programs on TV:

Interviewer: I see. Did you watch any sport program?

Cherry: uhm..((OC: she meant no.))

Interviewer: For example, football game or basketball game...

Cherry: Sometimes, me and my dad watched basketball.

Interviewer: Basketball? What is your dad's favorite sport?

Cherry: I think it's uh.. football.

Interviewer: football. But, you are not.. you don't

Cherry: I don't like to watch football.

Interviewer: why?

Cherry: I don't know I can't never figure out what's their goals, I meant what are they trying to do.

Interviewer: But, did your dad teach you how to watch it?

Cherry: yup.

Interviewer: But, you still cannot figure out.

Cherry: That's miracle.

Interestingly, Cherry addressed that she did not like football at all because she could not figure out the rules even her father taught her how to watch the game. However, she enjoyed the game and learned the rules from it when she was watching women basketball with her sisters:

Interviewer: How about basketball? Did you know?

Cherry: yup. I know few things about basketball.

Interviewer: why? Who teaches you?

Cherry: My sisters, they taught me because they watched all of the games. [She spoke like singing a song.]

Interviewer: oh, your sisters like to watch basketball games. That's why you like basketball.

Cherry: She nodded her head.

Interviewer: uh...I see. [Do you have] any particular team that you support?

Cherry: uh…I just like to watch basketball.

Interviewer: you watched men's or women's?

Cherry: girls.

Interviewer: girls. Oh, is that WNBA?

Cherry: yup.

Interviewer: Women, right?

Cherry: She nodded her head. (Cherry, African-American female, Yaya School, Interview)

The partner she watched TV with seemed to be a factor. In Cherry's case, her sister motivated her to watch the game and guided her to understand the "sport." Similarly, Helen in Cathay School watched TV sport programs with her father and brother at home:

Interviewer: Any sports program or channel that you watched at home?

Helen: Soccer and swimming.

Interviewer: Soccer and swimming?

Helen: yap!

Interviewer: why?

Helen: because ... I don't know.

Interviewer: Did you know the rules?

Helen: Rules? A little bit.

Interviewer: Did you watch them by yourself or with your family?

Helen: with my family, my dad or brother. (Helen, Korean female, Cathay School, Interview)

Based on Helen's expression below, she watched the sports game when her father or brother watched. She enjoyed watching sport games with her family, especially her brother. Below was an example that she gave:

Interviewer: How about basketball? Right now, it's the season for NBA.

Helen: oh, yeap. I see ((OC: I think she meant "watched")).

Interviewer: you watched it?

Helen: uhm... ((OC: uhm = yes!))

Interviewer: which team did you support?

Helen: L.A. Lakers.

Interviewer: Oh, Lakers? Did Shaquille O'neal move to Miami this year? ((OC: I tried to

provide her some type of player's name and tested her that whether she knew that.))

Helen: nmn ((OC: nmn = yes.))...and Sacramento ((OC: she meant that she also liked

Sacramento team.))

Interviewer: I like L.A. Laker. ((OC: I tried to tell her that I also liked basketball game))

Helen: They are very strong.

Interviewer: I like Kobe Bryant. ((OC: again, I tried to provide a player's name because I

know the language barrier.))

Helen: Oh, me too. ((OC: she seemed to be very excited when I said Kobe's name.))

Interviewer: really?

Helen: bom...((OC: she made a sound and showed me Kobe's dunking movement.))

Interviewer: how about your brother?

Helen: my brother, he likes Sacramento Stojakovic ((OC: she meant Predrag Stojakovic.))

(Helen, Korean female, Cathay School, Interview)

The two female participants' responses concerning TV sports media seemed to highlight the

family's involvement as a key factor that motivates them to watch sports on TV. However, male

participants presented a different mode of watching media information on TV. In other words,

female participants' watching of sports media portray a passive mode whereas male students

tended to be active.

2) Virtualized game creation and the Internet innovations. This issue focused on the different representations of virtualized game and the Internet game settings. As shown in the question number five in Table 6 (see p. 24), one major difference between both of the two Schools was that all Cathay's participants responded playing online games, video games and computer games while most of Yaya's children played only video games and computer games. The general descriptions of these three different types of games were: 1) online games, which indicated a child went to a website and played a game through the Internet and might play against an unknown person; 2) video games were made by Xbox, PlayStation, Game Boy, Game Cues companies, etc.; 3) computer games were loaded into your computer system and played through CDs. The evidence showed that most children from Yaya School played video games most often but none of them mentioned online games. In addition some students lacked computer knowledge. For example, one of the participants, Alex, at Yaya School expressed his idea and knowledge of a computer: "I don't have a computer yet. I just need to get a monitor and the screen. I already got a keyboard" (Caucasian male, Interview). Similarly, another female student, Marry from Yaya School, expressed that she only played "digital cable" game through her remote control. She learned knowledge of computer game from an activity at school:

Interviewer: … How about the computer? Did you play computer games?

Marry: ((OC: she nodded her head and meant yes.))

Interviewer: what kind of game did you play?

Marry: Picture. I took pictures.

Interviewer: pictures? ((OC: she nodded her head. I was confused when she told me that she played picture game on computer, therefore, I asked her to see whether she mentioned taking pictures.)) You know how to take a picture?

Marry: No, I mean I draw a picture. ((OC: It was interesting because she thought about computer game, about the activity that she learned from her computer class in school.))

(Marry, Hispanic-American female, Yaya School, Interview)

At Yaya School, the responses of most children to the question of computer games were directly related to Pinball, FreeCell, Spider Solitaire, and Minesweeper in a computer window system. And further, most students at the School knew how to play video games and were able to identify and play his/her favored role/team character in a sport game. Stacy's case provided an example of playing soccer and basketball video games:

Interviewer: What is your favorite video game that you played on PlayStation, Game Boys, or Computer?

Stacey: um... My favorite game of sports is basketball, soccer, and ...that's all.

Interviewer: So, you also played the soccer game. It's on the PlayStation?

Stacey: ((OC: she nodded her head.))

Interviewer: Oh, is that very hard? Which level are you in?

Stacey: I'm in tenth. ((OC: she shook her head and showed me that it wasn't hard.))

Interviewer: How many levels did it have?

Stacey: about up to 19.

Interviewer: Oh, you are almost half way, right?

Stacey: ((OC: she nodded her head.))

Interviewer: So, did you play the soccer game by yourself or with your sister?

Stacey: my sis... uh...I am in a different team from my sister. She uses twelve. ((OC: she seemed to tell me that her sister was more advanced than her.))

Interviewer: So, did she always compete with you?

Stacey: ((OC: she nodded her head.))

Interviewer: Which team is yours?

Stacey: I am in the Orange [Crushes] ((OC: I wasn't sure about the last word that she said.)).

Interviewer: Back to the previous question. When you watched soccer, which team did you like? ((OC: I tried to compare whether there was the difference between the team she played and the team she watched on TV.))

Stacey: um...I'm not sure. I don't care. ((OC: it seemed that she didn't have a favored team in soccer.))

Interviewer: You just like to watch?

Stacey: ((OC: she nodded her head.))

Interviewer: How about the basketball?

Stacey: uh…. The Sixers... and I like Magic and the Nets.

Interviewer: How about baseball?

Stacey: baseball, the Braves.

Interviewer: You like Braves, how about Yankees?

Stacey: ((OC: she shook her head and made a sound that meant no.))

Interviewer: How about the basketball video game?

Stacey: basketball video game...

Interviewer: it's similar to soccer game, right? that you need to pick a team and play. Which team did you pick?

Stacey: the Sixers.

Interviewer: Which player did you usually played?

Stacey: um...

Interviewer: It's PA, right? ((OC: I tried to help to recall the player that she pick from the video game.))

Stacey: I think. I'm not sure. (Stacey, Hispanic-American female, Yaya School, Interview)

In Stacey's dialogue, she picked her favored team and played a team member when she played basketball video games. In the same manner, Mike provided a different experience when he played football on PlayStation since he never played football in a real setting. He remarked on the relationship between a football game showed on TV and a football game on PlayStation:

Interviewer: What is your favorite video game that you played on PlayStation, Game Boys, or Computer?

Mike: nmn...Football on the play station.

Interviewer: o.k.

Mike: and, on the computer, Soccer.

Interviewer: oh…you played soccer on the computer. nmn...I see. o.k. Now, when you play football and do you know how to play it right?

Mike: uhm...((OC: he shook his head and meant no.))

Interviewer: But, you know how to play the video game?

Mike: uh..((OC: He nodded his head.))

Interviewer: So, what did you know on the video game?

Mike: um...that if you go before the guy, if you touch the defense player, um...when you are in the defense before they said "hup", your all side gets [a] flag.

