Pre-adolescent Children and Their Friendship Intentions

Towards

Peers with Physical Impairment

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Abstract

Pre-adolescent Children and Their Friendship Intentions Towards Peers with Physical Impairment by Clare Yuk Kwan CHENG.

Social inclusion of children with disabilities is considered to be an important aspect of inclusive education. Previous research mostly approached this issue by either examining the attitudes of typically developing children towards disabilities or the friendship quality and status of children with disabilities. By adopting a qualitative research design, the present study is an attempt to draw from these two lines of research to develop a conceptual framework for understanding pre-adolescent children's friendship intentions towards their peers with physical impairment. The research is also a response to the paucity of local studies in this area. The data are analysed in three domains: Conception of friendship, Attitudes towards people with physical impairment and Factors influencing friendship. Four theoretical constructs, Physical Attribute, Social Attribute, Empathetic Attribute and Cognitive Attribute, are finally developed to explain the relationship between friendship conception and attitude of acceptance. Based on the theoretical constructs, the peer experience of two children with physical impairment, one being a success story and one less satisfactory, is described to illustrate the limiting and facilitating factors for their social inclusion. Recommendations for local inclusive education and suggestions for future research are provided at the end of this project.

Key words: inclusive education, disabilities, friendship intentions, pre-adolescence

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CHAPTER ONE: INTRODUCTION

1.1   Background

Educating children with special educational needs (SEN) together with typically developing children has become an important trend in education provision since the conceptualization of the term "inclusive education" in the Declaration of Special Education Needs in the Salamanca Conference in 1994 (UNESCO, 1994).   It is recognized that inclusion benefits peer interactions, providing children with SEN with language, social, and academic role models. Inclusion also provides benefits to the general school population fostering attitudes such as tolerance, acceptance, and the appreciation of differences in people (e.g. Diamond, 2001; Lieber, et al., 1998; Peck, Carlson and Helmestetter, 1992).

The literature on inclusive education over the past 10 years, however, has not universally supported the benefits of inclusion.   Some writers have argued that simply placing children with SEN in mainstream schools does not guarantee positive attitudes between the typically developing children and their disabled counterparts (Kluwin and Gonsher, 1994; McEvoy and Odom, 1996).   Some studies in general support the idea that inclusion provides children with SEN with increased opportunities for interactions with more competent social partners, but claim that inclusion also puts them at a relatively high risk of peer rejection (Guralnick, 1999).

The intention of the typically developing children to interact with their disabled counterparts is also considered to be a crucial element in the promotion of the full

participation of all students in the culture, curricula and communities of the school, which is recognised as a tenet of inclusive education (Booth and Ainscow, 2002). Buhs, Ladd and Herald (2006) demonstrate that early peer exclusion is closely associated with declining classroom participation and increasing school avoidance in children with SEN. While teachers' attitude, adequate classroom support and appropriate learning and teaching strategies are considered influential factors in achieving inclusion, the attitude and the intention of the typically developing children to interact with their peers with SEN is in no way less significant in assuring genuine inclusion.

Free play time and physical education classes are the time when most interactions between pupils occur.   The physical contact and emotional interflow in these interactions is a natural way to cultivate friendship.   Understanding the intention of the typically developing children to interact with the physically impaired peers in these activities will shed light on the issue, particularly, for the purpose of minimizing attitudinal barriers. Also, children with physical impairment are particularly vulnerable to exclusion from these activities due to their physical constraint.   Most of the time, the initiation of shared activities and interactions between the children with and without physical impairment will depend on the typically developing peers. Even with the teachers' support or guidance, the willingness of the typically developing children to work and play with their physically impaired peers in these activities will inevitably affect the quality and sustainability of the interactions.

1.2   The Research Problem

The previous discussion leads to the aim of my research study which is: to understand the friendship intentions of typically developing children towards peers with physical impairment as exhibited in their intention to interact with them in physical education classes and free play time.

In particular, the present study was also prompted by the empirical findings of an earlier pilot study of children with cerebral palsy carried out at my workplace (Cheng, 2003).   Using a standardized battery of self-concept, Self Descriptive Questionnaire I, developed by Marsh (1990), over a three year period, I followed the progress of five children with cerebral palsy who had been integrated into mainstream primary schools. The results showed that the children demonstrated a declining self concept of their physical ability (Appendix 1.1) which did not match with the Gross Motor Function Measure (Russell, et al., 1993), the objective assessment of their physical ability which used a standardized battery for measuring gross motor functions of children with cerebral palsy.   There was also a concomitant decline of self concept in their relations with their peers.   This prompted the questions: Did the discrepancy between the objective measurement and self concept in physical ability indicate some degree of exclusion of these children in the physical education classes?   Was there any relationship between the peer relations and the self concept of physical impairment? Why did both show a declining trend?   The quantitative data in the pilot study was unable to answer these questions. This led to my determination to carry out a qualitative study to investigate the intention of the typically developing children to

engage in work and play with children with physical impairment and the factors which influenced their decision.

In this research, concepts of friendship are expanded to include more mature dimensions such as mutual support, loyalty and affection starting in pre-adolescent children (Furman and Bierman, 1983). The results of the previous pilot study also showed that the score on peer relations dropped more significantly in the case of children from primary three onwards. Their age ranged from 8 years to 12 years. Therefore, for the present study, I chose pre-adolescent children as my targeted subjects, which resulted in the research title "Pre-adolescent children and their friendship intentions towards peers with physical impairment".

1.3   The Purpose and Significance of the Research

A policy of including children with mild disabilities into mainstream schools has been more widely adopted in Hong Kong since 1997 (Cheng, 2007). While internationally there is a growing awareness of the importance of researching into the attitudes and friendship of children towards their peers with SEN (see e.g. Nowicki and Sandieson, 2002; Rizzo, et al., 2003; Bunch and Valeo, 2004; Laws and Kelly, 2005), most studies on inclusive education in Hong Kong, to my knowledge, still focus on teachers and are more concerned with the delivery of curriculum (see e.g. Potts, 1998; Wong, 2002; Wong, Pearson and Lo, 2004; Luk, 2005; Chong, Forlin and Au, 2007). Based on communication with personnel of special schools, anecdotal data indicates that peer problems at times pose difficulties for children with physical

impairment in continuing their school career in mainstream schools beyond primary level (Cheng, 2003). Consequently, the present study is a response to the paucity of local research in the area of peer relations and is intended to increase concern for the social needs of students with physical impairment in the highly academic orientated atmosphere in Hong Kong education.

Social incompetence is recognized as a common cause of failure in inclusive education for students with learning disabilities (Shireen and Richard, 2000). Some researchers also found that children with physical impairment in mainstream schools are more likely to lack friends in comparison with their typically developing peers (Yude and Goodman, 1999). Viewed from the disability model, there is a tendency to concentrate on the traits of the child with SEN and attribute such social isolation to the paucity of social skills of children with disabilities (Soresi and Nota, 2000; Monchy de, Pijl and Zandberg, 2004). However, friendship, particularly at pre-adolescence and beyond, is developed from mutual peer interactions. Frostad and Pijl (2007) demonstrate that there is a low correlation between social position and social skills for pupils with sensorial difficulties or motor impairments. The findings indicate that it is too simplistic to attribute the phenomenon of social isolation solely to the inadequacy on the part of children with SEN. Typically developing children may also have a role to play. Therefore, the purpose of my study was to investigate the supporting and limiting mechanisms to friendship formation between children with and without physical impairment by gaining an in-depth understanding of the typically developing children's intention to befriend their peers with physical impairment.

In sum, the aims of the present study are:

1. To respond to the paucity of the local literature on peer relations in inclusive education;

2. To raise awareness of the social needs of children with physical impairment during their process of inclusion; and

3. To gain an in-depth understanding of the intentions of children at pre-adolescence to befriend peers with physical impairment so as to appreciate their social inclusion.

1.4   Research Questions

In my effort to achieve the purpose of my study, I chose to employ qualitative inquiry to explore the personal experience of the typically developing children with peers with disabilities within natural contexts like physical education classes and recess, and to capture the points of view of the children concerning the following two major research questions:

1. How do children perceive and understand disabilities, and in what way does it influence their friendship intentions towards peers with physical impairment?

2. What is the friendship conception of pre-adolescent children, and in what way do their friendship intentions towards peers with physical impairment relate to their conception?

1.5   Conceptual Framework

The term attitude represents collective perceptions or summaries of favourable or unfavourable objects and so serves as a behavoural guide to approach or avoid them (Overwalle and Siebler, 2005).   In terms of this concept, a body of research has addressed the issue of children's attitude towards disabilities in mainstream settings as an approach to investigate the social inclusion of children with disabilities (see e.g. Esposito and Reed, 1986; Harper, 1997; Scheepstra, Nakken and Pijl, 1999; Laws and Kelly, 2005).   However, discrepant findings are revealed in studies on the relationship between social contact and attitude in children with and without disabilities (Nowicki and Sandieson, 2002).   Psychometric measures to assess attitude are used in most of these studies which adopt quantitative methods of data collection.

In the case of psychometric measures of attitude which are employed in quantitative studies, the different evaluative reactions to an attitude object are integrated in an overall attitude score.   The outcome is often described in an algebraic formula which is calculated from the responses to a set of hypothetical statements (Overwalle and Siebler, 2005).   In this way, the contextual element in the formation of an attitude is masked and a full understanding of factors influencing the attitude formation is hardly accessible.   Such a situation is reflected in a number of studies.   For example, Nikolaraizi, et al. (2005) in their quantitative study of a cross-cultural examination of 288 young children's attitude towards peers with special needs reveals this limitation of superficiality. Their study shows self-contradicting evidence that although the typically developing children in both inclusive and non-inclusive settings score high

in the Acceptance Scale for Kindergartners-Revised (ASK-R), which the researchers use as a standardized measure of the children's attitude towards disabilities, the children are hesitant in befriending or playing with a child with special needs in response to the open questions after the administration of ASK-R.   It is evident that the psychometric data cannot explain how positive attitudes expressed by the children are formed and why the discrepancy between attitudes and intentions exist.

Laws and Kelly (2005) in an attempt to investigate using psychological measures typically developing children's attitudes and friendship intentions towards children with physical and intellectual disabilities face a similar dilemma.   They comment on the psychometric tools, the PATHS (Peer Attitudes Toward the Handicapped Scale) and BIS (Behavioural Intention Scale), they use,

> *"…the behaviours described by items included in the PATHS intellectual disability subscale focus on difficulties with school work.   The majority (although not all) of the BIS questions children's intentions to be friendly towards a child outside the classroom.   Some children may find difficulties with classroom activities to be irrelevant to decisions about friendships outside the classroom, reducing any correlation between the two measures."*
> (p. 94).

These statements, in one way, reveal the limitation of quantitative studies as a result of the constraint imposed by the psychometric tools used and, in another way, reflect the importance of the contextual element and the effect it has on different individuals

in understanding human and social behaviour such as friendship intentions.

In sum, the use of psychometric measure of attitude in quantitative studies can at best provide a pattern of peer acceptance in the typically developing children towards their peers with disabilities but fail to address the reasons and the process of the formation of the response, particularly related to genuine circumstances.

In addition to the attitudinal aspect, friendship between children with and without disabilities is also a relational issue. Some researchers approach this issue by using socio-metric methods which usually involve asking children to name their friends and quantifying either total nominations or mutual nominations. *"Socio-metric methods primarily provide indications of group acceptance and rejection without regard to the significance of individual relationships."* (Overton and Rausch, 2002, p. 12). However, as in the case of psychometric measures, socio-metric methods yield little information about the process of friendship formation and thus the factors influencing the relationship.

In the present study, my research concerns were to understand the intentions of the typically developing pre-adolescent children to work and play with peers with physical impairment, and to understand why and how their intentions were formed. The psychometric measures or socio-metric methods would not have satisfied my research concerns and I sought to use qualitative method in the conceptual framework of friendship intention described below.

I used the term 'friendship intentions' to denote a close peer relationship which is distinguished from the superficial preference for peer interactions. Although the terms peer relationship and friendship are often used interchangeably, Rubenstein (1984) suggests that friendship involves "*a higher order of consistent preference, mutual involvement, and positive feelings*" (p. 126) compared with "*the less intense and less enduring peer relationships*" (p. 127). In line with Rubenstein's suggestion and the impact of disability, I posited that friendships involving children with and without physical impairment were built on a foundation of acquaintance and acceptance, suggesting a continuum of peer relationships which were relevant to both immediate needs and long-term goals.

This postulation involves the conception of friendship of both children with and without physical impairment in relation to needs and goals, as well as an attitude of acceptance of physical impairment on the part of the typically developing children. These elements are not static in children. They change with the children's biological maturation and are influenced by the physical and social environments with which they have close or remote contact (Berk, 2000). Hence, I held a developmental and psycho-social perspective in interpreting the friendship intentions of the typically developing pre-adolescent children towards their peers with physical impairment giving rise to a proposed conceptual framework depicted in Figure 1.1.
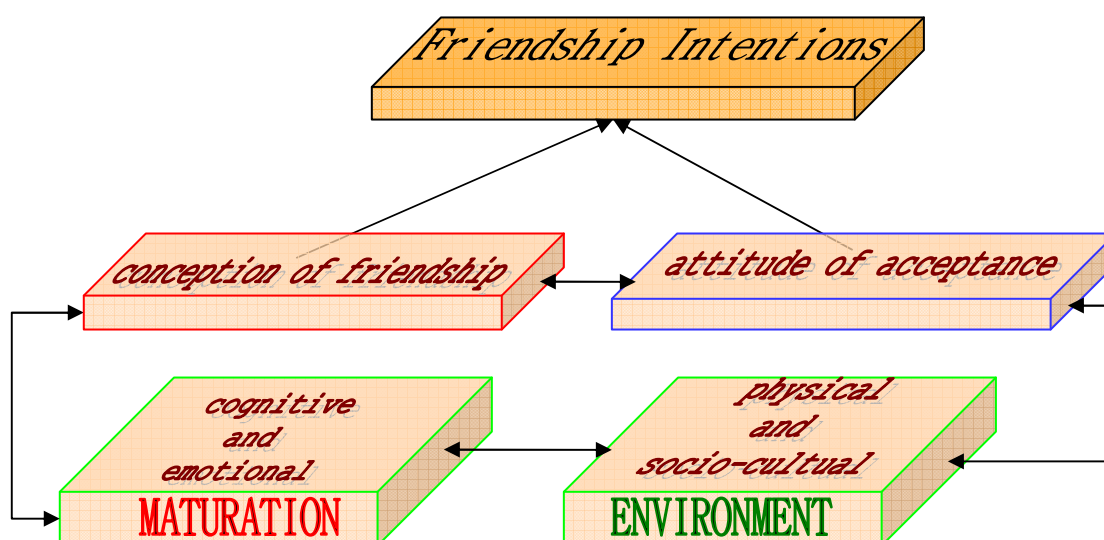
Figure 1.1: A Proposed Conceptual Framework of Friendship Intentions

In this framework, the cognitive and emotional maturation of the children shapes their conception of friendship while the physical and socio-cultural environment where the children spend most of their time (in this case, the school and family) has an impact on the attitude of their acceptance towards physical impairment. The emphasis in the framework is on the interplay between the different elements.

1.6   Chapter Outline

Chapter two provides a literature review in three areas, viz. the concept of attitudes, friendship conception and development in pre-adolescent children and the school culture in Hong Kong. The review serves to provide me with insight and evidence to support and refine my conceptual framework. Chapter three describes my research design and provides detail of my research methods. I will present my arguments for the choice of the research design and methods. Findings and their interpretations are

presented in Chapter four. The data collected from the children with and without physical impairment are analysed simultaneously and are described in three domains. A final conceptual framework will be developed based on the analysis of the data. Chapter five discusses the findings with respect to their implications to local inclusive education and for substantiating previous research in the area of children's attitudes towards disabilities and friendship intentions. Chapter six concludes this research project with recommendations for local practice and further research.

CHAPTER TWO: LITERATURE REVIEW

2.1   Introduction

In this study, I adopted a qualitative approach to investigate the friendship intentions of the typically developing pre-adolescent children towards peers with physical impairment.   My intention was not to develop a scientific model with pre-conceived hypotheses, but a conceptual framework as a thinking chart to explore the influence of attitudes and conception of friendship on friendship intentions.   Consequently, the role of the literature review is to extrapolate meaning from previous studies to support my conceptual framework (depicted in Figure 1.1) and assist in formulating my interview questions and interpreting the data.

In the literature on social inclusion of children with disabilities, some researchers focus on the attitude of the typically developing children toward disabilities in order to predict their peer interactions with and preference for their disabled peers and making little reference to the age-relevant friendship conception (e.g. Roberts and Smith, 1999; Laws and Kelly, .2005).   Some others focus on peer relations in terms of, for example, social acceptance, friendship patterns, level of social structure and functions of friendship between the children with and without disabilities, paying little attention to the impact of attitudes towards disability on friendship intentions (e.g. Hall and McGregor, 2000; Heiman, 2000; Wiener and Schneider, 2002).   In the present study, I attempted to bring these two lines of study into my conceptual framework as described in the introductory chapter.   In supporting my conceptual

framework, I present a review of the literature in the following areas:

1. The concept of attitudes to elaborate on the attitude component of my conceptual framework;

2. Friendship conception and development in pre-adolescent children to elaborate on the friendship component of my conceptual framework

3. The school culture of Hong Kong with respect to its challenges and support for inclusive education as the socio-cultural background.

2.2   On The Attitude Component of The Conceptual Framework

Physical appearance is the most salient cue in face-to-face encounters between people and may have a significant influence on one's attitude towards others. Some researchers show that it is also an important determinant for peer preference and interaction (Crystal, Watanabe and Chen, 1999). On the other hand, attitudinal barriers are identified by students with physical impairment as the most damaging of their school experiences (Pivik, McComas and Laflamme, 2002). Attitudes of typically developing children towards physical impairment thus become the focus of study in the investigation of the social inclusion of these children (e.g. Roberts and Lindsell, 1997; Roberts and Smith, 1999; Nikolarizi and De Reybekiel, 2001; Bunch and Valeo, 2004; Laws and Kelly, 2005; Nowicki and Sandieson, 2002; Nowicki, 2005; 2006).

Quantitative researchers using attitude measures attempt to understand the attitude

pattern of children towards peers with disabilities by investigating the relationship between attitudes and pre-conceived variables, such as age, gender, types of disabilities and role of inclusion which are thought to influence attitudes. However, the literature does not present a conclusive picture (Nowicki and Sandieson, 2002; Nowicki, 2006). Nowicki (2006) attributed the difficulty to the variety of measures used. As attitudes are psychological constructs invented to explain phenomena of interest, the conceptual framework of attitude that the researcher holds can thus influence its measurement and consequently the result of the study. It follows that researchers have to take the conceptualization of attitude into consideration in formulating their study. Consequently, I had borrowed relevant ideas from quantitative studies to conceive my conceptual framework of attitude but was aware of the interpretative nature of my study which I outlined in the research methodology chapter.

2.2.1 Concept of Attitudes

There is a long history of conceptualization of attitude and *"the literature contains more than 30 definitions of the term (Rao, 2004) that have been proposed over the years."* (Findler, Vilchinsky and Werner, 2007, p.166). Although a universally accepted definition has yet to be identified, the more widely accepted interpretation of the concept states that "*attitudes are acquired behavioural dispositions that contain residues of experience of such a nature as to guide, bias, or otherwise influence later behaviour*" (Vargas, 2004, p.276). The multi-component model identified by Eagly and Chaiken (1993) is representative of this concept. The model is based on the

tenet that attitudes are global evaluations of stimulus objects which influence the person's subsequent response to the objects. The global evaluations are derived from the person's experience in three basic sources of information, affective, cognitive and behavioural.

In the case of the disposition concept, although attitudes are considered to reflect people's beliefs, debates have also focused on how well an attitude measure can predict the actual behaviour. Ajzen and Fishbein (1980) have taken an approach to integrate factors which may influence attitudes into a composite model for behavioural prediction. They coined the model "Theory of Reasoned Action" and later produced the revised "Theory of Planned Behaviour" (Ajzen and Madden, 1986).

The multi-component model has the advantage of being able to explain attitude structure and its stability while the "Theory of Planned Behaviour" provides a framework for predicting behaviour from attitude (Roberts and Smith, 1999). I extrapolated ideas from these models to formulate the attitudinal part of my conceptual framework for the collection and analysis of my qualitative data, and also discussed how it was linked to the friendship component in my conceptual framework.

2.2.1.1   The Multi-component Model of Attitude

In this model, attitudes are viewed as complex systems consisting of the person's beliefs about the attitude object (cognition), his/her feelings towards the object

(affect), and his/her action tendencies with respect to the object (behaviour intention). Rosenberg and Hovland (1960) depicted the model in a schematic representation (Figure 2.1) alongside which some attitude measures employed in quantitative studies are developed.

Measurable independent variables

Intervening variables

Measurable dependent variables

STIMULI (individual, situations, social issues, social groups, and other "attitude object")	ATTITUDE	AFFECT	Sympathetic nervous responses / Verbal statements of affect
		COGNITION	Perceptual responses / Verbal statements of beliefs
		BEHAVIOUR	Overt actions / Verbal statements concerning behaviour

Figure 2.1 Multi-component Model of Attitude (Rosenberg and Hovland, 1960, p.3.)

In these attitude measures, the three components of attitude are combined to provide a global evaluation of the attitude object, which is still inadequate to provide a better understanding of attitude formation and behaviour prediction. It follows that there is a need to investigate the relative importance of the components in the overall attitude score and the inter-relationship of the components (Haddock and Huskinson, 2004).

Nowicki (2002; 2005; 2006) is one of the few researchers who have paid special attention to the multi-component model of attitude in studies of children's attitude towards disabilities. Nowicki (2005) examined the attitude of children from age 6 to 12 years towards children with intellectual and physical disabilities based on the

potential variables including age, gender, social cognitive development and knowledge about disabilities.   In this study, she has contributed to the understanding of attitude formation and behaviour prediction by using a more sophisticated statistical procedure, principal component analysis, to explore the association of the cognitive, affective and behavioural attitude components.   In showing evidence of the presence of the three attitudinal components in children even as young as those of pre-school age, her findings suggest that affective and behavioural responses may be more highly related to one another than are cognitive responses, irrespective of the age and gender of the children. By using a standardized measure with hypothetical statements and hypothetical target children, Nowicki realized the limitation of her study:

> *"One limitation of the current study was that knowledge was assessed in a rudimentary manner.   A more extensive interview probing children's beliefs and behaviours may have provided more information about the role of knowledge on attitude formation.   The questions were general and did not give participants an opportunity to speak about what they may have known about different kinds of disabilities"* (p.35).

Nowicki's reflection on the limitation of her quantitative study indicates the potential contribution of qualitative study in the in-depth understanding of children's attitude formation towards disabilities which is one of the purposes of my study. The evidence of the presence of the three components of attitude in children and the relationship between different components of attitude, however, provided me with the insight to

probe the cognitive, affective and behavioural aspects of the children's attitude towards their peers with physical impairment in my in-depth exploration of peer acceptance.

2.2.1.2   The Theory of Planned Behaviour

The Theory of Planned Behaviour, a revision of the Theory of Reasoned Action (Ajzen and Fishbein, 1980) proposes three basic requirements for determining a person's behavioural intention. They are attitude toward the behaviour, subjective norm and perceived behavioural control. This model is considered to be the best predictor of actual behaviour.   Figure 2.2 depicts the model.
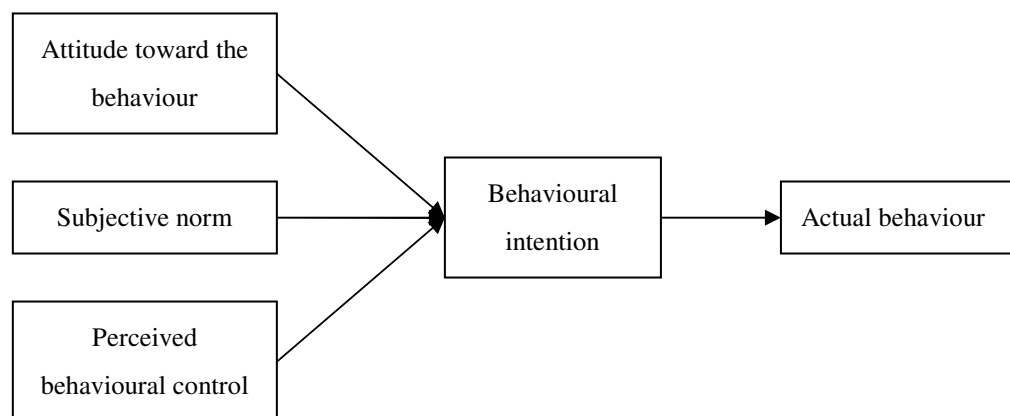
Figure 2.2 The Theory of Planned Behaviour (adapted from Roberts and Smith, 1999, p.40.)

"Attitude toward the behaviour" is the personal factor which shows "*the individual's positive or negative evaluation of performing the behaviour*" (Ajzen and Fishbein, 1980, p.6).   "Subjective norm" is the normative or social factor which reflects "*the person's perception of the social pressures put on him to perform or not perform the*

behaviour in question" (p.6). "Perceived behavioural control" represents "*the person's belief as to how easy or difficult performance of the behaviour is likely to be*" (Ajzen and Madden, 1986, p.457). Perceived behavioural control is related to extraneous or intrinsic factors which prevent the person from enacting the behaviour. For instance, the lack of opportunities for interaction due to the seating arrangement in the classroom and the lack of skills for handling physical disability may appear to the typically developing children as barriers which prevent them from interacting with peers with physical impairment and thus reduce their intention to befriend peers with physical impairment. Hence, based on the concepts of subjective norm and perceived behaviour control, I included an environmental component, physical and social, in the attitudinal part of my conceptual framework.

The Theory of Planned Behaviour contributes to the conceptualization of attitude by introducing the concept of behavioural intention as the mediator and predictor of actual behaviour. "*Behavioural intentions are defined as the person's decision to perform particular behaviours and represent a summary of the person's motivation to act*" (Armitage and Conner, 2004, p.128). In making this linkage between attitude and behaviour via behaviour intentions, Ajzen and Fishbein (1980) emphasized the importance of making a very clear reference to a person's attitude toward the behaviour instead of toward objects or people. It follows that the extent to which a person likes or dislikes an attitude object may not necessarily result in a negative evaluation of the behaviour towards the attitude object. This concept of attitude towards behaviour may have implications for my interpretation of the children's response in the qualitative interviews. For instance, children holding a negative

attitude towards disability may not have a negative evaluation of the behaviour of offering help to a person with disability.

Similar to the multi-component model of attitude described earlier, the relative importance of the three determinants in the Theory of Planned Behaviour needs to be determined in situations of conflict in order to a make reliable prediction of actual behaviour from behavioural intention. Ajzen and Fishbein (1980) posited that the relative importance of the determinants in the Theory depends in part on the intention under investigation and in part on individual differences. In this case, studies attempting to derive a universal formula in predicting behaviours of all kinds are superfluous. Additionally, studies which provide strong empirical support for the Theory of Planned Behaviour or the Theory of Reasoned Action are mostly on discrete behaviours, for example, smoking (Côté, Godin and Gagné, 2004), substance abuse (Crano, et al., 2008), eating habit (Gratton, Povey and Clark-Carter, 2007), physical activity (Eng and Martin Ginis, 2007; Hamilton and White, 2008), reading (Sideridis and Padeliadu, 2001), participation in inclusive physical education (Verderber, Rizzo and Sherril, 2003).

Behaviour such as friendship intention involves more than simple observable actions. Friendship as one form of interpersonal relationships develops between two or more individuals through a series of interactions over time such that each interaction may be influenced by past and anticipated future interactions (Hinde, 1995). Hinde posited that the interactions embedded in friendship "*are often not identified by what the participants actually do together, but by aspects of quality, intimacy, interpersonal*

perception, commitment and satisfaction" (p.6).   According to the Theory of Planned Behaviour or the Theory of Reasoned Action, any behavioural intention can be predicted from attitude provided that the measure of attitude corresponds to the measure of behaviour (Ajzen and Fishbein, 1980).   It follows that attitude studies using psychometric tools to predict friendship may encounter methodological difficulty or the tools do not actually measure what they are supposed to do.

Roberts and Smith (1999) are among the few researchers who explore the friendship behaviour of children towards peers with disability based on the Theory of Planned Behaviour.   They managed to find the link between behavioural intentions and the actual behaviour of interaction statistically significant but weak.   They made the following comments on their findings and methodology:

> "*Indeed a lot of the variance in children's interactional behaviour toward peers with physical disabilities was left unexplained….As such, it may not have captured the fine grain interaction patterns that related to children's particular behavioural intentions…there may have been other subtle social competence or personality issues that were not captured by the measures used in this study.*" (p.47).

These post-hoc explanations echo the need for a different methodological approach in the study of friendship.   A closer examination of the psychometric measures which they use reflects some fallacies common in these measures with respect to friendship. The first one is that the developmental aspect of children's friendship conception is

overlooked. For instance, in order to measure the behavioural intention of the typical children from age 6 to 12 years to befriend peers with physical impairment, Roberts and Lindsell (1997) develop the Behavioural Intent Scale which consists of 10 hypothetical situations supposedly in order of increasing intimacy of peer interactions. The authors made the assumption that more positive responses to statements of higher intimacy indicated a higher level of peer acceptance and friendship intentions. However, after close scrutiny of these hypothetical statements, it is possible to find some situations which actually describe friendship conception at different developmental stages rather than simply reflecting levels of peer acceptance or friendship intentions. For example, the statement "I would offer him/her some of my sweets" indicates a lower level of intimacy compared with the statement "I would go to the cinema with him/her". It is obvious that the preference shown by a child aged 12 years in these two statements may truly indicate friendship intentions as "hanging out together" is the more frequent context for friendship development emerging from the pre-adolescent stage (Zarbatany, Hartmann and Rankin, 1990). However, if the statements are presented to children aged 6 years, the preference shown by them may not be indicative of the level of friendship intentions but rather the plausibility of carrying out the activity on their own.

The second common fallacy which is reflected in Roberts and Smith's (1999) study is the ignorance of the complexity of children's friendship conception. For example, the authors made the assumption that the amount of "positive" physical or verbal interactions directly correlated with friendship behaviours. According to Hinde's (1995) observation which was mentioned in the preceding paragraph, friendship

behaviours can be covert and may not be displayed to an outside observer. To further complicate matters, in the literature on peer relationship, it is noticeable that "*at any level of social organization, the understanding of participants will necessarily differ from that of outsiders. Humorous anecdotes shared among friends, for example, can strike outsiders as unnecessarily cruel.*" (Rubin, Bukowski and Parker, 1998, p.623). Consequently, it may be facile to qualify the amount of supposedly positive interactions as representation of friendship behaviours.

Nevertheless, the preceding arguments are not to argue against the value of investigating attitudes toward disability in order to understand peer acceptance and friendship but to highlight the complexity of friendship conception and friendship development which warrant a qualitative investigation. More will be discussed in the literature review of friendship presented later in this chapter.

