



Research in the Clinical Setting: A Qualitative Study of the Value of Play Research
in the Continuing Education of Occupational Therapists

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Abstract

Occupational therapists have always recognized play as an important part of a child's life. However, until recently play has been viewed as a medium for reaching treatment goals, rather than as an activity that is valuable in and of itself. If occupational therapists think of play as the primary activity or occupation of childhood, then play should be a very important area of focus for paediatric clinicians.

In order to assist children to become as independent as possible with play and to have fulfilling play experiences the occupational therapist needs to have a clear understanding of how to assess, set goals which lead towards competence in play, and promote play. Recent play literature has placed importance on play behaviours and looking at the relationship between the child and both the human and nonhuman environment. Believing that play and playfulness can and should be promoted, for children with physical disabilities, requires that therapists learn new assessment and intervention strategies.

A new assessment tool, The Test of Playfulness, was developed by Bundy in 1994. It addressed play behaviours and environmental influences. The author, a co-investigator and eight occupational therapists were involved in a playfulness study using this test to compare the playfulness of children with physical disabilities with their able-bodied peers. After the study was completed the author questioned whether or not involvement in the playfulness study was enough of a change agent to bring about transformative learning in order to further the eight occupational therapists' education about play.

This study investigated changes in either the therapists' thinking about play or their behaviour in their clinical practice. The study also examined the participants' retention of knowledge about the Test of Playfulness.

The eight therapists who had been involved in the playfulness study (participants) were matched with eight therapists who had not been involved (nonparticipants). The therapists were interviewed 9 to 12 months after completion of the playfulness study. They were asked to describe various scenarios of play and open ended prompts were used to elicit the therapists' perceptions of play, good play, the role or value of play, environmental and gender influences on play, play assessment and intervention, and play research, for children with and without disabilities. The participants were also prompted to discuss their experience with the playfulness study. A self-report questionnaire was also completed at the end of the interview.

The results of the study demonstrated that: (a) the play research project was a good format for continuing the participants' education about play; (b) their thinking had changed about play; (c) according to self report, they had used this new knowledge in their clinical practice; and (d) the participants remembered the items on the Test of Playfulness and could use them in describing various aspects of play.

This study found that participating in a play research project had been an effective method of professional development. It also highlighted the need for increased awareness of the recent literature on play and the developing role of the occupational therapist in the assessment and intervention of play.

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CHAPTER ONE: INTRODUCTION TO THE PROBLEM

This study examined the impact of participating in a “play research” project on the continuing education of occupational therapists. Specifically, the study investigated whether or not the therapists who had been involved in the play project had experienced transformative learning. Evidence was gathered to determine if the participants had changed their thinking about play or had changed their behaviour in their clinical practice. The study also examined the therapists’ retention of knowledge about a new play assessment tool.

Problem Background

There is a vast selection of information written about play. The literature over the past several decades has documented how views about play have changed. First, play was studied in a biomedical and developmental context (Erikson, 1963; Freud, 1955; Piaget, 1972). Next, it was believed that how the person and the environment interacted determined whether or not the play activity was successful. If the demands of the environment matched the skills of the player then play was successful. If the demands of the environment exceeded the skills of the player then it was not (Csitszentmihalyi, 1975). Play is currently being influenced by the shift in health care away from institutions and into community, family centred care. Special needs children are integrated into community daycares, preschools, schools, and social or sports activities. Therapists are looking at person-environment relationships with emphasis being placed on how to change the environment rather than the child. Quality of life has also gained

importance with a focus on playfulness as a style or approach to an activity that determines whether or not the child finds the activity to be play (Bundy, 1993).

Occupational therapists have always recognized play as an important part of a child's life. However, until recently play has been viewed as a medium for reaching treatment goals in the clinical setting and at home, rather than as an activity that is valuable in and of itself. If occupational therapists think of play as the primary activity or occupation of childhood, then play should be a very important area of focus for paediatric clinicians. We need to value play for play's sake and not simply as a medium for intervention.

The assessment tools available to therapists to evaluate play have focused on performance skills and developmental levels. Shifts in thinking among play researchers have included placing more importance on play behaviours and looking at the relationship between the child and the environment (both human and nonhuman, Bundy, 1993; Ferland, 1994; Play research group, personal communication, 1994.). Believing that play and playfulness can and should be promoted, for children with physical disabilities, may prove to be an exciting paradigm shift for therapists as it will demand a change in both assessment and intervention strategies.

Purpose of the Study

The purpose of this study was to investigate the value of research project participation as a format of continuing education. The research project was titled "A Pilot Study to Address the Reliability and Validity of the Test of Playfulness

(ToP) - Research Version 2.2 - and to Compare the Playfulness of Children with Physical Disabilities with Age-Matched Able-bodied Peers" (Gaik & Rigby, 1994).

Eight therapists and two co-investigators participated. In this study, the author interviewed the eight occupational therapists who participated in the play project and a matched group of eight occupational therapists who were not involved in the project. Using qualitative research methods the benefits or deterrents to the clinician's continuing education were examined. Specifically, the therapists' responses to interview prompts about play were analyzed. Differences between the comments of those who did and those who did not participate in the play project were identified. Evidence of changes in thinking about play and in behaviour in the clinical setting was gathered from the group of therapists who participated in the play project.

Importance of the Study

Most of the literature on the continuing education of occupational therapists has measured their learning through questionnaires. This study explored the effects of participation in a play research project on the personal learning of the occupational therapists involved by asking them, and the group who did not participate in the play study, to describe scenarios of play. These were scenarios of good play, play assessment, and treatment. Additional information was gained through interview prompts regarding changes in thinking and behaviour as a result of being involved in the project and through a self-report questionnaire. It was believed that the study would provide information on the value of participation in

research as a means of continuing professional education. It could potentially guide therapists in their choice of how to continue their education and could offer information to institutions to help decide what educational pursuits to finance. The results of this study could also provide support for evaluating learning through story telling. Of added interest to occupational therapists would be the knowledge and thinking about play of those who did not participate in the play study.

Definition of Terms

Children with Physical Disabilities: for the purpose of this study, refers to children with a primary diagnosis of cerebral palsy. The severity of the problem ranges from mild to severe and can be found in combination with numerous other secondary diagnoses.

Able-Bodied Children: for the purpose of this study, refers to children with no known disabilities.

Playfulness Study or Pilot Research Project: refers to the research project titled “A Pilot Study to Address the Reliability and Validity of the Test of Playfulness (ToP) - Research Version 2.2 - and to Compare the Playfulness of Children with Physical disabilities with Age-Matched Able-Bodied Peers (Gaik & Rigby, 1994).

Playfulness Study Participants: are those occupational therapists who participated in the playfulness study.

Playfulness Study Nonparticipants: are the matched group of occupational therapists who did not participate in the playfulness study.

The Test of Playfulness: refers to a research version of a play assessment tool to be used with children between the ages of 2 and 10. In the first section the therapist scores play behaviours according to the extent the behaviour was observed, the intensity of the behaviour and the skillfulness the child demonstrated. In the second section the therapist comments on the elements of the human and nonhuman environment that promoted or detracted from the child's play.

Nonhuman Environment: refers to aspects of the physical environment which influence play (e.g., play materials, space).

Human environment: refers to aspects of the social and cultural environment that influence play (e.g., playmates, adult expectations).

Limitations of the Study

1. As with any study where the data is collected through self-report, the information is only valid for these particular participants in this particular situation. Also, self-report is not always an accurate reflection of people's behaviour.
2. Since it is a study based on people's perspectives the results cannot be generalized to a larger group. In this study the results will be stated as being applicable to only this group of 16 participants. They may however still be of interest to other occupational therapists working with children with cerebral palsy between the ages of 2 and 10 years.
3. Even though the therapists had been initially asked to think of children between

2 and 10 who had cerebral palsy they often referred to children with other diagnoses.