Interviewer: Ok. You know the rules?

Mike: Yes.

Interviewer: the football?

Mike: Yes.

Interviewer: When you played the video game?

Mike: Yes. ((OC: He smiled and nodded his head.))

Interviewer: uh...So, when you watched the football game, you know...the rules, right?

Mike: Yes.

Interviewer: So, did you learn the rules from the video game or you learned the rules from the TV?

Mike: I learned the rules from the Video game then I started to watch the football game.

Interviewer: Oh...I see. Uh…but, you never play it. You never play the football?

Mike: no.

Interviewer: Are you trying… [Do] you want to play?

Mike: yes. But, my dad says that I got to eat more first. (Mike, Multiracial Male, Yaya School, Interview)

In Mike's conversation, he seemed to present an interesting relationship between TV sport media and virtualized video games. He stated that he learned the rules from the video game first; and then, he started to watch a game. He continued his talk, revealing the relationship among TV, video games, and real practices as follows:

Interviewer: o.k. how about soccer on the computer game? So, you're good at the soccer game?

Mike: Yes.

Interviewer: better than the football game?

Mike: Yes. ((OC: his sound likes to show that "of course"))

Interviewer: o.k. So, you learned the soccer and your dad taught you how to play.

Mike: Actually, I played soccer first and then I learned the rules on the computer.

Interviewer: uh...So, did you see any difference [between] the computer and...

Mike: Yes.

Interviewer: What is the differences?

Mike: That I don't get to play and that they had like power up and start to make you go faster and goes on the ground and past and going on that.

Interviewer: But, when you actually played the soccer, did you think about the computer game?

Mike: Nope.

Interviewer: No! You can get power and running.

Mike: nope.

Interviewer: no! Why?

Mike: because it makes me laugh when I kicked and then when I laughed sometimes I close my eyes and when I play soccer because it's so bright and one time they made a goal on me because I wasn't paying attention and I was thinking about the game [video game].

Interviewer: oh…really! So, the video game, it's different from actually soccer game?

Mike: ((OC: he nodded his head.))

Interviewer: but, you can play very well in the computer game.

Mike: ((OC: He nodded his head.))

Interviewer: Because it got the power

Mike: Yeap!

Interviewer: You can control anything?

Mike: ((OC: He nodded his head.))

Interviewer: But, did you try to do some difficult skills in an actual soccer game?

Mike: Yes.

Interviewer: Like you learned some skills from the computer, right?

Mike: Yes.

Interviewer: Did you try to do these skills…?

Mike: Yes.

Interviewer: Oh. Really? Did that work?

Mike: It did work.

Interviewer: oh...really!! So, you perform it very well?

Mike: Yes. (Mike, Multiracial Male, Yaya School, Interview)

In the case of Mike, he not only obtained the information of sports from virtualized video games but also tried to exercise those skills that he previously gained from video games in his real practices. In other words, he seemed to identify himself as a role character in a video game and then imagine himself as such a character when he practiced the sport in the field.

In contrast, Cathay School's participants played online games the most, among others. Moreover, they all seemed to visit certain websites and played the games, as shown in Table 6 (see p. 80). Sarah provided a very good example of playing a swimming game on the Internet and trying different styles of strokes in the real swimming pool in India:

Interviewer: Did you play any sports game?

Sarah: Yes, I do.

Interviewer: What kinds?

Sarah: swimming.

Interviewer: oh... they [the Internet game] did have swimming game?

Sarah: yap. I won the second place in this one because one time of five, or six swimmers and I just swim one on and just before them. ((OC: language barriers))

Interviewer: So, you are quick because you can swim very fast. ((OC: she nodded her head.)) Can you change the style?

Sarah: Yeap, I know freestyle, breaststroke. And I don't know the butterfly one.

Interviewer: Did you swim? Do you know how to swim?

Sarah: yeap. I like the most style is breaststroke. You do have to do like this and its wave in here. ((OC: she showed me how to do breaststroke.))

Interviewer: o.k. now, when you swim and [when] you played the game, did you see the difference?...

Sarah: I don't underst[an]d.

Interviewer: Like, when you're playing the swimming, the butterfly or freestyle, in the computer game [online game], and when this setting, situation, moved to your real swimming pool. When you swim, did you try to connect with the computer's game?

Sarah: yeap. I do because in my Internet and when I went to the swimming, and I saw people were swimming and made a different kind and I just try this kinds and just.. ((OC: she tired to express that when she saw some people swim different styles of strokes in the swimming pool, and at the same time she tried to connect those styles with online game that she played and then she tried it.))

Interviewer: Did that help?

Sarah: yeap, it did help.

Interviewer: So, you tried some kind of styles from Internet.

Sarah: Yeap, I did it in India. ((OC: she expressed that she tried the different styles of

strokes when she were back in India.)) (Sarah, Indian female, Cathay School, Interview)

This gave a typical example demonstrating conjunction or dis-conjuncture between the

sentiments of online games and real game practices, as expressed by the Cathay's students. To

put it more clearly, when they expressed the coordination of the two images (online games and

the real practice), they felt successful in that particular sport; otherwise, they sense the failure.

Interestingly, they also noticed that both were the same thing; online game was easier than real
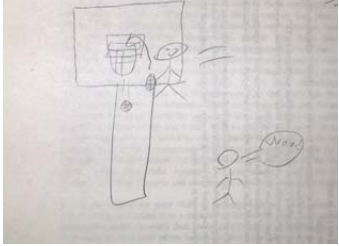
game practice since online game was not real.
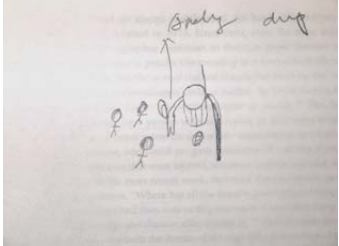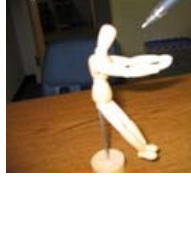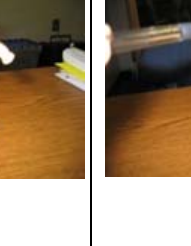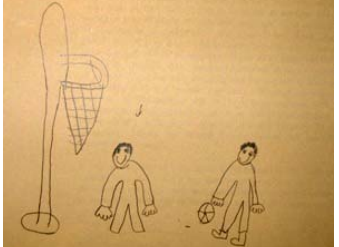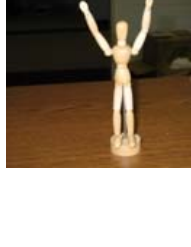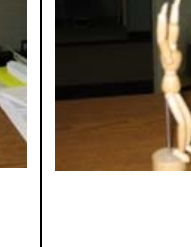
3) "Becoming" imaginary. Based on the evidence on the topic, TV media, virtualized

games and Internet influences shaped children's imagination of body image and movement.

Evidence showed that the children tried to connect and apply what they observed on TV media

and Internet and transformed them in real sports setting, although the various influence of media,

video games and online games tended to be mixed and hybrid in the process of imagination and

image-mapping. In other words, the data from both Yaya Elementary School and Cathay School

displayed a mixture of hybirdity of imagination of body image movements, although different

according to their cultural context. The data of participants (two from Cathay School and two

from Yaya School) were recorded, as shown in Table 9. Basically, each participant had different

experiences from media, video games and online games. For example, Andrew did not have a

TV at home but he did play online games at home and video games at friend's house; Helen not

only watched NBA games with her family but also played video and online games at home;

Mike watched soccer games and played soccer video games at home; and Joe only watched NBA

games on TV.

The data were collected from the interview responses to question number seven: the children were asked to imagine playing one of his/her favorite sports for ten seconds, and then to draw the picture on a piece of paper and demonstrate the movement through the artist model. Interestingly, the data displayed an ongoing process of images-mapping, a hybrid mixture of identities and a "becoming" of an imaginary world. To put it more precisely, in their experiencing playing online games, the children developed a "hybrid" characteristic of identities and composed multiple "selves" (body-images) in such a flow of multiplicity through the game. For instance, Joe, who only watched NBA games on TV with his brother, and Mike, who watched soccer game and played soccer video games at home, showed similar human figure drawings in their papers. They seemed to provide fine details of their body forms, such as their hair styles, facial expression, hands and feet. Their human figure drawings, as understood through Gorman and Mundy's (1969) work, demonstrate "the body image, an interaction of body perception with body conception of the entire body" (pp.173-174). Specifically, as the artist model shown in Table 8, Joe's movement demonstration illustrated his basketball defense movement: "bend your knees and put your arms up" (Hispanic-American male, Yaya School, Interview). Similarly, Mike's description mentioned that "like that. ((OC: he made his movement on the artist model.)). I jump up and hit it that part of my head" (Multiracial male, Yaya School, Interview). Additionally he showed me in an actual move: he jumped and arched his hands and feet together forward (Interview fieldnotes), as shown in Table 9.