To sum up, the Theory of Planned Behaviour enabled me to fine tune my conceptual framework for data collection and analysis with respect to the understanding of the attitude of the typically developing children towards peers with physical impairment. As a specific framework to study discrete behaviour, the Theory of Planned Behaviour also indirectly supports my emphasis on a qualitative approach to investigate friendship intentions.

2.3   On The Friendship Component of The Conceptual Framework

The social benefits and specifically the opportunities which inclusive education

creates for friendship development between children with and without disabilities is one of the main objectives of inclusive education. To justify this claim some researchers have taken an indirect route to study the attitude of typically developing children towards their peers with disabilities and infer their intention to befriend the peers. Without taking the developmental stages and complexity of friendship formation into consideration, the results of these studies may at best relate to peer acceptance but not necessarily be indicative of friendship intention. Richardson (1971) who was among the earliest researchers to study the relationship between attitude and friendship preference realized this limitation in his study to assess friendship choices of children with and without physical disability in a summer camp and went on to posit that:

> *"It would be valuable to make direct observations of children with and without physical disabilities who are living together, in order to study the nature, development, and shift in friendship patterns and how these factors are related to values. From the present study, it appears that the influence of values toward disability on behaviour diminishes as the interpersonal relationship moves from simple to more complex and that other interpersonal values increasingly come into play."* (p.257-258).

Richardson's contention is not only concerned with methodology but also points out the difference between peer acceptance in the initial encounter and the peer relationship through more direct contact and interactions over time. This notion is further elaborated in studies on subjects beyond early childhood (e.g. Johnston, 1995;

Fisher, Pumpian and Sax, 1998) in which it is noticeable that an acceptance of peers with disabilities in school-based activities does not necessarily evolve into personal friendships and their inclusion in activities outside of school.

Developmental psychologists provide answers to these phenomena by drawing our attention to the effect of cognitive and emotional maturation on children's ability to reflect on their own and others' behaviour, emotions, and intentions resulting in deeper and new ideas about friendship and interpretations of friendship experiences (Selman, 1980).   Hartup and Stevens (1997) specifically highlight that as children progress from childhood to pre-adolescence, they generally expect greater intimacy and stability in their friendships.   With such a conception of friendship, some suggest that typically developing children beyond early childhood might be hesitant regarding forming closer relationships with their disabled peers for fear of the unknown and insecurity concerning the disability (Ward, Center and Bochner, 1994).

However, from another developmental perspective, with increasing cognitive advances and emotional maturation, children are more able to take the perspective of another person, either by understanding the circumstances facing him or her, or to have emotional responses close to those the other person is experiencing (Commons and Wolfsont, 2002).   This perspective-taking ability and the vicarious sharing of emotion constitutes the psychological state which is referred to respectively as cognitive and emotional empathy (Smith, 2006).   High or mature empathy is recognised to associate closely with pro-social behaviour and a caring attitude (Hoffman, 2000).

Social scientists provide us with another important perspective on the characteristics of friendship. It is that the social and cultural context plays a significant part in the manifestation of peer interactions and relationships (Rubin, Bukowski and Parker, 1998). For example, Chen, Rubin and Sun's (1992) comparison study on social reputation and peer relationships in Chinese and Canadian children reveals a significant difference in the acceptance of shyness-sensitivity in these two cultures; shyness-sensitivity is valued by Chinese children and thus is not associated with isolation and rejection while the opposite holds in Canadian children. The contrast can be understood from the cultural context. The Confucian-based values which are predominant in Chinese culture place a high regard on group awareness, sensitivity to others and interpersonal harmony (Chen, 2000) while "*inhibited or restrained behaviours are generally negatively evaluated in western children's peer groups*" (Abou-ezeddine, et al., 2007, p.107). Therefore, cultural values have a part to play in understanding children's attitude toward peers as well as peer relationships. Moreover, as mentioned in the previous section on attitude, some peer interaction behaviours may appear to be unfriendly to outsiders but not to the children involved in the interactions. This indicates that the subculture specific to children from different backgrounds also shapes their social behaviour with their peers.

The aforementioned views suggest that, with age, typically developing children's friendship intentions toward peers with disabilities are not simple attitudinal issues but complex manifestations of the interplay between their psychological maturation and their physical and socio-cultural environments which together shape their attitude and friendship conception. It is beyond the scope of the present study to thoroughly

explore this complex issue but I made a bold attempt to include the idea in my conceptual framework (depicted in Figure 1.1) and consequently guided my thinking process in collecting and interpreting the data in several aspects. Firstly, there was a need for me to distinguish between "peer acceptance" and "friendship" in my interpretation of the children's discourse during my qualitative interviews. The mode of interactions was a reflection of these different levels of peer relationships. Consequently, it contributed to one main part of my data analysis. Secondly, I had to take into consideration the cognitive and emotional maturation in interpreting the children's conception of friendship which might influence their intention to form a close relationship with peers with physical impairment. Consequently, analysis of the friendship conception of the sample of children I recruited in my study preceded my interpretation of the supporting and limiting factors affecting their friendship intentions toward peers with physical impairment. An understanding of the friendship conception specifically at pre-adolescence is an essential background for the above interpretation. I presented a review of literature in this respect in the subsequent section. Thirdly, in line with the socio-cultural influence on attitude and peer relationship, I needed to gain some information on school culture and was aware of the societal value at large in eliciting and interpreting the children's discourse. I reviewed the school culture in Hong Kong at large as a background in the subsequent section and adopted some methodological procedures to select my sample to meet the need of this socio-cultural factor with an understanding of the limitation of the generalizability of the findings.

2.3.1 Friendship Conception of Pre-adolescent Children

Children's friendship has been ascribed with many properties which form their friendship conception. Most researchers agree on these properties. They include reciprocity in terms of needs and affection, intimacy in terms of sharing thoughts and secrets, sustainability in terms of commitment and attachment, and finally friendship is voluntary, not obligatory or prescribed and is not a simple dyadic relationship. Friendship must be understood within the network of other relationships (Rubin, et al., 1998). These properties demonstrate much social complexity. Based on Hinde (1995), Rubin, et al. (1998) contribute to the understanding of such social complexity of children's friendship by articulating these properties in a successive structure which consist of interactional, relational and group levels. Rubin, et al. (1998) ascertain a developmental trend in these levels with "*changes in the frequency or forms of specific behaviours*" in the interactional level, "*changes in qualities of friendships or patterns of involvement in friendships*" in the relational level and "*changes in configurations of and involvement in cliques and crowds*" in the group level (p. 633).

This successive structure provides a systematic skeleton for me to identify themes in my qualitative data. The subsequent sections highlight the specific friendship properties at pre-adolescence at these three levels which are significant in my investigation.

2.3.1.1   Friendship Properties at The Interactional Level

At pre-adolescence, one striking feature at the interactional level is a decline in the physical form of interaction such as rough-and-tumble play.   Verbal interactions such as gossiping become more prominent (Parker and Gottman, 1989).   Another form of interaction which emerges at this stage is teasing.   These features of interactions which are typical of pre-adolescence warrant attention not so much because children with physical impairment are at risk of bullying but rather to remind myself to be cautious of misinterpreting fun teasing as verbal bullying.   Fun teasing can be a way of expressing friendship among pre-adolescent children.

2.3.1.2   Friendship Properties at The Relational Level

In their conception of friendship at the relational level, pre-adolescent children go from "*a reward-cost stage*", to "*a normative stage*" and finally enter "*an empathic stage*" (Bigelow, 1977).   At the reward-cost stage, tangible entities such as toys act as media to maintain friendship in young children.   At the normative stage, friends are considered to abide by shared values and rules.   Loyalty is an expected quality of friendship among early pre-adolescent children.   At the empathetic stage, sharing similar interests and willingness for self-disclosure of secrets and feelings are regarded as criteria for friendship in late pre-adolescent children.   It can be seen that there is a gradual shift of intimacy in the relationship during pre-adolescence. Selman and Schultz (1990) ascribe this process of change to pre-adolescent children advancing their perspective-taking ability to appreciate feelings and intentions, and

not just manifest actions of others. Bonding and continuity of friendship is also expected between friends at this late stage of pre-adolescence. As an intimate quality of relationship does not emerge overnight, these close relational features at pre-adolescence should alert me to look for pre-requisites for developing such a quality of friendship. It also necessitates distinguishing between peer acceptance and genuine friendship intention.

2.3.1.3   Friendship Properties at The Group Level

Being involved in voluntary, friendship-based groups is a new form of social experience which emerges in pre-adolescence. These groups are referred to as cliques to distinguish them from the adult-assigned work groups. By late pre-adolescence, most peer interactions take place in the context of the clique (Crockett, Losoff and Peterson, 1984). It follows that group acceptance is significant for friendship development at this age as being rejected may limit opportunities to socialize and make friends. The close relationship between group acceptance and friendship development at pre-adolescence prompted me to identify the nature of cliques in my sample as well as factors influencing the entry of children with physical impairment into cliques.

2.4   School Culture in Hong Kong

Prior to 1997, Hong Kong had been under British rule for one hundred and fifty years with substantial British influence on law and order as well as the education system.

Nevertheless, with 95% of Hong Kong's population being of Chinese ancestry (Hong Kong SAR Government, 2006), Chinese culture is still prevalent in many aspects of the life of Hong Kong, education being one. Luk (2005) describes inclusive education in Hong Kong as "*mixes and interactions of 'Western' tendencies and 'Chinese traditions'*" (p.100). In Chinese society, education was traditionally perceived as the pathway to status, wealth and material comforts (Cheng, 1998). It was never intended to be a means to achieve social equity. Inclusive education is indeed a Western concept in education. Hong Kong being a place where East meets West, the school culture presents both challenges and support to inclusive education. In the subsequent sections, I presented a review of inclusive education as a background to the socio-cultural component of my conceptual framework.

2.4.1 School Culture in Hong Kong Challenges Inclusive Education

Cheng (1990; 1995; 1998) has researched extensively on the culture of education in Hong Kong and East Asia and identified four key features of Chinese culture which differ from those in mainstream Western culture and impact on education. These cultural features are: a collectivistic rather than an individualistic culture; an emphasis on effort rather than ability; a focus on academic rather than social relations; and a holistic rather than an analytic methodology. Of these four features, the first three are fundamental to the issue of inclusive education in the sense that these fundamental values challenge the principles of inclusive education.

Collectivism emphasizes conformity which challenges the principle of meeting pupils'

individual educational needs.   A deviation from the norm such as adaptation of schoolwork or school-based activities may make a child with physical impairment appear conspicuously special in addition to his or her physical appearance; similarity breeds connection.   Social scientists note that school children form friendships and play groups at higher rates if they are similar in terms of their demographic characteristics (McPherson, Smith-Lovin and Cook, 2001).   In addition to this unfavourable situation concerning social inclusion for children with disabilities, the impact of collectivist values in large classes in Hong Kong, typically 30 to 40 students, forces teachers to impose strict discipline which requires students to be self-restrained and quiet throughout the lessons (Cheng, 1998).   There is little room for free interaction among students even in physical education classes (Cheng, 2005-2006).

The emphasis on effort challenges the principle of appreciating individual pupil differences.   There is a firm belief among Chinese educators and parents and even students that 'diligence can compensate for stupidity', a well known Confucius saying. Li (2003) demonstrated that at the age of four or five, Chinese children already believe that effort is more important than ability for learning.   Although Luk (2005) observed the belief in effort and hard work by devoted parents had helped their children with disabilities to succeed both academically and socially, it was "*not without much stress*" (p. 100).   In general, this effort oriented concept can make both the teachers and the typically developing children less sensitive to the difficulties children with disabilities might face.   In addition to the salient physical feature, children with even mild physical impairment can have other covert difficulties such as problems with perception and fine coordination (Gillberg and Kadesjö, 2003; Arp,

Taranne and Fagard, 2006).   These subtle difficulties which these children exhibit can be misunderstood as behavioural or dispositional defiance such as laziness and untidiness which discourages peer acceptance.

The academic focus challenges the principle of fostering a mutually receptive culture. The values of schooling are highly focused on academic achievement (Luk, 2005). In addition to being affected by the traditional cultural influence, being a city for trade and finance, Hong Kong's education system is strongly attuned to economic needs. In response to global development in the 21st century, Hong Kong has stressed the importance of making a radical change over from an industrial to a knowledge-based economy.   Education is the frontier to prepare for this competitive change as it is envisaged that '*education holds the key to the future of Hong Kong*' (Education Commission, 2000, p. iv).   This pressure to emphasize knowledge acquisition is inherently built into the education system in Hong Kong.   As a result, academic learning has a high priority at the expense of other learning experiences such as the development of social skills and interpersonal communication, and even physical well-being can be undermined (Johns and Dimmock, 1999).

In addition, the congested curriculum allows little time for teachers to attend to the emotional needs of students.   This is graphically demonstrated in the greater acceptance by teachers in the general classroom of children with physical or sensory impairment rather than those with emotional or behavioural difficulties, because the former do not normally hinder the teaching schedule (Wong, Pearson and Lo, 2004). The criticism by some parents of the lack of sympathy and understanding shown by

some teachers in stigmatizing their children with special needs in mainstream schools study is indicative (Wong, 2002). It is generally recognised that teachers have a direct influence on students' learning outcome (Monsen and Frederickson, 2004).

This over-emphasis on academic learning can reduce teachers' motivation to achieve full participation in non-academic subjects such as physical education for students with physical impairment when participation is perceived to pose difficulties (Wong, et al., 2004). Physical education with its aim of "*developing students' physical competence, cognitive domain, creativity, collaboration skills, social skills and enhancing their physical fitness*" (CDI, 2001, Ch 1, pp. 3) should be an ideal platform for promoting inclusion between children with physical impairment and their typical developing peers and enhancing understanding of abilities and difficulties of peers. However, currently opportunities for fostering a mutually receptive atmosphere are frittered away under the predominant emphasis on knowledge acquisition in schools.

2.4.2 School Culture in Hong Kong Supports Inclusive Education

In general, the school ethos in Hong Kong emphasizes pro-social behaviours which include helping, co-operating, caring and taking responsibility for another. This in part is in line with traditional Confucian teaching and in part derives from the Christian doctrine on which 60% of primary schools are based (data retrieved from http://chsc.edb.hkedcity.net/primary/ on Oct 10, 2008). In his investigation on the development of Christian school culture in Hong Kong, Ho (2002) highlighted "*the loving culture based on Christ's love*" and "*the collaborative culture in Christ*" as two

of the main characteristics of Christian schools (p.23-24).   Diversity and respect for others is also promoted as key values in moral and civic education in general (Curriculum Development Institute, 2002).   In spite of the aforementioned challenges imposed on inclusive education, this school ethos counteracts the challenges.   Luk (2005) echoed the importance of the value domain affecting inclusion in his in-depth study of an inclusive school in Hong Kong based on Slee and Corbett's (2000) three-tier model of inclusion.   The first tier refers to policy and the notion of school effectiveness, the second tier to structural modifications to the school environment and curriculum and the third tier to deep culture and the hidden curriculum.   Luk (2005) observed the improvement in the inclusive practice in the school and concluded that:

> *"The change was brought about mainly by the personnel, in particular, the caring attitude and the perseverance of the teachers and parents, rather than by policy or structural changes in the first and second tiers respectively."* (p.99).

Inclusive education is based on the concepts of human rights and respect for differences.   Cohen, et al. (2006) demonstrated a significant association between peer respect and peer liking among Chinese children.   Peer liking was also positively correlated with friendship quality in their sample of children in China. The pro-social ethos advocated in schools may encourage such peer relationships which are favourable for inclusion.   Cohen, et al. (2006) further demonstrated the difference in the concept of respect between children in China and the United States.   Generally,

children in the United States regard respect in terms of reciprocity while children in China view respect as inherent in the social order. The former may represent a culture emphasising fairness and human rights while the latter concerns harmony and interpersonal relationship. As Hong Kong exhibits a socio-cultural feature where "East meets West", "*there are mixes and interactions of 'Western' tendencies and 'Chinese traditions'*" (Luk, 2005, p.100). The interplay between these different concepts in human relationships will be an interesting issue in understanding the friendship intentions of the typically developing children toward their disabled peers.

2.5   Summary

The review of the literature has served to illuminate the conceptualization of my framework in investigating the friendship intentions of the typically developing pre-adolescent children toward peers with physical impairment. It has also provided ideas for the formulation of my interview questions and data interpretation. The literature on social inclusion of children with special education needs in general consists of two main focuses, one on the attitude of the typically developing children toward disabilities and the other on friendship patterns and functions as well as socio-metric findings. My conceptual framework combines the two lines of thought.

Studies on attitudes provide me with the insight to include an environmental factor, physical and social, in my conceptual framework as well as to record affective, cognitive and behavioural information in the children's discourse about attitudes toward their disabled peers. The inadequacy of relying on attitude measures to infer

children's friendship intentions prompts the use of qualitative methods as well as the inclusion of the component of friendship conception of pre-adolescent children in my conceptual framework.

From the developmental and social perspectives, studies on children's friendship reveal the interplay between children's psychological maturation and their physical and socio-cultural environments in shaping their attitude and friendship conception. The review of literature of friendship conception at pre-adolescence and the school culture in Hong Kong provide the background for eliciting and interpreting the children's discourse in my present qualitative study.

CHAPTER THREE: RESEARCH DESIGN AND METHODS

3.1   The Aims of The Study

My research focus was the friendship intentions of typically developing pre-adolescent children towards peers with physical impairment. The aims of the study were:

1.   to respond to the paucity of the local literature on peer relations in inclusive education;

2.   to raise awareness of the social needs of children with physical impairment in their process of inclusion; and

3.   to gain an in-depth understanding of the intentions of children at pre-adolescence to befriend peers with physical impairment.

Based on the aims of the study and the review of literature related to social inclusion of children with special educational needs, I formulated my main research questions as follow:

1.   How do children perceive and understand disabilities, and in what way does it influence their friendship intentions towards peers with physical impairment?

2.   What is the friendship conception of pre-adolescent children, and in what way do their friendship intentions towards peers with physical impairment relate to their conception?

3.2   Research design

3.2.1   Research paradigms

A paradigm is the philosophical underpinnings of research.   Punch (1998) further elaborates that

> *"As used in social science it [paradigm] means a set of assumptions about the social world, and about what constitutes proper techniques and topics for inquiry.   In short, it means a view of how science should be done.   It is a very broad term, encompassing elements of epistemology, theory and philosophy, along with methods."* (p.28).

That is to say before researchers decide their methodological approach to investigate the problems or issues of concern, they should have already upheld a certain philosophical position about the nature of the problems or issues to be investigated.

In research in the social sciences, there are two main philosophical positions or paradigms from which research designs are derived.   At one end is the positivist paradigm and at the other is the interpretive paradigm.   The two paradigms uphold two very contrasting conceptions of the world and consequently the methods of investigation.   Easterby-Smith, Thorpe and Lowe (1994) provide a concise description of the key features of the two paradigms which is tabulated in Table 3.1.

Table 3.1: Key Features of Positivist and Interpretive Paradigm

	POSITIVIST PARADIGM	INTERPRETIVE PARADIGM
Basic beliefs:	The world is external and objective;	The world is socially constructed and subjective;
	Observer is independent;	Observer is part of what is observed;
	Science is value-free;	Science is driven by human interests;
	Knowledge is concerned with generalization, prediction and control.	Knowledge is concerned with interpretation, meaning and illumination.
Researcher should:	Focus on facts;	Focus on meanings;
	Look for causality and fundamental laws;	Try to understand what is happening;
	Reduce phenomena to simple elements;	Look at the totality of each situation;
	Formulate hypotheses and then test them.	Develop ideas through induction from data.
Preferred methods include:	Operationalizing concepts so that they can be measured;	Using multiple methods to establish different views of phenomena;
	Taking large samples.	Small samples investigated in depth or over time.

(source: from Easterby-Smith, Thorpe and Lowe, 1994, p.80)

In exploring the friendship intentions of typically developing pre-adolescent children towards peers with physical impairment, I sought to probe the children's thinking about their own perceptions, feelings and knowledge about disabilities as well as about their experience with physically impaired peers with regard to influencing their decision to make friends. It is, therefore, the meaning rather than the pattern of friendship intentions that I was interested in. In my conceptual framework of friendship intentions, I considered that the children's experience and perception was an interplay between their own biological development and the physical and social environments. Therefore, without a pre-conceived hypothesis, I saw a particular

need to penetrate the unique culture of childhood in order to understand how the world actually appears to them. Nevertheless, the interpretation of the interplay represented my subjective annotation of the children's meaning in expressing their thoughts about the issue under investigation. With my aim to arouse awareness of the social inclusion of children with physical impairment, I would have shaped the thinking processes of the children through my investigation. In other words, the 'reality' of the children's friendship intentions towards peers with physical impairment was constructed by both me as the researcher and the children as subject of the investigation. There is no intention to generalize this 'reality' but to illuminate the issue of social inclusion. With the notion of subjectivity, the seeking for meaning and the social construction of 'reality', I chose the interpretive paradigm to conduct the present study.

3.2.2   Choice of Research Design

The choice of research paradigm guides the research design which includes data collection, sampling and data analysis. Based on the interpretive paradigm, I chose qualitative research design which is concerned with providing "thick and rich" description of phenomena in data collection and extrapolating meaning from the data in the analysis (O'Donoghue, 2007).

The common types of qualitative research designs include the ethnographic approach, the grounded theory approach and the phenomenological approach. The ethnographic approach concerns the deep understanding of a culture or social group.

It requires the ethnographer to immerse himself or herself into the culture or social group for a length of time in order to gain an in-depth knowledge of the nature, structure and functioning of that culture or group (McDuffie and Scruggs, 2008). From the practicality point of view, it was difficult for me to undertake this approach. The grounded theory approach is intended to allow the researcher to generate theory that explains or underlies the phenomena under investigation (Walker and Myrick, 2006). The heart of this approach is constant comparison, an iterative procedure of theorizing or abstraction of the raw data, which are drawn from theoretical sampling, a repeated procedure in recruiting subjects until theoretical saturation is achieved. The amount of time required for data analysis and the logistics in recruiting subjects for successive interviews were beyond the time frame and resources of the present project. The phenomenological approach is concerned with examining the lived experiences of people and particularly the subject's relationship to his or her experience. It is a way of interpreting experiences of shared meaning and practices in specific contexts (Benner, 1984). In the present study, I aimed to explore the social experience and hence the friendship intentions of typically developing pre-adolescent children towards peers with physical impairment in real school context. Thus, the phenomenological approach meets my purpose.

The methods used in the phenomenological approach are inductive methods which involve transcribing material (usually interview transcripts), coding data into themes, and drawing conclusion regarding the phenomena based on themes (Byrne, 2001). A qualitative interview is characterized by its unstructured format which involves direct interaction between the researcher and the respondents. It brings me into close

contact with the children and offers me an opportunity to unravel how they make sense of their perception and experience. Hence, I used qualitative interview as the method of data collection. I adopted a purposeful sampling procedure with selection criteria to select a specific group of children who had lived experience with disabled peers. I used thematic analysis to interpret meaning from the data. Each of these components of the qualitative research design selected were described and discussed in the sections which follow.

3.3 Data Collection and Sampling Method

3.3.1 Data Collection Method

Qualitative interviews can be carried out on an individual basis or in groups such as focus group interviews. A focus group interview is a group interview in which the researcher elicits interactions within the group with a series of open questions based on topics under investigation (Morgan, 1997). It is suggested that focus group interviews are better able to draw upon participants' attitudes, feelings, beliefs and reactions. Hence, focus group interviews suit the purpose of the present study. In addition, I chose focus group interviews as the instrument for data collection for the following methodological reasons:

1. Children's talking together replicates the group setting with which they are familiar with in the classroom. The children feel relaxed and it is easier to facilitate conversations between me and the children in contrast to individual

interviewing.

2. The group environment allows greater anonymity than individual interviewing and therefore helps the individual to disclose more freely, particularly her/his perceptions and beliefs (Beck, Trombetta and Share, 1986). As a result, this may minimize any tendency for social desirability in children.

3. The group format gives the children space to raise issues that they want to discuss. That offers me the opportunity to elicit a range of opinions from the children and tap into perspectives from the children unaddressed in my research questions.

4. The interactive group format of focus groups enables me to observe any peer influence on the friendship intentions among the children and provides me with insight into social norms. This reveals a potent factor in friendship intentions in real situations.

Prior to the focus group interview, I engaged myself as an observer in the school during physical education classes and recess, where in both situations at least one student with physical impairment was included. I took the role of a volunteer who was supposed to help without defined duty. I strived to be as unobtrusive and natural as possible so as not to interfere with the children's usual interactions and to bias the observation. However, the observation was not intended for data collection but allowed me to prepare and fine tune the focus group interviews in the following ways:

1. To build up rapport with the children before the interview.

2. To identify some popular activities that I could refer to as a ground for shared

meaning during the interviews.

3. To formulate the main questions and probes in context for the interviews.

4. To identify any typical features of peer interactions in different schools and different grades so as to provide a context for my interpretation of the data.

3.3.2   Sampling Method

The target group of the present study was typically developing children who have exposure to peers with physical impairment in school.   To ensure this criterion, I adopted purposeful sampling to recruit typically developing pre-adolescent children from mainstream primary schools which were known to admit children with physical impairment through a pilot project for supporting integrated education for children with physical impairment carried out at my workplace between the year 2003 and 2006 (Spastics Association of Hong Kong, 2006).   Based on my conceptual framework of friendship intentions, there was the need for me to understand the socio-cultural background of the school in order to better interpret the data.   From the practicality point of view, I chose a small number of schools with similar ethos and culture with which I was already familiar.   The schools were thus chosen based on the following criteria:

1. The schools follow the central curriculum so that the time allocation for physical education classes and recess are common;

2. The schools have pupils with physical impairment in upper primary years;

3. The schools are set up under the same religious doctrine, in this case is

Christianity, so that they have similar school ethos.

In qualitative research, it is the richness and the depth of the subject in which the researcher is interested. Sampling is then driven by the need to increase the range of data to uncover multiple realities (Kuzel, 1999). Therefore, the total number of children that I recruited for the interview was not the major concern but rather the need to select children from a wide enough spectrum to gather different viewpoints. "*In purposeful sampling, the most important guiding principle is maximum variation*" (Koerber and McMichael, 2008). It is recommended for "*obtaining the broadest range of information and perspectives on the subject of study*" (Kuzel, 1999, p.39). Maximum variation in the sample can be achieved by "*using specific selection criteria that seem theoretically important and choose data sources to represent the range of those criteria*" (p.40) Therefore, I adopted maximum variation in sampling with selection criteria, firstly, according to the following groupings:

1. Primary 3 and 4 school children with physically impaired peers in the class;

2. Primary 3 and 4 school children without physically impaired peers in the class;

3. Primary 5 and 6 school children with physically impaired peers in the class;

4. Primary 5 and 6 school children without physically impaired peers in the class.

The age difference between the children in each group was not more than two years. According to the above categories, all the children had exposure to peers with physical impairment in school but with varying degrees of proximity. This exposure of each child met the purpose of the study to explore the children's perception based

on genuine experience and not hypothetical situations. The grouping of the children was also based on their developmental level, so that they were on a similar verbal and cognitive competence level in their discourse. This was intended to ensure that no one child would dominate a conversation because of higher language competence. Other criteria included gender and sociability of the children which was suggested to relate to attitude towards disabilities (e.g. Laws and Kelly, 2005). These selection criteria were achieved by the school guidance teacher/officer of each school acting as gatekeeper to select children with varying level of sociability as perceived by the teachers. Mixed gender grouping was also adopted.

Friendship is a mutual relationship. Although in the present study, my focus was on the friendship intentions of the typically developing children towards peers with physical impairment, after conducting several focus groups with the typically developing children, I found the need to hear the voice of the children with physical impairment on this issue to have a deeper understanding of the barriers and facilitators of friendship intentions of their typically developing peers. I recruited children with physical impairment from the previously mentioned pilot project which supported integrated education. The interviews focused on exploring their perception of friendship with their typically developing peers in schools. The children knew each other well before the interview because of their previous acquaintance in the pilot project. This gave the advantage that they would talk freely between themselves and with me. The inclusion of this sample met the purpose of maximizing the range and richness of data as well as the interpretive orientation of the present study.

3.3.3   Participant Descriptions

The number of participants in a focus group is recommended to be six to twelve in adult interviews (Vaughn, Schumm and Sinagub, 1996), and for children, the group size is determined by the age of the children.   Morgan, Gibbs, Maxwell and Britten (2001) proposed an optimal number, especially for children, to be four or five.   In the present study, I chose around six children in one focus group to ensure maximum variation.   Each group of children came from the same school.   Three schools were chosen and the school profile is provided in Table 3.2.   I sent letters directly to the school principals to seek their permission to recruit children (Appendix 3.1).   Informed consent was then sought from the parents of the children through the School Guidance Teacher/Officers.   Confidentiality of identifiable information about the school and the children was assured.

Table 3.2:   Profile of Participating Schools

School code	School type	Number of students (in academic year of 2006-2007)	Number (grades) of students with physical impairment	Religion
M	Aided, Co-education Primary school	856	2 (Primary 1) 1 (Primary 2) 1 (Primary 3) 1 (Primary 6)	Protestantism
C	Aided, Co-education Primary school	836	1 (Primary 1) 1 (Primary 4)	Catholicism
K	Private, Co-education Primary school (P1-P6)	515	1 (Primary 6)	Protestantism

I recruited a total of eight focus groups of typically developing pre-adolescent children with altogether 47 participants (one group with five participants only) and the demographic information of the participants of each focus group was tabulated in Table 3.3. Each focus group interview lasted for one hour. I interviewed two of the focus groups (Focus group 1 and 5) twice because the children were keen to talk more about their peer with physical impairment beyond the time scheduled for one interview. These children had peers with physical impairment in their own class. Initially, I intended to interview Focus group 2 twice for the same reason as that of Focus group 1 and 5 but School K failed to schedule an extra time for interview. At the end, I conducted a total of ten focus group interviews with the typically developing pre-adolescent children.

Table 3.3: Demographic Information of The Typically Developing Children

Focus group	Participating school	No. of participants (gender)	Year of study	Age range of participants	Average age	Peers with physical impairment in same class (Yes/No)
1*	C	6(1M/5F)	Primary 4	9 years 5 months to 10 years 2 months	9 yr 10 mo	Yes
2	K	6(3M/3F)	Primary 6	11 years 6 months to 13 years 2 months	12 yr 1 mo	Yes
3	K	5(1M/4F)	Primary 5	11 years to 11 years 5 months	10yr10.6mo	No
4	S	6(4M/2F)	Primary 4	9 years 6 months to 10 years 4 months	9 yr 11 mo	No
5*	S	6(4M/2F)	Primary 3	8 years 7 months to 9 years 3 months	8yr 10.4 mo	Yes
6	C	6(3M/3F)	Primary 5 and 6	10 years 11 months to 12 years 1 month	11 yr 5.5 mo	No
7	C	6(4M/2F)	Primary 3 and 4	8 years 6 months to 10 years 3 months	9 yr 5 mo	No
8	S	6(4M/2F)	Primary 5 and 6	10 years 6 months to 12 years 5 months	11 yr 9.6 mo	Yes

*The groups were interviewed twice.