4. Since this is a qualitative study, no objective data has been gathered that could provide answers with statistical significance. This study does, however, provide an understanding of the changes in thinking and behaviour that the participants experienced as a result of being involved in the playfulness study.
5. The use of storytelling to investigate the participants' and nonparticipants' perceptions about play limited their comments to what they believed about play in particular scenarios. Storytelling did, however, appear to be a nonthreatening and comprehensive method of examining the therapists' knowledge about play.

Outline of Remainder of the Document

The literature on play theories, play of children with and without disabilities, occupational therapy and play, continuing education of occupational therapists, and transformative learning is reviewed in Chapter 2. The review outlines how the views on play have changed over the past several decades.

Chapter 3 presents the research design chosen for the purpose of this study. First the pilot study research project is outlined. Next the subject selection, procedure, data gathering and recording, and the analysis of the data for this study are outlined. Finally, the limitations of the design are discussed.

Chapter 4 presents the research findings of the study. Chapter 5 discusses the findings, draws conclusions, and makes recommendations for future play

research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

In order to gather the information necessary to examine the relationship between participation in a research project on play and the continuing education of the occupational therapists involved, several topics were explored. First, the major play theories were reviewed. Then, the literature regarding the play of able-bodied and disabled children was examined. Next, literature on the continuing education of occupational therapists was studied. The last subject to be explored was transformative learning.

Theories of Play

Psychological Perspectives

There is a vast quantity and variety of information written about play. For the purpose of this paper some of the best known theories are outlined, including psychoanalytic, psychological, developmental, and competence perspectives.

Freud was the first to introduce the psychoanalytic play theory. His theory later became the basis for play therapy with children. Freud provided names and definitions of the inner institutions of the mind: the “id,” “ego,” and “superego.” He considered the id to be impulses, excessive wishes and basic desires which all seek gratification and are ruled by the pleasure-pain principle. The ego was believed to be mainly conscious and used logic when dealing with the environment. The ego modified the impulses of the id and the demands of the superego and was ruled by the reality-principle (Sim, 1969). The superego was described as largely

unconscious and the moral critic. Freud interpreted the play of normal children as the ego's struggle for coherence, where play allowed them to first fail and then succeed in overcoming anxiety. The pleasure principle was the term that described the elimination of tension and the simultaneous occurrence of pleasure achieved through playful activities (Wehman & Abramson, 1976).

Freud viewed play as a means for wish fulfillment and mastery over troubled situations. He believed that children could become conscious of some of the things that were troubling them and could neutralize these stressful events through play. Play activities could allow children to achieve mastery over their covert thoughts and overt actions (Neumann, 1971).

Freud believed that children's wishes directed their play. He identified, through observation of children's play, that they had a wish to be bigger, to be adults, or to be someone else they admired. The children then created a fantasy situation they would have liked to have seen exist. Through pretend play children could be a parent, royalty, a teacher, or anyone else they wished and could attain some of the power or prestige denied to them in reality (Peller, 1952). Freud also thought that children wished to replay painful encounters where they had played a passive role, by creating fantasy situations where they could take an active role. By repeating the experience and being able to assume control in play, the previous painful experience could be reversed and children could develop a sense of mastery (Freud, 1955). Play would take the form of repetition of painful states of mind so that the pain might become bearable, and even pleasurable, through assimilation to the whole activity of the ego (Piaget, 1972). Through activity and repetition, Freud

believed children could come to understand both their thoughts and their actions.

Erikson took Freud's work a step further and placed emphasis on the growth functions play could serve (Herron & Sutton-Smith, 1971). He believed play was a means of developing ego function and mastering reality. As a function of the ego, play attempted to integrate the self with the external processes. Erikson believed the ego wanted to become adept at the diverse areas of life, especially in those areas that the individual was the weakest. "To hallucinate ego mastery is the purpose of play--but play... is the undisputed master of only a very slim margin of existence" (Erikson, 1963, p. 212).

Erikson (1963) proposed that play began with, and centred on, children's own bodies. This was referred to as "autocosmic play." It began with exploration and repetition of all sensations and expanded to play with objects and people. Erikson described a "microsphere" where children played alone and learned mastery over toys, and a "macrosphere" where children played with others and learned to share and interact.

Adults' play and children's play were considered to be different. Erikson speculated that when adults played, they moved sideways into another reality but when children played, they were moving forward to new stages of mastery. He proposed that "the child's play is the infantile form of the human ability to deal with experience by creating model situations and to master reality by experiment and planning" (Erikson, 1963, p. 222). Children's play was seen as an attempt to resolve conflicts, and with each resolution, to build ego strength (Singer, 1973). Childhood play involved one mastery after another and when successful in

resolving psychosocial crises formed the basis for a productive, creative, and healthy life (Levy, 1978).

An alternative, developmental view of play was offered by Piaget who discussed the implications of play on cognitive development. He believed that the functions of play and intelligence were inseparable, and that cognitive development depended on interactions between heredity and the environment (Levy, 1978). The growth of intelligence was hypothesized to occur through interaction with the environment by means of the principles of “assimilation” and “accommodation”. Assimilation was defined as a process of altering information to make it fit individual needs and therefore become part of the children's know-how. Accommodation referred to any adjustment individuals had to make in order for their actions to fit the novel demands of the situation (Reilly, 1974; Wehman & Abramson, 1976). If the two processes were in relative “equilibration” or balance, Piaget considered that an act of intelligence had occurred. If accommodation predominated over assimilation then the result was imitation. If assimilation predominated over accommodation, the result was play (Piaget, 1972).

Another of Piaget's contributions to play theory was the identification of four developmental stages of play. He related the type of play behaviour to the children's stage of cognitive development and classified play according to the degree of mental complexity presented by each play activity. The sensorimotor stage (0-2 years) was characterized by exploratory sensory activities that provided the opportunity for motor development and mental experimentation and problem solving. This was a time for repetition in order to practice each new skill. The

second stage, the preoperational stage (2-7 years), involved symbolic or make-believe play whereby the child could pretend one object was something else. The third stage, the operational stage (7-12 years) included the socializing function of play. Play and games included others and had rules and order. The last stage was the formal operations stage (12 years and on) where abstract thought and logical assumptions were possible tools for reasoning. Play at this stage included activities that challenged abstract thinking, others, and responsibility (Ellis, 1973; Florey, 1971; Levy, 1978; Piaget, 1972; Reilly, 1974).

Piaget believed that children's play followed the above sequence and gave way to intelligent, rational behaviour. He believed that children played less as they got older because fewer skills and events were novel and therefore new skills were mastered faster. He also believed that the quality of play would increase with age as mastery needs receded (Reilly, 1974).

Freud, Erikson, and Piaget all viewed play as requiring the sequential development of specific stages. Freud and Piaget suggested that the stages needed to be mastered in childhood, whereas Erikson talked about development over people's life span. While all of these theories have been criticized widely by play critics who take exception to specific developmental points, all are recognized as valuable in the quest to understand play.

Behavioural and Other Perspectives

Also of interest to occupational therapists are several theorists who believed in intrinsic motivation with regard to visual exploration, manipulation, curiosity and other aspects of play. One behavioral theorist, Robert White,

described play by saying:

"...the many hours that infants and children spend in play are by no means wasted or merely recuperative in nature. Play may be fun, but it is also serious business in childhood. During these hours the child steadily builds up his competence in dealing with the environment."(Florey, 1971, p. 276).

White (1959) believed that mastery of skills was developed through successful play encounters with one's environment. Feelings of self-confidence and self-reliance were a result of the children's mastery within their environment, achieved by directness, persistence, and selectivity in play behaviour. Consequently, the children were motivated to continue exploring and experimenting in play.