In contrast, Helen and Andrew from Cathay School displayed different human figure drawings in that they did not emphasize full representations of body forms. In Andrew's drawing, the picture of basketball dunking movement was in fact out of the images or movements in video or online games; he drew his dunking picture as a camera lens, took it from the top of the basket.

Table 9. Drawing and Movement Performance

Cathay School: Helen, Korean Female Sacramento NBA Flying Dunking Movement (TV, Online & Video Game)					
Cathay School: Andrew, Multiracial Male Taipei American School Dunking Movement (Online & Video Game)					
Yaya School: Mike, Multiracial Male YMCA soccer field Jumping and Hitting it in his head (TV & Video Game)					
Yaya School: Joe, Hispanic-American Male Home Basketball Defense (TV)					

He also stated that "I like to dunk. It's more like I get the ball and I dunk like this…((OC: he tried to show me a perfect dunking movement in the artist model.))" (Multiracial male, Cathay School, Interview). Furthermore, the picture shown in Helen's drawing offered another type of perspective. Helen imagined that she was one of the NBA basketball players in Sacramento's team. She expressed her flying dunking movement: "[I] take the basketball. Shu…((OC: she was making a sound like the basketball went through the net.)) I am dunking and then here are some people: 'wow, what the hack!'" (Korean, Cathay School, Interview). The artist model's pictures shown in Table 9 seemed to present a sharp contrast between Cathay's students with Yaya's students. In both Mike's and Joe's (at Yaya School) imagined favorite sports, they relied very much on their previous sports experiences with their family, which also revealed "self-evaluations of satisfaction with their own physical appearances" (Jaskson, 2002, p. 20). In contrast, the examples from both Andrew and Helen in Cathay School showed very different versions; they seemed to compose a "hybrid" nature of self-images and ongoing process of images-making, as they were playing online games. Similar to Turkle's (1995) study of identity in the age of the Internet, the emerging culture of simulation has been affecting one's idea about mind, body, self, and machine. Turkle (1995) claimed that the computer was no longer simply a tool but became a reflection of oneself. Or to put it more precisely, computer has eroded "boundaries between the real and the virtual, the animate and the inanimate, the unitary and the multiple self" (p. 10). In other words, the mixture of the real and imagery worlds revealed the fact that the children have in fact transferred and transformed their real "selves" (body-images) into imaginary ones in the virtual world of online games.

Mapping Cultural Images

This theme emerged from the interview question number six: a participant selected five of his/her favorite pictures and explained the reason(s) of his/her picks in the eleven-slide PowerPoint presentation show (See Table 6, p. 80). The findings indicated participants to tell a variety of "cultural" stories through recalling stories from memory and drawing maps, and sharing them with the interviewer. For further discussion, the data were organized by four categories according to their different ethnicities that included Caucasian, African-American, Hispanic-American, and Asian-American.

Caucasian. Three examples were included in the category, one male from Yaya School and two female from Yaya and Cathay School. They offered a similar pattern in that they compose their self-images through "others" and kept questioning the values of their own experiences. Alex from Yaya School, for example, picked the running picture as one of his favorite pictures. In his response to the interview question, he seemed to always mention himself as the first person position and others seemed less significant than himself:

Interviewer: Which picture do you like here?

Alex: nmnm… what's that one? ((OC: he pointed the running picture.))

Interviewer: This one? ((OC: nm.)) Running.

Alex: ((OC: he was playing his lips and made a strange sound.))

Interviewer: why?

Alex: Because I like to run.

Interviewer: why? ((OC: it matched what I observed in his PE class. He run very well in fitness testing.)) I saw you run in fitness testing. You can run very fast. Who teaches you how to run?

Alex: Nobody.

Interviewer: really!

Alex: I did. My dad teaches me how to run.

Interviewer: So, did you run by yourself or…?

Alex: nmn..((OC: he meant yes!))

Interviewer: [continuing] or with your dad?

Alex: Everywhere by myself. ((OC: he laughed))

Correspondingly, Lucy from Yaya School told about her story of skateboard in the following dialogue:

Interviewer: Which picture do you like here?

Lucy: that [picture]. ((OC: she pointed skateboard picture.))

Interviewer: why?

Lucy: because a lot of people skateboard.

Interviewer: Do you know how to skateboard?

Lucy: ((She nodded her head.))

Interviewer: Really?

Lucy: ((OC: she nodded her head and said.)) Because I go to Wal-Mart all the time to skateboard with my friends outside.

Interviewer: Really? ((OC: she nodded her head.)) Did you play this one like the picture shown here?

Lucy: ((OC: she nodded her head.))

Interviewer: Is that difficult to learn?

Lucy: It's not. When you get to do it, and all you do is like you sit on it and then in the middle when it's riding in down to the street and you just gently stand up and then you're doing good.

Interviewer: Did anyone teach you how to skate?

Lucy: ((OC: she shook her head.))

Interviewer: No! ((OC: I repeated her body language to confirm what she told me.)) Did you just learn it by yourself?

Lucy: ((OC: she nodded her head.))

Similarly, Brittany from Cathay School gave an expression in the dialogue in which she explained why she picked swimming as one of her favorite pictures:

Interviewer: Which picture do you like here?

Brittany: Um..I like swimming.

Interviewer: Why?

Brittany: Because we have [a] swimming pool at our apartment, so that I really...like going down there.

Interviewer: In Taiwan?

Brittany: Yeap. When we bought that house, I do that a lot.

Interviewer: Even now? Are you still going to swim? It's cold, isn't it?

Brittany: Yeap. But, it's usually sort of warm. It's not like cold. So…

Interviewer: You go there by yourself or with...?

Brittany: Um..I usually go with my mom because she knows how to swim.

Interviewer: Oh, she knows how to swim. So, did she teach you?

Brittany: Um... I actually swim by myself.

Interviewer: So, did you teach your mom?

Brittany: Well, she taught me but she only taught [me] how to kick and stuff like that. I

swim by myself.

Evidently, the children presented good examples of the way the three Caucasian children (one

male and two females) mapped their own image through culture, a process of identification that

began with "I," others (parents) and then returned to the self. They emphasized more on personal

values than others—a sentiment perhaps derived from individualism.

African-American.   The African-American children composed their self-images a bit

different from that of the Caucasian children. They tended to affirm the "self," and yet without

the appearance of an "other." They composed, it seemed to me, a unique self which was

somehow void and lacked solid content. Two examples, on one male and female, were recorded

as follows:

Interviewer: Which picture do you like here?

Jerry: That one ((OC: He pointed to a golf picture.))

Interviewer: Why?

Jerry: Because I like to play golf.

Interviewer: You like playing golf?

Jerry: Yes.

Interviewer: Did you know how to play?

Jerry: Yes, ma'

Interviewer: Oh…who teaches you?

Jerry: I just..I just uh..I just know how.

Interviewer: Did you watch any golf game on TV?

Jerry: No, ma'

Interviewer: No! Any game on computer?

Jerry: No, ma'

Interviewer: O.k. you like to play golf. ((OC: I was surprised that he told me that he liked to play golf and he didn't have chance to play it.))

Jerry: Yes, ma'

Interviewer: Did Ms. Robinson know that you like to play Golf?

Jerry: Yes, ma'

Interviewer: Did she teach you how to play?

Jerry: No. I just, [was] only born to play.

Interviewer: You played at home or here [in the gym]?

Jerry: At home.

Moreover, Jerry offered another example from his experience of riding the one-wheel bike at home. He seemed to express that he knew everything in the following conversation:

Interviewer: Which picture do you like here?

Jerry: That one. ((OC: he pointed the one-wheel bike picture.))

Interviewer: This one? Why?

Jerry: Because I have the [zoo-of-saka: it meant the one-wheel bike] at home. I know how to ride this.

Interviewer: You don't know how to ride?

Jerry: I know how to ride.

Interviewer: You know?

Jerry: Yes, ma'am ((OC: at the same time, he was sort of showing me that he knew everything and everything seemed to be very easy for him.))

Interviewer: Wow! Have you ever tried this one before?

Jerry: Yes, ma'am

Interviewer: And, you have that [one-wheel bike] at home?

Jerry: Yes, ma'am

Interviewer: Is that very difficult to ride?

Jerry: Yes, ma'am

Interviewer: How difficult is it?

Jerry: Very hard. ((OC: At the same time, he seemed to show me that he knew how to ride the bike because it's very difficult for other people to learn.))

Interviewer: Did you fall from the bike often?

Jerry: ((OC: he nodded his head.))