For the interviews with children with physical impairment, I recruited eight children, mainly with cerebral palsy and spina bifida, from the aforementioned pilot project

supporting integrated education. Table 3.4 shows their demographic information. Informed consent was sought from the parents of the children directly. Confidentiality of identifiable information was assured. Five of them participated in one focus group interview at my workplace and three in individual telephone interviews. These were conducted instead of focus group interviews partly due to the children's availability and partly due to the marked peer influence which I had observed in three of the children in the focus group interview. As the children knew me well, the telephone interviews served the same purpose as face-to-face interviews.

Table 3.4: Demographic Information of Participants with Physical Impairment

Child (pseudonym)	Diagnosis and mobility	Sex	Age	Year of study	No. of years in mainstream settings	School type
Focus group participants						
Yetta*	Spina bifida and independent walker with foot orthosis	F	9 years 9 months	Primary 4	6 years	Aided, co-education primary school Catholicism
Patrick	Cerebral palsy with left hemiparesis and independent walker	M	10 years 4 months	Primary 5	8 years	Aided, co-education primary school Protestantism
Sue	Spastic diplegic type of Cerebral palsy and independent walker	F	11 years 9 months	Primary 5	7 years	Aided, co-education primary school
Jan	Spina bifida and independent walker with foot orthosis	F	11 years 10 months	Primary 5	7 years	Aided, co-education primary school
Tina	Spastic diplegic type of Cerebral palsy and independent walker	F	14 years 11 months	Secondary 1	9 years	Aided, co-education secondary school Catholicism
Individual interview participants						
Wing	Ataxic type of cerebral palsy and independent walker	M	12 years 7 months	Primary 6	6 years	Aided, co-education primary school
Helen*	Spastic diplegic type of cerebral palsy and walking with crutches	F	12 years 5 months	Primary 6	4 years	Private, co-education primary school Protestantism
Carmen	Spastic diplegic type of cerebral palsy and independent walker	F	12 years 10 months	Primary 6	6 years	Aided, co-education primary school

*Children attending the schools same as two of the typically developing children group

3.3.4   Data collection

Data collection was conducted from April to July, 2007, the last three months of a school year, so that children would have been familiar with peers in the school. School visits for observation of physical education classes and recess were conducted prior to the focus group interviews with the typically developing pre-adolescent children.   Each school was visited twice for half a day for this purpose.   The focus group interviews were conducted at the school premises according to the schedule provided by the School Guidance Teacher/Officers.   The interviews were not to interfere with the regular school timetable so that the majority of the interviews took place during lunch recess or after school hours.

The focus group of the children with physical impairment was conducted in a training room at my workplace where the children used to have their training in the pilot project which had already been completed for a year at the time of the data collection. The individual telephone interviews were arranged with the children at their convenience.

Being the sole researcher, I used a video camera (Panasonic NV-GS47) stationed on a tripod to capture the whole process of the focus groups audio-visually for analysis of group dynamics and transcriptions.   Simultaneously, I used a digital MP-3 player with voice recorder (Unique FS-256) to record the conversations as a back up.   The audio-visual recording procedure saved me from field-note taking during the interviews and also allowed me scope for multiple reviewing for modifying questions

for subsequent focus groups and data analysis.   I used the same digital MP-3 player to record the telephone interviews.

I introduced myself to the children as an independent researcher unrelated to the school and explained to them that I was interested to know how children play and work together with different peers.   I assured confidentiality that all the information given by them and the recording would only be used by me.   Although informed consent was sought from their parents, I asked them for assent for the interviews to take place and to record it after explaining its purpose.   These procedures gained children's confidence to express themselves freely.

3.4   The Interview and Its Conduct

3.4.1   Methodological Challenges when Interviewing Children

Many qualitative researchers find the task of interviewing children a unique opportunity as well as a dilemma (Eder and Fingerson, 2003).   There are inherent methodological challenges in interviewing children.   They mostly come from two sources; one from the power imbalance between adults and children, and one from the children's capacity to focus attention and their language competence.

3.4.1.1   The Power Imbalance between Adults and Children

Children are confined to subordinate roles in society.   Particularly, Chinese children

are taught to listen to, respect, and obey adults. Another factor that sustains unequal adult-child power relations is a belief that adults have superior knowledge (Robinson and Kellett, 2004). Such an inherent power imbalance might inhibit children to converse freely and be more likely to give monosyllabic answers to questions. The aim to probe the deeper meaning of children's perspectives is then hard to achieve. I tackled this challenge by maintaining an appropriate balance of power in terms of directing and controlling the group, and creating a friendly atmosphere conducive to iterative conversations. The strategies that I adopted included:

1. Providing a non-threatening physical set-up of the interview room by conducting the interviews at the children's own school, creating a non-classroom setting and allowing freedom of movement;

2. Creating a sense of security through cultivating group cohesiveness with "warming-up" cooperative games before the interview. The reason is that when children regard themselves as a group, they are more likely to express themselves freely as they experience a sense of anonymity and support from their peers;

3. Complementing informality with participation by establishing some ground rules to ensure equal opportunity to speak and to encourage listening before intervening.

3.4.1.2 The Language Competence and Attention Focus of children

The limited vocabularies, especially of young children may pose difficulties for

children to express themselves fully. Moreover, the differing ideas, understandings and social worlds of children and adults make the meaning systems of children different from those of adults (Miller and Glassner, 1997). Consequently, when the children are struggling to find the appropriate words to describe their thoughts, adults commonly interject and offer them choices which the children tend to follow but which might not be what they actually mean. It has been suggested that this practice can compromise the integrity of the data (Irwin and Johnson, 2005). However, based on the interpretive paradigm, this process can be regarded as a phenomenon of social construction of knowledge with the children and the researcher. Nevertheless, measures should be considered to facilitate children's own expression in order to delve into their perspective.

Another problem is children's inability to focus attention on one conversation item. Children do not tend to hold on to one issue to follow a line of conversation but rather move back and forth between several issues. Consequently, it becomes hard for the researcher to trace their line of thought in the transcription and coding processes.

The problems of language competency and attention pose difficulties in accessing children's meaning in qualitative interviews with children. That challenges the richness, fullness and coherence of the data gathered. The key strategy to tackle these challenges is to contextualize the interview and take the culture of childhood into consideration. I have adopted the following strategies in this respect:

1.   Making use of genuine experience by including conversation about events I

observed in the classroom and by using audio-visual information on children with physical impairment to tap into their personal experience;

2. Making use of peer support in the construction of meaning by inviting other children to rephrase expressions or supplement vocabularies in case of ambiguity. I used simple everyday language in my open questions as well as trying to incorporate the language I heard from the observation in the school;

3. Establishing the confidence in discourse by adapting interview schedules relating the children's immediate experience in general to core issues of the study;

4. Sustaining attention and the line of conversation by using structured activities such as simple write-and-draw activities in some parts of the interview. This individual exercise within focus groups serves as "*a reprieve from the group experience, giving the individual children a chance to reflect on their ideas without the pressure of an immediate question to answer*" (Morgan, et al., 2001, p. 12).

3.4.2 Interview Schedules

Taking into consideration the aforementioned challenges and the desire to gauge broad and deep perspectives of the children on the issue of friendship intentions, I designed the interview schedule according to the characteristics of pre-adolescent children.

3.4.2.1   Interview Schedule with Typically Developing Pre-adolescent Children

I used open-ended questions in a semi-structured format in the focus group interview to capture the points of view of the typically developing pre-adolescent children concerning the major research questions. Each focus group interview last for about one hour. I divided the interview schedule into four sections based on the questioning route of focus group interview recommended by Krueger and Casey (2000). The four sections were laid out from the general to the specific and from the easy to thought-provoking. The four sections included introduction, transition (A and B), core and summary around the major research questions. At the same time, I juxtaposed "stimulus activities" between the open-ended questions. A summary of the four sections is presented in Table 3.5.

Table 3.5: Interview Schedule with The Typically Developing Pre-adolescent Children

Main questions	"Stimulus activities"*
1. Introduction: On children's preferences for friends	
1. What do you consider are essential for being friends? 2. What would you expect your best friend to be like? 3. How easy is it to make friends in school?	1. A game called "Perfect Match" which involves choosing partners according to a description with hidden criteria. 2. Pen-and-paper activities: worksheets on - Self perception of social competence (appendix 3.2) - Peer preference (appendix 3.3) - Shared activities with friends (appendix 3.4)
2. Transition – part A: On children's perception and understanding of physical impairment	
1. Can you describe your first encounter with a disabled person if any? 2. Can you describe how you felt about him or her at that time? 3. Do you know what causes his/her disability? How do you get these ideas? 4. What labels would the general public give to persons with physical impairment? How do you find these labels?	1. A group game called "A tour to Crocodile Island" in which the children hop with one leg to get onto a piece of newspaper together according to command. 2. Pen-and-paper activity: choose descriptors to describe your impression of people with disabilities(appendix 3.5)
3. Transition – part B: On children's perception of a hypothetic peer with physical impairment	
1. What difficulties would you anticipate that he might face in your school? 2. Give reasons why you would find it appropriate or not to enroll him in your school? 3. Can you give reasons whether you would describe the child as a person with physical impairment?	1. A 2-minute video vignette of a child with cerebral palsy in different postures and reaching out for toys. 2. Pen-and-paper activity: repeat worksheet in appendix 3.4 with reference to making friends with physically impaired peers.
4. Core: On children's personal experience and friendship intentions with peers with physical impairment	
1. Can you describe any classmates with physical impairment whom you know? 2. Can you tell me your experience in playing or working with him/ her? 3. If given a choice, would you like to invite him/ her to be a partner in PE classes and can you give the reasons for your choice? 4. Do you have any ideas why this classmate looks like this? Can you give me the reasons whether you would like to know more about what causes his/her condition?	Pen-and-paper activity: Give a descriptor for the impression of peers with physical impairment in your own words (appendix 3.6)
5. summary	
1. Give explanation to the choice of preference for friends.	Pen-and-paper activity: Indicate choices from the 'friendship preference scale' (appendix 3.7).

*The order of "stimulus activities" within one section were pre-planned but altered according to the progress of the conversation and responses of the children.

In qualitative interviews, prompts and probes often serve as retrieval cues and invitation for elaboration respectively. Some researchers suggest that stimulus texts such as photographs, films, news, sketches or historical sources are effective as prompts and probes (Gaskell, 2000). Some childhood researchers (e.g. DeLoache and Marzolf, 1995; Price and Goodman, 1990; Wilson and Pipe, 1989) also demonstrate that the use of actual or miniature objects are more helpful than verbal labels to stimulate young children's recall and narratives. I based my thinking on these concepts to devise the "stimulus activities".

I used "stimulus activities", partly to tackle the aforementioned challenges of interviewing children and partly as prompts and probes. For example in the transition part of the interview schedule, the game "A tour to crocodile island" was intended to artificially impose physical constrain on the children and naturally lead onto the conversation on their perception of physical impairment. The game then served as a clue. The selection of a list of descriptors encouraged the children to articulate their perceptions and feelings towards persons with disability when they were asked to explain their choices. The list of descriptors (Appendix 3.5) then served as provokers. The "stimulus activities" also served as microcosms for discussion. For example, in the transition section, I used a 2-minute video vignette of a pre-school child with cerebral palsy to elicit the children's opinions on the inclusion of peers with physical impairment to their schools. The "stimulus activities" at times served to elicit deep meaning from the children's perspective. For example in the summary section, some children who had expressed positive perception of their peers with physical impairment indicated a low preference for

playing with the disabled peers. This might be interpreted as an indication of rejection. In explaining their choices, however, they elaborated on their concern about safety. Their explanation provided me with a renewed perspective to interpret the data as well as ideas for formulating questions in subsequent interviews. I also used the "stimulus activities" as an additional tool to tap into peer influence on the perception of peers with physical impairment. For example, in the core section, the children wrote down their own descriptor to best describe their peers with physical impairment. By contrasting the descriptors chosen in the transition section, the children might show up the peer influence.

3.4.2.2   Interview Schedule with Children with Physical Impairment

The interview schedule was similar in both focus group and individual telephone interviews for the children with physical impairment. A summary of the interview schedule was described in Table 3.6. As in the case of the focus groups with the typically developing children, I juxtaposed "stimulus activities" in the interview schedule. I designed the main questions around four main topics which include "advocacy", "personal preference for friends", "disability awareness" and "acceptance" based on the principle of tackling issues from impersonal to sensitive. Some of the questions were based on the response of the typically developing children in their focus group interviews. For example, the questions on disability awareness were in response to the dilemma of the typically developing children in enquiring about their disabled peers' condition. The interviews with the children with physical impairment provided information on the other side of the story and gave me a fuller

perspective on the issue of friendship between these children.

. **Table 3.6: Interview Schedule with Children with Physical Impairment**

Main questions	"Stimulus activities"
1. Introduction: On advocacy	
1. What would you suggest to his parents, teachers and the principal to make him happy in the school? 2. Imagine that you are a representative of students with physical impairment, what would you suggest to schools?	#Show a video vignette of a pre-school child with spina bifida who was going to a mainstream primary school in his next school placement in the coming new school term.
2. Transition A: On personal preference for friends	
1. Tell me how you make friends in school. 2. Tell me the things you like to do with your friends. 3. How do you find PE classes? How important is it to you? 4. What makes people want to make friends with you?	#Pen-and-paper activities: worksheets on - Peer preference (appendix 3.3) - Shared activities with friends (appendix 3.4)
3. Transition B: On disability awareness	
1. Do you think your classmates know about the causes of your disability and your difficulty in moving around? Would you like to explain your disability to your class and why? 2. What would you suggest to help your classmates understand your condition?	
4. Core: On acceptance	
1. What labels do you most prefer and most reject which people use to describe you and why? 2. Do you think your physical condition has anything to do with making friends in school? Any good or bad experience? Would you give me some examples? 3. Have you encountered any difficulties in finding partners in PE classes or joining games in recess? What do you think the reason was? What did you do then?	#Pen-and-paper activity: choose descriptors (appendix 3.8: combined list of appendix 3.5 and 3.6) which - you most prefer people use to describe you. - you most reject people use to describe you
5. summary	
1. Give explanation to your priorities	Pen-and-paper activity: Indicate your priorities of school functions: academic work, making friends, extra-curricular activities

#For the individual telephone interviews, the options on the worksheet were read out and the condition of the child in the video vignette was described.

3.4.3   Ethical Considerations

There are two main ethical issues in researching children, one concerns assent and the other welfare of the children.

In the present study, I used the School Guidance Officer/Teacher as gatekeeper to recruit children.   Flewitt (2005) posits that "*the researcher risks exploiting the relationship between the gatekeeper and the person they are introducing*" (p. 554). Hence besides assuring informed consent and confidentiality for the parents and schools, I sought verbal assent from the children before the interviews and also made it explicit that refusal to participate was acceptable.   Time was also given to the children to clarify any doubts before they gave assent.   Each child was assigned a code or a pseudonym instead of his or her name during the interviews to assure anonymity.

Besides assuring informed consent and confidentiality, the ethics for researching on children are also concerned with weighing up risks and benefits that the research procedures might have brought about.   From a standpoint of reflexivity, in doing research, we have "*to acknowledge that the methods we use to describe the world are – to some degree – constitutive of the realities they describe*" (Atkinson and Coffey, 2003, p. 421).   In the present study, I not only gain access to the perception of the children in the interview process, but the interactions I elicited in the focus group might have some impact on the children's perception of persons with disabilities and/or their peers with physical impairment.   For the integrators

themselves, in the interview especially concerning acceptance, I might arouse some negative feelings in them about their own impairment.

To ensure that the typically developing children took home a positive concept for the benefit of social inclusive, I delivered a disability awareness programme of around fifteen minutes after the interviews were completed. The programme had been developed by me and my colleagues in a pilot project to support children with physical impairment in integrated education in Hong Kong for the past three years and was implemented in a number of mainstream schools (Spastics Association of Hong Kong, 2006). The core content of the programme consists of a video vignette showing a child with physical impairment in his/ her usual mobility and activities which he/she can achieve with appropriate adaptations, together with a power-point presentation on the cause of the conditions and the appropriate way of befriending peers with disability.

To alleviate any potential psychological impact on the integrators, I showed them a 2-minute video vignette on a person with absent upper limbs but leading a normal life. The message given to the children was to encourage them to ignore the external circumstances but to make use of every opportunity to lead a life of their choice.

3.5   Data analysis

3.5.1   Transcription and Translation of Verbatim Responses

The interviews were conducted in the mother tongue of the children. In this case, it

was Cantonese, a dialect in Guangdong province in China. There was then the issue of translating the verbatim from Cantonese to English in the transcription procedure.

Temple and Young (2004) posit that the issue of translation is related to the paradigm the researcher holds. Researchers who adopt the positivist paradigm are concerned with "*validity in terms of 'correct' interpretations*" in their translation (Temple and Young, 2004, p163). The forward-backward translation becomes the 'gold standard' within this positivist paradigm.

Researchers who adopt the interpretive paradigm challenge this concept of "objective" validity. Within the interpretive paradigm, knowledge and knowledge production is reckoned to be socially constructed. The subjective nature of translation is illustrated by Phillips (1960) who posits that "*almost any utterance in any language carries with it a set of assumptions, feelings and values that the speaker may or may not be aware of but the field worker, as an outsider, usually is not*" (p. 291). This implies that language incorporates values and beliefs, not just a tool or technical label for conveying concepts (Temple and Edwards, 2002) and their interpretations rely on the receiver. It also indicates the contextual importance of spoken language which warrants consideration in translation (Simon, 1996).

I am a native speaker of Cantonese and I was also at an advantage in understanding the contextual perspective of the children for the translation because of the observation in the school before the interviews. Therefore, in line with the interpretive paradigm on which the present study was based, I did not adopt the

forward-backward translation approach. Instead, I acted as the researcher as well as the translator while I kept a list of translated words or phrases which I found ambiguous (Appendix 9) as a check for validity in translation.

3.5.2 Data Analysis Method

Rubin and Rubin (2005) describe data analysis in qualitative research as the process of "*moving from raw data to evidence-based interpretations*" (p. 201). Thematic analysis is a way to achieve this process by a search of themes that emerge as being important to the description of the phenomenon (Daly, Kellehear and Gliksman, 1997). Analysis begins with recognizing a pattern in seemingly random information presented in the textual data by a coding procedure. This involves sub-dividing the interview transcript to explore the meaning carried in them, comparing them for similarities and differences, and then classifying them in a category or a theme which delineate the central idea of the selected textual data. Themes are further clustered to form overarching themes as the final interpretation of the data. Auerbach and Silverstein (2003) coin the term "theoretical constructs" to refer to this abstract grouping of themes. As the final step of the analysis, the qualitative researcher has to convey this abstraction of findings in a way which is meaningful to the reader to fulfill the ultimate aim of illuminating the aspects of the social world under investigation (Basit, 2003). Basit interpreted Gough and Scott's (2000) ideas about the features of coding as two distinct and yet linked functions: "*one focusing on meanings inside the research context and the other concerned with what may be meaningful to outside audiences*" (p. 144).

Besides following the steps in thematic analysis, I also used my conceptual framework of friendship intentions to guide my data analysis.   Firstly, as I developed my conceptual framework from developmental and psycho-social perspectives, I searched within these traditions to seek for terms to describe themes, for example, "mutual friendship" and "clique" in friendship properties.   Secondly, based on my conceptual framework, I oriented my interpretation of textual data into domains, namely "Friendship conception of typically developing pre-adolescent children", "attitudes towards people with disabilities" and "factors influencing the friendship". This orientation facilitated my pattern recognition within the textual data.   The subjectivity in this practice might be contested but Gadamer (1975) argues from the interpretive paradigm "*that it is impossible to escape from our 'pre-understandings' even temporarily.   But at the same time, it is precisely through the interplay between one's interpretive framework or pre-understandings and the elements of actions one is trying to understand that knowledge is developed*" (cited in Usher, 1996, p.21).   The subjectivity of interpretation of the textual data is not denied but rather made transparent, and it also implies that the analysis of one researcher is only one of several ways in which the data can be interpreted.

Based on the aforementioned concept and for clarity, I divided the process of thematic analysis into two related phases.   The first phase I named "Making Meaning from The Data" and the second phase "Communicating My Ideas" after the idea of Auerbach and Silverstein (2003).   The first phase of data analysis was done at the same time of data collection.   During these processes, I kept notes or memos of my thoughts and ideas about the data as well as the questions to ask in subsequent

interviews.   The memos served to guide my interview strategies and to organize my thoughts for developing themes.   An example of a memo is shown below:

Memo after interview with focus group 1 in which the children had a peer with physical impairment in the same class:

"The children were eager to express their viewpoints when the core topics about their personal experience with their physically impaired peer. Because of the time constraint, I had to skip the summary section of the schedule and ended the interview with the disability awareness video hastily.   I might have to extend the duration of focus group interviews with children who have physically impaired peers in the same class or have two sessions of interview with these children."

3.5.2.1   Phase One: Making Meaning from The Data

There were three steps in this phase:

1.   Selection of relevant interview text

2.   Identification of recurring messages from relevant interview text

3.   Synthesis of recurring messages into themes

The first step aimed to cut the transcription down to manageable proportions. The text

of the transcription which was related to my research concerns was extracted and was referred to as relevant interview text.

In the second step, I located the relevant text which presented similar ideas and I summarized them into a sentence or a phrase which was called "recurring message". For example, I identified the following responses of four children (name code: C 4:3; S 3: 5; S 4:5 and K 5:5) from the three schools, C, S and K. The children all expressed a sympathetic attitude:

C4:3   *"I find them pitiable. More people should be with them, trying to understand them and playing with them."*

S3:5   *"If we play with him, he won't know that others reject him because of his illness.   I won't let him have this unhappy feeling."*

S4:5   *"If I don't play with him, he may feel that he is being abandoned and feel lonely.   If we don't play with him, it seems we are saying, 'You are disabled.   You can't play and we don't want to play with you.'"*

K5:5   *"If there are not any kindhearted people like me, he will not have a partner.   He will be very sad."*

I used the sentence "*Children initiate interaction out of sympathy*" to present the recurrent message in these responses.

In the third step, I developed a theme by gathering groups of recurring messages

which shared something in common, such as concepts, information or phenomena. For example, I ascribed the theme "Social goal of friendship" to the recurring messages "Friends are for fun and companionship" and "Friends are for psychological support" in analyzing the friendship conception in the typically developing pre-adolescent children.

3.5.2.2 Phase Two: Communicating My Ideas

This phase involved two steps:

1. Formulating theoretical constructs by abstraction of groups of themes

2. Concluding with a theoretical narrative from the children's responses and the observation in the school to depict the theoretical constructs

In formulating theoretical constructs, I organized the themes into broader and more abstract ideas which linked my data to the literature related to my research concerns. For example "pro-social quality" was the theoretical construct derived from the themes "affiliation with the culture in leisure activities", "gaining admiration through excelling in play and academic areas" and "positive temperament in overcoming the psychological impact of physical disfigurement".

Theoretical narrative brought life to the "cold" theoretical constructs developed in the previous step. I chose two children with physical impairment in my sample to retell their stories in terms of their responses and my observations in their schools during recess and physical education classes. One child to whom I gave the pseudonym,

Yetta, was well accepted by her typically developing peers in the interview. The other child, Helen (pseudonym), indicated a certain degree of rejection by her peers in her individual telephone interview and in the focus group interview of her typically developing peers. These stories were framed in terms of the theoretical constructs.

3.5.3   Validity and Reliability

Within the interpretive paradigm, the concept of an objective reality validating knowledge is generally refuted (Easterby-Smith, Thorpe and Lowe, 1994). "*Data are produced from social interactions*" and "*there are no 'pure', 'raw' data, uncontaminated by human thought and action*" (Freeman, et al., 2006, p.27). It has been argued that the analysis of one researcher is only one of several ways in which the data can be interpreted. Hence, the relevance and use of validity and reliability defined by the conventions in positivist quantitative studies as a check for research rigor in interpretive qualitative research has been an issue of debate for years (Rolfe, 2006).

One group of researchers favours the decision to rename and disclaim the convention procedures after Lincoln and Guba's seminal work in the 1980's (e.g. Altheide and Johnson, 1998). Lincoln and Guba (1985) introduced the concept of trustworthiness to replace the positivist inquiry rigor of validity, reliability and generalizability. A new set of terminologies, including credibility, transferability, dependability and confirmability was invented as criteria for trustworthiness. Credibility is comparable with internal validity; transferability with external validity; dependability with reliability; confirmability with objectivity or neutrality (Tobin and Begley, 2004).

Later, they add authenticity as a criterion unique to naturalistic inquiry (Guba and Lincoln, 1989). Lincoln and Guba (1985) assert that ensuring credibility is one of the most important factors in establishing trustworthiness. They regard member checks as "*the single most critical technique for establishing credibility*" (Guba and Lincoln, 1989, p.239). However, researchers like Sandelowski (1993) contest that the concept underpinning member checks is inconsistent with the interpretive paradigm if "*reality is assumed to be multiple and constructed*" (p.3), then one should not expect respondents or peer researchers to arrive at the same interpretation as the researcher. Morse (1999) makes a stern comment that "*there is something quite wrong with this picture in which the participant has more analytic authority than the researcher*" (p.717). Member checks were not appropriate in the present study for both paradigmatic and practical reasons. As the focus group transcripts were synthesized and abstracted cross all children, there was no reason for individual children to be able to recognize themselves in the text, and presentation of textual data or analysis to the children would have become another session of qualitative interview.

I consider some other criteria in trustworthiness also confusing. For example, "*the concept of confirmability is the qualitative investigator's comparable concern to objectivity*" (Shenton, 2004, p. 63) but the key criterion to consider is the extent to which the researcher admits his or her own predispositions (Miles and Huberman, 1994) and this carries the essence of subjectivity. The expectation of achieving repeatability as demonstrated in dependability and transferability makes interpretive qualitative studies no different from the positivist orientation. Bodgan and Biklen's

(1998) questioning "*will two researchers independently studying the same setting or subjects come up with the same findings*" (p35) is illustrative of the argument from the interpretive concept.

Another group of researchers like Munby (2001) stresses the focus of research. He makes a scholarly comment that "*there is more to assessing research than what is conveyed by reliability and validity*" (p.3) and ascertains that

> "*the enterprise of discussing validity and reliability from varying viewpoints can too quickly involve us in debates about word usage. This can distract us from seeing that research at its most fundamental is an argument that lead us to purpose, related literature, data, and analysis to a specific point*" (p. 5).

Along the same line of thought to that of Munby, Morse, et al. (2002) criticize Lincoln and Guba's concept that it shifts the research focus "*from constructive (during the process) to evaluative (post hoc)*" (p. 4). They further comment that "*while strategies of trustworthiness may be useful in attempting to evaluate rigour, they do not themselves ensure rigour*" (p.9). They claim that the responsiveness of the investigator at all stages of the research process is fundamental for proclaiming validity and reliability. They argue that "*strategies for ensuring rigour must be built into the qualitative research process per se*" (p. 9). Agreeing with Kvale's (1989) argument that the concern of validation is to investigate, to check, to question, and to theorize, Meadows and Morse (2001) propose verification strategies to ensure

research rigour.   These include methodological coherence, sampling sufficiency, developing a dynamic relationship between sampling, data collection and analysis, thinking theoretically, and theory development.

Methodological coherence requires the researcher to constantly be aware of interdependence of components of qualitative research design and to modify them as required, such as expanding sampling plans to meet the analytic goals. Methodological coherence was achieved in the present study with the careful planning from the research paradigm, research design to method in association with the research questions and conceptual framework.   My sensitivity to the interdependence of these components was demonstrated in the decision to recruit children with physical impairment as a sample after the first focus group interview.   This sensitivity was aroused by my constantly reviewing the focus groups through the audio-visual recording and the procedure of concurrently collecting and analyzing data.   These procedures also enable me to refine subsequent interview questions and process for more in-depth interpretation.

Sampling sufficiency includes sampling appropriateness which is evidenced by recruiting participants "*who best represent or have knowledge of the research topic*" and sampling adequacy which is evidenced by "s*aturation and replication*" (Morse, et al., 2002, p. 12).   Sampling appropriateness was achieved in the present study by adopting purposeful sampling to recruit typically developing children who had a lived experience with peers with physical impairment.   In the present study, sampling saturation was not achieved by the number of focus groups but rather by the

maximum variation in one focus group to obtain broad perspectives from the group. I used a variety of strategies such as using "stimulus activities" to tap into the depth of children's perspective and was also sensitive to the interaction need of the children. Interviewing two focus groups twice was an example of this awareness to gain fuller information. The procedure of data analysis grounding on the interview transcript demonstrated my thinking theoretically and my effort to achieve theoretical understanding through the final presentation of a theoretical narrative. The theoretical narrative based on two children with physical impairment in the sample on one hand served to communicate my finding to the reader and on the other hand functioned as a verification of the finding. I regarded this as a way of showing internal validity if this term has to be used to demonstrate research rigor.

I agreed with Bruner's (1996) claim, "*The process of science making is narrative*" (p. 126), with Munby's (2001) insight, "*Research is about persuasion*" (p. 11) and with Usher's (1996) teaching, "*Hermeneutic understanding is therefore a learning experience involving 'dialogue' between ourselves as researchers and that which we are trying to understand*" (p. 22). The issue of validity and reliability in interpretive qualitative research is best understood from Usher's statement on a fusion of horizons, "*By comparing and contrasting various interpretations, a consensus can be achieved despite differences – indeed because of differences*" (p.22).

3.5.4 Limitations of the Method

The limitations of the method of the present study lie mainly in two aspects: the

sampling and the interviews.

In using the school as gatekeeper in sampling, I might run the risk of recruiting only children whom the school felt confident would produce desirable responses in the interview. To minimize this effect, I gained the understanding from the school principals and the student guidance teachers/officers by thoroughly explaining to them the objectives of the research project and assuring confidentiality. I also had the advantage of already having a mutual-trust relationship with the three schools through the pilot project of supporting integrated education. However, having the student guidance teachers/officers to select children with varying experience with the disabled peers and with varying degree of sociability, the selection was based on the teacher's perspective only. It might be different from that of the children themselves. A "snow balling" procedure in recruiting additional focus groups by children's recommendation after their first interview could be a better way to broaden the range of sampling. However, with the tight timetable and packed schedule of the school calendar, I was unable to expand the number of focus groups in the same class. To deal with this limitation, I could only tap into "second-hand" perspectives.

Another limitation arose from the advantage of interviewing children in a group. The group format encouraged the children to express themselves more fully. However, focus group interviews with children are not always as smooth or have equal participation as depicted in the above conversations. Some children were more dominant and some were quieter especially those with varying degree of sociability. This was evidenced in one focus group with primary three and four children in School

C where one child spoke only five times while the others on the average spoke ten to thirteen times. Besides the frequency, the detail the children gave also showed the discrepancy. Individual interviewing after the focus group for some children might be appropriate for the purpose to tap more into their perspective.

One other limitation came from the cross-language transcribing process. In the focus group interviews, Cantonese was used as the language media of discourse. In transcribing a spoken language in other culture, it is hard to retain the accent in the conversation and the style of children's talk. It proved to be difficult for me to convey some of the interactional account in the transcribed verbatim to substantiate my interpretation of the children's discourse.