Bateson (1956) was interested in communicative interaction in play and he described a play "frame" or created milieu which children can move in and out of. He highlighted the relationship between play and reality and discussed how children learned to communicate effectively to come in and out of the play frame. This metacommunicative frame that play provided gave a message about how the players should interact with each other and stated that what they are doing is not real. Exaggerated movements, expressive faces, high pitch voice, and different modulations gave the message "This is play" (Bateson, 1956).

According to activity theory, which looked at the transactional nature of an individual and the environment, play was viewed as an activity (Stewart, Pollock, Sahagian-Whalen, Law, Toal & Harvey, 1993). Csikszentmihalyi (1975) described an experience often seen in play as "flow." "Flow denotes the holistic sensation

present when we act with total involvement" (p. 43). Flow was observed when children gave their total, undivided attention to an activity which matched their skills with the demands of the environment. Csikszentmihalyi developed a graphic representation of flow demonstrating how in order to feel competent, creative and in control the challenges of the activity must be matched with the skills of the player (see Figure 1).

Two psychologists addressed the relationship between work and play. Day (1979) described a play-work continuum and the conditions involved in play activity. Cotton (1984) viewed play as an analog to adult work. She identified competence, capacity to cope with the environment, ego strength, and investment in life as being developed through childhood play.

Play is considered to be a difficult to define, complex phenomenon (Rubin, Fein, & Vandenberg, 1983). In their extensive review of developmental psychology literature concerning play, Rubin et al. (1983) identified the following six traits that separate play from other activities: (a) intrinsic motivation; (b) attention to means rather than ends; (c) organism rather than stimulus dominated (e.g., what can I do with this object rather than what does this object do?); (d) nonliteral, simulative play (pretend or fantasy play); (e) freedom from externally imposed rules; and (f) requiring the active participation of the player.

Neumann (1971) described transactional qualities of play involving the children's internal control, intrinsic motivation, and the freedom to suspend reality and used a continuum of these qualities to determine play versus non-play behaviours. Anita Bundy, an occupational therapist, has broken down the qualities

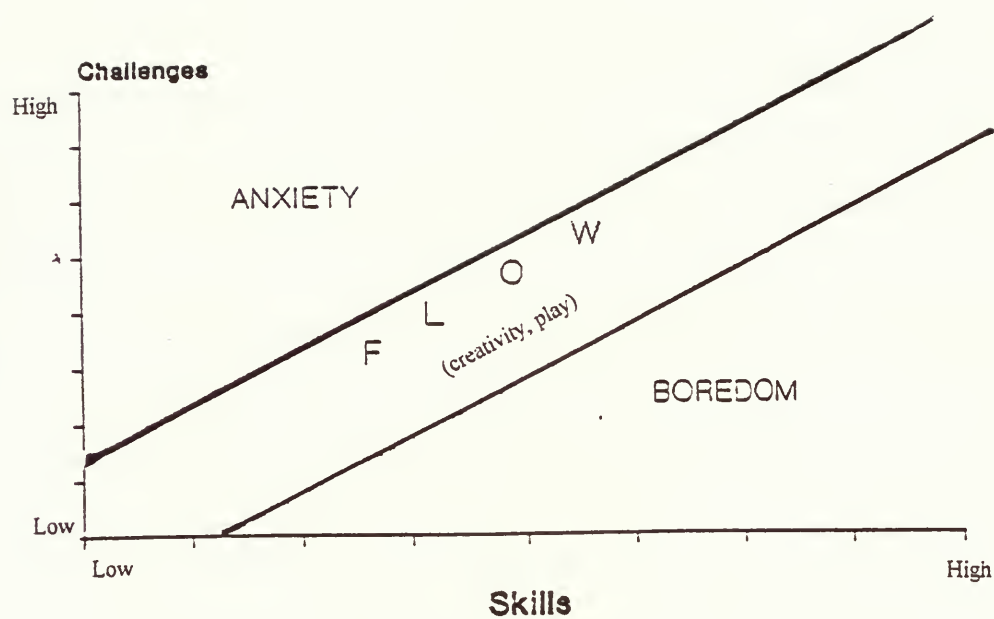


Figure 1. Activity - optimal experience (Csikszentmihalyi, 1990, p. 74).

of play described by Neumann (1971) and by Rubin et al. (1983) into their component parts, to comprise the third draft version of her Playfulness Scale, now called the Test of Playfulness (Appendix A). She believed that attention to the concept of playfulness as a behaviour had critical implications for the paediatric practice of occupational therapists (Bundy, 1993).

Bundy (1993) stated that playfulness was the term applied to describe play as "a style we use when we approach problems and situations in a flexible manner" (Bundy, p. 217). She suggested that having a playful approach to an activity or to life could be more important than what activity one engaged in. Playfulness was sometimes defined as the disposition to play and the terms play and playfulness were often used synonymously.

In 1991, Bundy, Morrison, and Fisher formulated a model with the intention that it would be used as a guide for the development of an evaluation of playfulness in clients, and to assess the elements of play in specific intervention sessions. They took the concepts of intrinsic motivation, internal control, and the freedom to suspend aspects of reality and broke them down into their component parts. Motivation was shown on a continuum from intrinsic to extrinsic. Control was also on a continuum from intrinsic to extrinsic and involved items of self-control and shared control. Freedom to suspend reality was on a continuum from free to not free. It is a combination of these elements that determine play or non-play, playfulness or non-playfulness (see Figure 2; Bundy, 1993).

Ferland, an occupational therapist, supported the work of Herriot, Bundy, and other theorists who believed that play was a subjective attitude. Ferland called

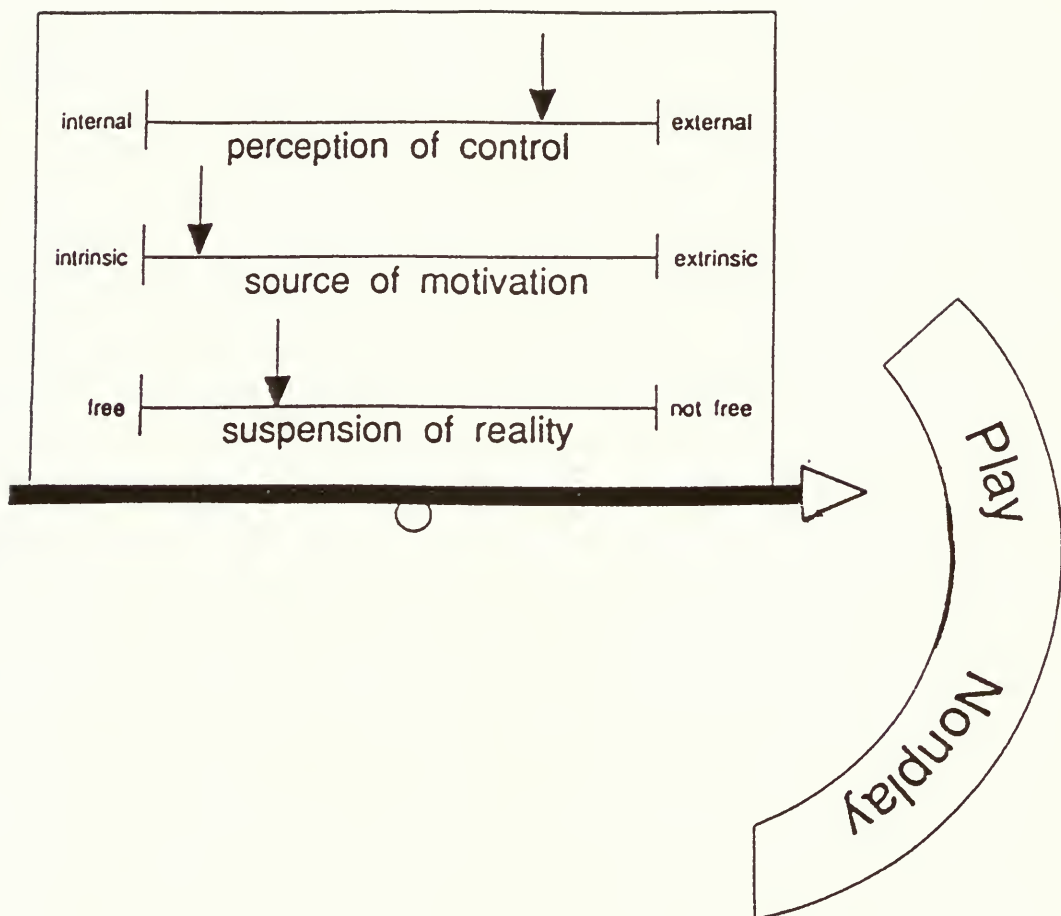


Figure 2. The play-nonplay continuum: A balance between perception of control, source of motivation, and suspension of reality (Bundy, 1991, p. 220).