Interviewer: Do you need anyone to help you when you ride it?

Jerry: Nmn…I just "use the ball." ((OC: I was confused when he told me that he just used the ball to help him to ride the bike.))

Interviewer: Oh...how about your sister?

Jerry: Mnmn...She just watched. She never wants to ride it.

Interviewer: I see.

Jerry: Nobody, don't, doesn't want to ride it, but me.

Interviewer: How about your parents?

Jerry: Uhm..((OC: he shook his head and meant "no".))

The case of the female student was a bit different from Jerry. Cherry seemed to adopt a standard (individual and cultural) form whereby she could learn the skills by herself, as she claimed:

> Interviewer: Which picture do you like here?
>
> Cherry: Wow...I like the basketball picture.
>
> Interviewer: O.k. why?
>
> Cherry: I like it because when I like learning this kind, is kind of help me to learn because if you like watching TV, you stop the TV and you can see like exactly where their hands [are] on and exactly where their feet [are] on.
>
> Interviewer: O.k. but, when you watched it, I mean watching the screen, then like, [did] you watch the hands or the person or the feet?
>
> Cherry: Yup, I watched where they are [players], so that I can do that too.

A similar dialogue also appeared in Cherry's story. She provided a description of her learning process through computer game to actual baseball and basketball practices:

> Interviewer: O.k. when you played baseball game on the computer, did you learn something from there?
>
> Cherry: I only learned that if you got three... if you missed the ball three times, and then you are out.
>
> Interviewer: So, you know the rules?
>
> Cherry: Yup, I know the few rules.
>
> Interviewer: Did you learn to play baseball from the computer game first or you learn to play it with your sister, first?
>
> Cherry: I learned from the computer [game] and then I tried it.
>
> Interviewer: O.k.

Cherry: Because you do it on the computer you can learn it [baseball] more and try to do it before you're going to play.

Interviewer: How about the basketball game that you watched on TV?

Cherry: Yup, I'm kind of doing the same thing because if you watched it [basketball] first and then you can learn exactly how they do it.

Interviewer: Did you try it [the basketball skills on TV] before?

Cherry: Yup.

Interviewer: Is that hard?

Cherry: Yup. Some of them are hard; some of them are easy.

Interviewer: Did you think you improved?

Cherry: Yup, sometimes, I felt that I've bigger improved.

Interviewer: Can you tell me how did you think you improved?

Cherry: Uh…I'm used not to be able to dribble, and then one time [after I watched the basketball game on TV, and] my sister showed me how to dribble and I dribbled the first time and I tried it and I got it right. That was a bigger improved.

Interviewer: Did you watch the basketball game on TV first, and then you tried to practice it with your sister?

Cherry: Yup. If I don't watch them first then I don't [know how to do them].

In the African-American male student's seemingly "polite" response, he seemed to hide a strong sentiment of "resistance." In comparison, the female student identified and composed her self-image through an association of individual or a cultural standardization. What is more interesting in the process of mapping a self image is that African-American kids were that they had no real "other" individual appeared, and thus they composed a relatively unique self-image.

Hispanic-American.   Distinctively, the Hispanic-American students addressed more about "others" than "self"; they tended to situate individual values from a peer, group or community environment. In other words, they tended to adopted values of others at the expense of their own. Below was a recollection with Joe's story of skateboarding in the following manner:

Interviewer: Which picture do you like here?

Joe: That one. ((OC: he pointed skateboarding.))

Interviewer: This one. o.k why?

Joe: I like skateboarding and I skateboarded.

Interviewer: You skateboarded. oh..You have a skateboard at home?

Joe: Yup.

Interviewer: Oh…That's neat. So, you played it everyday or ...

Joe: Sometimes.

Interviewer: [continuing] with…?

Joe: With my friends.

Interviewer: With your friends, your neighbors?

Joe: Yup.

Interviewer: Oh...how about your brother? Did he play too?

Joe: He has to go to school.

Interviewer: Nmn…Is it very difficult to play?

Joe: ((OC: He nodded his head.))

Interviewer: Did you learn by yourself or your friend teaches you how to play?

Joe: My friend.

Likewise, when telling how Marry's big brother taught her how to play soccer and basketball, she often referred to her family as follows:

Interviewer: Which picture do you like here?

Marry: She pointed one picture. ((OC: the basketball picture.))

Interviewer: This one! Why?

Marry: I like to play basketball.

Interviewer: Basketball. Who teaches you how to play basketball?

Marry: Uh…my big brother.

Interviewer: Your big brother. And, who teaches you soccer? ((OC: because she mentioned that one of her brothers taught her how to play soccer in the previous question and I tried to make sure whether it's the same brother that she mentioned before.))

Marry: My big brother.

Interviewer: So, he teaches you basketball and soccer, right?

Marry: ((OC: she nodded her head.))

Interviewer: That's good. So, did you play it at home? Basketball?

Marry: ((OC: she nodded her head.))

Interviewer: So, you have a hoop there [at home].

Marry: Yeap! When we moved to the house, did you understood, it was broken. and my dad fixed it. And, he made another part of house and put a basket and put them in and stock them there. He can make it a little or small.

Interviewer: Oh..really! Did you play the basketball only with your [big] brother or other brothers and sisters?

Marry: Sometimes with my two brothers.

Interviewer: Your two brothers.

Marry: And with my sisters. We have two sisters.

Interviewer: Oh...how about your dad? Did he play?

Marry: ((OC: she shook her head.))

Correspondingly, Julia told about her experience in related to the hula-hoop hopscotch picture. Notice that she also tended to situate individual values with her sibling and her physical education teacher in the following dialogue:

Interviewer: Which picture do you like here?

Julia: ((OC: She pointed the hula-hoop hopscotch picture.))

Interviewer: This one? why?

Julia: ((OC: she kept silent for about 7 sec.)) because I like jump.

Interviewer: You like to jump! Who teaches you how to jump?

Julia: My sister.

Interviewer: Your sister. How old is your sister? ((OC: I remembered that she is the first child in her family.))

Julia: Six [years old].

Interviewer: You are two years older than her.

Julia: ((OC: she nodded her head.))

Interviewer: Did she teach you how to jump?

Julia: ((OC: she nodded her head.))

Interviewer: You like this picture. Have you ever played this kind of activity before?

Julia: ((OC: she nodded her head.))

Interviewer: You had played it before. ((OC: she nodded her head again.)) Where did you play?

Julia: In there [gym].

Interviewer: Who teaches you?

Julia: Ms. Robinson. ((OC: Ms. Robinson is her physical education teacher at Yaya Elementary School.))

Interviewer: Oh, Ms. Robinson. Did you like it?

Julia: ((OC: she nodded her head.))

The way that they mapped their self images in cultural context showed its unique cultural quality that "others" seemed to play a major dominant role in a Hispanic-American child's imagination and construction of self-image.

Asian-American.　　The mapping of self image in the Asian-American students exhibited a very different pattern from the previous ones. In other words, Asian-American student's narrative regarding their self-image imagination represented a pattern of "keychain" development (from one keyword to another keyword); they tended to start their stories by a keyword, and when another keyword came out of the story, the keyword itself composed another story that might totally deviate from the original story line. Such a narrative continued to develop and seemed to have no end. It seemed to me, they were living in their life stories; and consequently composing their self-images in such a cultural flux full of "stories"—a tremendous mixture of the present and past. Three examples, two females from Yaya and Cathay Schools and one male from Yaya School, were recorded as follows:

Interviewer: Which picture do you like here?

Nana: I like that one.

Interviewer: O.k. why?

Nana: Because it's like a swimming. I don't know how to swim but I want to learn how to swim. I don't want to swim in river because we went to [Lincoln near park], I meant [Lincoln island], and I want to swim in the little kid's thing. And, I almost swimming [at the big kid's thing] and I learned how to swim when we went to the big kid's thing and I went there and there is one feet/two feet/three feet/four feet it's up to eight feet. And then, I was swimming and then I went to the two feet and then I did get to there when I went to three feet, like I couldn't do it because the water like over my head and then loose the wave was coming because there is some [waves] and then it's like something like that when the button necklet like it's very [large] that's when the wave it's coming and then the wave come out and go to the one feet and all we sitting down the way was coming and puts me back.

Interviewer: Wow, were you scared?

Nana: If I go to the three feet, and then if I stay like facing it, it will still put me back and off for there. It's hard.

In the same manner, Jenny shared her story when she was in the United States:

Interviewer: Which picture do you like here?

Jenny: That one ((OC: cheerleading)) because before I want to be a cheerleader when I always saw a person cheering and then they also remind me one time I went to a[n] ice hockey game, and then just looked they had the same color thing and I cheered there.

Interviewer: Oh, you want to be a cheerleader?