CHAPTER FOUR: FINDINGS AND INTERPRETATION

4.1   Introduction

I interviewed 47 typically developing children (24 boys and 23 girls) in 8 focus groups from three mainstream primary schools. The average age was 9 years and 6 months.   I also conducted a focus group interview with 5 children with cerebral palsy and spina bifida (1 boy and 4 girls with average age 11 years 9 months) and individual telephone interviews with 3 children with cerebral palsy (1 boy and 2 girls with average age 12 years 7 months).   These children were all studying in mainstream schools and had participated in a 3-year pilot project on integrated education supported by my workplace so they were familiar with me.   Of these eight children, two were studying in two of the schools included in this study.

The analysis of the data was presented in two phases: Phase One "Making Meaning from The Data" and Phase Two "Communicating My Ideas".

In Phase One of my data analysis, I identified three domains. Domain one related to the conception of friendship of the typically developing pre-adolescent children. Domain two was concerned with the attitude of the typically developing pre-adolescent children towards people with physical impairment in general. The third Domain consisted of three sub-domains on factors influencing friendship between pre-adolescent children with and without physical impairment.

In subsequent sections, I elaborated on the findings in each domain in terms of the themes I created to interpret the main ideas which the children tried to communicate to me in the interviews. I also used the information I gathered in the pen-and-paper activities and the observation in the three schools to illuminate my interpretation of the children's discourse in the interviews.

In Phase Two of my data analysis, I presented the theoretical constructs which I developed from synthesizing the themes in the three Domains. I retold the stories of two children with physical impairment in this study to summarize the findings related to my research concern and to illustrate my conceptual framework of friendship intentions.

4.2   Phase One of The Data Analysis: Making Meaning from The data

4.2.1   Domain One: Friendship   Conception   of   The   Typically   Developing
Pre-adolescent Children

I elicited responses from the typically developing children relating to this aspect in the introductory section of the focus group.   Both the "stimulus activities" and the main questions which I asked in the interviews were listed in Table 3.5.   In responding to my three main questions, "*What do you consider are essential for being best friends?*", "*What would you expect your best friends to be like?*" and "*How easy is it to make friends in school?*", the children provided a description of their interactions with and expectations of friends which reflected the conception of friendship compatible with

the stage of their development. I identified five themes in this domain: *"clique aspect of friendship", "Social representation of friendship", "Social goal of friendship", "Reciprocity of friendship"* and *"Sustainability of friendship"*. Table 4.1 demonstrated how I synthesized the themes from the recurring messages reflected in the examples of the relevant interview text.

Table 4.1:   Friendship Conception of Typically Developing Pre-adolescent Children

Themes	Recurring messages	Examples of relevant interview text
Theme 1 "Clique" aspect of friendship	1. Peers sharing similar interests can become friends	- I usually make friends with those who share with me the same interest, say the same pet or same hobby. - When I play chess, I won't choose those who don't like to play chess.
	2. Peers with similar personality or character make better friends.	- I make friends with those whose personality matches mine. - If we have a different personality, one being energetic and the other being quiet, then it would seem that you are playing alone, not in a group.
Theme 2 Social representation of friendship	3. Good conduct or a caring personality is an attraction for friendship.	- She should like to help others and not do bad things. And I don't like my friends to be always scolded by teachers or have poor conduct. - I would choose those who are very caring and have concern for others, and don't always argue with you. - I want to make friends with those who obey rules.
	4. Good academic performance is an attraction among peers.	- I want my best friends to have achieved well in school and not always get warnings from the teachers. - I like those who have good examination results.

Table 4.1: **Friendship Conception of Typically Developing Pre-adolescent Children** (cont'd)

Theme	Recurring messages	Examples of relevant interview text
Theme 3 Social goal of friendship	5. Friends are for fun and companionship.	- I have many requirements. For example, she should treat me with snacks and she should not make jokes about me. - I look for friends I enjoy talking with. - I like those who are more active. So when I feel bored, I can play with them.
	6. Friends are for psychological support.	- When I am unhappy, she can comfort me. - We can share our feelings. When I am unhappy, I can talk to them.
Theme 4 Reciprocity of friendship	7. Friends accommodate and help each other.	- Those being friends with me are easy going. Sometimes, I might be demanding but they give in and accommodate me. Sometimes they might not be able to make a decision and I would help them.
Theme 5 Sustainability of friendship	8. Looking for a lasting friendship	- I wish my best friend would not always say "break off with me". - I wish my best friend would always keep in touch with me.
	9. Time nurtures friendship.	- We have known each other since we were very young. Gradually, we became friends. - We see each other every day. Eventually we become friends.

4.2.1.1   Theme 1:   Clique Aspect of Friendship

It was apparent in the interviews that the children showed a clear preference for peers who shared similar interests and displayed a temperament closer to their own.   In addition, the observation which I conducted in the schools provided a vivid picture of the emergence of cliques from early pre-adolescence.   The following was an extract from my diary of an observation which gave some illustrations:

Diary: 2007-4-18 School K at recess

Events observed:

The playground was small and packed with children, the majority of whom were from the lower primary classes.   Three to four young children holding hands forming a "train" ran passed me and the train continued to steer round the playground with more and more young children joining in making the train longer. The game lasted for about five minutes with the children laughing and making noises. The train "broke down" eventually.   The children were dispersed and went for other games with the other children.   I picked a few of them to ask if they were good friends.   They said they did not know each other well and they came from different classes of primary one and two.

At a corner of the playground, a group of six to eight older children played an organized game. Some of them stood facing a wall with the other children standing behind them at a distance.   The children moved and turned around according to some key words one of them uttered out loud.   I could not make out the rules of the game and asked a student who was an on-looker beside me if he knew how to play the game. He was in primary four, the same class as the group of children playing the game.   He replied that he knew roughly what they were doing but did not know the rules well and he did not join them.   After talking to me, he left.   The game continued until the end of the recess.

Younger children tend to interact freely with their peers on a here-and-now basis. It is often the activity itself which encourages them to stay together for a short time as was demonstrated in the "train" game at the recess in School K.   In upper primary classes, the pre-adolescent children not only demonstrated a more complex structure in their games but also in the selection of peers for the game. The children's interests and personality traits were the "unstated pre-requisites" for such voluntary social groups or cliques.   These "unstated pre-requisites" acted as exclusion or inclusion factors influencing friendship intentions as demonstrated in the organized game of the older children in School K and their on-looker peer.   The children with physical impairment also observed this strong affective clique bond among their typically developing peers as was reflected in the responses in the focus group interview with the physically impaired children:

> Yetta: *"Even for 'finger guessing games', they go together in groups to play."*
>
> Tina: *"They go in a group to play basketball.   It seems that they make many friends but I don't play basketball. I find I can't make a few more friends."*

This "clique" aspect of friendship which emerges in pre-adolescence has a significant implication for understanding the friendship intentions of typically developing pre-adolescent children towards peers with physical impairment.   The implication is particularly significant because the majority of peer interactions at this developmental stage occur in the context of a clique as shown in the literature on friendship studies (Rubin, Bukowski and Parker, 1998). This phenomenon was also revealed in my observation in the three schools.   In primary 5 and 6, the majority of the children

gathered in groups of varying sizes in the classroom or in the corridor doing different sorts of activities during recess. Some groups were seemingly chatting on certain topics of interest and some were playing chess or card games. The children reported to me that one or two of them were responsible for bringing their own chess or card games to school. This showed that there was some form of organization of cliques and the membership seemed to be stable.

This property of friendship has a developmental trait. As sharing similar interests and temperament were other "unstated pre-requisites" which defined a clique, the children would have to get to know each other before the clique evolved.

There are at least two important implications. First, peer interaction in early childhood forms an important basis for friendship development in pre-adolescence. By creating a broader spectrum and more opportunities for peer interaction in the lower primary, the school can help to improve the friendship intentions of typically developing children towards peers with physical impairment at the pre-adolescent stage. The second implication relates to the timing of inclusion. Children with physical impairment admitted to mainstream schools at upper primary classes are apparently required to have higher social competence in order to be more socially accepted.

4.2.1.2   Theme 2:   Social Representation of Friendship

The expectation of the qualities of their best friends expressed by the typically developing children clearly revealed that peers who strived for academic success, and

were obedient to the teachers as well as being sensitive to the needs of the others gained popularity. This preference for friendship was evident in both boys and girls across primary 3 to 6.

With a strong emphasis on academic achievement in the education system in Hong Kong, school children spend a great proportion of their time after school or during recess doing homework (Johns and Dimmock, 1999, Wong, Pearson and Lo, 2004). The phenomenon coincided with my school observations, particularly in primary 5 and 6. It was consistent across the three schools. In the pen-and-paper activity "shared activities with friends" in the focus group interviews, out of the fourteen options which I listed for them to choose from, "Doing schoolwork together" was among the top five and was even more highly rated than "playing together" with their best friends. The fourteen options are listed in order of their preference below:

1. *Giving you help at all times*	8. *A companion in extra-curricular activities*
2. *Sharing same interests*	9. *Can make jokes with*
3. *Listening to what you say*	10. *Sharing same dislike*
4. *Cheering me up when I am sad*	11. *Talking on the phone*
5. *Doing schoolwork together*	12. *Going to school together*
6. *Keeping secret*	13. *Being generous to share snack*
7. *Playing together*	14. *Can argue with*

This academic orientation in Hong Kong education may be an advantage to physically impaired children who have good academic ability with regard to making friends in comparison to those with double weakness in physical and academic performance.

Compensating for their reduced participation in physical activities, these high achievers may seize this alternative outlet to interact closely with their typically developing peers. The response of Wing to my question on how he found the relationship with his classmate supported this notion:

> Interviewer: *"Would it be hard for you to have close friends because you did not have any chance to participate in such group games in PE?"*
>
> Wing: *"Yes, it is. They didn't want me because I ran too slowly."*
>
> Interviewer: *"Besides PE classes, are there any situations for you to develop a close friendship with your classmates?"*
>
> Wing: *"To teach them to do homework. Some classmates approach me for help because I am good at school. I can make good friends through helping them in homework."*

From the perspective of the children with physical impairment, good academic achievement might even be a pre-requisite for developing friendship.

Nevertheless, the story might not be that simple in interpersonal issues like friendship intentions. It was obvious that the favourable interactions between best friends at the top of the list mentioned above were more related to intimacy such as "Sharing same interests", "Listening to what you say" and "Cheering me up when I am sad". This reflects the development of a more complex friendship conception in pre-adolescence and beyond in comparison with those in early childhood where friendship is understood in terms of momentary interactions (Rubin, et al., 1998). Therefore, the friendship intentions of the typically developing pre-adolescent children towards peers with physical impairment had to be considered from different perspectives.

Discipline and cooperation is emphasized in typical primary schools in Hong Kong partly due to the large class sizes and partly because of the unique collectivist culture (Cheng, 2007). Compliance with the teachers is valued among primary school students as was revealed in the responses of the children in the focus groups. Being helpful and caring were the qualities which the children also admired. Such benevolent character traits and acts are endorsed by the Christian ethos which the three schools nurture in their students. In other words the pre-adolescent children willingly conformed to the values and standards advocated by the school which was reflected in their voluntary choice of making friends. Such quality of the pre-adolescent children in Hong Kong may assist the school to promote acceptance of peers with disabilities as the very first step to friendship intentions.

4.2.1.3 Theme 3: Social Goal of Friendship

In responding to my question about how they chose friends, some children focused on their aims in making friends, which I termed "Social goal of friendship". It showed a gradual increase of intimacy in their expectation of friendship. Being at a transition stage from childhood to adolescence, the pre-adolescent children presented an intermediate stage of friendship development which was shown in the social goal of friendship. On the one hand, these children enjoyed here-and-now interactions which they found pleasurable and were more related to shared activities or tangible objects. Such features of peer interactions were typical of younger children. On the other hand, the pre-adolescent children perceived friends as intimate peers for disclosing their feelings and for seeking psychological support - a higher level of conception of friendship in which appreciation of the inner aspect and not just

manifest actions of a person become important. In engaging themselves in self disclosure with one another, the pre-adolescent children also had the opportunities to learn to understand the other's perspectives. This perspective-taking ability helped to develop an empathetic attitude in these children towards their peers with physical impairment. However, due to the transitional characteristics of the pre-adolescent children in friendship development, it was also necessary to take into consideration the feature of "here-and-now peer interaction" of these children in the process of developing their empathetic attitude.

4.2.1.4 Theme 4: Reciprocity of Friendship

Based on their perspective-taking ability, pre-adolescent children appreciate that mutual give-and-take interaction is an essential feature of friendship. It forms the basis for conflict resolution and accommodation (Rubin, et al., 1998) and is valued as a feature of a high quality friendship at this developmental stage. The typically developing pre-adolescent children in the focus group interviews obviously expressed this expectation of reciprocity of their able peers. However, the external features and pragmatic limitations of their peers with physical impairment may impose a dilemma in their interaction with these peers with respect to this feature of friendship and warrant attention.

4.2.1.5 Theme 5: Sustainability of Friendship

The typically developing pre-adolescent children demonstrated an understanding of friendship as "*an affective bond having continuity over time, distance and events*"

(Rubin, et al., 1998, p. 640.) in their responses to my question on their relationship with their best friends. This understanding of friendship had significant implication for the study in the way that the questions I asked about the children's intention to make friends with peers with physical impairment should not be interpreted by the children as the mere willingness to show friendliness such as offering help. Conversely, the children's responses allowed me to understand whether there were any differences in their perception of friendship with peers with and without physical impairment.

4.2.2 Domain Two: Attitudes Towards People with Physical Impairment

In this section, I considered the attitude of the typically developing pre-adolescent children to people with physical impairment in general as the first part of the transition to the core research issue of friendship intentions. The main questions of the interview and the "stimulus activities" were listed in Table 3.5 under Transition Part A. I identified five themes in this domain, namely, *"Acceptance of disability from a cognitive perspective", "Acceptance of disability from an affective perspective", "Positive perception formed through looking beyond the impairment", "Negative perception formed through focusing on impairment"* and *"Negative perception arising from societal contempt"*. Table 4.2 demonstrates how I synthesized the themes from the recurring messages reflected in the relevant interview text.

Table 4.2:   Attitudes of Typically Developing Pre-adolescent Children towards People with Physical Impairment

Theme	Recurring messages	Examples of relevant interview text
Theme 1: Acceptance of disability from a cognitive perspective	1. Acceptance shown from a human rights perspective	- It's not quite respectful to call them handicapped people. They also have their own identity. - Everybody should have the right to expect how people call them. You shouldn't call people whatever name you like. - I learnt about racial discrimination in the news report. It makes people with disabilities very sad. So I decided not to do that to them.
	2. Acceptance of differences as normal	- Actually, I find they are like normal people. There are only some small problems with their movement. - I am not scared of them because basically they are like normal people. Those who have acquired disability were originally normal. - They have a good nature like normal people.

Table 4.2: **Attitudes of Typically Developing Pre-adolescent Children towards People with Physical Impairment** (cont'd)

Theme	Recurring messages	Examples of relevant interview text
	3. Sympathy for people with physical impairment	- They are already sad because of having only one leg. It's not good to laugh at them.
		- I saw a child and his father in Causeway Bay. The father had lost one arm and the child had no legs. The child cried pitifully so that my mother and I gave them $100. They were so poor.
	4. Concern for the practical well-being of people with physical impairment	- I saw a man without the right hand. It will surely be laborious for him to write with the left hand.
Theme 2:		- I think they don't find it easy to walk. They have to use a wheelchair or crutches.
Acceptance of disability from an affective perspective		- It's not a very good thing because walking becomes inconvenient for him.
	5. Concern for the psychological well-being of people with physical impairment	- If we call them handicapped people, their self-esteem may be hurt. If you call them sir or madam, they may at least have some hope that they may recover one day.
		- If we look at them with some discriminating attitudes, they would feel sadder. They would blame themselves for getting such an illness. They might find it meaningless to live and commit suicide. It's not worth dying like that.

Table 4.2: **Attitudes of Typically Developing Pre-adolescent Children towards People with Physical Impairment** (cont'd)

Theme	Recurring messages	Examples of relevant interview text
	6. Empathy for people with physical impairment through a pro-active stance	- Although they are pitiful, I will tell them, "knowledge can change your life. Never give up!" - He is unhappy but we can have compassion for him and he can be optimistic to face his disability.
Theme 3: Positive perception formed through looking beyond impairment	7. Appreciation of the ability of people with physical impairment beyond their disability	- I saw some people draw with their mouths in a shopping mall. They drew very well. They earned money to buy prostheses so that they could move again. - I saw a person break a skiing record in the TV. He had only one leg but he could still break the record. - I saw a man in the swimming pool near my home. He was very good at swimming although he had only one leg.
	8. Association of physical impairment with positive emotion in the face of disability	- They are optimistic. Although they have lost both legs, they face it bravely. - They are confident because sometimes when people exclude them, they still show confidence to make friends. - Most of them work very hard to get rid of the prejudice that people have towards them. They work very hard to gain achievement in certain areas. I think they are optimistic.

Table 4.2: **Attitudes of Typically Developing Pre-adolescent Children towards People with Physical Impairment** (cont'd)

Theme	Recurring messages	Examples of relevant interview text
	9. Association of physical impairment with negative emotions based on a comparison with norm	- They are unhappy because they cannot move like normal people. - They feel inferior when they compare themselves with the normal people. - They are cowardly because they cannot move like normal people.
Theme 4: Negative perception formed through focusing on impairment	10. Association of physical impairment with negative emotions resulting from a lack of ability	- They feel they have "no face" because they can't do much. - They cannot participate in a lot of activities. - They feel inferior because they have very few friends to play with..
	11. Physical disfigurement arouses negative emotions	- I find they are ugly. Some might have broken their legs and the bones stick out. It's disgusting. - I know he won't infect me because I have learnt that in General Studies. But if they lose a leg, it looks nasty. - I saw some walk with crutches and some in wheelchairs. I was afraid and shocked. - I was scared because I was afraid they might be infectious or have some illness that was out of control.
Theme 5: Negative perception arising from societal contempt	12. Association of physical impairment with poverty	- They don't have legs and hands. They cannot do any work. The only thing they can do is to beg. - I saw them on the street. They were very poor. They were begging.
	13. Association of physical impairment with dishonesty	- I watched the Sunday Report on the TV and it told a story of a man who could not find a job. He then deliberately chopped his arm off to beg for food. - Some people who are not originally beggars are kidnapped by some bad guys. They chop their arms off and force them to beg.

4.2.2.1   Theme 1:   Acceptance of Disability from A Cognitive Perspective

The notion of human rights and respect for people regardless of their physical impairment was a prevailing theme in the typically developing pre-adolescent children's response to my question about their attitude towards the label of handicap used by the general public.   The children from different year groups presented the concept at different levels:

> *S 3: 4*   *"The rights of normal people means that he can do what normal people do.   For example, he can be like normal to go to the cinema, to buy McDonalds, etc"*
>
> *S 3/4: 2*   *"I think simply looking is not prejudice. I think prejudice includes many things like saying something bad, staring at him for a long time, and then talking behind him saying 'He is burnt. How poor he is…' etc."*
>
> *S 5/6: 4*   *"Everybody is equal in front of the law.   We cannot be prejudiced against him though he is disabled."*

The children demonstrated a progressive representation of their moral beliefs on human rights and discrimination.   The early pre-adolescent children conceived human rights from their concrete life experience such as going to the cinema, shopping or addressing people.   The children at mid pre-adolescence were able to associate subtle behaviours like staring and gossiping with discrimination. When approaching adolescence, the children were able to apply general principles such as legal concepts to their moral beliefs on human rights and equality.

In examining the descriptors on the impression of people with physical impairment

(refer to appendix 3.5) chosen by the children, those children who were more articulate in their acceptance of disability from a conceptual perspective selected the more positive descriptors. This was more obvious in those who had a disabled peer in their classes. The descriptors from the three children, S3: 4, S3/4: 2 and S5/6: 4 listed in Table 4.3 below provided an illustration:

Table 4.3: Impression of People with Physical Impairment (PI)

	S3: 4	S3/4: 2	S5/6: 4
Year group	Primary 3	Primary 4	Primary 6
A peer with PI in the class	Yes	No	Yes
Descriptors on people with physical impairment			
Positive	Brave Normal Rich Confident Kind Optimistic	Normal Kind Optimistic Confident	Optimistic Confident Happy Kind Normal Brave
Negative	Unhappy	Unhappy Poor Cowardly	None

Considering this positive side of the typically developing pre-adolescent children's perception of physical impairment, it was still worth-noting the affective responses evoked colouring their attitude towards people with physical impairment. S5/6: 4 was a good example. She chose all positive descriptors in her selection but in describing her feeling in her own words, she wrote, "*I find them very pitiful.*"   In

her verbal elaboration of her written comment, she said: *"I find them pathetic. They have problems with their legs. They look sad in the wheelchair because they cannot move freely like us."*

This provided evidence that children's attitude was composed of both cognitive and affective components. There was interplay between these two components in the children's reaction to disability, one over riding the other or vice versa as shown in the following responses:

> S3/4: 4   *"I think we should not be afraid of them. If we are so scared and although we haven't said it, they can feel it. I think this is also a form of prejudice."*
>
> S3/4: 1   *"I know they won't infect me because I have learnt that in General Studies. But if they lose a leg, it looks nasty. If they have no fingers, I find it disgusting. It's flat here (pointing to the fist)… poor thing!"*

In presenting the other themes in this Domain, I explored the possible factors influencing such contradictory outcomes.

4.2.2.2   Theme 2:   Acceptance of Disability from An Affective Perspective

In sharing their experiences of encounters with people with physical impairment, the majority of the typically developing pre-adolescent children in all the focus groups showed a compassionate stance. Parental values might have helped to shape this attitude as shown in the charitable acts where the children followed their parents. It is recognized that parental influence accounts for a significant part of the attitude formation of children in the early years (Diamond and Huang, 2005). The

pre-adolescent children in this study still showed compliance to parents who could continue to influence the children's judgment and attitude. This was shown in the response of a primary 4 girl to my question on how they learnt to treat people with disabilities:

> S3/4: 5   *"My mother told me if I stared at people with disabilities like that, I would be taken as discriminating against them. Therefore I know I should not stare at them."*

Teachers also helped to shape the children's attitude and behaviour towards people with disability as shown in the following response of a primary 6 girl:

> S 5/6:4   *"In General studies, we learn how to accept peers with disabilities. The teacher doesn't force us to help. She wants us to do it voluntarily. She wouldn't force us otherwise we may think, 'You want us to do it because you want us to show sympathy.' But the teacher's words account for eighty percent of our actions."*

Consistent with the findings presented in Domain one on the children's social representation of friendship, the typically developing pre-adolescent children showed similar compliance to adults' value system. Therefore, parents and teachers alike could have a role to play in friendship intentions involving these children.

Compatible with their psychosocial development as shown in the friendship conception in Domain one, the typically developing pre-adolescent children also demonstrated their perspective-taking ability to appreciate the difficulties people with physical impairment face in terms of daily living for instance mobility, writing as well

as emotional reactions such as having suicidal tendencies. This perspective taking combined with a compassionate stance represented an empathetic attitude in accepting people with physical impairment. I coined this "acceptance of disability from an affective perspective" which was complementary to Theme One "acceptance of disability from a cognitive perspective".

However, the empathy this group of children showed towards people with physical impairment was largely a vicarious sharing of emotion. A number of the children used phrases such as "poor thing", "they are sad" and "they are pitiful" in their initial comments on physical impairment. The descriptors they chose to describe their impression of people with physical impairment also echoed this stance. The descriptor "Unhappy" was at the top of the list the children chose from the descriptors provided (refer to appendix 3.5) and the sentence "I find them pitiful" was the most frequent expression the children wrote about their feeling towards people with physical impairment. Their compassion was likely to be a spontaneous reaction when they came face to face with people with physical impairment. They admitted that their knowledge of disability was limited and some children might have been confused as shown in the following discourse between two primary 5 students:

> K5: 4   *"People with physical impairment are also mentally retarded."*
>
> K5: 2   *"I don't agree. I think mental retardation is inborn. Those people with physical impairment probably have accident when they grow up. They lose their arms or legs. It is about their body so it has nothing to do with mental retardation."*

With their limited understanding of disability, the children's perception of people with

physical impairment was mostly based on their intuition. This ability of perspective taking was close to personal empathy and normative personal sympathy in Commons and Wolfsont's (2002) stages of empathy. In personal empathy, "*feelings belong more to oneself than to the other person's feelings aroused in a situation*" (p.31). Normative personal sympathy is typified by the idea that "*this is how people feel in a situation like this*" and the empathizer "*non-systematically tries various things to help*" (p.31). Sometimes, empathy at this premature level might create a misunderstanding or barrier between the children with and without physical impairment. For example, in contrast to the most frequently selected descriptor by the typically developing pre-adolescent children, their physically impaired counterpart in the interviews expressed their dislike of the descriptors "pitiful" and "take pity on me" from the list of descriptors I provided (appendix 3.8). In this respect, the acceptance of the disability from the affective perspective could be a disadvantage to friendship development of these two groups of children.

4.2.2.3 Theme 3: Positive Perception Formed Through Looking Beyond The Impairment

The responses in this theme depicted the children's positive perception of people with physical impairment by focusing on their ability rather than disability. The description of people with physical impairment was wider and richer in representations of activities such as "swim in the swimming pool near my home" and "draw with their mouths in a shopping mall" as well as perceived intention such as "work very hard to get rid of prejudice" and "earn money to buy prostheses so that they can move again". The attitude reflected in these responses was not a

spontaneous affective reaction but a belief which was based on positive experiences of an encounter with physically impaired persons.   The children were then able to "*see self as impartial, though caring*" (Commons, et al., 2002, p.31).

Some children who imparted pro-active directions such as "never give up" to people with physical impairment also demonstrated a strong personal aspiration to maintain a persistently positive attitude as shown in the following responses of a primary 4 student in the focus group interview.

> S3/4: 4   *"The teachers teach us not to discriminate against people with disability but I think most importantly it depends on ourselves.   If you don't want to follow, no matter how much people tell you, you won't listen.   The most important thing is that we ourselves always have to remember not to discriminate against them."*

> S3/4: 4   *"They really need someone to care for them and support them. Actually, I want to be a social worker when I grow up. I want to understand them so that I know how to counsel them."*

The positive encounters and the motivation for a deeper understanding of people with disability enabled the typically developing pre-adolescent children to perceive physical impairment from a different angle and appreciated its positive impact on people with physical impairment such as imparting positive attributes like being "strong willed", "optimistic" and "confident" in their choice of descriptors on the impression of people with disability.   These impressions coincided with the expectation of the children with physical impairment in this study.   They chose "strong willed", "clever", "brave", "confident", "optimistic" and "normal" as their top preferences from the list of descriptors I provided (appendix 3.8).

4.2.2.4 Theme 4: Negative Perception Formed Through Focusing on Impairment

Some children not only expressed an unpleasant feeling at the sight of physical impairment but also perceived distressful emotion on the part of the person with physical impairment as a result of the imagined lack of ability and deviation from being normal.   The negative connotation in these responses indicated a negative affective component of attitude towards disability.   However, in examining the responses of individual children, I found that the negative attitude did not necessarily indicate a rejection of people with physical impairment.   Some of these children also held a positive belief (cognitive component of attitude) based on human equality. The following sets of responses from two children provided good illustrations:

> S5/6:1   *"They might have suffered injuries before and could not be cured. So they could not live a normal life again. They feel sad as if they have lost something…If I call them handicapped persons, it seems like they are very special.   We should use a more "normal" term to call them. "*
>
> C5/6:4   *"They are cowardly because they cannot move like normal people…No, I don't like the term handicapped persons. In fact, they are ordinary people too. Why do we call them handicapped or lame? That actually means we are prejudiced against them."*

The internal conflicts between the cognitive and affective components of attitude arose from false assumptions about people with physical impairment because of an inadequate knowledge of their disabilities and lives.

4.2.2.5   Theme 5:   Negative Perception Arising from Societal Contempt

The common encounter with physical impairment for the children was with street beggars who might arouse their sympathy and yet left a negative impression.   In addition, societal contempt reinforced the false assumption they gathered from the street beggars.   In addition to parental attitude, societal values were also influential to children's attitudes towards disability.   This is another significant factor to consider in peer acceptance between children with and without physical impairment especially related to a proper concept of equal participation.

4.2.3   Domain Three: Factors Influencing Friendship

The responses of the typically developing pre-adolescent children in this domain were elicited by the questions and activities designed in the Transition Part B, the Core and the Summary section.   A summary of the main questions and "stimulus activities" in these sections was listed in Table 3.5.   The findings in this domain were central to the research concern of the present study but they were also closely related to the findings in the preceding sections.   I identified three sub-domains in these factors. They were:

1.   Facilitators for friendship intentions

2.   Barriers to friendship intentions

3.   Mode of interactions

In Sub-domain one and two, the responses of the typically developing pre-adolescent

children in all focus group interviews were analysed. In Sub-domain three, I compared the responses of the children who had a peer with physical impairment in the same class and those who did not. I identified the mode of interactions or intended interactions unique to each group. Twenty typically developing pre-adolescent children (11 girls, 9 boys) in four focus group interviews belong to the group with a physically impaired peer in the class. Four children (3 girls, 1 boy) with physical impairment were located in four classes (1 primary three, 1 primary four and 2 primary six) in the three schools (2 in School S, 1 in School K and 1 in School C). A profile of these children was provided in Table 4.4. Seventeen typically developing pre-adolescent children (10 girls, 17 boys) in 3 focus group interviews belong to the other group.

Table 4.4: Profile of The Children with Physical Impairment

School code	Description of the children with physical impairment (Pseudonym, gender, grade and diagnosis)
S	Mike (M, primary 3, spina bifida)
	- Walks independently with a waddling gait, wears a pair of below knee foot orthoses, has double incontinence, performs intermittent catheterization four hourly with his mother. - Normal hand and verbal functions and good academic performance - Has studied in a mainstream education setting since kindergarten.
	Eunice (F, primary 6, spina bifida)
	- Admitted to the school at primary 5 and walked independently with support of foot orthoses - Had an operation to the lower limbs in summer of primary 5 and needs a wheelchair
C	Yetta (F, primary 4, spina bifida)
	- Wears a pair of below knee foot orthoses and a body brace, walks independently with a waddling gait, has double incontinence and performs intermittent self catheterization four hourly with the help of her mother - Normal hand and verbal functions and good academic performance - Studied in a special childcare centre in the preschool age and in normal school since primary one
K	Helen (F, primary 6, cerebral palsy)
	- Walks with a pair of tripods independently, the left hand is clumsy - Had operation on the hips in primary 5 and did not take part in PE classes in primary 5 and 6. - Normal verbal functions and good academic performance - Studied in a special school until 7 years old, admitted to school K at primary 2

4.2.3.1   Sub-domain one: Facilitators for Friendship Intentions

Table 4.5 demonstrates how I synthesized the themes from the recurring messages revealed in the selected relevant interview text.   I identified six themes in this sub-domain: *"Attuned to peer group's leisure culture"*, *"Gaining admiration through excelling in play and academic areas"*, *"A positive temperament for overcoming the psychological impact of physical disfigurement"*, *"A moral belief on human rights and equality"*, *"A caring nature favours a receptive attitude"* and *"Knowledge of disability in encouraging positive relationships"*.   Themes one to three are related to the child with physical impairment.   Themes four to six are related to the typically developing pre-adolescent children.