play an interior attitude and stated that play is not doing, it is being. She believed that play was a very personal experience that was dependent on the subjective “ludic” attitude of pleasure. She defined “ludic” as an attitude or pleasure, with curiosity, humour, and spontaneity that translated into a freely chosen behaviour for which no specific outcome was expected (Ferland, 1992).

Reilly (1974) suggested that occupational therapists viewed play as “occupational behaviour”, on a continuum to work, with the focus being on the development of abilities which would ultimately be used in work. Ferland challenged this view arguing that with the multihandicapped population the present quality of life of children and their families was being neglected for an uncertain and possibly unrealistic future. She asked therapists to evaluate the children's ludic attitude (for example, imagination and initiative) in addition to their physical performance components (for example, grasp and eye-hand coordination) to assess the abilities and difficulties of the child in play. Ferland proposed that therapy should consist of prompting play through the provision of a situation where children took the lead, the therapist acted as a facilitator, and a play partner acted as the model. She also described the interaction of interest, attitude, and action in the play of children with their parents. She believed that this interplay led to pleasurable interactions, mutual discovery, and ultimately to children's independence in play and the well-being of the family (see Figure 3; Ferland, 1994).

In summary, over the past several decades, views about play have changed. First play was studied in a biomedical and developmental context with only

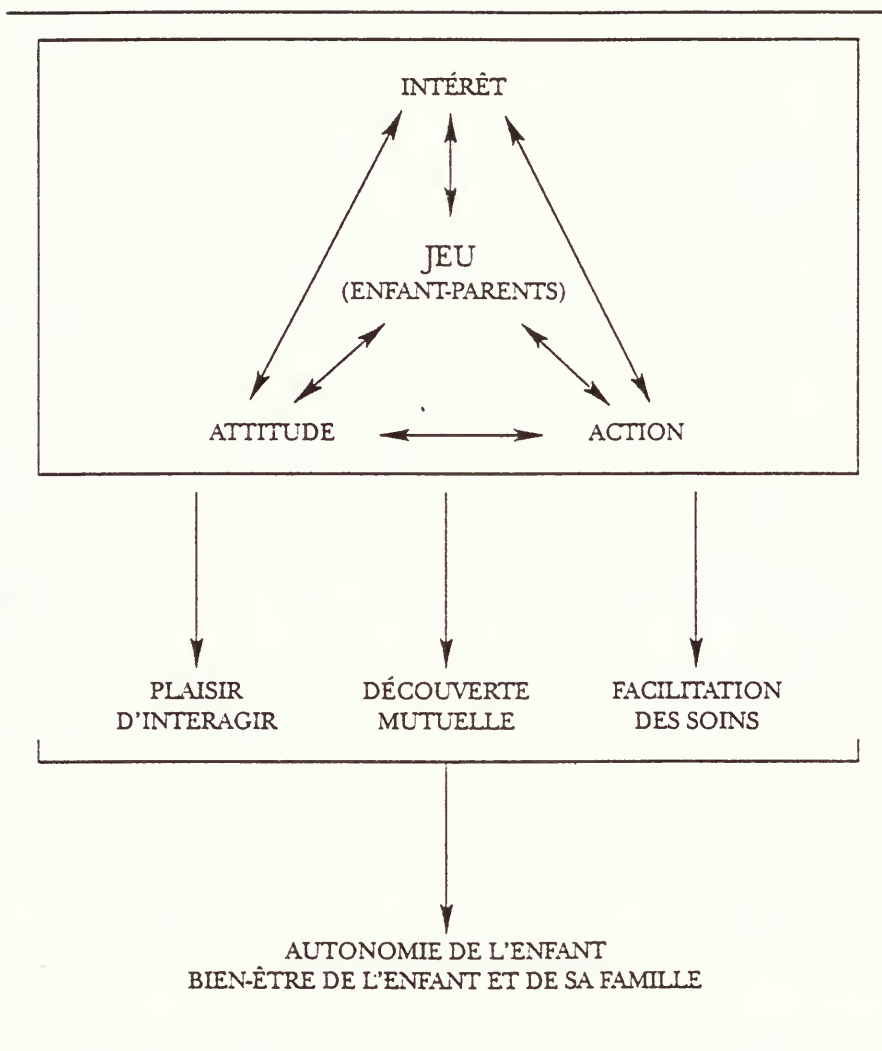


Figure 3. Le modele ludique et les parents (Ferland, 1994, p. 97).

modest interest in the effects of the environment. Next how people and the environment interacted was believed to be a key factor in whether or not the play experience was successful. If the demands of the environment matched the skills of the player then play was successful. If the demands of the environment exceeded the skills of the player then it was not (Csikszentmihalyi, 1990).

Currently play is being influenced by the movement of integration of special needs children into community schools and other activities. Person-environment relationships are being studied with more emphasis being placed on how to change the environment rather than on how to change the person. With the whole sociopolitical vision of health shifting from in hospital services to community based and family centred, play is being more closely linked with quality of life. Since playfulness is a style or approach to an activity that determines whether or not an individual finds an activity to be play or work, it can have great impact on how the individuals feel about their quality of life (Bundy, 1993).

Play of Able Bodied Children

There is general agreement that play is the predominant activity of childhood (Bundy, 1993; Kielhofner & Barris, 1984; Missiuna & Pollock, 1991)). Play experience is believed to be beneficial for a child as it contributes not only to cognitive, social, emotional and physical development (Erikson, 1972; Kielhofner & Barris, 1982; Piaget, 1972), but it is also believed to influence the development of problem-solving ability, creativity, flexibility, achievement motivation, morality and social attitudes (Bundy, 1993; Cherfas & Lewin, 1980).

Play provides children with the opportunity to do something because they want to have fun and experience pleasure (Neulinger, 1974; Neumann, 1971). Free play encourages intrinsic motivation if children are inspired by the activity and the internal rewards such as enjoyment and satisfaction (Rubin et al., 1983). Sometimes the perception that play is fun is clearer after the play has ended than while it is occurring (Bundy, 1993). While observing play, Csikszentmihayli (1975) found that external, visible, and instant demonstrations of fun or joy were not always present during play that children qualified as being fun.

Play provides a place to try out activities with minimal risk, where the consequences of a failed attempt are not as great as if they were tried out in real life (Vandenberg & Kielhofner, 1982). The children can try alternative approaches to achieving an outcome and can use creativity and flexibility (Bundy, 1993; Lieberman, 1965). "New elements are interwoven with past experience" in a creative playful response that "exercises an individual's behavioral flexibility" (Ellis, 1973, p. 127).