Jenny: Yeap, before.

Interviewer: In the States?

Jenny: Yeap. My uncle, he order [reserved] us a big room, we could eat snack or something and we can [could] watch the people play ice hockey.

Tom mapped his story in relation to the goalie picture that he selected from the slide. His recollection seemed to start with the goalie picture, and then connect it to the phrase that his father told him. Based on the phrase itself, he composed another story that he experienced at home:

Interviewer: Which picture do you like here?

Tom: I like this one [Goalie Picture]

Interviewer: Why?

Tom: Because he's [the goalie] always "dragon". "Dragon best dragon back." ((OC: I wasn't sure about the phrase that he tried to tell me and I think he must learn it from somewhere.))

Interviewer: What does that mean?

Tom: Play your best.

Interviewer: Oh…Play your best.

Tom: Um.. ((OC: he nodded his head.))

Interviewer: Which means…

Tom: You do your best.

Interviewer: O.k. who teaches you this phrase?

Tom: My dad.

Interviewer: What did he tell you? Can you say it again?

Tom: Ya..[swim do]. ((OC: I think he spoke Mong. Language.)) I am flipping the window.

Interviewer: You flipping the window? ((OC: I was confused about the sentence that he mentioned because it didn't relate to the goalie picture and the phrase.))

Tom: I am kicking the [downs sogani] ((OC: Mong's language again.)) It always hit on the window.

Interviewer: Did your dad tell you to play the best? ((OC: I tried to make a connection between those two things together.))

Tom: Um.. ((OC: he meant yes.))

Interviewer: And then?

Tom: Then, I hit the window, through the window.

Interviewer: Why did you hit the window?

Tom: When Jamie [his older sister] always scared me, I always hit the windows. That's why that I have to get it outside, man.

Interviewer: Oh...Did you mean you always play goalie in the house?

Tom: Um.. I played, played... [then] I hit the window.

Interviewer: Did you break the window?

Tom: Um.. ((OC: he meant yes.))

Interviewer: Did you play soccer?

Tom: Um… ((OC: he meant yes.)) I can do the soccer like that [goalie picture].

They seemed to be talkative in their descriptions: Nana, Jenny, and Tom gave a "keyword" and developed a story line by that keyword. As the story continues to develop, they jumped to another related "keyword" and developed another story. It seemed that they tended to situate

themselves in stories, a complex social and cultural context in which they composed and mapped their own image of self and body movement.

In summary, culture played a key role for the children in the composition of their self-images; in other words, children mapped their body images in various cultural environments, whose elements, in turn, would have various impacts on them directly or indirectly. The picture selection activity presented a good example showing the way children mapped their self images and body movements based on their different ethnic origins and cultural backgrounds. As shown in the above discussion, children with different ethnic and cultural backgrounds presented distinct patterns of composing self images and imagining body movements.

Summary

This chapter provides different perspectives of young children's imagination and construction of body-image/body-schema as influenced by their different cultural backgrounds: a) father-image/mother-image and sibling-image/PE teacher-image; b) gender and sports; c) technology, body-image and the imaginary; and d) mapping cultural image. These findings supported and extended numerous aspects of the process of constructing body schema/body image. In other words, the psychological configurations of body-image in connection to body movement as influenced by social forces, including gender, ethnicity and socio-cultural changes, impacted children's imaginations because they were transformed from Freud's father-image/mother-image to sibling-image/PE teacher-image, and displayed a mixture of "interior" and "exterior" imagination in sport according to their current cultural and social contexts. More strikingly, due to the influence of TV media, video games and especially online games, children tended to transfer and transform their real "selves" (body-image) into imaginary ones in the virtual world. Additionally, culture played a key role for children in the composition of their self

images; in other words, children mapped their body images in various cultural environments, whose elements, in turn, would have various impacts on them directly or indirectly in the context of physical activity and sport involvement and understanding.

CHAPTER V

DISCUSSION AND IMPLICATIONS

General: Discussion in the Context of Extant Literature

Home-education, school-education and recent technology were intertwined in shaping

children's identity in the context of body movement and body-image/body-schema. Moreover,

children from diverse cultural backgrounds were dealing with personal, psychological and social

issues in their construction of identity. The study attempted to ascertain that imagination in body-

schema was largely governed by cultural elements, and consequently, youth identity formation

was transformed in a multicultural/global environment, as culture continued to mediate between

memory and body in the phase of learning. To be more specific, family education, based on

different cultural backgrounds, molded in the youth, certain images of their bodies and the

society as well. An identity, which built heavily on ethnicity and culture, was actually

constructed before school education. And yet, school education introduced alternative social and

cultural values, which impacted children's imagination in body movement and body-schema

construction.

This study investigated further these questions: once the old identity was challenged, how

was new identity formed in the face of other ethnic groups and cultural characteristics? How was

the boundary between ethnicity/culture blurred or reinforced? Furthermore, as contemporary

technology in education enhanced the complexity of children's imagination in body movement

by introducing in the youth, a culturally and socially multiple world, how much had internet-

based virtual world reshaped children's imagination in body movement and in identity formation.

Having family, school and technological elements were intertwined with children's imagination in body movement, and identity formation presented a world that highlighted difference, hybridity and multiplicity. Such an understanding was useful and required for physical education teachers working in a multicultural education environment and in a global society. In the context of the purpose of the study, the construction of eight to nine years-old children's body-images was influenced by their cultural and family backgrounds, school curricular design and use of technology in a physical education classroom as well as in daily life.

In general, the concept of body schema was recognized as an exercise of imagination based on one's "outer" and "inner" experience, while body image was represented as the way of one's visualized reflection that was heavily depended on varying elements in diverse environments. Researchers have often focused on the framework of *self-schemata*, viewed as something derived from the frequent self-evaluations of previous self and others' behaviors (Harrison, Lee, & Belcher, 1999). In short, the process of constructing body schema/body image could be seen as psychological configurations influenced by social forces such as gender, sexual-orientation, ethnicity and sociocultural change. Such a process of construction, however, was indispensable to utopian visions or virtual frameworks in mind that was vital to the construction of an existence of human imagination. The so-called utopian visions became of great significance in this information age, because they provided an alternative schema that crossed both "time" and "place" in virtual reality sustained by the Internet and expanded the imaginative horizons of human potentialities (Marty, 2003).

It seemed that the transnational economic, cultural and political practices, intensified by transnational companies and telecommunication, have actually brought about a new world in this age of globalization. And if so, how would children respond to such a global environment in

their imagination in body movement? With this regard, Catherine Bell's "ritualized body" provided a useful framework for the understanding of the politics of body-power relation to a global age, especially the imagination in body movement, which was recognized as both physical practice and mind exercise situated in a social milieu. Bell's "ritualized body," as a medium of internalization and reproduction of social values, was recognized in an intimate relationship with the world, the regimes of *power relation*. In other words, power relation was ritually constructed by the body transformed in a given time and space. In the same sense, the body-power relation could be seen as the creation of the social body molded as an autonomous local sphere for the internalized social forces and power (Bell, 1990).

In addition, in an information age, the body is "globalized." In this postmodern/global social system, individuals expose themselves to such global reality "irrespective of their social location" (Shilling, 1993, p. 73). Clark (1997) has pointed out the prominent qualities of current global life—larger in material volume, faster in movement and greater in material diversity. The globalizing process was also the reinforcement of localism, and thus an event of hybridization of both local and global phenomena. In fact, human body as a site of global human integration usually refers to the phenomenon of cultural diffusion. From this perspective, globalization was in fact a cultural hybridization event and the mixture of phenomena that manifested itself in a *mélange* of human body. Culture, as in Cole's mediational triangle theory, was recognized as medium that bridged memory (self) and body in the process of body-schema construction. Cultural hybridization, as an immediate product of globalization, further complicated the body image formation process. Each culture presented itself as a different "paradigm" that was governed by the "politics of multiculturalism (Nederveen Piesterse, 2004).

Information technology has created a regime of "virtual reality" that allowed the humankind to travel virtually anywhere anytime without limits. In addition, technology in education is no longer simply a tool or subordinate subject to curricula; in contrast, it has, in fact, transformed the classroom into a diverse, multiple, fluxional and global virtual hyperspace. Also, the extensive use of technology actually reshaped the image of body in that the humankind attempts to make the body match the machine and vice versa. Human imagination has created particular figures that have represented the common experience of the body as a fundamental technological tool, in addition to human's specific envy, wish and desire, and these figures, in turn, took over common definitions of body image. In other words, the human has been undergoing a new kind of evolution in a new environment of information, symbols, communication and virtuality. Virtuality extended the body by erasing it; the body traveled virtually without changing temporal and spatial locus of the physical body. More profoundly, technology introduced the diversity and complexity of a global society, and accordingly, children travel as flows and "deterritorized" notions of culture that traversed in the "fluid and open-ended" virtual world that technology has provided.