Table 4.5: Facilitators for Friendship Intentions

Theme	Recurring messages	Examples of relevant interview text
Theme 1: Attuned to peer group's leisure culture	1. The peers share similar interests.	- Even if Mike were naughty, I will play with him because we have the same interest. - We have some common interests. He likes what we like. So we share the same feeling and that makes us friends.
	2. The peer with physical impairment takes the initiative to interact.	- Yetta came across and asked what we were doing. We invited her to join us. Then we played together.
Theme 2: Gaining admiration through excelling in play and academic areas	3. The peer with physical impairment excels in the games in which other children are interested.	- We played a finger-guessing game together. Yetta was much better than us. Yetta was very good at the game. - She is very good at the game.
	4. The peer with physical impairment shows good academic performance.	- Yetta is not bad. She does well in school. She is the fourth or fifth in the class. - We play with Mike and we find him very good at school.

Table 4.5: Facilitators for Friendship Intentions (cont'd)

Theme	Recurring messages	Examples of relevant interview text
	5. Children appreciate their physically impaired peers' consideration for others.	- She does not fuss about winning or losing. - When we ask her to play with us, she is willing to compromise. - She was very enthusiastic but she did not want others to accommodate her because of her physical impairment. - Whatever he does, he will wait for those who are slow.
Theme 3: A positive temperament for overcoming the psychological impact of physical disfigurement	6. Children appreciate their physically impaired peer's personality.	- I found Yetta looked very weird before. But when I played with her for the first time, I found she was very cooperative and committed and it was fun to play together. - Although she has some impairment, she does not mind. She continues to live happily. - I realized her appearance is unimportant. I have to look at her inner attitude. - She can forgive so many people. She has a very good personality. - I find Mike is happy when he is playing. But when he works, he won't laugh and play around.

Table 4.5: Facilitators for Friendship Intentions (cont'd)

Theme	Recurring messages	Examples of relevant interview text
Theme 4: A moral belief on human rights and equality	7. Children adopt the concept of human equality.	- Even if we have different interests, or do not get along very well with each other, we should not discriminate against him because we are in the same school. We belong to the same community. - Because everyone is equal. I will play with classmates both with and without disability.
	8. Children perceive peers with physical impairment as ordinary classmates	- There's no difference in getting along with her compared with others. We are just ordinary people and can be friends. - Friends are for comforting and encouraging you. So there's no big difference between disabled and normal people. - She won't interrupt the class. She is just like ordinary people.
Theme 5: A caring nature favours a receptive attitude	9. Children initiate interaction out of sympathy.	- I find they are pitiable. More people should be with them, trying to understand them and playing with them. - If we play with him, he won't know that others reject him because of his illness. I won't let him feel unhappy. - If there are not any kind-hearted people like me, he will not have a partner. He will be very sad.
	10. Children initiate interaction to provide help	- I will definitely pair up with the classmates with physical impairment because they need help. - I would play with her because I want to understand her.

Table 4.5: Facilitators for Friendship Intentions (cont'd)

Theme	Recurring messages	Examples of relevant interview text
	11. Understanding of the peer's condition as essential to caring.	- If I know about his disease, I can understand him better so that I can be more caring towards him. - I would want to play with her more when I understand her condition better. She might get well later and I want to make her happy.
Theme 6: Knowledge of disability to encourage positive relationships	12. Understanding of the cause of physical impairment improves acceptance.	- In the beginning, I found her a bit odd. Her feet were crooked when she walked. Later, I knew she had a disease and gradually she looked alright and not too ugly to me. - If you don't know what disease she has, you might suspect she has certain kinds of diseases and make guesses all the time. This will ruin your intention to make friends with her. If you know she isn't infectious, you'll feel more at ease.

4.2.3.1.1   Theme 1:   Attuned to Peer Group's Leisure Culture

The discourse of the typically developing pre-adolescent children of primary 3 and 4 carried a prevailing message about sharing similar interests with peers with physical impairment when they considered the peers as friends.   From the observation in the school, there was a clear distinction in the way in which recess was organised across the three schools, ranging from well structured to laissez-faire.   Each school seemed to have different popular games or play culture.   In School C, for example, a "finger-guessing game" seemed to be popular.   It was noticeable that children with physical impairment joining the popular game were mentioned by their typically developing peers as friends sharing similar interests.

Another feature common to the three schools was a sequential change in the form of activities during recess from the lower primary to upper primary classes.   An extract from my diary of an observation during a noon recess in School S illustrated the typical trend I observed in all the three schools:

Diary: 2007-4-27 School S at noon recess in the classroom and on the corridor

Primary 3

- mainly unorganized voluntary spontaneous physical activities with holding, pushing, hugging, imitating movements, moving around in small groups of 3 to 4 children
- lots of physical interactions and lots of verbal interactions; noisy and energetic
- Mike was playing with four boys with more physical than verbal interaction. Mike fell onto the floor several times while playing rough with the boys.   Mike initiated a joke "shaking the hair".   The others imitated and laughed at each other's messy hair.
- A few were working on their own either reading or doing homework
- Mixed-gender groups existed though much fewer than single-gender groups.

Primary 4

- not many children in the classroom, the majority in the corridor as performers or on-lookers for a school performance practice supervised by a teacher.
- A few children remained in the classroom with fewer physical interactions than verbal interactions.   More chose to work on their own either reading or doing homework

Primary 5

- playing board games in different corners of the classroom, more self-organised groups
- fewer physical and more verbal interactions
- Girls in one large group sat in a circle chatting.
- mainly single-gender grouping except one group with a girl in a group of boys playing a card game.   The girl appeared to be the leader of the group.

Primary 6

- down to the playground for school performance practice

The peer interaction in primary 3 (the early pre-adolescence stage) retained a large proportion of rough-and-tumble play. The frequency of this form of play declined across primary 4 to 6 and was gradually replaced by more organized games which were more verbal in nature. Consistent with research findings on children's friendship development (Rubin, et al., 1998), it was evident that the change in the form of interaction across pre-adolescence of the children in the study demonstrated a gradual increase in intimacy which involved sharing feelings and viewpoints. Such relationships would not happen suddenly. Pederson, et al. (2007) posit that peer experience in early childhood is influential on the peer relationship in middle childhood.

In light of the developmental change in peer interactions and considering the importance of attuning to the play culture, I speculated that children with physical impairment who could take the initiative and participate in the more physical orientated games in lower primary classes would stand a better chance of friendship development with their typically developing peers later on in their pre-adolescent years. This speculation was supported by the children with physical impairment in their response to my question about the kind of games from which they could make more friends. They all indicated that games involving active physical activities provided more opportunities compared with sedentary games. Because of the special needs of the children with physical impairment, the school and their parents could easily undermine this facilitator of friendship due to their concern for safety. This danger was demonstrated by Carmen who described her experience in primary one and two in her individual telephone interview:

> Carmen: *"I want to advise the teacher not to remind the students all the time to be careful not to push me over at recess. In this case, once I fell, many students would rush to me to offer help. Actually, I could get up on my own as I was not hurt at all. That's a bit of an exaggeration. I felt unnatural…Some boys would play when they were talking to me. The male teacher would say, 'Oh, you push her. Say sorry to her right now.' In this way, the boys were afraid to play with me as the teacher might punish them in case I was pushed over. As a result fewer and fewer classmates wanted to play with me."*

Apart from changing their mindset, schools and parents can enhance this facilitator through some practical arrangements in order to create opportunities for interaction. In School C, for example, during recess in the playground there were play corners for more structured activities as well as free play areas allowing self organized games. Standby supervision was provided by a teacher and parent volunteers for lower primary classes. The provision of a variety of activities and non-interfering support right from the beginning of their school careers are crucial in order to enable the physically impaired children to attune to their peer group's leisure culture.

4.2.3.1.2 Theme 2: Gaining Admiration through Excelling in Play and Academic Areas

Consistent with the findings on social representation of friendship in the conception of friendship among typically developing pre-adolescent children, those with physical impairment who showed high academic ability appeared to be popular. However, the typically developing pre-adolescent children talked about how they played their

favourite games with their peers with physical impairment at length before they recognised their physically impaired peers' academic achievement.   The comment from a primary three boy on Mike was illustrative:

> *S3:2*   *"We play with Mike and we find him very good at school."*

It remained uncertain as to whether the academic achievement was the initial attraction drawing the typically developing pre-adolescent children to play with the physically impaired peers.   My further inquiry into their perception of Mike might provide an insight into this uncertainty:

> *Interviewer:*   *"Would you still play with Mike if he were naughty and not good at school?"*
>
> *S3:2*   *"Yes, because we have the same interest.   His mother loves him so much that if he were naughty, she would scold him.   And if he were naughty again, she might take him to see a clinical psychologist."*
>
> *S3:1*   *"If he were really stupid, we could find someone to teach him.   If he were stupid, his mother would have given him private tuition."*

Besides sharing similar interests, the children showed a certain established closeness in their relationship with Mike and defended his "integrity".   In this regard, admiration for the academic achievement of the peer with physical impairment was a consequence of rather than an antecedent to their friendly relationships.

Therefore other factors would have to come into play in order that academic achievement could have positive effect on friendship intentions.   Similarly, the

advanced play skills of the children with physical impairment might have to be combined with other qualities before the typically developing peers really appreciated them. The following responses from a primary 4 girl to my assumption of her relationship with Yetta supported this notion:

Interviewer.: *"Is it because Yetta is good at the game, so you like to play with her?"*

C4:3 *"No, not at all. She is kind. She does not fuss about winning or losing."*

Interviewer.: *"You like to play with her and she is nice. So you like to play with her more."*

C4:3 *"Yes, that's right."*

The responses of the children confirmed that whilst excelling in school and games might be an advantage for the children with physical impairment to attract attention and admiration among their peers, pro-social qualities, for example, kindness and being easy-going as in Yetta's case, were essential pre-requisites to make this factor a benefit for friendship development.

Research on children's popularity echoes this finding. Adler and Adler (1998) show that children, particularly boys, who are at either end of the academic achievement continuum may be subjected to serious peer rejection. High academic achieving boys who lack other status-enhancing traits are often stigmatized.

4.2.3.1.3 Theme 3: A Positive Temperament for Overcoming The Psychological Impact of Physical Disfigurement

It was evident in the discourse of the typically developing pre-adolescent children that

the pro-social behaviours of their peers with physical impairment such as being considerate, easy-going, patient, cooperative, negotiable, forgiving and courteous had changed their initial reactions when encountering the unusual appearance of the physically impaired peers. This group of children demonstrated a mature perspective-taking ability which enabled them to look beyond the physical impairment to appreciate the inner quality of their peers.

In the responses of this group of children, there were many descriptions of activities and interactions which showed that the children with physical impairment participated in a full range of school activities such as group projects, PE classes and free time. Through closer encounters, the typically developing pre-adolescent children could observe their peers with physical impairment in wide ranging aspects such as in the descriptions given below:

> C4: 2   *"We were in the same project group. Yetta and I were the leaders. I found that whatever I said, she would listen. She seemed to have little to talk about in the group discussion but when I talked to her, she had a lot of ideas. This shows that she was actually very enthusiastic but she did not want others to accommodate her in a special way because of her physical impairment."*

> C4: 4   *"Once in a PE class, I saw some classmates throw the basketball at her head. I wondered whether they had done it on purpose or just by accident. I immediately asked if she was hurt and then she said that had happened to her often since she was young. She can forgive so many people. She has a very good personality."*

> C4:6   *"I feel sorry for her but she is strong. She is virtually my idol."*

In my observation of a PE class of Yetta's class, there were a large proportion of games which were cooperative in nature. The teacher had paid special attention to Yetta's physical impairment and yet included her in the games naturally. An extract from my diary of the observation provided an illustration:

Diary: 2008-4-17 School C /Primary 4 /PE class	
A football practice:	**My thinking**
Yetta was not able to stand on one leg.	How would the teacher handle Yetta?
Children paired up quickly and Yetta was with another girl. The teacher asked one child in each pair to roll the ball to the partner to kick. He explained that was not easy and both have to cooperate. Yetta took up the role to roll the ball.	It might be a way to exempt Yetta from kicking but it would be better if she could really be involved in the game.
The practice in pairs lasted for a short while. The teacher asked the children to form a big circle with each other holding hands. The teacher then selected a few students to stand in the middle of the circle and kicked the balls to their peers who formed the circle. The rule of the game was to keep the balls within the circle. Yetta could join in the kicking because she could hold onto the peers on both sides for support naturally as the children had to form the circle. The excitement increased with more and more students selected to be in the middle of the circle.	Yetta was fully included and not embarrassed by her physical incompetence. She looked equal with the others. The game appeared to the students as a genuine football practice.

Cooperative learning is one of the highly recommended strategies to encourage peer collaboration and is being used as a vehicle for promoting the inclusion of students with disabilities (Putnam, 1998). The strategies used by the PE teacher simulated

cooperative learning. He encouraged interdependence among the children and created constructive interactions which enabled the typically developing pre-adolescent children to be more sensitive to their peer with physical impairment. Similarly the group project mentioned previously by Yetta's classmate facilitated communication between the children and hence promoted understanding. In other words, teachers undoubtedly have a significant influence in bringing about typically developing children's appreciation of their peer with physical impairment through appropriate teaching strategies to include the physically impaired student in classes which have physical challenges. Carmen's suggestion also echoed this emphasis:

Carmen:	*"If you don't take PE classes, others will think your ability is lower and they dare not play with you… A lot of my classmates didn't realize I could do it. So if you actually have the ability to do it but the teacher does not let you take PE classes, you have no way to show your ability. For example I can play with the hula hoop but the boys can't."*
Interviewer:	*Some students with physical impairment might not be as good as you physically. There are a lot of activities they can't do. Would it be bad for them to join PE classes?*
Carmen:	*"No, it won't. Even if your mobility is not very good, your classmates at least can see you make effort to try. They will have a good impression of you."*

Therefore, the positive temperament of children with physical impairment as a facilitator for friendship intention is not simply related to the innate qualities of the children themselves but also depends on the opportunities provided for them to demonstrate these qualities.

4.2.3.1.4   Theme 4:   A Moral Belief on Human Rights and Equality

The moral belief on human rights which the typically developing pre-adolescent children held in their attitude towards people with disability in general had a positive influence on their friendship intentions towards peers with physical impairment. This phenomenon was evident irrespective of whether or not there was a peer with physical impairment present in the class.   However, in comparing the responses from these two groups of children, I noted the differences in their reasons for advocating equal rights for their peers.   Children who had peers with physical impairment in the same class tended to provide more pro-active reasons.   For example, some of them used leading phrases such as "even if we have different interests" and "even if he is stupid" to emphasize that the differences between themselves and the peers had no adverse impact on their friendship.   Children who had peers with physical impairment in other classes tended to justify equal rights under criteria such that the peers proved to be close to the norm.   The following responses from children without physically impaired peers in the same class were examples:

> *K5: 2*   *"I think the little boy can study in our school because there is no problem*
> *with his intelligence.   He has only some problems with his body."*
>
> *K5:3*   *"The little boy looks cute and obedient. We should accept him to our*
> *school to give him encouragement."*
>
> *C5/6: 4*   *"She won't interrupt the class.   She is just like ordinary people as we*
> *are."*

The more pro-active concepts of children who had physically impaired peers in the same class might have resulted from their direct experience with these peers.   The

segregation of children with disabilities from mainstream education as the norm of practice in Hong Kong education may partly contributes to the vague concept of human rights in the children who had no peers with physical impairment in the same class. The discourse among these children demonstrated how they accepted segregated education entitlement as a justification for equal participation and safe guard for preventing discrimination:

> K5:4   *"If the boy is mentally disabled, there are schools like Ebenezer School (a special school for visually impaired children which the class visited before) specially designed for them. Such children usually don't go to normal schools."*
>
> K5:2   *"I think some of the children with physical impairment can come to our school but some cannot. Those who have more severe physical problems cannot come. They might need something special, for example, a special chair to give them support. I think they will be happier in those schools. Some of our classmates might discriminate against him. He will be unhappy if people stare at him.*

It was obvious that the children basically had a receptive attitude towards peers with physical impairment based on a moral belief on human rights and equality but the dual education system might have conveyed contradictory messages on the acceptance of diversity.

4.2.3.1.5   Theme 5:   A Caring Nature Favours a Receptive Attitude

The caring nature of the typically developing children was shown through their empathy and help towards peers with physical impairment. This naturally led the

children to appreciate the need to initiate interaction with their physically impaired peers, which provided a good beginning for friendship intention.   In the discussion of the property of friendship of typically developing pre-adolescent children, I pointed out that the children at this developmental stage perceived friendship as a reciprocal and lasting relationship and not simply a here-and-now interaction.   In addition, they conceived having fun and psychological support as the social goal of friendship. Consequently, the interaction initiated by the typically developing pre-adolescent children which resulted from their caring nature had to be further developed to become age-group appropriate friendship.

The typically developing pre-adolescent children frequently used phrases such as "pitiful", "abandoned", "lonely", "sad" and "can't do" to describe the situations of the peers with physical impairment which encouraged them to interact.   Such interaction showed a hierarchical social status, in which the typically developing pre-adolescents adopted a nurturance role.   Hartup (1989) describes vertical and horizontal relationships.   Vertical relationships are those formed with individuals with more knowledge and higher social power as demonstrated by the relationship of children and adults.   Hartup posits that sibling relationships are usually of this nature with the older child in a nurturance role and the younger one as a dependent.   This describes closely the relationship between the children with and without physical impairment mentioned above.   Horizontal relationships by contrast, are formed between partners with equal status.   They are usually between peers and are central to friendship. Consequently, genuine friendship can only be formed between the typically developing pre-adolescent children and the physically impaired children when the

vertical relationship is shifted to a horizontal one. This shift could have been achieved by the children with physical impairment growing out of a dependency role. In this study, some children with physical impairment demonstrated a desire for independence to strive for equal status. Carmen's recommendation to other peers with physical impairment provided a good illustration:

> Carmen: *"If he can't climb stairs, let him use the lift. If he can walk, it's better to let him climb stairs so that he can get along with his classmates…If you give up taking the lift and climb the stairs as others. You are like them so that you get closer to the classmates."*

In their preference for shared activities with friends, the children with physical impairment also strongly indicated a desire for equal status. They rated "giving you help at all times" as the last but one least preferred option and "A companion in extra-curricular activities" top of their list of preferred shared activities with friends as shown in Table 4.6:

Table 4.6: Preferred Shared Activities with Friends with Physical impairment

Most preferred shared activities	Least preferred shared activities
1. *A companion in extra-curricular activities*	1. Going to school together
2. Talking on the phone	2. *Giving you help at all times*
3. Playing together	3. Keeping secret
4. Sharing same interests`	4. Can argue with
5. Listening to what you say	5. Can make jokes with

As the horizontal relationship is mutual and reciprocal in nature, the effort of the children with physical impairment to strive for such relationship through independence has to be echoed and appreciated by their typically developing peers as shown in the response of Yetta's classmate:

> *C 4:1*   *"Yetta really doesn't like to bother others. She doesn't want to do any damage because of herself to those who are concerned about her...She does not really want you to help her too much. She wants to be a normal person who can live on her own."*

The school can facilitate a horizontal relationship to develop in the children with and without disability by moving beyond the pre-dominant focus of providing physical access and safety as their sole concern to providing inclusive education of children with physical impairment. Teachers have to be aware that habitually assigning an assistant role to typically developing pre-adolescent or older children thus making them responsible for access and safety needs of their physically impaired peers can undoubtedly inhibit rather than facilitate friendship between these children. In addition to the adoption of appropriate teaching strategies such as cooperative learning to promote collaboration between these children, teachers require sensitivity and skills to build on the caring nature of typically developing children when dealing with the interplay between the desire for independence and genuine need for help in children with physical impairment. With all due respect, teachers in some mainstream schools may not have adequate knowledge about the ability and disability pertaining to individual children with physical impairment to promote such interactions. Further study is warranted to justify this statement for the benefit of peer

relationships.

The caring nature of the typically developing pre-adolescent children provided a positive prospect for friendship development with their physically impaired peers through the mutual efforts of all three parties, the two groups of children and the teachers.

4.2.3.1.6 Theme 6: Knowledge of Disability to Encourage Positive Relationships

The responses of the typically developing pre-adolescent children in the focus group interviews demonstrated their eagerness to know more about the causes of the physical impairment of their peers. They provided their reasons for their inquiry, which supported the notion that an increased knowledge of disability results in positive behavioural intentions. In this regard, the following responses provided good illustrations:

> *S3/4: 2*   *"If I know about his disease, I can understand him better so that I can be more caring towards him."*
>
> *C3/4: 1*   *"I would want to play with her more when I understand her condition better. She might get well later and I want to make her happy."*
>
> *C5/6: 4*   *"Actually I want to know the reason for the disability very much. I don't want to make the wrong guess that when a person uses a wheelchair, he must fail to move his legs."*
>
> *K6: 6*   *"If you don't know what disease she has, you might suspect and make guesses all the time. This will ruin your intention to make friends with her. If you know she isn't infectious, you'll feel more at ease."*

The knowledge of disability facilitated friendship intentions in several ways; for some children, the information helped alleviate fear and clarify doubts thus preventing misconception of the peer with physical impairment; for the majority of the children, they found that the information provided them with the knowledge and skills to appropriately support their peers physically and psychologically.

Based on Nabors and Larson's classification (2002), the information which the children sought to know could be identified as descriptive and explanatory information about the physical impairment. Descriptive information highlights the functioning of the peer with physical impairment such as the speed in climbing stairs; the explanatory information provides medical or causal information about the physical impairment. Research suggests that explanatory and descriptive information concerning disability improves people's attitude and behavioural intentions towards others with disability. For example, Campell, et al. (2004) found that a combination of descriptive and explanatory information improves the behavioural intentions of third- to fifth-graders towards an unfamiliar child with autism. This finding also holds for more prominent disability such as physical impairment. Holtz and Tessman (2007) evaluate the behaviour change intervention in children from aged 8 to 11 years towards peers with Tourette Syndrome, a condition characterized by involuntary tics. The intervention programme made use of a video to provide developmentally appropriate explanatory information on the cause and symptoms of the disease and descriptive information on the life of a child with the syndrome. These results demonstrate that both types information foster positive attitudes and behaviour intentions.

The analysis in Domain two demonstrated that a knowledge of disability not only changed the children's attitude towards physical impairment but also resulted in a more mature empathy towards peers with physical impairment. More concrete information about physical impairment and the life of their peers in face of physical impairment enabled the typically developing pre-adolescent children to adopt perspectives closer to their peers' situations. This enabled mutual understanding between the typically developing pre-adolescent children and their physically impaired peers, leading to the likelihood of a sustainable friendship after their initial acquaintance. Hence, knowledge of disability facilitated a positive relationship between the typically developing pre-adolescent children and physically impaired children in both initiation and sustainability of friendship intentions. The following account given by a primary 4 girl on her change of attitude to and relationship with Yetta and my memo of her account illustrated this idea:

Responses of C4: 2	Memo
"In our first PE class, the teacher asked all of us to accommodate Yetta and let her be the first. At that time I thought everyone had to accommodate her just because she had a little problem with the legs. She needed others to serve her as if she was a queen. But one day her maid did not come to accompany her to take the lift and she had to climb the stairs. The boys rushed by and were quicker by one flight of stairs. Then I realized that Yetta really needs to be the first when we line up. I was wrong before. I found she had no ill will towards us. She was very kind-hearted. She gave us no trouble to play with. From then on I made good friends with her." "I read a book about exercises making muscles stronger. Active games will do good to her health. So I play with her in PE classes as long as the sports are not too vigorous." "After being with her in the same class, I realize her appearance is not important. I have to look at her inside. I have learnt that by now."	- Misunderstanding was ameliorated by the information on Yetta's disability and C4:2 obtained descriptive information about the physical impairment through direct encounter and keen observation. - With better understanding of the disability of Yetta, C4:2 changed her attitude towards Yetta and initiated friendship. - C4:2 obtained explanatory information related to the condition of Yetta through books and felt competent to interact with her in face of her impairment. C4:2 also showed ability to perceive Yetta's physical need. - With her appreciation of Yetta's inner virtues, C4:2 demonstrated a likelihood to commit to sustaining her friendship with Yetta.

C4:2 obtained the explanatory and descriptive information about Yetta's physical impairment through her vigilance. Nevertheless, for the benefit of the social integration of children with disabilities, the lack of an appropriate channel for the children to obtain knowledge of disability should not be neglected. The majority of the children demonstrated great eagerness to seek explanatory information and yet

they hesitated to clarify their doubts about their peers' physical impairment. The following responses provide vivid examples of this dilemma:

C 4: 6   *"When I was in primary one, I felt sorry for Yetta but I dared not ask her anything about her disease. I was afraid I would hurt her and other classmates might accuse me of being prejudiced against her. It troubled me a lot."*

S 4: 1   *"He might be very sensitive to what I am asking. He is conscious that he is disabled and might think I discriminate against him."*

It was evident that the dilemma arose from the children's conception of disability as a taboo topic. This might also be reinforced by the good intention of the school and the society of an eastern culture to avoid stigmatizing children with disabilities. To understand better the actual effect of disclosing explanatory information about the children's disabilities, I sought to conduct a direct dialogue with the children with physical impairment. In my interviews with these children, they presented two contradictory reactions to the disclosure of their diagnosis. Some children with physical impairment anticipated a negative reaction from their typically developing peers:

Patrick: *"About 10% of the whole school understands my physical condition but they don't know the diagnosis. I never told anybody, not even my good friends. They should know when they look at my leg. If they knew the diagnosis, it's by a hundred percent they would have a bad reaction."*

Jan: *"Apart from the boys, the whole class understands my physical condition. But for the diagnosis, I have not mentioned. I don't want them to know because I am afraid they will be prejudiced against me."*

Ironically, the children with physical impairment refrained from disclosing their diagnosis to their typically developing peers in order to avoid prejudice while the typically developing pre-adolescent children hesitated to inquire about explanatory information of the physical impairment for fear of being mistaken for being prejudiced against the physically impaired peers. False assumptions on the part of each other's perception about themselves created psychological barriers between the typically developing pre-adolescent children and their physically impaired peers. Such situation was likely to create tension in their interaction. Jan's comment on her classmate provided further evidence:

> Jan: "I find him nosy because one day he raised his hand in the middle of the class to ask the teacher about my disease. The teacher asked if I was willing to tell the class. I said no and the teacher said it's alright. I think that classmate was too bored in the class and he wanted to find something to occupy himself. I always quarrel with him."

Conversely, some other children with physical impairment who had a more positive perception of their physical impairment were more open about disclosing their diagnosis. They also experienced positive feedback from their typically developing peers after the disclosure. The following accounts provided their perception of their own impairment and the disclosure was enlightening on the issue of stigmatization:

> Tina: "A few classmates of the present school know my diagnosis. If they want to know, I don't mind telling them. I think they want to know probably because of my appearance and they want to find out what caused me this."

> *Yetta:*   *"My classmates know my diagnosis and our relationship didn't change at all afterwards."*
>
> *Wing:*   *"My classmates do not have any queries about my physical condition because they all know why. I told them, "I run a bit slowly and my movements are not too good." Miss Suet told them I had cerebral palsy. They then helped me to the sick room when I fell. Before, it was the teacher who helped me. They also rung me up at home and we chatted over the phone."*

The open attitude to disclosing information, both explanatory and descriptive, about disability relieved the unnecessary psychological burden between the children with and without physical impairment. The available research also suggests that educating children about the disability being faced by a classmate has a beneficial influence on the adjustment of the affected child (e.g., Peavey and Leff, 2002 and Prestia, 2003). With more explicit explanatory and concrete descriptive information about the physical impairment presented in age-appropriate context, further peer support can be promoted as demonstrated in the following comment by Yetta's classmate:

> *C4: 6*   *"We tried out some of the training exercises which Yetta had to do. We found them a bit hard so it would be much harder for Yetta as she has got some impairment…If you use to play very energetic games, as Yetta has problems with her legs, then you should make changes to suit her."*

By facing the facts about the physical impairment in a positive manner, instead of treating it as a taboo topic, the typically developing pre-adolescent children could gain better knowledge of disability which actually promoted the concept that children with

and without physical impairment were more similar than dissimilar. The children were then empowered to initiate accommodation for their peers with physical impairment, which they naturally integrated into their school life. Friendship could then be sustainable. Hence, the local conservative culture regarding the disclosure of disability revealed in this study warrants attention.

4.2.3.2   Sub-domain Two: Barriers to Friendship Intentions

Table 4.7 demonstrates how I synthesized the themes from the recurring messages revealed in the examples of relevant interview text. I identified five themes which contributed to the barriers for the typically developing pre-adolescent children developing friendship with peers with physical impairment. Theme one related to the intrinsic limitations arising from the physical impairment itself. Theme two and three related to the inadequacy of their knowledge of disability and skills to handle physical impairment among the typically developing pre-adolescent children. Theme four related to an external social factor which I coined "social constraints". Theme five related to misunderstanding or misconception during verbal or non-verbal interactions between the typically developing pre-adolescent children and their peers with physical impairment and I used the term "communication failure" to describe this phenomenon. This sub-domain provided counter evidence to support the findings in the previous sub-domain on facilitators for friendship intentions.

Table 4.7:   Barriers to Friendship Intentions

Themes	Recurring messages	Examples of relevant interview text
Theme 1: Intrinsic limitations of physical impairment	1. Appearance deters interaction	- I found her legs were not normal. She looked weird to me. - Her appearance was so odd that I suspected she was one of those special students. - To some extent her appearance discouraged me from talking to her.
	2. Untidiness and clumsiness arouses repugnance	- Her hair is yucky. The collar of her dress is untidy and stained. - Sometimes she drops tissue on the floor and kicks it to your seat. She is dirty. - Last year she spilled the whole bowl of rice on me. She is clumsy. - If she doesn't talk too much and is not dirty, she will not cause trouble.
	3. Physical incompetence disadvantages peers as a playmate	- I won't invite him to join my group in PE classes since he can't move well. I don't want to bother him. - I prefer to play with other classmates because I don't have to think too much about the games. - If he uses crutches, ball games will not suit him. The teacher might ask him to sit on the side for a rest. I would not like to have him as a partner.