Bishop and Chace (1971) investigated the relationship between parents' attitudes and systems of thinking and the play behaviour of their children. Parental attitudes were determined through interviews and play behaviours were observed while the children performed the task of selecting cardboard shapes varying in complexity and colour and arranging them on a blank board. The researchers concluded that flexible, abstract thinking mothers "placed few constraints on the play of their children, providing a flexible and encouraging environment, and reared children who were more creative or flexible in their behaviour" (Ellis, 1973,

p. 130).

Play experience with increasingly complex toys and activities provides children the opportunity to develop expanding competencies in problem solving, and to learn to be flexible and look for more than one solution (Erikson, 1963). This type of play can also promote feelings of self-reliance in children, that is, the belief that they can do things themselves without assistance and can try different ways of doing these activities. Play allows them to explore what they can do with the objects and not to be restricted to what the objects can do (Hutt, 1982).

Play with craft materials and social play with peers are just two of the early play experiences believed to develop school readiness skills (Shonkoff & Meisels, 1990). From the play experience, the growing competence that is achieved prepares the individual for the complicated tasks and responsibilities of the school years and later to adult life (Bledsoe & Shepherd, 1982; Bundy, 1989; Reilly, 1974). Play opportunities with peers can lead to feelings of self-worth, and enjoyment of being with others.

Children enter and exit play by a variety of strategies. Bateson (1956) observed that children would smile, giggle, or make an exaggerated gesture to let the play group know their intentions. In a study by Sutton-Smith comparing kindergarten children with preadolescent children, both primarily used ludic techniques to enter the “play territory” (Herron & Sutton-Smith, 1971). That is, they used a play gesture such as a mock attack, initiated a fantasy, or made an absurd expression. Social gestures such as greetings, requests, and announcements were also used by one third of the younger children and half of the older children.

Lieberman (1965) studied playfulness in young children and found that those who were highly playful in a play situation were also spontaneous and humorous in other settings. Sutton-Smith suggested that play was the balance between work and play, thoughtfulness and spontaneity, impulse and control, humour and seriousness, as applied appropriately in different situations (Herron & Sutton-Smith, 1971).

The Play of Children with Physical Disabilities

Disabled children often do not have as much time to engage in play as their able-bodied peers. More time is spent on self-care activities for which these children are frequently dependent on their parents for assistance (Brown & Gordon, 1987). Their play is often incorporated into carrying out a therapy home program rather than playing for play's sake (Bundy, 1993; Ferland, 1994). Parents are often more concerned with their children's difficulties in other areas such as walking or talking than play. Having an inability to grasp toys or not being able to move to where children are playing are clear examples of how children with disabilities may encounter limitations in their experiences with play activities. They may lack both the ability and the opportunity to make the play experience a successful one (Frampton, Kerney, & Schattner, 1969; Gralewicz, 1973). When the demands of the environment and /or activity are greater than the skills of the player, the child may feel less competent, isolated, and anxious (Csikszentmihalyi, 1975).

If children are not truly integrated into a community play group they may

miss those opportunities with peers that facilitate acceptance into a peer group and foster the use of socially appropriate play skills (Rigby, Elliott, & Oster, 1993).

Missiuna and Pollock (1991) stated that deprivation of normal childhood play experience can result in secondary social, emotional, and psychological disabilities. They believed that in play, children learn about the world around them and discover that they can have an effect on it. They highlighted the importance of free play, with the barriers to play removed, for children with physical disabilities.

Kielhofner (1985) considered that disabling conditions could lead to children having less opportunity to play and, therefore, they might experience more failure in performance, feel less in control, and have a reduced sense of competence and mastery within their environment. A study of physically disabled adolescents showed that they spent more time watching television, a passive activity, and less time on fine motor activities and that they demonstrated an unfulfilled craving for social activities (Ferland, 1994).

There is also literature to support the positive aspects of the play for children with a disability. Reilly (1974) believed that children with disabling conditions could use their better developed skills to compensate for weak areas of development. Bundy (1989) studied the play of 24 non-disabled boys and 24 boys with subtle developmental delays. She found that the children's unique combination of strengths and weaknesses influenced the content of the children's play.

In a study by Jennings, Connors, and Stegman (1988), 22 physically handicapped and 39 non-handicapped children were assessed during structured

tasks and unstructured free play. The preschoolers with physical disabilities demonstrated the same level of motivation as their able-bodied peers but persisted less with difficult tasks and preferred play that was less challenging.

Beeghly and Cicchetti (1987) found that although the symbolic play of children with Down's Syndrome progressed at a slower pace, the developmental sequence was the same as that of their non-disabled peers. They also found that developmental achievement was nurtured in play in supportive environments which encouraged free expression and exploration.

Stewart, Pollock, Sahagian-Whalen, Law, Toal and Harvey (1993) interviewed ten adolescents with disabilities and ten adolescents with no disabilities to explore their perceptions of the play experience and the meaning of play and work. The overall themes that emerged included the feeling that play was individual and that what was fun for one person was not necessarily fun for another. What was considered fun changed with age and with different environments. Both groups believed having friends was important. The adolescents with a disability identified feeling part of a group as having a significant effect on not feeling "different." The adolescents with a disability believed that they always had to initiate play with others and felt that perhaps others were uncomfortable with their disabilities and did not know how to involve them. Both groups viewed choice as being the determinant of whether something was work or play and could see both aspects in such activities as school work, sports, and baby-sitting.

When asked to rate their satisfaction with play as a child, 9 out of the 10

children in both groups indicated they were satisfied. When asked to rate their satisfaction with play as a teenager all the children in both groups indicated that they were satisfied. Barriers and supports to play were identified. Both groups felt distance, economic barriers, and too much homework hindered play. The disabled adolescents also talked about physical obstacles. Supports to play included gaining physical skills through practice and having friends. The disabled adolescents also mentioned environmental adaptations that allowed them to succeed at play. Some differences in the type of play between the children with disabilities and their peers were noted. Females with a disability engaged in more passive individual play and males with a disability engaged in less active, social play (Stewart et al., 1993).

Occupational Therapy and Play

Occupational therapists assist clients to become as independent as possible in the areas of self-care, productivity, and leisure. Play has been called the primary productive activity or occupation of young children and is therefore within the realm of this health profession (Bundy, 1989). Previously, play was viewed as a medium for intervention, a way to achieve physical performance goals. Increasingly, play is being viewed as important in and of itself (Bundy, 1989). The literature is directing occupational therapists to consider the match between the person and the environment and the attitude toward the activity (Bundy, 1989; Csikszentmihalyi, 1975; Ferland, 1992). The goal for children with physical disabilities should be to achieve competence in play. In order to assist children to

achieve this goal there is a need for occupational therapists to develop both a better understanding of and skill in, the assessment and intervention of play (Bundy, 1993; Missuina & Pollock, 1991).

Continuing Education of Occupational Therapists

Occupational therapists often find themselves in positions where entry level skills are not sufficient for high quality care. As well as needing to acquire specialized skills, occupational therapists need to keep abreast of changes within the health care system and advances in medicine and treatment techniques.

The usual method of upgrading skills is to attend conferences or workshops. With diminishing health care dollars, hospitals and other health care facilities have cut education budgets and are even less able to support staff requests for funding for educational activities than previously. In most facilities the occupational therapists are asked to share their newly acquired knowledge with their colleagues, but this often means giving a brief overview of what was learned in one or more days.

Several researchers have questioned whether or not continuing education activities, such as workshops and conferences, are effective in helping health professionals apply newly acquired knowledge in the clinical setting (Davis, 1984; Ferrell, 1988). One method which has been used to evaluate therapist's learning is self reporting. It is believed to be an effective way of rating the participants in a continuing education activity's knowledge and their skill in performing certain tasks (Ferrell, 1988; Hewitt, Hobday & Crawford, 1989).