Consequently, several elements regarding family education, school education and technology education were taken into consideration in the examination of the children's imagination in body movement; they included social and cultural environments, experience, the body, the self, body-image/body-schema, and even the virtual "reality" of the cyber world. Significantly, situated in contemporary social and cultural context, imagination in body movement, as a result, experiences a "fluid and open-ended" travel practice in a virtual reality created and sustained by information technology, rather than a fixed, stable identity in a specific

socio-cultural context. This is particularly observable when computers and the Internet are intensively used both at home and in school.

To achieve the goal of the study, twenty-two participants were recruited from elementary schools in Georgia, USA and Taipei, Taiwan as permitted by authorities in each country. To ensure racial diversity, different ethnic groups of participants were recruited from a wide range of both elementary schools, specifically in the age of eight/nine years old of children. Eight boys and twelve girls (six different cultural backgrounds) in third and fourth grade level voluntary participated in the study from both elementary schools. Each participant was asked to conduct at least one interview and several observations in physical education class, computer class and recess in the study. Participants were also offered to experience taking pictures by their own as a reward for participation after the first interview. However, the photo taking activity was not considered as a part of the data findings because of the limited resource and confidential issue. The data was collected over at least four to ten weeks in the fall 2004 and spring 2005.

Specific: Discussion of Findings in Light of Existing Literature

Some points in literature review were taken into consideration for the understanding of key research questions for the study; certain data collection techniques, such as observation and interview, as well as documentary analysis, were used. These helped to understand the extent to which children's body imagination is influenced by cultural and social differences, school curriculum, as well as by technological appliance and Internet world. Four major themes emerged: a) father-image/mother-image and sibling-image/PE teacher-image; b) gender and sports; c) technology, body-image and the imaginary; and d) mapping cultural images.

The primary goal of the study was to investigate how young children, specifically in the age of eight/nine years old of children, from different ethic groups and cultural environments

constructed and presented their body-schema/body-image in physical activity. The process of their constructing body image and identity seemed to be influenced by their unique family situations, cultural backgrounds, social statuses and use of technological appliances. The following are the findings and discussions according to the four themes.

Father-Image/Mother-Image and Sibling-Image/PE Teacher-Image

Four types of sibling and family structure were found in the study: 1) he/she is the only child at his/her family; 2) he/she is the first child at the family; 3) his/her parents are separated so did his/her sibling; and 4) he/she has either an older brother, a sister or both in the family. Interestingly enough, each type of sibling and family structures seemed to correspond to a different "image" representation in a child's imagination in sport in the study. For starters, the child who is only child in the family tended to prove the schema that father-image was dominant figure in shaping a child's imagination in sport. Second, the first child in the family tended to adopt either father-image or mother-image. And yet, when the child's family did not get involved in sporting matter so much, a PE teacher-image might appear. Third, when the child grew up in a family where parents are separated, he/she tended to reveal a different pattern from others. In the child's sports imagination, one might hardly find the father-image, mother-image, and even physical education teacher-image; instead, the children of this kind relied heavily on the image of mass media and video games instead. Finally, the child who has either older brother, sister, or both in the family was found to wave a new pattern in which he/she tended to adopt his/her older brother-and-sister-image; in such a case, older brother-and-sister-image tended to replace father-image and mother-image as the primary influence on shaping the child's imagination in sport.

Based on the findings, the Freudian conception of relationship between father, mother, children, in which "the feelings and ideas in the unconscious which are attached to the concept of

father" (Gorman, 1969, p.5), perhaps needed further modification in regard to the construction of children's body imagination. Furthermore, Freudian study of father-image, mother-image, and family-image echoed Robertson, Thomas & Thomas, and Morris and Whiting researches on visualized reflective body image. Those images were constructed and modified by outer and inner experiences through one's imagination as influenced by varied factors such as sociocultural change, different gender, sexual orientation, race/ethnicity, and important physical characteristics. Father and mother were not necessaries the major figures in the family that shaped children's body images. Or to put it more precisely, a child's body-image was not necessarily embedded in the figures of family or PE teachers that might usually take the roles, especially not in a "normal" family. In short, the Freudian conception of the triangle relationship among father, mother, and child in a family was not doubt a powerful tool for the understanding of child's construction of body images. And yet, in the face of current society where family was not always "complete" and "stable," it seemed necessary to take those images of such figures as PE teachers and siblings (older brothers and sisters) into considerations when looking into the question of how a body image was imagined.

Gender and Sports

Two major issues emerged from the study including: they were 1) favorite sports as cultural (environmental) picks and 2) picture selections from gender point of view. The findings showed that the relationship between gender and sports were not only displayed in the mixture of "interior" and "exterior" imagination in sport according to their current cultural and social context, but it also echoed Foucault's docile body and Bell's ritualized body as a regime of power relation. Foucault's "docile bodies," produced by disciplines, implied a map of control and dominance. Likewise, Bell's "ritualized body," as a medium of internalization and

reproduction of social values, was recognized in an intimate relationship with the world. As far as body imagination is concerned, Bevir (1999) also indicated the regime of bio-power, articulating that power "requires individuals to internalize various ideals and norms so that they both regard an external body as concerned with their good, and strive to regulate themselves in accord with the dictates of that external body" (p. 350). According to the findings, picture selections suggested a pattern of child's "interior" imagination based on gender difference; however, the pattern was immediately influenced by cultural (environmental) settings, as the favorite sports picks hardly displayed gender difference as evidence by the two Schools with different cultural and social contexts. These data implied that fact that power relations were embodied by the body ritually constructed and transformed in space. That was to say, the relation between power and the body was displayed by a social body, which molded an autonomous local sphere for the internalized social forces (Bell, 1990).

In other words, the participants in both Schools presented their ritualized bodies and transformed such bodies into docile bodies in their playground (space) during recess (time). To put it more clearly, Taiwan's School saw no big difference in favorite sports between male and female students; they played similar sports in the playground during recess. To put it another way, their ritualized bodies that conveyed various social values were disciplined and trained through limited space (playground) and time (recess). What is more interesting was the fact that these ritualized bodies were transformed into docile bodies, as they played certain kinds of sports in the playground. The expression of body performance was singular and unified; the gender difference tended to be erased. In contrast, in the United State's School, male and female students displayed very different patterns in favorite sport picks and played different sports in the playground during recess. Perhaps the design of playground told the difference. In a field without

clearly specified areas and well-set equipments, students, both male and female, tended to express the bodies more "freely" and thus projected the "interior" gender distinction in "the outside world," as compared to the case in Taiwan. That was perhaps why students tended to address their gender differences and one could still observed the "exterior" gender difference.

The body as a ritualized body and as embodiment of various cultural and social forces was further reinforced by the findings in regard to pictures selections. The data showed that the students in both Schools appeared to address gender difference; female students tended to select those that suggested the "feminine" quality of beauty, jumping motion, family involvement, gymnastics, little kids' involvement, and cartoon pictures while male students seemed to suggest more "masculine" quality, such as fighting, the motion of shooting, pitching, kicking, batting, and actual setting of photo. Apparently, social and cultural values impacted greatly on the selections, as they clearly displayed gender differences. In short, the ambiguity and similarity of male/female favorite sports and picture selections in both Schools located different cultural contexts evidenced the intervention of social and cultural values in determining gender distinction. Perhaps the related question could be: was gender difference a biological, social, cultural, or even an ideological matter?

Technology, Body-Image and the Imaginary

In view of the tremendous influence of TV media, video games, and especially online games, children seemed to transfer and transform their real "selves" (body-images)   into imaginary ones in the virtual world. Accordingly, the comparison of both Schools in the study provided three different points of views regarding technological influence in the digital and mobile age: 1) sports media functioned as a means of perception; 2) virtualized video games helped develop the role character in sport; and 3) internet innovation not only created "a

communicative, perceptive, and functional diffusion of the body" but also extended "the body spatially in unprecedented ways and allows it to occupy the whole planet" (Longo, 2003, p.26).

According to the findings, the child's body-image in Taiwan's School no longer served as "self-evaluation of satisfaction with their own physical appearances" (Jackson, 2002, p. 20), especially when the effect of technology penetrated the body. That could be observed from the relation between human imagination and body action (Fortunati, 2003). As previously argued, the children from Taiwan's School seemed to compose a "hybrid" nature of body-images and express an ongoing process of image-making while playing online games and imagining their body movements. Nederveen Pieterse (2004) might call such a movement and phenomenon "flows and traveling culture" (p. 80). In short, the internet innovation, especially online games, transformed the reality into a particular imaginary world where the subject could travel without limits. More interestingly, such an imaginary world allowed the children in Taiwan's School to imagine their body movements in a way in which their bodies and machines (computers) penetrated each other and thus experience a process of "hybridization" of body imagination, composing an fluid, unfixed subjectivity and an ongoing process of image-making.