Table 4.7:   Barriers to Friendship Intentions (cont'd)

Themes	Recurring messages	Examples of relevant interview text
	4. Children fail to appreciate the difficulties faced by the peer with physical impairment	- In fact, she only appears a bit slow in walking. Her speed is not too far behind us. - Maybe she thought, "If I am with my classmates, I can integrate into their circle." But such an idea gives her a personality of wanting to do everything with others together.
	5. Children equate physical impairment with inability to cope with physical activities.	- He can't take Arts classes because he can't go to the arts room. Moreover, he can't go out sketching. - I think the boy cannot take PE classes, visual arts, computer and music. In music class, we play the recorder which needs the hands. In PE, we need hands and feet. In computer classes, he needs to use the hands to type. He may not be able to learn.
Theme 2: Inadequate knowledge of disability	6. Children presume psychological stress on peers with physical impairment from physical activities	- I won't ask them to attend PE classes because he might be sad if he realized he couldn't move so well with his legs. - I am afraid he can't cope with the psychological stress and secondly it's no point to force him if he can't do it.
	7. Children limit the participation of peers with physical impairment in physical activities because of a concern for safety.	- Art and craft are too difficult for them. They might hurt themselves in using scissors as their hands are clumsy. - Basketball is vigorous. He might be strained. To protect him, I will not pair up with him. He can be an on-looker.
	8. Children misunderstand adaptations for the peer with physical impairment as favouritism	- Before, I thought Yetta was selfish. She always occupied the whole escalator. I found her very weird. - In our first PE class, the teacher asked all of us to accommodate Yetta and let her be the first. At that time I thought everyone had to accommodate her just because she had a little problem with the legs. She needed others to serve her as if she was a queen.

Table 4.7:   Barriers to Friendship Intentions (cont'd)

Themes	Recurring messages	Examples of relevant interview text
	9. Children perceive themselves as having inadequate skills to handle the physical limitations of peers with physical impairment.	- It is a bit troublesome to help her climb up- and down-stairs. I am afraid if I am not strong enough, I might cause her trouble. - We are afraid we might make her fall over. There are a lot of people rushing around during recess.
Theme 3: A sense of inability to face physical impairment	10. Children anticipate the inconvenience in playing with peers with physical impairment.	- I like to play with able classmates more because it is more convenient. - I like to play with able classmates more because there are not many games I can play with classmates with physical impairment. - I will not bother him to be my partner in PE as he cannot move well anyway.
	11. Children feel uneasy about interacting with peers with physical impairment	- I dare not to ask because I am afraid I will hurt him. But if I ignore him, it seems we do not care about him. - We were scared so that we didn't know how to ask her when she passed by. After she walked away, we started to think about it. It's too late.

Table 4.7: **Barriers to Friendship Intentions** (cont'd)

Themes	Recurring messages	Examples of relevant interview text
	12. Teachers' reprimand reinforces peers' negative attitude	- We were scolded by the teacher because of her. - The teacher says if we do wrong, we can be forgiven but she is not motivated in most things.
Theme 4: Social constraints	13. Substitute arrangement in school encourages a concept of segregation	- Because he doesn't need to take PE. If I invite him to join the class and if he gets injured, the teacher may need to take the responsibility. - If we have a classmate with physical impairment in PE classes, our teacher will get a very caring person to look after him all the time and be partner with him. - I won't invite him as partner because if he can't do it, our teacher will let him sit and watch us. - If they study in a school which is specially designed for them, they will be happier. They won't be somehow discriminated against.
	14. Cliques limit new comers.	- Actually I don't really like to play with him because I have already some good friends who share similar interests. - All my friends are normal and we don't have any classmates with physical impairment.
	15. Fear of peer's teasing.	- His movements are weird; our class is so unfortunate that other classes tease us. - They will tease us saying why we have a special classmate. Then they will giggle.

Table 4.7: Barriers to Friendship Intentions (cont'd)

Themes	Recurring messages	Examples of relevant interview text
	16. Perceiving the peer with physical impairment a recipient of help.	- Helen gave us the impression that she needed others to help when she first came to our school. Therefore, if somebody does need help, how come he will ask her for help in turn? He might feel a bit embarrassed. - We don't ask Helen questions about homework probably because the way she does her homework might not be able to solve our problems.
Theme 5: Communication failure	17. Frequent requests for help irritate peers.	- Maybe sometimes she asks too many questions about homework so we find her annoying. - If there are things she can cope with, she should do them on her own and not rely on others for everything. Otherwise it seems that you just say "thank you" and expect people to do everything for you.

4.2.3.2.1 Theme 1: Intrinsic Limitations of Physical Impairment

Children with physical impairment inevitably appear different. Research on social relationships including children's friendship reveals children's preference to associate with others who are similar to rather than different from themselves (McPherson, Smith-Lovin and Crook, 2001). Cliques in pre-adolescence represent such a tendency at this developmental stage. Hence, children with physical impairment are disadvantaged in terms of friendship development in their initial encounter with their typically developing peers due to their appearance and salient disability which are their intrinsic limitations.

On examining the responses of the typically developing pre-adolescent children, it appeared that their negative reactions to the external features of their peers with physical impairment had different foci. Some focused on the appearance of the peers, which I coined the "physical focus"; others were directed to behaviour such as untidiness and clumsiness exhibited by the peers, which I coined the "behavioural focus". Yet another group of reactions centered on the physical incompetence of the peers likely to occur in interacting with them, which I coined the "interaction focus".

The negative reactions to the external features of the physically impaired children with the physical focus were demonstrated to be associated with the affective component of attitude. The typically developing pre-adolescent children used phrases such as "looked weird to me" and "appeared odd" to describe their emotional reactions. They were facing an affective attitudinal barrier to friendship intention towards their physically impaired peers arising from the visual impact of the physical

impairment. The children who displayed this reaction were mostly those who recalled their initial reaction in their first encounter with their peers with physical impairment some time ago. Some children changed their perception after knowing their peers for a longer time or gaining a better understanding of their peers as illustrated in the following responses of a primary 4 and a primary 6 student:

> C4: 6   *"To some extent her appearance discouraged me from talking to her. But after talking to her for a while, I was brave."*
>
> S5/6: 4   *"In the beginning, I found her a bit odd. I wondered why she always wore white sports shoes and her feet were crooked when she walked. Later, I knew she had a disease and gradually she looked alright and not too ugly to me."*

There was also a sense of regret for misunderstanding their peers when the children shared these past experiences as shown in such self-reflection, "*I misunderstood her before. I am sorry about it.*" Consequently, the affective attitudinal barrier arising from the negative reaction with the physical focus alone could be alleviated effectively by the facilitators discussed in Domain two.

The negative reactions to the external features of the physically impaired children with the "behavioural focus" were associated with both the affective and cognitive components of attitude. In describing the peer with physical impairment, the typically developing pre-adolescent children used more judgmental comments such as "*If she is not proud and not dirty, she will not cause trouble.*" and "*If she is not untidy with the school uniform, that will be alright.*" as well as judgmental descriptors such as "*as clumsy as*", "*funny*" and "*yucky*". This indicated that the children had already

some preconception about their peer with physical impairment, which formed the cognitive component of attitude. The children also often used the word "unfortunate" to describe their feeling of their situation with this peer in the class. Such strong emotional reaction indicated an uncompromising affective attitudinal barrier. In responding to my further inquiry about their understanding of the clumsiness of this peer, the children demonstrated false assumptions and misconceptions about the cause of the clumsiness:

> *Interviewer:* "Have you ever doubted what makes her like that?"
>
> *C5/6: 5:* "The teacher says if we do things wrong, we can be forgiven but she is not motivated in most things."
>
> *Interviewer:* "Do you think she is clumsy because she is not motivated?"
>
> *C5/6: 5:* "Yes."
>
> *C5/6: 4:* "Exactly."
>
> *C5/6:2:* "She once passed by me. She tripped herself and dropped her lunch box. She was careless but she blamed others."

The inappropriate behaviour of the peer with physical impairment inevitably aggravated her typically developing peers' negative perception. However, the misconception of the impairment was likely to reinforce the negative affect and vice versa. Moreover, in their responses, the children gave similar remarks to both past and recent incidents, indicating a rather fixed perception. Consequently, more effort is required to overcome a combination of cognitive and affective attitudinal barrier which arise from the negative reactions with the "behavioural focus".

The negative reactions to the external features of the physically impaired children

with the "interaction focus" mainly came from the typically developing pre-adolescent children who did not have a peer with physical impairment in the same class. On examining their written choices on the "friendship preference scale" (appendix 3.7), this group of children all showed a lower preference for peers with physical impairment. With little direct personal experience of interacting with peers with physical impairment, these typically developing pre-adolescent children would be more susceptible to the influence of external factors such as a lack of knowledge of disability, a superficial concept of discrimination and accommodation and negative social values.

4.2.3.2.2 Theme 2: Inadequate Knowledge of Disability

The lack of knowledge about the physical impairment of their peer was reflected in the typically developing pre-adolescent children who either failed to appreciate or were over-anxious about the impact of physical impairment on their peer's functioning. As a result, the typically developing pre-adolescent children formed false assumptions and misconceptions which brought about a negative affective and cognitive attitude towards peers with physical impairment. This included feeling weird about them, finding them selfish, expressing dislike, presuming physical incompetence, having ill judged concerns about safety and stress on the part of the physically impaired peers. In all, the negative affective and cognitive attitude may succumb to a poor motivation in interacting with peers with physical impairment and affect friendship intentions in the long run. This was demonstrated by a classmate of Helen:

> K6: 1   *"Helen told us she had cerebral palsy when she was born.   So she got*
>
> *problems with her body.   In fact, she only appears a bit slow in walking.*
>
> *It's not a big problem.   Her speed is not too far behind us and there is no*
>
> *big problem…Helen has physical impairment.   Maybe because of that*
>
> *she thought, 'If I can be with my classmates, I can integrate into their*
>
> *circle.'   In this way she would feel happy because she felt that she was*
>
> *normal like everyone.   But such idea gives her a personality of wanting*
>
> *to do everything with others together."*

The responses obviously showed a barrier to friendship intentions from an accumulative misunderstanding of Helen's condition.   It, however, revealed an important aspect about delivering knowledge of disability to the typically developing pre-adolescent children.   Seemingly, Helen's classmates knew about her diagnosis but a medical term alone was not enough to inform the typically developing peers about the difficulties she faced day in and day out.   Helen required a pair of crutches to walk and she admitted in her individual telephone interview that at times she could not handle some classroom situations such as arts classes:

> Helen: *"We have to clean up after arts.   I cannot hold the things on my own and*
>
> *walk to the basin.   I ask some classmates to help but they sometimes say*
>
> *that they are not free."*

Could it be the case that those classmates who refused to help misinterpreted her intention as "*a way to integrate into their circle*" and were unaware of her genuine difficulty?   As mentioned in the preceding sub-domain, a contextual knowledge of disability with both explanatory and descriptive information presented in an age-appropriate context promotes mature empathy and facilitates friendship intentions.

Helen's case provided a counter example to support this notion. It highlighted an important message that partial explanatory information of disability could do harm than good. Partial information unintentionally accentuates dissimilarities rather than similarities between children with and without physical impairment, and hence discourages peer interaction. This issue warrants attention especially in a culture where disability is a taboo topic.

As to the children with physical impairment, I found them expressing an ambivalent feeling in the face of an unfamiliar inclusive setting when they were first admitted to the school. On responding to my question about their anticipated perception of the typically developing peers towards a child with physical impairment on the first day of school, the children with physical impairment provided the responses which reflected this ambivalence as shown in Table 4.8:

Table 4.8: **Perceived Reactions of Typically Developing Peers to A Child with Physical Impairment on The First Day of School**

Negative reactions	**Uncertain reactions**	**Positive reactions**
- Tease him. - Don't like to make friends with him. - Find him troublesome.	- Curious about him - Stare at him - Ask him why he walks like this.	- Welcome him

There was a higher tendency among the children with physical impairment to expect negative or uncertain reactions than positive reactions from their typically developing peers. In their initial contact, the typically developing children misinterpret their

physically impaired peers' condition while the physically impaired children were skeptical towards their typical counterpart. The phenomenon indicated that empowering the typically developing pre-adolescent children with a knowledge of disability has to be timely. Such intervention also has to be an on-going process and adapted to age throughout the school careers of the children with physical impairment especially at transition stages. Wing's comment on his preparation for secondary school highlighted this point:

> Wing: *"The secondary school has too many students. I won't know what all of them are thinking. I am afraid the more they hear about my condition, the more they misunderstand. They will tease me. Primary school students are innocent and are more understanding."*

The bigger and more complicated social ecology of a secondary school compared with a primary school warrants a different approach in promoting disability awareness.

4.2.3.2.3   Theme 3:   A Sense of Inability to Face Physical Impairment

The typically developing pre-adolescent children were unable to handle the unfamiliar situations arising from their physically impairment peers. This was demonstrated by their expression of fear of accident and the anticipated inconvenience in playing with the physically impaired peers as well as apprehension to communicate with them. Coupled with the perceived incompetence of the peers with physical impairment discussed in the preceding theme, the inadequate play and communicative skills of the typically developing pre-adolescent children posed difficulties for them to interact

with these peers.

To some extent, the inadequate descriptive information on disability undermined the ability of the typically developing pre-adolescent children to handle the physical impairment of their peers in interaction. The lack of exposure probably was another reason for this inability as the majority of the children who indicated this difficulty came from classes without a peer with physical impairment. Helen's experience in physical education classes, however, revealed another situation of inadequate exposure:

> Helen: *"When I was in primary two and three, the teacher bought some toys, like bowling or basketball from ToyRus for me to play with in PE classes. In primary four, when the teacher taught us some sports, I was given some simple games like bouncing a basketball alone while the others were playing the basketball. My classmates didn't know that I knew how to play wheelchair basketball. I didn't take PE in primary five and six."*

Helen was given substitute activities as a form of accommodation to enable her to participate in physical education classes. Without direct contact with her typically developing peers in the playground, Helen was deprived of the opportunity to demonstrate her capabilities as well as actual limitations. Her typically developing peers were not sensitized to her physical condition. Consequently, the typically developing pre-adolescent children on the one hand equated physical impairment with an inability to cope with physical activities and on the other hand they were unable to develop adequate skills to interact. Carmen's experience in her early years of school clearly described a similar situation:

> *Carmen:* *"In the past my mother looked after me in PE classes and played badminton with me. My classmates thought my ability was lower and they dared not play with me."*

Hence, the opportunity provided for the children with physical impairment to fully participate in physical education is closely related to the empowerment of the typically developing pre-adolescent children to interact with them as well as for friendship development as Helen advocated:

> *Helen:* *"PE is quite important to us. PE classes can help us to develop friendship and strengthen our body. If the team wins, we will be very happy and congratulate each other and become better friends."*

4.2.3.2.4   Theme 4:   Social Constraints

The social constraints as a barrier to friendship intention came from both the teachers and peers. Research shows that teachers' appraisal of children have an influence on the children's self-perception and peer perception (Stephan and Maiano, 2007). An example was found in one focus group of primary 5 and 6. The group expressed their negative impression of their peer with physical impairment at length before mentioning that the teacher reprimanded her. They seemed to use the teacher's authority to justify their perception of their peer and to prove they were victimized as expressed in the following discourse:

> *C5/6: 4*   *"We were scolded by the teacher because of her."*
> *C5/6: 5*   *"The teacher says if we do wrong, we can be forgiven but she is not motivated in most things."*

In this regard, the teacher's reprimand on the child with physical impairment who had already been rejected reinforced and justified the negative perception of the typically developing pre-adolescent children towards the peer. Obviously, teachers' understanding of the children with disabilities or other special education needs is important for peer acceptance right from the beginning of the children's admission to the school.

Teachers can also influence friendship intentions of the typically developing pre-adolescent children towards their physically impaired peers negatively by unintentionally introducing a segregated approach. The discussion between the typically developing pre-adolescent children on the appropriateness for a child with physical impairment to take PE classes revealed an acceptance of segregation which was subconsciously instilled in these children:

> K5: 4 *"If we have a classmate with physical impairment in PE classes, our teachers will get a very caring person to look after him all the time and be partner with him. If the sports are too vigorous for him, he doesn't have to play."*
>
> K5: 2 *"I think if they study in a school which is specially designed for them, they will be happier. They won't be somehow discriminated against."*

A combination of the substitute practice and the dual education system reinforced the typically developing children's concept that their physically impaired peers were different from them and hence produced an acceptance of segregation which discourages friendship intentions.

Another social constraint arose from the typical properties of pre-adolescent friendship, cliques and gossip (Rubin, Bukowski and Parker, 1998). The perception and belief that peers with physical impairment were different from themselves was the core of this constraint. The children mentioned all their friends being normal and being laughed at for having a special classmate. Coupled with teachers' unintentional action in instilling dissimilarities between children with and without physical impairment, this social constraint can be a strong barrier to friendship intentions.

4.2.3.2.5   Theme 5:   Communication Failure

The barrier to friendship intentions arising from a failure to communicate reflected a failure to shift a vertical relationship (a nurturant-and-dependent relationship) to a horizontal relationship (an equal and reciprocal relationship) between the typically developing pre-adolescent children with their physically impaired peers during their initial interaction. The responses under this theme all came from the typically developing pre-adolescent children of primary 6, who had associated with their peers with physical impairment for a few years and the vertical relationship was firmly established. The following responses provide a vivid illustration on how difficult it was to change vertical relationship once it was established:

> K6: 3   *"There seems to be something blocking... Whenever I need to ask for help in homework, I seldom think of Helen before I approach other classmates."*
>
> K6: 6   *"Helen gave us the impression that she needed help when she first came to our school.   Therefore, if somebody does need help, how could he ask her for help on the contrary? He might feel a bit embarrassed.   She has*

> *special needs but you ask for her help.   It appears that you want to take*
>
> *something back from her.   It seems odd."*

Typical of pre-adolescence, children look for equal status in their peer relationship. When a vertical relationship persists through to late pre-adolescence, intolerance of the vertical relationship exists as revealed in the following responses:

> *K6: 3*   *"Maybe sometimes Helen asks too many questions about the homework*
> *so we find her annoying."*
>
> *K6: 5*   *"If there are things she can cope with, she should do them on her own*
> *and not rely on others for everything. Otherwise it seems that you just say*
> *'thank you' and expect people to do everything, for you.".*

As to the children with physical impairment, how much did they sense the situation and react to it?   Helen's advice to other physically impaired peers based on her own experience demonstrated frustrations:

> *Helen:*   *"He should try his best to do things on his own if he can.   It's because if*
> *you ask people for help too often, they will find you annoying.   I had*
> *such experience before…My classmates don't play with me probably*
> *because I have to use crutches and do not walk fast enough.   There are*
> *many things I can't cope.   I feel a little unhappy about it."*

In spite of her own desire to be independent, Helen did have her intrinsic physical limitations.   However, some of her classmates failed to appreciate them when they were too used to the vertical relationship.   She admitted that some of her classmates who were initially her good friends no longer wanted to help her.   The situation had

occurred after she was promoted from primary 3 to primary 4 supporting the notion that a horizontal relationship needs to develop early on. Helen interpreted her typically developing peer's change of attitude as an act of looking down upon her and she coined the term "pigeon eyes" to describe them. ("Pigeon eyes" is a Cantonese idiom describing arrogance and treatment of others as sub-ordinates.) However, some of Helen's classmates expressed a concern for her independence as the reason for withdrawing their help. As K6:1 commented:

> K6:1   *"Sometimes her personality makes her expect too much help from others.*
> *I think she needs to learn to be on her own to do things she can cope with*
> *because there will not be too many people to help her in the secondary*
> *school or university."*

To some extent, the communication between the typically developing pre-adolescent children and their peers with physical impairment failed because vertical relationship persisted beyond early childhood and formed a barrier to a reciprocal friendship.

4.2.3.3   Sub-domain Three: Mode of Interactions

Research on friendship involving children in inclusive education has addressed the nature of peer interactions between children with and without disabilities in direct contact (e.g. Lee, Yoo and Bak, 2003; Hall and McGregor, 2000) or in hypothetical play (e.g. Laws and Kelly, 2005). Themes such as sharing, caring, helping, reciprocity, proximity and stability are identified to describe their interaction characteristics. Due to the difference in methodologies in these studies, it is not possible to compare the interactions in direct contact and in hypothetical play. Information in this respect,

however, is relevant for substantiating the understanding of the friendship intentions of the typically developing children towards peers with disabilities. In particular, it is useful for differentiating peer acceptance, preference for peer interactions and friendship intentions. To identify such information, I reviewed the interview transcripts of the typically developing pre-adolescent children by dividing them into two groups, one with a peer with physical impairment in the same class and the other group with such peers in another class.

In the group of typically developing pre-adolescent children with a physically impaired peer in the class, I identified five themes on the mode of interactions which facilitated friendship intentions. They included "*Helping*", "*Sharing*", "*Caring*", "*Adapting*" and "*Advocacy*". I identified two themes which were barriers to friendship intentions: "*Demand*" and "*Doubting*". Table 4.9 demonstrated how I developed the themes from the relevant interview text. In the group of typically developing pre-adolescent children with physically impaired peers in other classes, I identified three themes, "*Care-giving*", "*Accepting*" and "*Protecting*" which facilitated a friendship intention, and one theme, "*Avoiding*", which was a barrier to friendship intentions. Table 4.10 demonstrated how I developed these themes from the relevant interview text. The mode of interactions between the children with and without physical impairment in the same class was more complex and richer in context compared with those for the group with physically impaired peers in other classes. This phenomenon showed that actual contact or proximity made the difference.

Table 4.9: Mode of Interactions of The Typically Developing Pre-adolescent Children with A Peer with Physical Impairment in The Same Class

Themes		Recurring messages	Examples of relevant interview text
	1.	Children offer help naturally.	- Giving her some help is not a big deal. - When she dropped something, I voluntarily picked it up for her. - It doesn't bother me too much to give her help as long as I can.
Theme 1: Helping	2.	Children regard giving help as a duty	- If there is no one offering to help her, I will. - Sometimes our teacher asks me to help Helen. I try once or twice and I find it's ok. So I keep on helping. - If I could help her, I would offer help. But now I don't sit near her, so I help her less.
	3.	Children regard giving help as enjoyable	- Helping the weak is a joyful job because I don't feel ashamed. - I found it fun. She threw the bean bags and I picked them up.
Theme 2: Sharing	4.	Children share friendship through play.	- When I was in primary one and on the second day of school, I had no friends to play with during recess. I walked up and down along the corridor and saw Yetta was alone too. I then asked her to play with me and we started to make friends. - We made up a game to play with Yetta and she found it interesting. Whenever we have time, we ask her to join us in the game. It's good for her because we play the game in the playground and she can enjoy the sun too.
	5.	Children share feelings for psychological support	- She and I chat and laugh together most of the time. We share our feeling when we have something unhappy. - If we can make more friends, we can chat. We can share our secrets with each other. So I will make friends with anyone including Mike.

Table 4.9: Mode of Interactions of The Typically Developing Pre-adolescent Children with A Peer with Physical Impairment in The Same Class

(cont'd)

Themes	Recurring messages	Examples of relevant interview text
Theme 3: Caring	6. Children give psychological support.	- If she really feels she is useless because she walks too slowly like the handicapped, you can try to console her. - If she finds herself physical impaired and feels lonely, we can try to play with her and accommodate her.
	7. Children are concerned for the physical well-being of the physically impaired peer.	- If she plays too many active games, she will damage her splints. She would have to be absent from school and would affect her study. - If she plays games in which she has to walk up and down the whole day, she might get her legs injured.
	8. Children accommodate the physically impaired peer's physical condition	- When I play with her, say, football, I kick the ball more gently so that it is easier for her to catch. - We can play more hand games so that it would not be too tiring for her legs. - When we are in a race, I walk like a king penguin to let him go first.
Theme 4: Adapting	9. Children are willing to compromise	- If she is really not happy about the game, we may try something we both agree to play with. - If it is too hard to adapt to her, we try some other games which do not make her too tired. - If he can't play those games, we can play some other games which suit him.
	10. Children make themselves available	- We usually have two recess periods. We play with her in one period and with the others in another period. - It's easier for me to move around. I will try to be quicker to suit her.
	11. Children commit to resolving conflicts	- Sometimes she treats us as her maid and says, "Get this for me. Get that for me." I would then say, "What is the matter?" Anyway, we still laugh and talk together. - If you found she was not pleased with you, you could have asked her why she couldn't appreciate that you were busy.

Table 4.9: Mode of Interactions of The Typically Developing Pre-adolescent Children with A Peer with Physical Impairment in The Same Class

(cont'd)

Themes	Recurring messages	Examples of relevant interview text
	12. Children appreciate the physically impaired peer's independence	- Yetta really doesn't like to bother others. She doesn't want to do any harm to those concerned about her. - She doesn't really want too much help. She wants to be a normal person too and can live on her own.
	13. Children advocate physical fitness for the physically impaired peer	- She wouldn't only like to play sedentary games. She'd get bored. - I disagree that Yetta can only play sedentary games. I have heard some doctors said that if she moved her legs more, she'd get better and healthier. - If she plays more active games, she will exercise her legs more. Then she can move around more easily.
Theme 5: Advocacy	14. Children advocate equal rights for the physically impaired peer	- If some students underestimate his ability, I would help him to argue back. - I would tell the others that we are all human beings. Classmates with physical impairment are just born with some defect. What if we were them? If no one plays with us, what would we feel?
	15. Children advocate adaptation for the physically impaired peer	- If you are a class monitor, you should take the initiative to accommodate her because she has problem with her legs. - You shouldn't blame her. - I realize Yetta really needs to be the first because we are all quicker than her. She would be left behind as if no one cared for her.
	16. Children despise teasing the physically impaired peer	- Some of our classmates throw the basketball at her head. I was shocked and feel really sorry for her. - Sometimes I did not see her in any groups. It looked as if no one liked to play with her and I felt that people deliberately despised her.

Table 4.9: Mode of Interactions of The Typically Developing Pre-adolescent Children with A Peer with Physical Impairment in The Same Class

(cont'd)

Themes	Recurring messages	Examples of relevant interview text
Theme 6: Demand	17. Children expect the peer to reciprocate	- I don't agree that we have to make room for her all the time because everyone should have rights. We should treat her like a normal person even if she has some problem with her body. We can't give all our time to her. - He competes with us in playing electronic games and will not hold back like people who have a good relationship with you. - When we offer her help, she may help us in turn if it is possible.
	18. Children expect more independence from the peer.	- I expect our classmate with physical impairment not to ask us to help her with her homework. We might be wrong too. - If there are things she can cope with, she should do them on her own and not rely on others for everything. - I think she needs to learn to be on her own to do things she can cope with because there will not be too many people to help her in the secondary school or university.
Theme 7: Doubting	19. Children show dilemma in playing with the peer	- In fact, she didn't choose Yetta to be her partner to play football in PE. She really wished she has chosen her but she couldn't. - I partly agree not to always compromise and accommodate Yetta but I also agree with the other classmates to accommodate her. I really don't know how to make up my mind.
	20. Children question the ability of the peer to reciprocate.	- Helen gave us the impression that she needed others to help her when she first came to our school. Therefore, if somebody does need help, how come will he ask her for help in turn? He might feel a bit embarrassed. - We don't ask Helen about the homework because the way she does her homework might not be able to solve our problems.

Table 4.10: Intended Interactions of The Typically Developing Pre-adolescent Children with Physically Impaired Peers in The Other Classes

Theme		Recurring messages		Examples of relevant interview text
Theme 1: Care-giving	1.	Children intend to show kindness through offering help.	-	I will definitely pair up with the classmate with physical impairment because people with physical impairment need help.
			-	If the teacher doesn't have time to accompany her to take the lift, we can help her with the stairs.
Theme 2: Accepting	2.	Children see an opportunity for social learning.	-	I think it's not a problem for them to study in our school because we can practise how to get along with people with disability in general studies classes.
	3.	Children accept short term acquaintance with the physically impaired peer.	-	I accept them as we just play for a while. It will be fun to play with normal peers at a time and peers with physical impairment at another time.
	4.	Children regard it a novel experience to interact with the physically impaired peer.	-	I like to play with her because it's rare to meet such kind of person.
Theme 3: Protecting	5.	Children despise teasing behaviour	-	I think he looked down upon the classmate with physical impairment by imitating her walking. This would make her feel as if she could not do anything. Then she would not dare to do anything later on.
			-	The way he copied her walk would hurt her self-esteem.
Theme 5: Avoiding	6.	Children pick the peer with physical impairment as their last option.	-	In case I cannot join in any groups, I don't mind being a partner with the classmate with physical impairment.
			-	If I refuse the classmate with physical impairment, I might be alone.
	7.	Children fear peer blemishing.	-	His movements are weird. Therefore, our class is so unfortunate that other classes laugh at us.
			-	They will laugh at us saying why we have a special classmate. Then they will giggle.
	8.	Children feel uneasy when interacting with the physically impaired peer.	-	We were so scared that we didn't know how to ask her when she passed by.

4.2.3.3.1   Helping Versus Care-giving

The nature of help offered by the typically developing pre-adolescent children to a physically impaired peer in the same class reflected a sequential change; they offered help initially as a natural rather than an affective reaction but later on they showed joy in offering help.   The initial attitude to offer help indicated peer acceptance, and the final stage of helping attitude reflected friendship intentions.   The main element driving this change was the positive affect which arose during the process of offering help.   For example, in the case of a primary 6 boy of School S, the positive affect came from mutual interaction which gave him fun in helping his physically impaired peer in a bean bag throwing competition in a PE class:

> S5/6: 5   *"I found it fun. She threw the bean bags and I picked them up."*

The fun part actually promoted a horizontal relationship between the typically developing pre-adolescent children and their physically impaired peer.   Echoing the transitional nature of the friendship conception at pre-adolescence, the fun part in offering help represented pleasurable "here-and-now" interactions through which the children at this developmental stage partly developed their friendship with peers. Without this positive affect, the helping behaviour became situational and could not be sustained to develop a friendship as the other primary 6 boy in another school admitted that he no longer offered help to his peer with physical impairment because of the change of classroom organisation.

In the case of the typically developing pre-adolescent children with physically

impaired peers in other classes, their intended care-giving behaviour was closer to a spontaneous natural reaction or was duty laden out of their compassionate nature. This may represent the initial motivation in most care-giving behaviour which mainly indicates peer acceptance. In light of the contribution of the positive affect in the helping behaviour for developing a horizontal relationship in friendship intentions, teachers should be aware of the need to avoid inappropriate over-use of the initial motivation in the care-giving behaviour to encourage peer interactions.

4.2.3.3.2   Sharing, Caring and Adapting Versus Accepting

The nature of "sharing", "caring" and "adapting" in the interaction between the children with and without physical impairment in the same class demonstrated a horizontal relationship appropriate to pre-adolescence. In sharing and caring, the children experienced intimacy and reciprocity. The prominent feature of making compromises, accommodation and conflict resolution in adapting behaviour indicated a sustained friendship between the typically developing pre-adolescent children and their physically impaired peers in the same class.   The focus group interviews clearly showed that the children responded with an appreciation of their peers with physical impairment for their capability and pro-social qualities.   This may indicate that a concerted effort between the children with and without physical impairment was the basis of this sustainable friendship development.

The positive friendship intentions of the typically developing pre-adolescent children towards their physically impaired peers in other classes were shown in their readiness to accept the peers. However, the readiness was still precarious as the typically

developing pre-adolescent children viewed the relationship as a transient commitment as shown in the comment, "*I accept them as we just play for a while.*"   The positive sign was that the children showed an interest in the peer with physical impairment (they found it a novel experience to play with them) and saw the need to learn to interact with them (they could practice how to get along with people with disability in general studies classes).   Hence, it provided a good basis for the teachers to implement timely intervention and support for social interaction.