Poole (1989) utilized self-reporting to evaluate whether or not a change in behaviour had occurred. The effectiveness of a 65 minute audiotape continuing education program on how theory relates to research was studied. The study results showed that the knowledge of the participants in the program had increased immediately after the program with knowledge gains maintained 9 months later. These scores were significantly higher than those of the group who did not hear the audiotapes. However, no significant differences were found between the two groups in involvement in research related behaviours in their practice. Poole proposed that a series of audiotape programs might be better than one to produce behaviour changes. She also believed additional resources should be developed to assist therapists in applying new information.

Milligan and Petchers (1988) evaluated whether or not attending a training program on human sexuality and family planning made a difference to the human service professional's knowledge in this area or their ability to apply this knowledge to their practice setting. Analysis of the self-report data revealed significant changes in both knowledge and application. Participants reported feeling that their knowledge had increased and that new skills had been learned or existing skills had been improved.

Humphry and Geissinger (1992) developed a self-rating instrument to measure therapists' perceptions of their interpersonal skills in working with families of children with special needs. The article focused on the steps taken to develop a valid instrument and stated that differences in perceived abilities appeared to be captured by asking professionals to rate their performance.

This study investigates the potential effect of becoming involved in research projects as a means of furthering learning. Usually the research project investigator has received funding for materials and coordinating the project, analyzing the data, and writing up the findings. Therefore, if the clinicians become involved in projects which can further their skills, then research may be a cost-effective and efficient method of learning. The pilot project for this study (Gaik & Rigby, 1994) involved clinicians in actually using and scoring a new test to determine playfulness. The interviews in the present study appeared to substantiate the author's feeling that the research participants learned valuable information and skills and made some change to their practice in terms of play. This was in terms of their focus on or thinking about play and the use of some of the terminology, from the test, in report writing.

Transformative Learning

The theoretical formulations underlying transformative learning are based on changes in consciousness and "deal with the mental construction of experience and inner meaning" (Merriam & Caffarella, 1991, p.259). Mezirow's theory builds on the earlier work of Habermas who described a private domain of knowledge which he characterized as "emancipatory." This domain was believed to be most concerned with the learners own self-awareness (Candy, 1991). Mezirow equated emancipatory learning with perspective transformation and further defined this as involving,

"an interest in the way one sees oneself, one's roles and social

expectations. Emancipation is from libidinal, institutional, or environmental forces which limit our options and rational control over our lives, but have been taken for granted as beyond human control (Mezirow, 1981, p. 5).

Perspective transformation is a process through which the individuals become critically aware of how and why their presuppositions, basic assumptions, or personal beliefs may be incorrect or dysfunctional and therefore may bias the manner in which they think about, see, feel, act on, and interpret their environment.

Mezirow (1981) hypothesized that perspective transformation began with a "disorienting dilemma," that is, being faced with a situation in which individuals' previous forms of responses failed. The dilemma caused individuals to reexamine and challenge their beliefs and assumptions, and allowed them the opportunity for critical reflection about why they had attached these specific meanings to their reality. Mezirow (1990) considered that critical discourse assisted the individuals to validate a new perspective. Once they had reevaluated their assumptions they could either reject the new information as being invalid and stay with their old beliefs or they could reformulate these assumptions "to permit a more inclusive, discriminating, permeable, and integrative perspective" (Mezirow, 1990, p.14). In simpler terms, a new perspective was developed when new learning altered what was already known (Merriam & Caffarella, 1991). The final step in the transformative learning process was to use these new assumptions to guide decision making and future actions.

Brookfield equated the exhibition of critical reflection with self-directed

learning in adults (Brookfield, 1986). He found that, when a distinct scope of knowledge was investigated in order to learn specific skills and develop more insight, people became involved "...in a complicated and dynamic interconnection of reflection, action, individually planned activities, self-directed decision, decisions arrived at collaboratively, decisions imposed upon us from without and so on" (Brookfield in Merriam & Caffarella, 1991, p. 215). Cranton (1993) also linked self-directed learning to critical reflection. She defined self-directed learning as "the process of voluntarily engaging in a learning experience, being free to reflect on that experience, and being able to discern change or growth as a result of that experience, regardless of the setting in which it occurs" (p. 3).

Engaging in critical thinking is described as a difficult process. When one's assumptions are challenged, as not being the only way of thinking or living, the individual's assumptive world breaks apart. This may be detrimental to the individual's self esteem and a time when the educator will need to be sensitive and supportive (Brookfield, 1990).

Using repertory grids, role playing, metaphor analysis, and writing biographies are some of the techniques suggested for encouraging transformative learning (Cranton, 1992). Brookfield supported the technique of using critical incidents as a method of fostering critical reflection. The learners were asked to provide a critical incident in the form of a brief written description of a significant event in their life. Central domains in the participants lives were explored by asking them to write critical incidents on such topics as what worked and what did not work in a relationship, what made them feel satisfied and fulfilled in their

practice, or what did they last see on television that made them really angry.

Completing this exercise within a dyad or small group is believed to be important as it provides a verbal challenge to the learners' perspective (Brookfield, 1990; Mezirow, 1990). The writer reads this description aloud and the other group members identify the assumptions they think are embedded in the text, both in terms of the writer's basic value systems and the underlying assumptions that determined the action taken. In a group situation, learners have to assume both the role of subject and analyst and this heightens their awareness of their own and others' feelings and reactions to the assumptions being challenged. Stopping to think that one's assumptions might be distorted or invalid is difficult but is made easier with group support (Brookfield, 1990).

The Playfulness Study and Transformative Learning

The Playfulness Study met the criteria for self-directed learning and reflection as defined by Cranton (1993) and others. The study participants volunteered to engage in the project which implied that they were interested in learning. They were given opportunities to reflect on their experiences, with the training session and scoring the videotapes, both individually and within a small group setting. At the completion of the study, the participants had gained skill in administering a new test. Whether changes in their basic assumptions, thoughts, or actions regarding play occurred remained to be explored.

Both Mezirow (1990) and Brookfield (1990) stressed the significance of critical discourse. A small amount of time was spent during the training session

discussing what each person thought of as necessary to make an activity playful and the benefits of play. These beliefs were then compared with the benefits of the play experience described in the literature. Individuals were not asked to identify discrepancies with their beliefs so it is unknown whether or not this technique challenged their assumptions.

A second opportunity to challenge assumptions occurred when study participants watched and scored two videotapes of children playing. This was done in a small group setting and each item was discussed.

At the training session some of the play literature was reviewed. The literature concerning the play of disabled children identified several barriers to successful play. A disorienting dilemma may have occurred at the end of the study when the participants attended a group meeting to discuss the results. No significant differences were found between the group of children with physical disabilities and the group of able-bodied children for any section of the Test of Playfulness. For some this may have yielded a discrepancy between their previous assumptions and the study findings. What became apparent was that, if the environment was supportive, the physically disabled children were just as playful as the able-bodied children.

Cranton (1993) postulated that long-term work with others with expertise or interest in the field of instructional development had the most potential for transformative learning. As the pilot research project consisted of continuing opportunity for discussion and reflection, with other occupational therapists, it was anticipated that this study might provide some evidence of transformative learning.

Present Study

This study examined the impact of participating in the playfulness study on the continuing education of the occupational therapists involved. Specifically, the study investigated whether or not participation in the play research project was a change agent in either the therapists' thinking about play or their behaviour in their clinical practice. The study also examined the participants' retention of knowledge about the Test of Playfulness.

The eight therapists who had been involved in the playfulness study (participants) were matched with eight therapists who had not been involved (nonparticipants). Therapists were asked to describe scenarios of play. Open ended interview prompts were used to elicit the therapists' perceptions of play, good play, the role or value of play, environmental and gender influences on play, play assessment and intervention, and play research for children with and without disabilities. The participants were also prompted to discuss their experience with the playfulness study. The responses from the two groups were analyzed. Evidence of transformative learning and retention of learning about the Test of Playfulness was obtained from the participant group.