Similarly, if not contrast, the children in the United States' School, who played video games most, tended to apply their body images in the games. They created in the video games as an imagined world, a concrete object and the projection of the real world. Their formation of body images was different from that of the children in Taiwan, since the "concrete," "objective" imaginary world created by video games differed from the "smooth" world of the internet. This is observable. Based on the data, some children in the states' School had limited computer skills and knowledge and most of them played virtualized video games. As Lepper & Malone (1987), Malone (1981) and Malone & Lepper (1987) stated, visualized game creation was based on the

idea of the following characteristics: "challenge, curiosity, fantasy, and control." Among them, fantasy created by a game, is mostly striking. Fantasy, according to Rieber and Matzko (2001), encouraged "learners to imagine that they are completing the activity in a context in which they are really not present" (p. 50). With the four characteristics, the function of video games seemed to help develop a role character and form a self-identification through video images of body appearance and ideal character; also, these games often made children imitate and perform those images in the real world. One might say, the imaged bodies, again, perpetrated the real body, and the imagined world converged on the real world.

In sum, all these findings strongly suggested that the children's imagination in their body movements have been reshaped by such technological applications, including TV media, video games and online games. At this point, Fortunati's imaginary hyperspace, Nederveen Pieterse's information highways, and Longo's virtual reality were found suitable models to explain such new phenomenon and culture in an age of informational technology.

Mapping Cultural Images

Culture played a key role for children in composing their self images. In other words, children mapped their body images in various cultural environments, whose elements, in turn, had various impacts on them directly or indirectly. Four different ethnicities—Caucasian, African-American, Hispanic-American, and Asian-American—were discussed and addressed in the study. Nederveen Pieterse's (2004) spoke of cultural difference that cultural difference has been expressed as *open* site where one learned and shared beliefs freely. Moreover, each culture presents a "paradigm" indicating "different politics of multiculturalism" (p. 56). These findings demonstrated that each culture, regardless of gender, indicated its essential territorial cultural elements that stemmed from a learning process, particularly home culture. Specifically, the

essential territorial culture presented by Caucasian participants seemed to emphasize personal

values than others'—a sentiment that perhaps is derived from individualism. The way of

African-American children composed their self-images tended to affirm the "self" with less

confidence and a strong sentiment of "resistance." Similarly, the way of African-American

female students tended to adopt standard (individual or cultural) images and values, although no

real "other" individual appeared. Celio, Zabinski, and Wilfley (2002) pointed out that black

females and males have higher "self-esteem" than white females and males. Moreover, Vasquez

(1990) provided a clear statement that previous research has found "black students to be

significantly more person-centered than mainstream children who are characterized by an object-

centered approach to learning" (p. 300). The Hispanic-American students, however, addressed

more about "others" than themselves; they tended to situate individual values from a peer, group

or community environment. According to previous research studies, Vasquez (1990) and Giggs

and Dunn (1996) indicated that Hispanic-American students often offered strong senses of

"other-directedness." Family commitment—loyalty, a strong support system and a belief—was

the primary characteristic in most Hispanic cultures (Vasquez, 1990; Dunn, 1996). As for Asian-

American students, their narratives regarding their self-image imagination represented a pattern

of "keychain" development; they tended to start their stories by a keyword, and when another

keyword came out of the story the keyword itself composed another story that might totally

deviated from the original story line. As Feng (1994) pointed out that "Confucian ideas, which

include respect for elders, deferred gratification, and discipline, are strong influence" (How do

they differ from other children Section, ¶ 2). With such notion of Confucianism, Asian-American

students were educated and trained to be socialized listen more than speak, to speak in the polite

way and to be modest in dress and behavior (Feng, 1994). Based on the different ethnic origins

and cultural backgrounds, the children from diverse background, therefore, presented distinct patterns of composing self images and imagining body movements.

In conclusion, these findings are consistent with Morris and Whiting's (1971), Gallagher's (1995) and Thomas and Thomas' (2002) body-image, Gorman's (1969), Roberson's (1974) and Harrison, Lee, and Belcher's (1999) body-schema, Freudian *father-image*, *mother-image* and *family-image*, Stanley's (1992) C*urriculum for Utopia*, Slattery's (1995), Spencer's (1997), Wegner's (2002), Goldberg's (2003), Rothstein's (2003) and Nederveen Pieterse's (2004) Utopian Visions, Foucault's (1979) docile bodies, Bourdieu's (1977) and Bell's (1990) ritualized body, Bevir's (1999) bio-power, Foucault's (1979), Comaroff's (1985) and Bartky's (1998) power relations, Shilling's (1993) and Nederveen Pieterse's (2004) globalized body, Bakhtin's (1968) and Nederveen Pieterse's (2004) cultural hybridization, Luke's (2003) and Nederveen Pieterse's (2004) information technology, Fortunati, Katz and Riccini's (2003), Longo's (2003) and Nederveen Pieterse's (2004) bio-culture/bio-technology and Patton's (2002), Longo's (2003) and Nederveen Pieterse's (2004) global village as well as extension of the literature, such as Freudian *father-image*, *mother-image* and *family-image*, Foucault's (1979) docile bodies, Bourdieu's (1977) and Bell's (1990) ritualized body, Bevir's (1999) bio-power, Foucault's (1979), Comaroff's (1985) and Bartky's (1998) power relations, Shilling's (1993) and Nederveen Pieterse's (2004) globalized body, Bakhtin's (1968) and Nederveen Pieterse's (2004) cultural hybridization, Luke's (2003) and Nederveen Pieterse's (2004) information technology and Patton's (2002), Longo's (2003) and Nederveen Pieterse's (2004) global village, that asserts that home, school and contemporary technology are intertwined with on another and functioned together in shaping/reshaping children's imagination of body movement. In order to assist school teacher in understanding different ethnic children's body schema construction in their stage of

development as well as to integrate the ideal of multicultural education in a global perspective, the construction of imagination in children's body movement in diverse family backgrounds is found to be significant and needs to be take a into consideration in school curricula. In addition, based on the findings related to different cultural environments manifested in "home-education," "school-education," and "contemporary technology education," this study is hoped will help physical education teacher to enhance his/her understanding of identity formation process among young children in terms of their family and cultural backgrounds as their body-schema are gradually being established.

Implications for Future Research

Children's imagination in body-schema/body-image was found to be largely governed by both cultural and social elements, and consequently, youth identity formation has been transformed in a multicultural/global environment where social and cultural conditions has been drastically changed. As a result, the study found four major themes concerning the construction of body images and identity formation based on home, school, ethnic background and internet experiences. They were categorized as follows: 1) difference sibling and family structures, 2) the relationship between gender and sports, 3) the influences of TV media, virtualized video game creation, and the internet revolution, especially the process of becoming the imaginary, and 4) mapping different cultural images.

In addition to the findings and discussion, a few related issues should be addressed here for further consideration and for possible future research including: 1) the impact of internet revolution; 2) the self-boundary in relation to the "image of mosaic"; and 3) the imagination and creativity in body movement.

The Impact of Internet Revolution

Internet access has led us to the virtual reality. Moreover, such an imaginary hyperspace suggests the notion of fluid and open-ended experience rather than fixed and discrete as Nederveen Pieteerse (2004) has described. Correspondingly, the study found the undeniable and dominant tendency among the youth to depend on online games, especially in Taiwan's School. The students learned computer skills and knowledge in school and tended to share internet information and online game experience with peers. What is more, the reality of the imaginary world penetrated their daily life both in school and after school. The ways they speak, think and act has deeply been associated with those in the imaginary hyperspace. Not surprisingly, children's imagination in body movement has been profoundly influenced by the internet revolution. Therefore, future researchers may need to consider such impact as one of the major factors and tendencies in designing their research studies concerning children's body movement in physical activity in the age of informational technology.

The Self-boundary in Relation to the "Image of Mosaic"

Of course, young identity has been found differently among different ethnic groups in the study. Although children of different ethnic and cultural backgrounds presented various essential territorial cultures that stemmed from their learning process at home, the impact of the global society accompanied by the internet on children's imagination in body movement should be taken into consideration for future study. In fact, the study demonstrated the tendency for the young children to form a "hybrid" identity, a mixture of various kinds of cultural elements that may correspond to the so-called "image of mosaic" that Nederveen Pieterse (2004) has defined. The children in Taiwan's school seemed to present an example of the notion of cultural hybridization and a viable version of the logo "thinking globally and acting locally," as they

continued to blend essential territorial culture with global cultural flows. More profoundly, the boundary of self became blurred when the local self were glued onto the "globalized" body in the flows of global culture.