4.2.3.3.3   Advocacy Versus Protecting

The typically developing pre-adolescent children who had a peer with physical impairment in the same class demonstrated a positive cognitive and affective attitude which allowed them to express concern with the peer's physical well-being (such as "*exercise being good for the peer's health*"), the psychological well-being (such as "*the peer would get bored*") and the aspiration (such as "*the peer does not want to bother others too much and ask for too much help*").   With these attitudes, the children proved themselves committed to stand up for their peer (such as "*argue back for the peer when he is being despised*").   The proactive stance of advocacy in these typically developing pre-adolescent children was appropriate in context and indicated an enriched interaction between them and their physically impaired peer in school life.

The typically developing pre-adolescent children with physically impaired peers in other classes demonstrated protection by despising peers' teasing behaviour.   This was apparent as a response of one of the children in the focus group imitating the walking pattern of the peer.   The protection demonstrated in these children is

reactive in contrast to the proactive stance of advocacy. Nevertheless, it was a favourable sign for inclusive education as bullying was not acceptable among the school children.

4.2.3.3.4 Demanding, Doubting Versus Avoiding

In contrast to the interaction mode of "Advocacy", the typically developing pre-adolescent children who expressed "Demand" as the mode of interaction with their peers with physical impairment in the same class demonstrated an expectation of independence and reciprocity on the part of their peers rather than an empathy for the peer's aspiration for independence and reciprocity. This also showed that this group of typically developing pre-adolescent children lacked the knowledge and contextual experience to collaborate with their peers with physical impairment in contrast to the group of typically pre-adolescent children who demonstrated "Advocacy" for their physically impaired peers. The hesitation to interact with their physically impaired peers shown in the "Doubting" mode of interactions for this group of typically pre-adolescent children supported this notion. "Demand" interfered with friendship intentions of the typically developing pre-adolescent children towards the physically impaired peer when the latter was not able to meet the expectation. This interaction mode was restricted to primary 6. In light of the finding in the "Helping" mode of interactions aforementioned, the "Demand" mode of interactions in these primary 6 children also signaled an undesirable prolongation of the initial hierarchical nurturant-and-dependent relationship. As a result these typically developing pre-adolescent children attributed a personality problem to the inability of their peers with physical impairment to reciprocate. This was shown in the following response

of a primary 6 girl of School K.   Such perception could form an irreversible barrier to friendship intentions towards the physically impaired peers:

> K6: 1   *"It's a problem of personality. That is to say she is more dependent. For me, I won't ask for help unless I can't do it myself.   Most of the time I don't like doing things slowly.   I will easily get bored."*

"Demand" did not occur in the typically developing pre-adolescent children with peers with physical impairment in the other classes probably because they could not perceive the ability of the peers and had no expectation.   Instead they demonstrated fear and worry in interacting with the physically impaired peers, which indicated a lack of knowledge of the causes and functioning of peers with physical impairment in context.

4.3   Summary of Phase One Data Analysis

The findings in Phase One Data Analysis were presented in three domains: Domain One on friendship conception of the typically developing pre-adolescent children; Domain Two on the attitude of the typically developing pre-adolescent children towards people with physical impairment; Domain Three on factors influencing the friendship between pre-adolescent children with and without physical impairment.

In Domain One, I identified five themes, namely, *"Clique aspect of friendship", "Social representation of friendship", "Social goal of friendship", "Reciprocity of friendship"* and *"Sustainability of friendship"*.   The findings revealed that the children in the study demonstrated a pro-social and harmonizing attitude towards

friendship as characterized by the Christian ethos on which the three schools are based. Friendship was distinguished by more complex social interactions with voluntary friendship groups or cliques forming and maintaining affective bonding. The selection of peers and the goals to make friends were no longer purely based on the external tangibles but on internal psychological satisfaction which also demanded reciprocity from their peers. In addition to this intimacy of friendship conception, the pleasure derived from "here-and-now" interactions still contributed to some of the friendship development at this transitional stage between childhood and adolescence. The transitional nature of friendship indicated the influence of early peer experience on later friendship development at pre-adolescence. The children also regarded friendship as a sustainable peer relationship. This concept of friendship forms the mutual understanding between me and the children on my inquiry about their friendship intentions towards peers with physical impairment. The findings also reflected a friendship feature unique to the culture of Hong Kong education where academic achievement and discipline are paramount. Children valued the reputation of their peers in academic achievement and conduct, which also reflected their conformity to the adult standard and values. This feature of friendship has positive implications for the social integration of children who are high achievers and compliant in spite of their physical impairment.

In Domain Two, I identified five themes, namely, *"Acceptance of disability from a cognitive perspective"*, *"Acceptance of disability from an affective perspective"*, *"Positive perception formed through looking beyond the impairment"*, *"Negative perception formed through focusing on impairment"* and *"Negative perception*

arising from societal contempt". The findings revealed that the typically developing pre-adolescent children perceived people with disabilities from affective and cognitive perspectives. Adult and social values also played a crucial role in shaping their attitudes towards either the favourable or unfavourable side. They generally held moral beliefs on human rights and equality towards people with disabilities. Those children with a positive affect on people with disabilities demonstrated a more thorough understanding of disability and a richer and positive experience with people with disability in comparison with those children who held a negative affect. Hence, the moral beliefs could be superficial and rhetoric if there was a lack of knowledge of disability and a negative personal experience. The findings also showed that children with a strong personal aspiration to help people with special needs demonstrated a high intention to implement the receptive behaviour.

The typically developing pre-adolescent children's concept of friendship, the feature of peer interactions linked with their developmental stage and factors contributing to their attitude towards people with physical impairment in general provided an insight into the understanding of their friendship intentions towards peers with physical impairment. Domain three elaborated this understanding in three sub-domains: "facilitators for friendship intentions", "barriers to friendship intentions" and "mode of interactions".

I identified the facilitators for friendship intentions in six themes; *"Attuned to peer group's leisure culture", "Gaining admiration through excelling in play and academic areas", "A positive temperament in overcoming the psychological impact of physical disfigurement", "A moral belief on human rights and equality", "A caring nature*

favours a receptive attitude" and *"Knowledge of disability in encouraging positive relationships".* In accordance with the conception of friendship at pre-adolescence, I regarded the friendship intentions of the typically developing pre-adolescent children towards their peers with physical impairment as an attitude and decision of these children to form a peer relationship which exhibited intimacy, reciprocity and sustainability. It was also important to appreciate that peer experiences in early years form the basis of some of the facilitators. The findings also revealed that the typically developing pre-adolescent children, the children with physical impairment and the school as well as parents of the children with physical impairment could contribute to the facilitators for friendship intentions.

In line with the social goals of friendship in the typically developing children, the pro-social qualities of the children with physical impairment, together with their academic achievement and play skills attracted their typically developing peers and enabled them to access their friendship circles, a unique feature of pre-adolescent friendship. The children with physical impairment also demonstrated their striving for independence and full participation in school, even involving physical challenges. This signaled a strong desire on the part of these children for an equal status relationship with their typically developing peers. This is important in establishing an intimate and reciprocal peer relationship which is typical of pre-adolescent friendship.

Consistent with the finding on the attitude towards people with disabilities in general, a compassionate nature and a moral belief on human rights and equality prevailed in the typically developing pre-adolescent children's discourse about the inclusion of

peers with physical impairment. They generally demonstrated empathy for the physically impaired peers but only for those who had a contextual knowledge about their peers' physical impairment showed a strong friendship intention towards these peers. Such knowledge was gained through a timely provision of explanatory and descriptive information about the impairment and an enriched social contact which enabled the typically developing children to appreciate the ability and effort of their physically impaired peers. This knowledge of disability and experience with their peers enhanced their perspective taking ability and helped to develop a more mature empathy. Consequently, their affective response became more appropriate to their physically impaired peers and facilitated a sustainable, intimate and reciprocal friendship to develop.

The schools and teachers together with parents played an influential role in developing the children's empathetic attitude. Without being over-concerned for their safety, teachers and parents who adopted a supportive and non-interfering approach to provide a physically interactive and socially enriched play environment for all children were able to enrich the experience of the typically developing pre-adolescent children with their physically impaired peers. By employing teaching strategies which promoted collaboration in both academic and physical activities and an equal-status role assignment to students, the teachers could facilitate a horizontal relationship between these two groups of children. The findings indicated strongly that an open attitude to the disclosure of information on the causes of disability and the functioning of the children with physical impairment, together with a full participation of the children with physical impairment in physical education and other school life

involving physical activities, formed the basis for empowering the typically developing children with a complete and contextual knowledge of disability. Such empowerment enabled the children to demonstrate better acceptance of their peers with physical impairment and to adopt appropriate accommodations for friendly interactions, hence promoting friendship intentions towards peers with physical impairment.

In the sub-domain on the barriers to friendship intentions, I identified five themes, namely, *"Intrinsic limitations of physical impairment"*, *"Inadequate knowledge of disability"*, *"A sense of inability to face physical impairment"*, *"Social constraints"* and *"Communication failure"*. The findings provided counter evidence in support of the importance of a knowledge of disability, peer interactions of equal status and opportunities for such interactions for facilitating friendship intentions. Neglecting these factors resulted in aggravating attitudinal barriers, which arose from the typically developing pre-adolescent children's focuses on the salient disability apparently presented by physical impairment. The findings also underlined the potential harm of a partial and untimely provision of non-contextual knowledge of disability. This lack of knowledge of disability and opportunities for interaction, especially involving physical demands, led to a sense of inability of the typically developing pre-adolescent children to handle the physical impairment of the peer. In Physical Education, the concept of segregation was unintentionally instilled by the teacher's use of substitute activities or assistants as a teaching strategy to include children with physical impairment. The dual education system accentuated this situation and reinforced the tendency of the typically developing pre-adolescent

children to perceive their physically impaired peers as being different instead of similar to themselves. Their apparent inability to face physical impairment reinforcing this segregation deterred the typically developing pre-adolescent children from befriending their peers with physical impairment. Paradoxically, despite their sense of inability to face physical impairment, the typically developing pre-adolescent children perceived peers with physical impairment being recipients of help. The findings indicated that prolonging the nurturant-and-dependent relationship between children with and without physical impairment to pre-adolescence hampered the friendship intentions of the former towards the latter.

In the sub-domain on the mode of interactions between the pre-adolescent children with and without physical impairment, I analysed the characteristics of interaction for the children with a physically impaired peer in the same class and in the other classes separately. The purpose of performing the analysis in such a way was to substantiate my understanding of the friendship intentions of the typically developing children towards peers with physical impairment in the preceding domains. The analysis also assisted me to differentiate "peer acceptance" and genuine "friendship intentions" in the children's discourse.

I identified five themes which described the interactions leading to positive friendship intentions for the typically developing pre-adolescent children with a physically impaired peer in the same class. The themes included *"Helping", "Sharing", "Caring", "Adapting"* and *"Advocacy"*. The other group of typically developing pre-adolescent children who had physically impaired peers in the other classes demonstrated less complex mode of positive interactions which I categorised into

three themes, namely, *"Care-giving", "Accepting"* and *"Protecting"*. The mode of these positive interactions for these two groups of typically developing pre-adolescent children with their physically impaired peers differed in nature.

The typically developing pre-adolescent children who had a peer with physical impairment in the same class demonstrated cognitive and affective attitudes positively leading to a strong motivation for positive interactions. The "*helping*", "*caring*", "*sharing*" and "*adapting*" mode of interactions in these children presented a prominent feature of mutual and equal-status interactions leading to a horizontal relationship. The pleasure or positive affect during these interactions was important in driving the potentially hierarchical relationship as shown in the initial helping behaviour to a horizontal relationship in favour of an age-appropriate friendship development. Intimacy and reciprocity was then cultivated on the basis of this horizontal relationship as shown in the "*caring*" and "*sharing*" mode of interactions. Sustainability of friendship was established through the willingness to compromise, accommodate and resolve conflicts between the children with and without physical impairment as shown in the "*adapting*" mode of interaction. The friendship was shown to be consolidated by the pro-active stand of the typically developing pre-adolescent children in advocating for their physically impaired peers' physical and psychological needs, and ultimately their right and dignity. Throughout these positive interactions, the children articulated their viewpoints or experiences in context indicating an enriched interaction between them and their physically impaired peer in school life. They also expressed an appreciation of the capability and a pro-social quality of their peers with physical impairment, indicating a mutual effort

in actualizing their friendship. All in all, the pleasure or positive affect in the interactions right from the beginning, the enriched interactions in school life and the mutual effort for friendly interactions contributed to the features of the mode of interactions, leading to positive friendship intentions in this group of pre-adolescent children with physically impaired peers in the same class.

The nature of the positive intended interactions of "*care-giving*", "*accepting*" and "*protecting*" for the group of typically pre-adolescent children with physically impaired peers in other classes was basically a result of their compassionate nature and their moral beliefs on human rights. Their intended interactions demonstrated a hierarchical property with a nurturant-and-dependent relationship as shown in their motives of offering help and I used "*care-giving*" in this group of children to differentiate it from the more equal status nature in offering help in the group with physically impaired peers in the same class. The positive intent shown in "*care-giving*" mainly indicated peer acceptance. Their readiness to accept the physically impaired peers was to a certain degree precarious, as shown in their anticipated situational and transient interactions with the physically impaired peers. This peer acceptance was far from friendship intentions defined by the friendship conception at pre-adolescence. Nevertheless, the prospect for friendship development was positive with the interest they showed in their physically impaired peers and their concern for learning to get along with them, while showing contempt for teasing behaviour towards the physically impaired peers.

The contrast in the nature of positive interactions in these two groups of typically developing pre-adolescent children provided an insight into the understanding of the

mode of interactions indicating negative friendship intentions. "*Demand*" and "*Doubting*" mode of interactions were identified in the typically developing pre-adolescent children with physically impaired peers in the same class. These interaction modes revealed a less mature form of empathy in these typically developing pre-adolescent children leading to misconceptions about their peers' physical impairment. The lack of knowledge and contextual experience in collaborating with the physically impaired peers together with the prolonged hierarchical relationship in offering help were attributed to the underlying causes of these modes of interactions. It also demonstrated that peer acceptance in the initial peer interaction did not necessarily develop into positive friendship intentions. The need to differentiate between "peer acceptance" and "friendship intentions" in studies of social inclusion (e.g. Johnston, 1995; Fisher, Pumpian and Sax, 1998) is supported.

The group of typically developing pre-adolescent children with physically impaired peers in the other classes demonstrated an "*Avoiding*" mode of intended interactions which may hinder friendship intentions. Similarly, the worry and fear of these children shown in this mode of intended interactions with physically impaired peers revealed an inadequate knowledge of physical impairment, its causes and functioning. All in all, the mode of interactions leading to negative friendship intentions in these two groups of typically developing pre-adolescent children suggest a need for timely intervention, so as not to destroy the compassionate nature and the moral beliefs which most of these children possessed during their initial contact with peers with physical impairment.

4.4 Phase Two of the Data Analysis: Communicating My Ideas

In this phase of data analysis, I organised the themes developed in the first phase of data analysis into overarching themes, called theoretical constructs, which were linked to my conceptual framework of friendship intentions. I retold the stories of two children with physical impairment in my sample, Yetta and Helen, to communicate my ideas to the reader based on the theoretical constructs. The stories, called the theoretical narratives, also served to verify my findings.

4.4.1 Theoretical Construct

In my conceptual framework, I attempted to bring together the two lines of studies on social inclusion of children with physical impairment in inclusive education, one on attitude of acceptance and one on conception of friendship. The emphasis of my conceptual framework was on the interplay between these elements. Hence, I combined the themes of the three domains to develop my four theoretical constructs: Physical Attribute, Social Attribute, Empathetic Attribute, and Cognitive Attribute. The facilitating or impeding effect of these attributes is a result of the interactions between the components "conception of friendship" and "attitude of acceptance". When the two components are congruent, a facilitating effect is the result. Impeding effect results when the opposite occurs. Figure 4.1 shows how they fitted into my final integrated conceptual framework of friendship intentions.

Figure 4.1 Integrated Conceptual Framework of Friendship Intentions
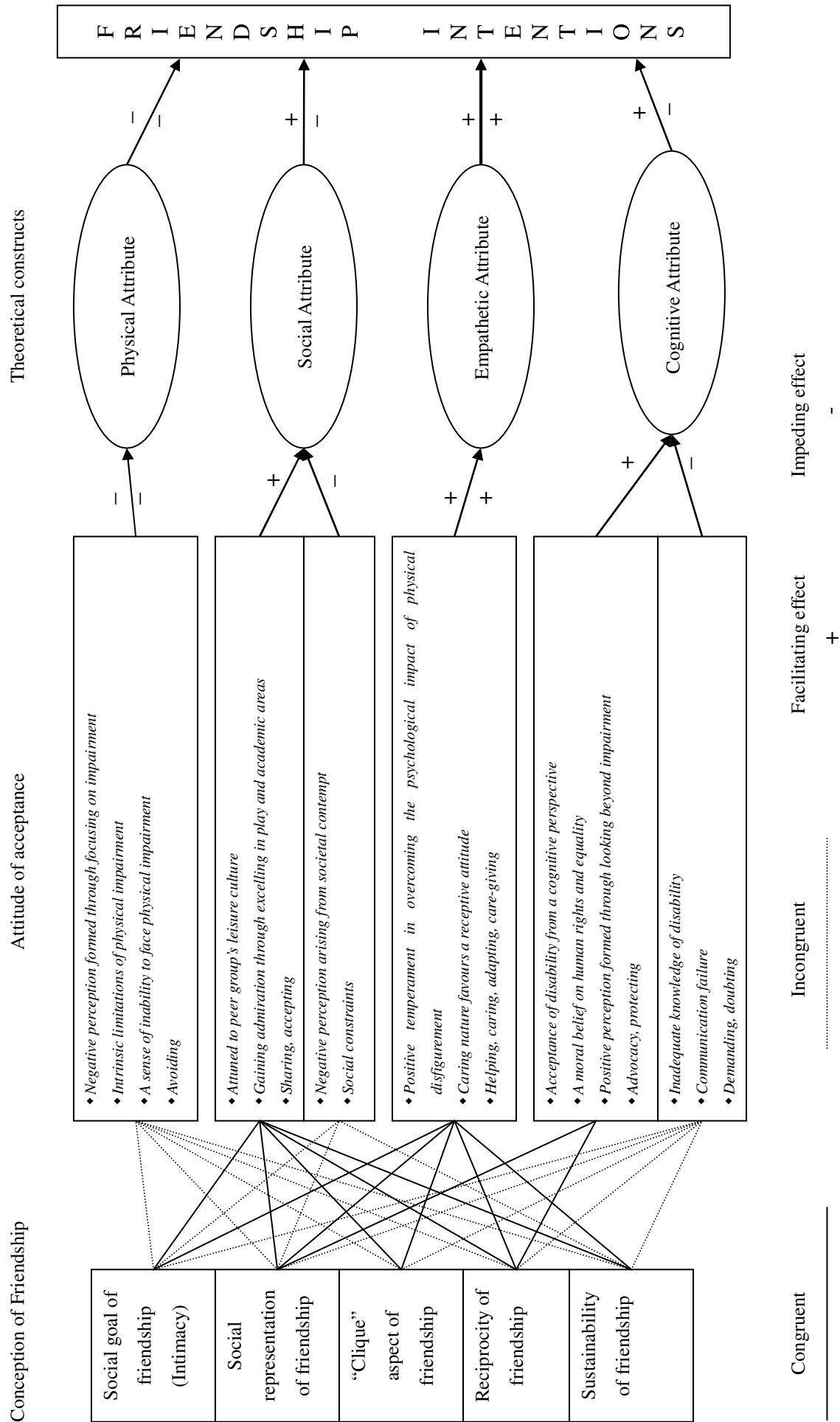
The premise underlying Physical Attribute is the focus on the salient external feature of physical impairment. In comparison to the other types of SEN, children with physical impairment inevitably present an observable debilitating trait as the first impression of their typically developing peers, and challenges to the physical environment. The themes under Physical Attribute depict a negative impression and perceived incompetence as a result of the unfamiliarity and uncertainty of the physical impact. Such reaction is incompatible with the conception of friendship and becomes the first line of barrier to friendship intentions by impeding the initial contact between children with and without physical impairment.

Social Attribute contributes to friendship intentions in two opposing directions. It acts as a facilitator by breaking through the first line of barrier (i.e. Physical Attribute) on the part of i) the physically impaired children in initiating contact in accordance with age-appropriate friendship conception and the children's leisure culture; ii) the typically developing children in experiencing life with physically impaired peers beyond their physical limitation; and iii) the school in creating opportunities for both groups of children to cross over the first line of barrier. Conversely, Social Attribute can become a barrier to friendship intentions by not only ignoring the above but also reinforcing the first line of barrier through detesting physical impairment as shown in societal contempt and social constraints. Hence, Social Attribute can become the second line of barrier to friendship intentions by presenting a poor social representation and disrupting the natural course of friendship development.

The positive affect is the main constituent of Empathetic Attribute which becomes a

strong facilitator of friendship intentions. The positive affect is grounded in the children's life experience compatible with their social maturation as shown in its congruence with the conception of friendship. The positive affect is nurtured in the cooperative culture of the school. The friendship intentions thus formed are likely to develop into genuine sustainable friendship. Hence, Empathetic Attribute can be a powerful facilitator to break through the first and second line of barrier.

Cognitive Attribute contributes to friendship intentions in two opposing directions. A knowledge of disability with explanatory and descriptive information in context is the central core of the positive side of Cognitive Attribute. In order to facilitate friendship intentions, the information on disability should not only be delivered adequately and appropriately in terms of time and content but also has to be congruent with the conception of friendship at the children's developmental stage. Ignoring the above can cause misunderstanding as shown in communication failure.

It is important, if not vital, to stress the interconnection between the four attributes. For example, the positive side of Cognitive Attribute in association with Empathetic Attribute provides favourable ground for the positive side of Social Attribute. At the same time the positive side of Social Attribute especially on the part of teachers contribute to the development of Empathetic Attribute and the positive side of Cognitive Attribute such as in establishing equal status relationship (enhancing reciprocity of friendship) between children with and without physical impairment and in ameliorating the negative impact of Physical Attribute. The overall facilitating effect of these three attributes to friendship intentions enables the typically developing

pre-adolescent children not only to interact with their physically impaired peers but also to develop a mature empathy so as to be an advocate for their peers as demonstrated in the analysis of their mode of interactions. Ignoring any of the three attributes and their interconnection, the negative effect of Physical Attribute can be aggravated and in turn reinforces the negative side of Social and Cognitive Attribute. The typically developing pre-adolescent children thus not only show a low motivation to befriend their physically impaired peers but also demonstrate a demanding attitude towards them as shown in the analysis of their mode of interactions. I concluded the findings with theoretical narratives of two physically impaired children in the study to illustrate these two opposite situations.

4.4.2   Theoretical Narratives

Yetta and Helen were two subjects included in my sample of children with physical impairment and their schoolmates were included in my sample of typically developing children. Yetta was satisfied with her social inclusion in her interview and her typical schoolmates revealed enjoyment in making friends with her. Helen expressed negative feelings about her social experience in school and her schoolmates revealed a certain level of misunderstanding and hesitation in interacting with her.

4.4.2.1   A Success Story

Yetta was a primary 4 student. She had spina bifida which rendered her with partial paralysis of her legs and difficulty in bladder and bowel management. She required

a pair of foot orthoses and a trunk corset for her walking and body alignment. Her appearance aroused a mixed feeling of fear and curiosity in her schoolmates during the early school days (Physical Attribute: "*When I was in primary one, she sat behind me. She looked weird to me. I always wondered why she had to sit on a special chair. And there was something hanging on her legs. Her appearance was so odd that I suspected she was one of those special students. I dared not talk to her.*" "*When I was in primary one, I felt sorry for her but I dared not ask her anything. I was afraid I would hurt her psychologically.*"). Yetta's physical impairment also posed challenges to the school routine (Physical Attribute: "*Yetta needs to go to the toilet during lunch. We usually have already started eating when she returns.*"). The school launched a disability awareness programme before there was any adverse effect on friendship intentions arising from Physical Attribute (positive side of Cognitive Attribute: "*In primary two, our teacher told us she had problems with her spine and took us to visit her special centre where she used to have physiotherapy. We tried some of her training on ourselves. We found it very tiring and hard. Yetta had problems with her body and she must have found it harder.*"). The school also adopted cooperative learning strategies to encourage peer interactions (positive side of Social Attribute: "*There are games we can play with Yetta together in PE classes and we do project together in other classes.*"). At recess, the school organised play corners with a variety of supervised and self-initiated games to suit the diverse abilities and interest of children (positive side of Social Attribute reinforcing Empathetic Attribute: "*When I played with Yetta for the first time, I found her very cooperative and enthusiastic. It's enjoyable to play with her.*" "*We play finger-guessing game with Yetta. She is very good at it. It's fun to play with her.*"). The natural peer interactions during play right from the early school days created a positive affect on the typically developing children towards Yetta and at the same time allowed Yetta to demonstrate her virtues which aroused her peers' attention to her needs (positive side Cognitive Attribute: "*She walks a bit more slowly than we do. At one time, she had to climb stairs at recess and she was a flight behind us. The boys were pushing. I understand why the teacher let her be the first and she really needs to be the first.*"). This encouraged more

spontaneous interactions between Yetta and her typically developing peers (positive side of Social Attribute: "*Once, some of us tried to design a game so that Yetta could play with us. She enjoyed the game and whenever she had time, we played the game again. It's good for her too because she could have some sunshine in the playground and got Vitamin D.*" "*We have a game that we need to stretch our legs apart. Once, Yetta wanted to join us. We let her in and gave her some allowance. She needed not stretch as far apart as we did.*"), and promoted understanding and mature empathy from her typically developing peers to break through the barrier arising from Physical Attribute (positive side of Cognitive Attribute: "*When I knew her better, I found she was kind and cheerful. Although she has some impairment, she doesn't mind and continues to live happily.*" "*I realized her appearance is unimportant. I have to look at her inner attitude. I have learnt that by now.*" Empathetic Attribute: "*She forgave so many people; she has a very nice personality.*" "*She is brave; she is my idol!*"). The typically developing children showed a high friendship intention towards Yetta and were likely to maintain it as shown in i) their concern for her well-being ("*I don't agree that Yetta should play sedentary games only. I read a book about exercises making muscles stronger. She will become healthier and needs not see the doctor so often.*"), ii) the horizontal relationship ("*Although Yetta said the game was not suitable for her, she was willing to accommodate us when we asked her to play.*"), and iii) standing in her perception ("*Yetta doesn't want to bother others…She doesn't really want you to help her too much. She wants to live on her own like a normal person.*").

4.4.2.2   A Less Satisfactory Story

Helen was in primary 5. She had cerebral palsy which resulted in spasticity in both legs and some clumsiness of the left hand. She walked with a pair of crutches. She was transferred from a special school for physically disabled children to a mainstream primary school on her parents' choice. Her first two years in school were uneventful as her mother was asked by the school principal to station herself in the

school in order to escort her to the toilet or to different classrooms (negative side of Social Attribute failed to avoid Physical Attribute).   The PE teacher tried to accommodate her in PE classes by providing her with substitute activities (negative side of Social Attribute: "*In primary two and three, the teacher bought some toys, like bowling or basketball from ToyRus for me to play with in PE classes... In primary four, when the teacher taught us some sports, I was given some simple games like bouncing a basketball alone while the others were playing the basketball. My classmates didn't know that I knew how to play the wheelchair basketball.*"), which unintentionally undermined Helen's ability.   The school made an effort to encourage peer acceptance by providing knowledge of disability which, however, was partial and unrelated to children's daily experience (negative side of Cognitive Attribute: "*I remember some years ago somebody came to our school to show us video of some disabled children.*" "*I remembered very clearly Helen's got cerebral palsy because she wore spectacles when she came to our school.*").   The school also encouraged a caring attitude towards peers with special needs but unintentionally instilled a vertical relationship (negative side of Cognitive Attribute: "*Helen gave us the impression that she needed help when she first came to our school. Therefore, if somebody does need help, how could he ask her for help on the contrary? He might feel a bit embarrassed. She has special needs but you ask her for help. It appears that you want to take something back from her. It seems odd.*"), which disrupted the natural course of age-appropriate friendship development.   The vertical relationship impeded friendship intentions of the typically developing peers towards Helen and adversely aggravated Physical Attribute (Helen's reflection: "*They didn't invite me to join their games probably because they found I couldn't walk fast enough with the crutches and I couldn't play well.*" "*No one asked me to join their group for school projects probably they thought I was slow. I had to persuade them.*") and created a misconception in the long run (negative side of Cognitive Attribute: "*If there were things Helen could cope with, she should do them on her own and not relied on others. Otherwise it seems that you just say 'thank you' and expect people to do everything for you.*").   Without an enriched contact in school life, Helen's typically developing peers failed to appreciate her virtues (Empathetic Attribute not activated: Helen's reflection: "*I tried to show my concern for them like giving an encouragement card to those who were ill and birthday*

cards on their birthdays…But some of them didn't say anything in turn""I helped them with homework whoever asked me for help" but her peer reflected, *"There seems to be something blocking… Whenever I need to ask for help in homework, I seldom think of Helen before I approach other classmates."*). Helen's social experience in school in turn hampered her motivation to make friends (negative side of Social Attribute: Helen's reflection: *"I wish to graduate from the primary school as soon as I can."* and friendship was the lowest priority she indicated in the rating of different aspects of school life.) while her peers assuming that being helpful was a gesture of good relationship with her (*"Our whole class didn't have any opinion on her; we always helped her, say, to escort her to the lift or pick up anything she has dropped."*). The interaction between Helen and her typically developing peers was at best demonstrating peer acceptance of her peers and not friendship intentions towards her at pre-adolescence stage.

CHAPTER FIVE: DISCUSSION

5.1 On Key Findings

The purpose of the study was to investigate the supporting and limiting mechanisms to friendship formation between pre-adolescent children with and without physical impairment by gaining an in-depth understanding of friendship intentions of typically developing children towards their physically impaired peers in local mainstream primary schools.   The study also served as i) an attempt to draw from previous research on children's attitude towards disabilities and friendships to develop an integrated conceptual framework of friendship intentions; and ii) a response to the paucity of the local literature on peer relations in inclusive education.   In the summary of Phase One of the Data Analysis and the Theoretical Narratives of Phase Two of Data Analysis, I summarized and discussed the significant findings.   In the subsequent discussion, I will focus on the substantiation of previous research and the implications of the findings for the local inclusive education with respect to social inclusion.

5.1.1   Substantiation of Previous Research

Findings of the present study suggested that by examining attitudes towards disability alone was not adequate to understand the typically developing children's intention to befriend physically impaired peers.   In general, the typically developing children presented a negative perception of physical impairment in their initial encounters with

their physically impaired peers.   This seems to be in line with findings in quantitative studies which generally reveal a negative bias in children's attitudes towards individuals with disabilities though some discrepancies exist (Nowick and Sandieson, 2002).   However, further analysis of the children's discourse revealed that a negative perception was not necessarily an indication of rejection.   It only evolved into a barrier to friendship intentions when the anticipated or direct experience with peers with physical impairment differed from the children's conception of friendship as was shown in the Physical Attribute.   Indeed, the negative impact of physical impairment on the typically developing children's perception can be a starting point for friendship by drawing the typically developing children's attention to the child with physical impairment.   When appropriate interventions can capture this opportunity to facilitate peer experience which is congruent with the conception of friendship, a high friendship intention towards the peer with physical impairment can be developed in the typically developing children as in the case of Yetta.