CHAPTER THREE: METHODOLOGY

Overview of the Chapter

This chapter describes the research methodology for this study. Specifically, the selection of participants for this study is discussed and the format of the interview is described. Details of proposed data collection, processing, and analysis are shared. Potential weaknesses of the study are acknowledged. First, however, the pilot study or research project which laid the foundation for this investigation is described.

Research Design

In this study a qualitative research design was used to investigate the impact of participation in a research project on the clinician's continuing education.

This method was chosen in order to obtain in-depth verbal descriptions of the participants' experiences in the pilot research project and to ascertain if, and in what way, this participation has made a difference in their views towards play and in their behaviour in the clinical setting.

Pilot Study Research Project

Playfulness Study Questions

In the playfulness study, Gaik and Rigby (1994) questioned whether children with physical disabilities would achieve lower scores on the Test of Playfulness compared with those achieved by their able-bodied peers. The authors, like others (e.g. Jennings, Connors, & Stegman, 1988; Missiuna & Pollock, 1991),

believed that many children with physical disabilities may experience some degree of deprivation in their childhood play experiences. Thus, Gaik and Rigby (1994) proposed to compare the Test of Playfulness scores of a sample of children with physical disabilities with those of a sample of able-bodied peers matched by age.

Gaik and Rigby (1994) also questioned what environmental factors influenced the playfulness of the children in the sample, as they believed that certain qualities of playfulness (e.g., engaging in motor, cognitive, or social challenges and negotiating with others) may foster the development of functional competence for children with physical disabilities. Thus, it was believed to be clinically important to understand factors in the environment which promoted or detracted from the playfulness of the child.

Instrumentation

The Test of Playfulness - Research Version 2.2, developed by Bundy in 1994, was used (Appendix A). It was an observational assessment of indoor and outdoor play, to be used with children between the ages of 2 years and 10 years who were both ambulatory and verbal. It consisted of 25 items. Examples of items included: is “actively engaged”; “demonstrates obvious exuberance”; “actively modifies complexity/demands of the activity”; “pretends”; “plays interactively with others”; “initiates play with others”; and “overall playfulness”. The test used three scales to rate: (a) the extent to which the described behaviour was observed in the child, (b) the intensity of the child's participation in the described behaviour, and (c) the skillfulness of the child's participation in the

described behaviour. Each scale used a 4-point Likert scale ranging from “rarely” or “never” to “almost always” for extent, and from “not” to “highly” for intensity, and from “unskilled” to “highly skilled” for skillfulness.

Users of the test were also asked to comment on elements of the human (e.g., caretakers, playmates) and non-human environments (e.g., space) in terms of their relative promotion or detracting from the child's play/playfulness (intrinsic motivation, internal control, suspension of reality, and reading cues).

Administration of the test involved 15-20 minutes of indoor and outdoor observation when the child was engaged in spontaneous, nonstructured play within a familiar, supportive environment among friends. Observers were expected to be minimally intrusive and nondirective. Descriptions of each item assisted in the scoring of the item. Until this pilot study the Test of Playfulness had not been tested for use with children with physical disabilities.

Pilot Study Participants

Eight occupational therapists volunteered to participate in the playfulness study. All were recruited from two children's treatment centres. All had worked with children between 2 and 10 years of age who had cerebral palsy.

Sixteen children who were between the ages of 2 and 10 years of age were enrolled in the pilot study. Eight children with no known disabling conditions were matched by age with eight children with mild to moderate cerebral palsy. The children with cerebral palsy were recruited from the caseloads of interested occupational therapists from two children's treatment centres. Inclusion criteria

for the children with physical disabilities were: primary diagnosis of cerebral palsy, independence in mobility (may use a mobility aid), and able to communicate verbally.

Training of therapists

The training involved 2 hours of orientation to theoretical constructs related to play theory and 3 hours of practice using the Test of Playfulness as a group. Previously made video recordings of children involved in indoor and outdoor play were used to train the occupational therapists in the administration and scoring procedures of the Test of Playfulness.

Data Collection Procedures

Video recordings were made of each child at play in their home or in a community environment. Fifteen to 20 minute videos were made where the children were engaged in indoor play and outdoor play. Parents were asked to ensure that each child had at least one playmate in the play environment during the taped session.

There was random assignment of the video-recordings to the scorers. The principal investigators and two occupational therapists each scored eight tapes. All tapes included indoor and outdoor play. Five occupational therapists each scored three tapes and one clinician scored two tapes. Sample size calculations were based on the level of reliability expected between raters (Donner & Eliasziw, 1987) for a sample of 16 children measured on average three times (as cited in

Gaik & Rigby, 1994).

Data Analysis

Reliability was analyzed using nonparametric statistical methods. The Spearman's rank correlation was computed to compare the three raters for each child. Ancova's were also computed to look at analysis of variance for each scorer and between scorers. The Mann-Whitney U test was used to compare the groups of subjects and age-matched pairs for each section of the Test of Playfulness. The comments made by scorers about observations of the factors which promoted or detracted the child's playfulness were collated, compared and grouped into common themes.

Results

The findings which showed that there were little to no differences between the Test of Playfulness scores for the group of children with physical disabilities and the able-bodied children had important clinical implications. This suggested that in spite of their physical disabilities, all the children in the sample were managing to use intrinsic motivation, internal control, and suspension of reality in their play activity with peers and with play materials.

Being playful also implied that the children were developing problem-solving ability, flexibility, creativity, and humour to help them to develop successful functional interactions within their environments. For example, one of the preschool children with cerebral palsy was actively engaged in play activity

with his peers and modifying the challenges of the activity and environment to suit his skills. While outdoors, he preferred to push a wagon full of children, rather than attempt to ride in the wagon himself. While indoors, when his friends were jumping on a bed, he ran around the edge of the bed, laughing and interacting with his friends and was definitely a part of the group's play frame. He appeared to have the insight that jumping on the bed, or getting in and out of the wagon would be too physically challenging for him. Yet, he was able to modify the activity to enable his active participation and utilize his social and imaginative strengths to help the group of children suspend reality and maintain their play frame.

Analysis of the observations of each child's play environment highlighted the factors which promoted and detracted from playfulness. In two play situations, inaccessibility of the play materials and too much adult intervention detracted from the children's playfulness. Also, when the play opportunities for the children were limited and seemed to be too challenging, they were less playful.

The children with physical disabilities who achieved high playfulness scores played in environments which were very conducive to their play. For example, two children who use powered wheelchairs for mobility, showed great exuberance during a game of chase through an accessible playground. The supervising adult was supportive and did not interfere with their suspension of reality while they called out amusing ideas to each other.

Shortly after scoring the tapes the participating occupational therapist's were asked to comment on their views of the Test of Playfulness and their experiences scoring the video-tapes. There was agreement that use of the Test of

Playfulness enabled them to view children's play in a new light. They believed that the ToP presents an optimistic view of the child and emphasizes a child's functional capacity. In addition they emphasized the importance of considering the environment the child experiences when addressing function.

Results of the study were presented to the participating clinicians in verbal and written form. Discussion of the results occurred individually with the investigators and in small groups.

Present Study

Selection of Participants

The eight occupational therapists who participated in the pilot research project were asked to become involved in this study. They are referred to as the playfulness study participants. This group was matched with eight occupational therapists who did not: (a) participate in the study, (b) attend the presentation of the study results at the Association of Treatment Centres of Ontario 1994 Conference or the Canadian Association of Occupational Therapists 1995 Conference, or (c) read a copy of the report submitted to the funding source, the Neurodevelopmental Clinical Research Unit. The inclusion criteria for the matched group of occupational therapists were that: (a) they were working with children between the ages of 2 and 10 years who have cerebral palsy, (b) they had a similar educational background, and (c) they had a similar number of years experience in occupational therapy practice. This group is referred to as the playfulness study nonparticipants.