The Imagination and Creativity in Body Movement

The two concepts of body movements, imagination and creativity, have been closely associated and been largely applied to education in contemporary society. This is more so in this information age when the internet access becomes available and popular; the power of internet information must has great impact on the children's imagination and creativity in body movement. One might find the children in Taiwan's School to have a relatively limited creativity in body movement than those in the United States because they tended to copy body movements on the online games instead of creating their own. In comparison, the children in the United States tended to display vigorous creativity and imagination in body movement since the internet information has not yet filled up the students' daily lives. However, if we take the opposite side of the story, the abundant information provided by the internet may create a different kind of arena where students are to be inspired to reach another level of imagination and creativity in body imagination, nevertheless whose content has not been fully investigated yet.

Implications for Practice

This study provides implications for both research and practice. This research challenges pre-and-in-service physical education teachers' training and development programs. It is clear from this research that pre-service physical education teachers in Physical Education Teacher Education Program (PETE) and in-service physical education teachers in elementary schools are not formally trained and asked to learn about child's imagination in body movement. This study adds to the existing literature on young children, specifically third/fourth grade children from

different ethnic groups and cultural environments, and further presents body-schemas of children in the context of contemporary physical education classroom.

     Pre-and-in-service physical education teachers occupy critical positions for which they can create effective learning environments and can motivate elementary school students to develop imaginative body movement in the context of home, school and contemporary society. Based on the findings of the study, pre-and-in-service physical education teachers can have a better understanding of different ethnic children's body schema construction in their stage of development. Such understanding will play a decisive role in promoting multicultural education in the age of globalization; it will also increase efficiency in PETE and elementary physical education curricula.

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APPENDIX A

PARENTS/GUARDIANS CONSENT FORM

PARENTAL PERMISSION FORM

I agree to allow my child, _____, to take part in a research study titled, "Imagination in Physical Education: A comparative study of youth identity and body-schema in elementary school students", which is being conducted by Miss Hsu, from the Department of Physical Education and Sport Studies at the University of Georgia (548-5284) under the direction of Dr. R. Chepyator-Thomson, from the Department of Physical Education and Sport Studies at the University of Georgia (542-4434).   I do not have to allow my child to be in this study if I do not want to.   My child can stop taking part at any time without giving any reason, and without penalty.   I can ask to have the information related to my child returned to me, removed from the research records, or destroyed.

- The reason for the study is to learn how third grade children from different cultural backgrounds construct and present their body movement/social body in a physical education classroom.

- If I allow my child to take part, my child will be asked to do two formal interviews and two focus group interviews in the beginning and the end of semester. The 1 to 1/2 hour interviews will take place during free study time and will not interfere with physical education lessons. During the semester, four 1 to 2 hours non-participant observations will also be conducted in physical education classes. Since children in the third grade level experience the transition from home education to school education, eight 1 to 2 hours non-participant observations will be conducted at home setting in order to understand the different interactive movement among children, parents, and physical education teacher. Audio taping will also be used in all interviews and observations. If I do not want my child to take part then she/he will be allowed to study as usual.

- The research is not expected to cause any harm or discomfort.   My child can quit at any time.   My child's grade will not be affected if my child decides to stop taking part.

- Any information collected about my child will be held confidential unless otherwise required by law. My child's identity will be coded, and all data will be kept in a locked box and secured location at researcher's home. Those tapes will be destroyed within five years after completion of the study.

- The researcher will answer any questions about the research, now or during the course of the project, and can be reached by telephone at: 706-548-5284.   I may also contact the professor supervising the research, Dr. R. Chepyator-Thomson, the Department of Physical Education and Sport Studies at the University of Georgia, at 542-4434.

- I understand the study procedures described above.   My questions have been answered to my satisfaction, and I agree to allow my child to take part in this study.   I have been given a copy of this form to keep.

Shan-Hui Hsu		
Name of Researcher	Signature	Date

Telephone: <u>706-548-5284</u>
Email: <u>shanhui@uga.edu</u>

Name of Parent or Guardian	Signature	Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your child's rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX B

INTERVIEW PROTOCOL

Imagination in Physical Education: A comparative study of youth identity and body-schema in elementary school students

Interview Protocol

Interviews conducted will each follow a format of open ended questions.

1. What grade are you in now?
2. How old are you?
3. What is your favorite sport/game that you play in the physical education class? How about at home? Can you tell me why?
4. What is your favorite TV sport program/channel that you watch on TV?
5. What is your favorite video sport game that you play on play station, game boy, and so on…? Can you tell me why you like to play this game?
6. There are several pictures on the desk. Would you please pick five pictures that you want to share with me? And, Can you tell me why you want to pick these five pictures and share with me?
7. Now, I want you to close your eyes and imagine that you are playing (your favorite sport) in the gym. Imagine that when you are playing (your favorite sport), what kind of pictures you would have in your mind. (10 sec.) Please open your eyes and draw (your favorite sport) picture that just showed in your mind.

APPENDIX C

INTERVIEW TOPIC PROTOCOL

Imagination in Physical Education: A comparative study of youth identity and body-schema in elementary school students

Interview Topic Protocol

- Please show us your favorite picture that you took and tell us the story about this picture.

- Please show us your favorite sports image that you found from Internet and tell us the story about this sports image.

APPENDIX D

CHILD ASSENT SCRIPT/FORM

Child Assent Script/Form

I want to see if you would be willing to help me with a research project about things that kids think about, things that they feel, and things that they do. I'll ask you questions but it is different from school because there are no right or wrong answers. I just want to know what you really think.

If you decide to do the project with me, your answers will be kept just between you and me. You can also decide to stop at any time or can chose not to answer questions that you don't want to answer.

Do you have any questions? Would you be willing to do the project with me?

_____

Child's signature (when age appropriate)

APPENDIX E

COVER LETTER (RECRUITING PARTICIPANTS)

Dear Parent/Guardian,

I am a doctoral student in the School of Health and Human Performance at the University of Georgia. I am writing to you to ask if you would be willing to allow your child to participate in a study that I would like to run at XXX Elementary School.

The study I intend to run is designed to gain a better understanding of children's body-schema construction according to their various family and cultural backgrounds, as well as to increase school teacher's awareness of children's different imagination in body movement in classroom. These body-schema constructions are believed to be developed mainly between the ages of 8 and 11 years and this is why your child is being invited to participate.

Practically, your child's participation will involve them working with me individually at the school. The research is designed to be like games so that your child would enjoy the experience as much as possible. The task involves one interview, one focus group interview, and several non-participant observations. People who have carried out similar work previously have found that children had very enjoyable experience. However, should your child wish to, they will be free to withdraw at anytime and of course you will be free to withdraw your child's participation at any point. Your children's participation will be treated with complete confidentiality and only I will have knowledge of their individual performance. The sessions will be audio-taped so that I can use them as memory aids for recording each child's performance. These audio tapes will only be seen by me and once the session has been coded the tapes will be erased. However, certain communication text may be of interest to me and I may wish to use the footage to illustrate these points. Such footage would only be viewed by other academics and would never be used unless I had your consent for this. All information will be kept in accordance with the confidentiality rules of Institutional Review Board. At no point will any information be written or published that could identify your child. Approval for this research has been obtained from XXX Elementary School, the XXX County School and Institutional Review Board at the University of Georgia.

If you are willing for your child to participate in the study please complete the attached consent form and return it to a member of the school staff. Also should you like any further information about the study then please don't hesitate to contact me - using the details above or provide me with your phone number so that I can contact you.

Many thanks,

Shan-Hui (Tiffany) Hsu
Doctoral Candidate
Rm 354
Physical Education and Sport Studies
The University of Georgia
Athens, GA 30602
shanhui@uga.edu
(O) 706-542-2902

APPENDIX F

PICTURE-TAKING ACTIVITY (LETTER)

Picture-Taking Activity

Dear xxxx,

You will be asked to take as many as pictures that you like and to share them with me in the next school meeting. I would like you to use either your own camera or the one I gave you to take the pictures similar to those I showed you on my computer in Ms. xxx's office last time. You can take pictures of your most favorite sport activity, for example, volleyball, soccer, basketball, baseball, dancing, running, football, gymnastic, and swimming, etc. You can take as many as pictures that you want during this week. On xxxx (DATE), I would like you to return the camera to me or to your teacher so that I can develop the film in a CD for you. If you have any question, please call me at (706) 548-5284.

Many thanks,

Tiffany Hsu
Doctoral Candidate
Rm 354
Physical Education and Sport Studies
The University of Georgia
Athens, GA 30602
shanhui@uga.edu
(O) 706-548-5284