Conversely, a positive perception of physical impairment does not necessarily indicate friendship intentions as demonstrated in the Cognitive Attribute; for example, when the anticipated or direct peer experience does not meet the expectation of reciprocity, a positive friendship intention may not develop even though the typically developing children hold a moral belief on human rights and equality about peers with physical impairment.   These findings might explain the self-contradictory findings between scores in a standardized measure of children's attitudes towards disability and their verbal responses to an open question related to their friendship intentions in Nikolarzizi, et al.'s study (2005) discussed in the introductory chapter.

After reviewing Tripp, French and Sherrill's study (1995), Nowick and Sandieson (2002) postulated that there might be a relation between the children's attitude towards individuals with disabilities and the nature of the assessment context such that children may be willing to express positive attitudes towards a target child with a physical disability with regard to academic activities but not gross and/or fine motor tasks. Their postulation appears to share some similarities with the findings in the present study. However, the postulation is task-focused and misses the main essence of peer interactions, the relational aspect, which is represented by the friendship conception component in the present study. Indeed, the Empathetic Attribute exerts a strong facilitating effect on friendship intentions. Hence, the pivotal point is the type and characteristics of contacts at the interpersonal level rather than the setting effect (a segregating model or various types of inclusive practice) which is often the focus of comparison in large scale survey studies (e.g. Buysse, Goldman and Skinner, 2002; Heiman, 2000). The idea of exploring friendship conception alongside the attitude of acceptance in the present study is supported.

Findings of the present study also support a multi-dimension model of attitude structure as shown in Nowick's study (2005) but with a different focus. Although quantitative studies on attitudes may demonstrate that the various components of attitude present are of differing importance in predicting behaviour, findings of the present study seem to suggest that there is hardly any such universal stable relationship, at least, in regard to children's friendship intentions. The evidence shown in the children's discourse supports my contention that the strength of different components of attitude depends on how they are formed. The resolution of the

conflict between different components, if existing, depends on the anticipated or direct peer experience and other social inputs that can reinforce the different components so as to determine behavioural intentions. This is demonstrated by comparing the process of attitude change in Helen's and Yetta's peers.

In Helen's case, her typically developing peers had a positive cognitive component of attitude formation from their moral belief on human rights and equality and acceptance of disability as a result of the explicit knowledge on disability they gained from disability awareness talks which were unrelated to their daily experience. Their positive attitude towards individuals with disability was then superficial in regard to the cognitive component. Some of them also held a negative affective component of attitude from their impression and indirect contact with disabled individuals. This was also weak as the affect was remote. However, the accommodation and support that the school provided for Helen imposed a disabling concept of physical impairment which reinforced the affective component negatively and weakened the positive cognitive component. The affective component then seemed to determine these peers' friendship intentions.

However, in Yetta's case, her peers held a strong negative affective component initially from the impact of her unusual appearance. Similar to Helen's peers, at that time, they also held a positive cognitive component towards disability which was superficial. Nevertheless, the school practice to include Yetta cultivated an "abling" concept of physical impairment in her typically developing peers. The children's positive cognitive component was then substantiated with life information and the

negative affective component was reverted to the positive side. Both cognitive and affective components of attitude became strong determinants of their friendship intentions towards their physically impaired peer.

The focus of discussion in these illustrations is not to make comparisons between different approaches to inclusive support but to suggest that it might be futile to quantify the different components of attitude for the purpose of predicting friendship intentions. As the attitude of acceptance seems to relate to the conception of friendship, I propose that an investigation of the nature of the interrelation between these attitudes and friendship conception, and the relative importance of different features of friendship conception to the attitude of acceptance might be a relevant direction for future quantitative research involving children with and without disabilities.

In the case of friendship research, findings of the present study showed that intimacy, reciprocity, sustainability and clique membership characterized the friendship features of the typically developing pre-adolescent children, which is consistent with the literature of the development on peer relationship. Besides being a maturation process, the friendship conception also reflected the typical socio-cultural influence in which the typically developing children had a high regard for peers with academic excellence and good discipline. The feature "Social representation of friendship" was added to the conception of friendship. This finding is pertinent for understanding whether the attitude of the typically developing children is towards the disability or towards the peer in particular. The implication is particularly relevant to

a cross-cultural examination of children's attitudes towards peers with disabilities for understanding friendship intentions (e.g. Laws and Kelly, 2005; Nikolaraize, et al., 2005) which does not often take into consideration this aspect of friendship.

Findings of the present study also showed that both the typically developing children and the children with physical impairment took into account the characteristics of friendship features when making friends. This finding seems to differ from previous studies which show that typically developing children have a lower friendship expectation from children with disabilities (e.g. Lee, Yoo and Bak, 2003; Han and Chadsey, 2004) but these studies focus on intellectual impairment or severe disability. Research on friendships between children with and without disabilities also demonstrates that the types of education setting are significant for friendship qualities and friendship expectations between these children (e.g. Buysee, Goldman and Skinner, 2002; and Lee, Yoo and Bak, 2003).

In the present study, I adopted purposeful sampling with selection criteria so that the typically developing pre-adolescent children had varied exposure to peers with physical impairment. This arrangement could resemble the setting effect with children having a physically impaired peer in the same class or in the other classes as two different settings. In actual fact, this assumption can be challenged because the children could have had a peer with physical impairment in previous year groups; the student grouping practice in local schools usually encourages regrouping of students in subsequent grade levels. However, interestingly, the responses of the typically developing children with and without physically impaired peers in the same class

generally differed irrespective of whether their responses were positive or negative. This phenomenon warrants further investigation what role previous peer experience can play and may also indicate a need for longitudinal vigilance in regard to the social inclusion of children with physical impairment and other disabilities.

The attempt of the present study to integrate the conception of friendship and attitude of acceptance into a unified framework for the understanding of friendship intentions is novel and some findings are still precarious and warrant further examination. In particular, the relations between different features of friendship conception and attitude of acceptance need further validation.

5.1.2   Implications for Local Inclusive Education

There are several implications of the current findings for the local situation that deserve attention. Specifically, they relate to the culture of the local schools and society at large.

Firstly, the conception of disability as a taboo topic prevents an open attitude to the disclosure of the information about disability. This can inhibit a natural peer interaction in daily encounters, for example, interpreting a normal gaze as staring and implying discrimination by both parties. It further discourages an understanding of the actual difficulties rendered by specific disability conditions.   Without adequate disability-specific knowledge, the deterioration of coping ability of children with physical impairment in mainstream setting can be misinterpreted by the typically

developing peers and even by the teachers as a behavioural or personality problem as in the case of Helen.

In contrast, in some inclusive practice, a non-labeling principle is advocated to avoid stigmatization and is generally advocated by local mainstream teachers (Spastics Association of Hong Kong, 2006). The non-labeling practice has been criticized for being an extreme interpretation of the social model of disability which "*sees disability, by contrast with impairment, as something imposed on disabled people by oppressive and discriminating social and institutional structures*" (Terzi, 2005, p. 201). Advocates of the non-labeling principle believe that by scrapping all medical labels employed in the bio-medical model of disability or by replacing them with general terms, stigma and stereotypical perceptions of people with disabilities are lessened. It is considered to promote "sameness" among children and hence better peer acceptance (Ho, 2004). Can this argument be strictly applied to conditions with overt features like physical impairment and disfigurement? In the present study, the reactions of some typically developing children in their initial encounters with their physically impaired peers seem to suggest otherwise. The analysis of findings also reveals that the negative side of Cognitive and Social Attributes arises largely from the lack of explanatory and descriptive information about disability. A recent official survey on public awareness and attitudes towards developmental disabilities (Census and Statistical Department, 2007) has provided evidence for this general lack of knowledge related to physical disabilities: less than 50% of the eight thousand and ninety-six households interviewed had heard about cerebral palsy which is one of the common developmental disabilities with significant physical impairment. With this

general lack of disability knowledge, it is believed that the non-labeling practice is simply an alternative presentation of the taboo culture.

Based on Attribution Theory, Weiner (1993) argues that with the provision of medical or causal information about disability, the person with the disability is perceived to be less responsible for the stigma and hence elicited sympathy from the others. A huge literature documents that sympathy increases pro-social behaviours (Hoffman, 2000). During the interviews, the majority of the typically developing children showed curiosity and interest to know about the causes of their peers' physical impairment for the purpose of understanding their peers better and providing physical and psychological help more appropriately. This finding supports Weiner's argument. However, to disclosing a taboo subject requires more than the provision of information as evidenced by the paradox in public health education which conversely portrays people with disabilities in a stigmatizing way (Wang, 1998). The contrasting peer experiences of Yetta and Helen reveals that by making the physical impairment explicit and yet not special, the teacher, the child and his or her typically developing peers can contribute to a full school life and friendship develops.

The second implication relates to the dual education system in Hong Kong. Although the majority of the typically developing children held a moral belief on human rights and equality concerning the education entitlement of children with physical impairment, they anticipated that their peers would be unable to participate fully in the school curriculum and even accepted exclusion. Some further recommended special schools for the sake of protection from discrimination. The

differentiation of education entitlement based on the level of disability required more effort from the children with physical impairment to demonstrate that they are more similar than different from their typically developing peers. Homophily is recognised as a determining factor in children's friendship choices (McPherson, Smith-Lovin, and Cook, 2001). Children tend to make friends with peers who share commonalities in personal traits. External features such as appearance, gender and age are predominant pre-requisites in children's friendship preference (de Guzma, et al., 2004; Drewry and Clark, 1984). Without being able to change their external features, children with physical impairment have to 'break through' interpersonal relations to the point where their typically developing peers begin to react to personal characteristics other than disability.

This need was overwhelming in the responses of the children with physical impairment in the present study as demonstrated in their drive to cope with physical barriers independently, to excel academically, be disciplined and tolerate teasing at times to build up an image of a good student. Some succeeded in their peer relations like Yetta and Mike while some failed like Helen. This situation raises concern not simply for the tension created in the children but the vicious circle specific to the general school culture in Hong Kong: the physically impaired children's effort to be good students may cover up their social needs which are of less concern in the highly academic orientation in the education system of Hong Kong. While debates on the pros and cons of a dual education system compared with a unitary inclusive education practice are yet to be concluded, the concern on social inclusion in this discussion is not on supporting either side. I contend that the social inclusion of children with

physical impairment can be achieved to a fuller extent when the effort of the physically impaired children and the positive effect coming from the moral belief held by the typically developing children are promoted within the present education context.

Finally, the marginalization of physical education within the local curriculum structure is unfavourable to the social inclusion of children with physical impairment. This view finds expression in some typically developing children's conception of physical education being optional and an acceptance of exclusion as illustrated in such responses, "*They can just watch in PE classes; PE is just entertainment. It's just something extra.*"; "*I don't think they get bored if they cannot attend PE classes; I suppose they should have got used to it. Anyway, they have to be concerned about their own safety.*" The apparently arbitrary accommodation made in physical education made for children with physical impairment as reflected in the present study seems to echo the suggestion that physical education "*loses out in the competition for curriculum status and resources*" (Johns and Dimmock, 1999, p.381). Johns and Dimmock remark that the marginalization of physical education in Hong Kong is influenced by the "*elevated sense of academic scholarship*" embedded in the Chinese culture and it has not been changed much even after the curriculum reform initiated in 2000 (Johns, 2002).

In the case of inclusive education, there is often less concern from both schools and parents about the physically impaired children's programme in physical education than about the safety and access within the school environment as illustrated in the

children's responses.   There is also the suggestion that the 'ableist' notions overwhelm the very foundations of physical education and sport and "*at the very least are unhelpful to those young people who do not neatly fit into this restricted understanding of physicality*" (Barton, 1993 cited in Fitzgerald, Jobling and Kirk, 2003, p.124.).   In this sense, by excluding children with physical impairment from physical education classes or by employing substitute activities, it is going to further alienate these children and accentuate the Physical Attribute.   It results in increasing the barrier to friendship intentions.   The recurrent message on the importance of their full participation in physical education classes for their social integration expressed by the physically impaired children in their interviews is not without justification.   Their self-advocacy was grounded not simply on the fun they could share with their typically developing peers but the effort they could demonstrate to their typically developing counterpart for cultivating a positive perception.

Alternatively, based on the Cognitive Attribute, full participation also reveals their limitations which can promote understanding of disability and hence acceptance of diversity if appropriate strategies are adopted.   Examples include the suggestion of "*equalizing the playing field by having everyone play wheelchair or chair basketball*" (Pivik, McComas and Laflamme, 2002, p.103) and the concept of Unified Sports in which similar numbers of able and disabled athletes join as partners in sports teams for training and competition (Townsend and Hassall, 2007).   Additionally, the fun element which is inherent in physical education is a powerful catalyst in the Empathetic Attribute as demonstrated in the interactions of some children in the present study.   The success of Yetta in her peer relationships is in line with Bailey's

(2000) idea that a quality physical education programme has a powerful effect upon self-esteem, confidence and peer acceptance.

While curriculum reform and cultural change are complex issues yet to be resolved within the inclusive education context, the focus of the above discussion is not on arguing against any possible negligence but for widening the perspective in including children with physical impairment: inclusive physical education for these children can offer not only social benefits but also promote an inclusive culture which celebrates diversity. Ironically, I contend that the marginalization of physical education relieves PE teachers from the pressure of a packed curriculum and enables them to experiment with different strategies if the endeavour of the physically impaired children to face their physical challenges is not overlooked.

In general, the pro-social and compliant nature which the children in the present study have demonstrated present favourable ground for any interventions and preventive measures to break away from the cultural limitations presented in the preceding discussion.

5.2 On Ethical Issues

The children expressed diverse opinions on their perception of disabilities, their judgment on the abilities of peers with physical impairment and their experience with peers with physical impairment. This suggested that the children were unlikely to show peer influence or social desirability in the focus group interviews. However,

after the interviews, there was still concern of arousing negative psychological consequence in the children especially related to the perception of their physically impaired peers and the self perception of the physically impaired children. This issue was dealt with by a presentation of a short disability awareness program at the end of each focus group interview. In the case of telephone interviews for the three children with physical impairment, a verbal description of the storyline of the video was presented and a brief discussion on the story followed. Both groups of children reacted positively to the programme. The typically developing pre-adolescent children were again asked to choose from the list of descriptors their impression of people with physical impairment (appendix 3.5) as a check on any adverse effect of the interviews on their perception. In comparing their choices with those in the beginning of the interviews, there was a marked shift from a negative to a positive description as shown in Table 5.1. A similar procedure was carried out for the physically impaired children and there was no change.

Table 5.1 Impression of People with Physical Impairment – A Comparison

Frequency of choices of descriptors on people with physical impairment	
Beginning of focus group interview **(in decreasing order)**	**End of focus group interview** **(in decreasing order)**
1. Unhappy	1. Normal
2. Kind	2. Kind
3. Poor, Brave	3. Happy
4. Optimistic`	4. Brave, Optimistic
5. Cowardly	5. Confident, Pessimistic
6. Normal	6. Unhappy
7. Pessimistic	7. Poor, Feel inferior
8. Happy	8. Cowardly
9. Feel inferior	9. Rich
10. Confident	10. Ugly
11. Ugly	11. Fierce
12. Rich	
13. Fierce	
Ratio of positive descriptors to negative descriptors	
Beginning of focus group interview	**End of focus group interview**
16 : 14	18 : 10

Although it was unclear whether the positive shift in the typically developing pre-adolescent children's choices was due to the discourse in the interviews or the influence of the disability awareness programme, it was certain that an adverse impact on perception of disability did not exist.

CHAPTER SIX   CONCLUSION

6.1   Summary of Key Findings

The present study investigated typically developing pre-adolescent children's friendship intentions towards peers with physical impairment by examining i) how they perceive and understand disabilities, and the way it influences their friendship intentions towards peers with physical impairment; and ii) their friendship conception and the way it relates to the friendship intentions.   Based on the interpretive paradigm, a qualitative approach was adopted in the investigation and an integrated conceptual framework of friendship intentions was developed for interpreting the findings.

Findings reveal that children's attitudes towards disabilities are greatly influenced by the external features of the disabilities but can be well modified through their social contacts with the peer.   The social contacts can be meaningful and facilitate friendship intentions when they provide experience and information which matches their friendship conception at their developmental stage and enhance their understanding of the disability in a life context, specifically, physical education classes and free play time in the case of physical impairment.

6.2   Recommendations for Local Practice

The present study suggests that more positive peer relationships not only lie in the

children themselves, but in the educational arrangements characterizing their daily school life and that of their peers with physical impairment. Children's biases towards peers with physical impairment may be quite pronounced at the beginning of primary school. Interventions designed to facilitate social inclusion need to be implemented from the first day of school. In addition, research has demonstrated that social ecology has impact on friendship development and friendship quality (Buysee, Goldman and Skinner, 2002). The present study also reveals the likelihood of changes in peer relationships from lower primary to upper primary and the children's concern with the big and complicated social ecology of a secondary school in threatening their peer relationships. Intervention should then be on-going and developmentally appropriate with special attention paid to transitional stages. Thus, children with physical impairment who are coping with the environmental and academic demands do not need the additional burden of enduring negative social evaluations by their classmates throughout their school career.

Contrary to the conventional practice in local schools in which safety is the major concern for inclusion of physically impaired children, the present study reveals that physical education classes can provide favourable opportunities for meaningful social contacts, and can foster a school culture in which diversity is appreciated. Integrating children with mild physical impairment requires less adaptation and may be more welcome by teachers. Enabling children with more pronounced physical impairment in full and meaningful participation in physical education may require more support for teachers in regard to their knowledge of physical disability and inclusive physical education strategies. A call for valuing the broader educational

benefits of physical education is needed in order to realize the support in view of the over-emphasis on academic learning in the present education system.

The present study also reveals a lack of disability awareness in school and a taboo culture towards disability which creates unnecessary misunderstanding between children with and without disabilities. In addition, the unintended creation of an unequal status in peer relationships between these children during classroom management indicates a need for teacher training with respect to children's social development and disability awareness. A curriculum to raise children's understanding of disability is beneficial to social inclusion but the way and timing of delivery is crucial to its real benefits.

6.3   Evaluation of The Research

In employing an interpretive qualitative approach, this research project has been a personal journey in understanding peer relationship between children with and without physical impairment. Besides being grounded in the responses of the children from the focus group interviews and on my observations in the schools, the analysis of the data was influenced to a certain extent by my background knowledge as a long serving physiotherapist in a special school for children with physical impairment. This gives me the advantage in understanding the physical and psychological needs of children with physical impairment not only in general but also specific to each medical condition. However, there can be a tendency for me to be over-empathetic towards the children with physical impairment in my interpretation

of the children's discourse.   A balanced view might be required from the reader in scrutinizing my findings.

There is also a limitation pertaining to the present study.   The children with physical impairment have participated in an integrated education support project conducted in my workplace for three years.   One part of the project was aimed at empowering their social competence and was an advocate for their full participation in school life. Their responses in the interviews could be a reflection partly of the training they received from the project and partly their personal experience.   As a qualitative research, the present study does not aim at generalization but additional attention has to be paid to this specificity of the subject in evaluating this research.

6.4   Suggestions for Further Study

Some quantitative studies demonstrate gender difference in attitudes and Nowicki's (2006) study substantiates the finding by differentiating gender difference and gender specific.   The former indicates a difference in attitudes between boys and girls.   The latter indicates a difference in attitudes towards the gender of the attitude object. In regard to friendship development, there is also evidence that girls and boys are different in their rate of maturation as well as features (Rubin, Bukowski, and Parker, 1998).   The present study did not take account of gender difference in the analysis of the responses.   Future studies in this area may be useful for developing appropriate interventions with respect to gender of the typically developing children and the child with physical impairment.

Early peer experience is demonstrated to influence later peer relationship (Pedersen, et al., 2007). Consequently, the timing when children with SEN join mainstream school may be one of the crucial factors influencing their social inclusion. The present study does not take this factor into consideration when analysing the responses from the children with physical impairment. Future studies in this respect may give insight to devising appropriate interventions related to different timing of inclusion.

Only children were interviewed in the present study and there were no attempts to validate statements made about adults' influence nor school practice. As the social ecology of a school is shown to influence students' social experience (Buysee, Goldman and Skinner, 2002), including adults' voice in the study may give rise to new perspectives. This is left for future investigations.

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APPENDICES

Appendix 1.1:   SDQ-I and GMFM Scores of Five Children with Cerebral Palsy Integrated into Mainstream Primary Schools

Child	Year	SDQ-I Score[1]		GMFM Score[2]	
		Physical ability (mean : 4.09)	Peer relations (mean:3.95)	Standing items (%)	Walking items (%)
1	2000	4.88	5.00	79	77
	2001	2.50	2.50	77	76
	2002	1.50	2.00	82	81
2	2000	3.38	4.13	82	63
	2001	2.75	3.63	82	60
	2002	2.25	3.25	90	64
3	1999	4.00	3.75	95	86
	2000	4.88	4.38	97	88
	2001	1.75	3.50	95	93
4	1999	4.25	2.75	92	82
	2000	2.75	1.50	95	89
	2001	1.85	1.00	95	94
5	1999	3.38	3.38	95	64
	2000	3.38	2.13	87	78
	2001	2.00	1.38	85	85

From the paper "*Practical experience for supporting integrated education for children with physical disability*." presented by the author at the CSNSIE Inaugural International Conference 2003 "Inclusive Education: A framework for Reform" December 16 – 19, 2003, Hong Kong.

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[1] SDQ I: Self-Descriptive Questionnaire I (Marsh, 1990), a validated self-reported questionnaire based on the multi-dimensional model of self-concept to measure the academic, non-academic, general and total self-concept of pre-adolescent children.

[2] GMFM: Gross Motor Function Measure for Cerebral Palsy (Russell, 1993), a criterion-based standardized instrument to measure the gross motor abilities of children with cerebral palsy.

Appendix 3.1: **Letter to School Principals for Seeking Permission to Recruit Children**

Dear Principal

Re: Study on "preadolescent children and friendship intentions towards peers with physical impairment"

Thank you for your verbal consent for me to recruit children from your school to participate in the above captioned study. I would, hereby, like to provide you with detail about the study.

I am currently undertaking a Doctor of Education course offered by University of Leicester, United Kingdom. The above captioned study is for the partial fulfillment of the requirement for my EdD degree. The whole study will be supervised by Mr Alan Sutton of University of Leicester, United Kingdom.

I intend to recruit children of primary 3 to primary 6 to participate in focus group interviews for me to gain a deep understanding of their intention to interact and play with peers with physical impairment. Each focus group shall be composed of 6 children of the same year grade or one grade above or below. One group of children shall come from a class with a pupil with physical impairment. Each interview shall last for about 1 hour and shall also be video recorded for analysis. The interviews shall be conducted in the school premises without interfering with the regular school timetable. At the end of each interview, I shall also give a 15-minute disability awareness programme to ensure children bring home with the right information about disability. In order to build up rapport with the children before the interview and gain background information for the interview, I would also like to interact with the children during recess and observe one physical education class on one day convenient to the school before the focus group interview is conducted.

I assure that all identifiable data concerning the school, the staff of the school, the parents and the children will be kept confidential and be used by me for the thesis only. These data and the video recording will be destroyed once the study is completed. The result of the data analysis reported in the thesis will be kept anonymous and reveal no individual identification. The participants will be free to

withdraw from the study any time during the course of the study without any commitment. A brief summary of the result of the study in the form of collective information without reference to individual subjects or schools will be given to you for information at the end of the study.

As your school is known to include children with physical impairment, I would like to seek your assistance in recruiting children from your school for my study. I, hereby, enclose an information sheet about the study and a consent form for parents for your distribution to prospective parents. I would be grateful if you could allocate a time for me to conduct the interview at your school and a pre-interview visit to familiarize with the children.

I will be delighted to clarify any queries concerning the study and please feel free to contact me at 25504711 or 23362011.

Your support and help is absolutely necessary to make my study possible and is highly appreciated. I hope the study will contribute to our understanding and effort to achieve an inclusive culture in schools.

I am looking forward to your favourable reply.

Yours sincerely,

Clare Cheng Yuk Kwan

Appendix 3.2: Self-Perception of Social Competence (adapted from Chen, Li, Li, Li, and Liu, 2000)

"Do you agree that you are like this？ Circle the option most closely to your choice in each descriptor." (English translated version)

I make new friends easily			**I am helpful**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
I have many friends.			**I can invite many friends to play with me.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
I follow rules and cooperate with others.			**I am kind to others.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
I like to play with others rather than alone.			**I am considerate and caring for others.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
I am active.			**I am quiet.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree

Appendix 3.3: Peer Preference (adapted from Chen, Li, Li, Li, and Liu, 2000)

"Do you like to make friends with these classmates? Circle the option closest to your choice in each descriptor. " (English translated version)

Those with few friends.			**Those who are helpful.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
Those who have many friends.			**Those like to play alone.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
Those who follow rules and cooperate with others.			**Those who are good at school.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
Those who like to play with others.			**Those who are leaders.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
Those who like talking.			**Those who don't like talking.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree
Those who are active.			**Those who are quiet.**		
☺	☺	☹	☺	☺	☹
Agree	Partly agree	Not agree	Agree	Partly agree	Not agree

Appendix 3.4: Shared Activities with Friends (adapted from Rodkin, Farmer, Pearl, and Van Acker, 2000.)

Arrange descriptors of shared activities with friends in order of importance to you. Fill in the blank square with your own words or pictures if the choices are not adequate. (English translated version)

	Giving you help at all times	Can make jokes with	
	A companion in extra-curricular activities	Going to school together	
	Playing together	Talking on the phone	
	Keeping secret	Can argue with	
	Sharing same interests	Doing schoolwork together	
	Sharing same dislike	Being generous to share snack	
	Listening to what you say	Cheering me up when I am sad	

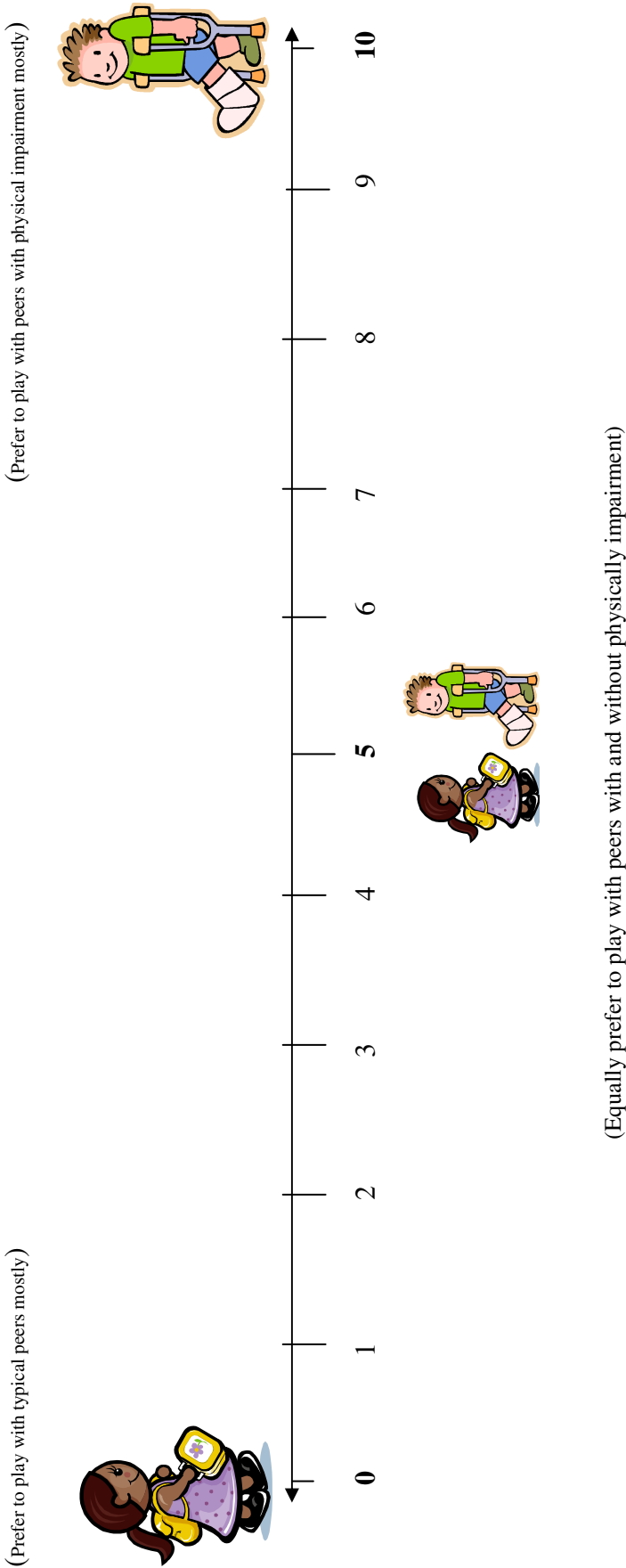**Appendix 3.5:** **Descriptors on The Impression of People with Physical Impairment**

Positive Impression	Negative Impression
Brave	cowardly
Optimistic	Pessimistic
Rich	Poor
Kind	Fierce
Confident	Feel inferior;
Normal	Ugly
Happy	Unhappy

Appendix 3.6: **Descriptors on The Impression of Peers with Physical Impairment Provided by The Typically Developing Peers in Their Own Words**

Positive Impression	Negative Impression
Never give up	Having problems
Patient with others	Special
clever	Scared (timid)
Marvelous	troublesome
Having strong will	Pitiful
More friendly than others	Unfortunate
Ordinary	Sad because cannot be a normal person again
	Peculiar
	Cannot participate in many activities
	Lack of confidence
	gloomy

Appendix 3.7: Friendship Preference Scale

Who do you like to play with, your typical peers or peers physical impairment?　Circle the number to represent your preference. (English translated version)

(Prefer to play with typical peers mostly)

(Prefer to play with peers with physical impairment mostly)

0　　1　　2　　3　　4　　5　　6　　7　　8　　9　　10

(Equally prefer to play with peers with and without physically impairment)

Appendix 3.8:   Combined List of Descriptors on The Impression of People with Physical Impairment

Positive Impression	Negative Impression
Never give up	Having problems
Patient with others	Special
clever	Scared (timid)
Marvelous	troublesome
Having strong will	Pitiful
More friendly than others	Unfortunate
Ordinary	Sad because cannot be a normal person again
Brave	Peculiar
Optimistic	Cannot participate in many activities
Rich	Lack of confidence
Kind	gloomy
Confident	cowardly
Normal	Pessimistic
Happy	Poor
	Fierce
	Feel inferior;
	Ugly
	Unhappy

Appendix 3.9   Translation Ambiguity

Written Chinese	**Translation**	**Ambiguity**
有問題	Having problems	有問題 (you wen ti) may also mean "crazy" in children's slang.
麻煩	Troublesome	麻煩 (ma fan) may also have a meaning of "annoying".
特別	Special	特別 (te bie) may also carrying some sense of awe.
遷就	Compromise	遷就 (qian jiou) implies giving up more to the other than just compromising