Participants

The eight occupational therapists who participated in the playfulness study were contacted by telephone or in person and asked to participate in this study. What was required of the participants with respect to time commitment, interview format, and the self-report questionnaire was explained.

The following demographic information describing the eight therapists was gathered. Two of the occupational therapists had been in practice between 1 and 5 years, two between 6 and 10 years, three between 11 and 15 years, and one between 16 and 20 years. Three of the occupational therapists had between 1 and 5 years experience working with children with cerebral palsy between the ages of 2 and 10, three had between 6 to 10 years, and two had between 11 and 15 years experience. With regards to education, six of the therapists held a baccalaureate degree in occupational therapy and two held Master's degrees, one in education and one in occupational therapy.

Nonparticipants

The playfulness study nonparticipant group was recruited from facilities servicing neurodevelopmentally delayed children. In each centre an occupational therapist in an administrative position was contacted and asked to provide a list of names of possible candidates for the study, whom they believed would be demographically matched to the playfulness study participant group. These therapists were then telephoned and asked to provide the information to complete

the demographics form. One children's hospital, one Board of Education office, and four children's treatment centres were contacted in order to find eight clinicians that met the criteria. The therapists were matched according to years in practice and years of experience working with children with cerebral palsy between the ages of two and 10. All of the nonparticipant group held a baccalaureate degree in occupational therapy.

Instrumentation

Demographic data was collected by asking the therapists to provide the information to complete the Therapist Demographics form (see Appendix B).

Interviews were conducted using story telling. Each therapist was asked to provide scenarios of play where they had (a) seen children with and without physical disabilities playing well, (b) assessed play, and (c) either treated play or used play as a treatment.

Two lists of open-ended interview prompts were devised (see Appendix C for the Interview Prompts for Playfulness Study Participants and Appendix D for the Interview Prompts for Playfulness Study Nonparticipants). The interview prompts were open-ended and somewhat vague in order to allow for unique responses from each clinician. The first 10 prompts to be directed to the two groups were the same and were focused on the topic of play. The first two questions were designed to elicit personal beliefs about play. The participants and nonparticipants were requested to describe play and to comment on its role or value. Next they were asked to describe "good play" for a child, and to

discriminate between good play for an able-bodied child and good play for a child with a physical disability. Then the participants were directed to consider their own practice and to comment on whether or not they assess or treat play. They were requested to decide how therapists could promote play for clients.

The focus of the interview then changed to the pilot research project on play. Specifically, the playfulness study participants were asked to describe their experiences in the pilot research project. They were asked to reflect on whether or not participation in the project changed their views about play. If they believed their views did change they were asked to elaborate on how and why their thinking changed. Another prompt addressed whether their participation in the playfulness study had changed their clinical practice.

The playfulness study nonparticipants were asked if they had been involved in any research projects involving play or the assessment of play. If the answer was yes, they were requested to reflect on these experiences and to describe whether the experience affected their thinking about play and their practice. If the nonparticipants had not been involved in a research project concerning play or the assessment of play they were asked to speculate what a research study about play would find.

Pilot Testing of Interview Prompts

The original list of interview prompts was shown to an occupational therapist, known to the author to be knowledgeable about play, for her comments and then revised. She suggested that the first question be rewritten to read, "How

would you describe play?" rather than "How would you define play?". This change was made as it seemed to be an equally informative but less difficult question to answer. The phrase, "What do you think of as good play..." was reworded in the third and fourth questions to "How would you describe good play...". In order to make it a more open-ended question it was suggested that the phrase, "How do you, as a therapist, treat play?" be expanded to, "How do you, as a therapist, treat play and/or use play as a treatment?". One change which was suggested and made to the list for playfulness study participants was to use "play research" rather than just "research" in the prompt "Tell me about your experience during our play research project." Overall the reviewer believed that the prompts were understandable and appropriate.

Self-Report Questionnaire

A self-report questionnaire was also devised to give additional information about the participants' behaviours and beliefs regarding play research and theory (see Appendix E). The participants were asked to answer yes or no to 18 questions. The first seven questions were designed to elicit some understanding of the participants' prior knowledge about play. The following two questions addressed the assessment and reporting of play. Treatment was investigated next with one question asking about intervention and another asking if research findings on play were used to determine intervention.

Question number 11 asked for a personal belief about whether or not play research was important for occupational therapists. The following four questions

asked about participants' previous involvement in play research and whether they believed they had time to be involved in research projects and if their employer would support their request to be part of a research project. Question 16 asked the participants to decide if they believed involvement in a research project was a good method of continuing their own professional education. The last question asked whether they believed they could learn as much from participating in a research project on play as they could from attending a conference on play. The questionnaire took approximately 15 minutes to complete.

The same occupational therapist who reviewed the Interview Prompts also reviewed the self-report questionnaire. She suggested that a column be added for additional comments. She believed that an example could be added to question number five for clarity, therefore "e.g., CAOT conference presentations" was added. Also at her suggestion, question number 11 was altered to read, "to help you decide upon intervention strategies" rather than, "to help you decide the intervention".

Procedure

The interviews took place at the participants' place of employment. They were asked to locate a small quiet room that they were familiar with and felt comfortable in. The average length of time for each interview was one hour.

The participants were informed that the purpose of the interview was to gather clinicians' ideas and beliefs about play and play research. The participants were reminded that since this was a study of personal beliefs there were not any

right or wrong answers. In order to become comfortable with the microphone for the audio recording, the participants were asked to introduce themselves and the equipment was tested to be sure that the conversation was audible.

The researcher explained that interview prompts were guides only and that the participants should feel free to take the conversation in any direction they wished. The researcher also explained that some notes might be taken during the conversation.

After the interview the tapes were transcribed. A copy of the transcript was given to the participant to review and verify its content. A narrative summary of the information was also provided to the participant and they were asked to verify or dispute the researcher's interpretation of their comments. Each clinician was asked to complete the self-report questionnaire at the end of the interview.

Data Analysis

A computer software program called Ethnograph was used to organize the data into codes representing thematic areas. Themes included: play of able-bodied children, play of disabled children, good play, role or value of the play, environmental influences, gender influences, play assessment, play treatment or intervention, views on the importance of play in occupational therapy, play research, continuing education on play, changes in thinking regarding play, and value of research in the clinical setting. The information was read and reread and subthemes emerged.

For the self-report questionnaire the affirmative responses of the two

groups were discussed and summarized in a table, to illustrate whether the two groups differed in their reported behavior and beliefs regarding play research and theory.

Limitations of the Study

A limitation of the study may have been not knowing the best time span between completion of playfulness research study and this study. Between 9 months and one year was chosen as the length of time that would allow for changes in both thinking and behaviour. Since 16 interviews needed to be completed, and the therapists had busy schedules and were in different cities, they were conducted over 2 months.

Another limitation was that although participants were asked to choose a time when they would not feel rushed or interrupted this was impossible to control. All therapists did, however, discuss all the topics.

There seemed to be a great deal of confusion over what constituted play assessment and treatment and therefore the yes and no answers on the self-report questionnaire were not believed, by the author, to be as valuable as the comments in the interviews.

Since the data was collected through self-reporting, the information is only valid for the participants in this study. Self-reporting is not always an accurate reflection of people's behaviour.

Results of this study are only applicable to these 16 therapists and cannot be generalized to a larger group. However, they may be of interest to other occupational therapists working with children with physical disabilities between the

ages of 2 and 10 years.

Therapists responded to the interview prompts with children with cerebral palsy in mind, but often also referred to children with other disabilities in the similar age range.

This qualitative study provides an understanding of the changes in thinking and behaviour the participants experienced as a result of being involved in the playfulness study. Since it is not a quantitative study there are no answers with statistical significance.

While storytelling is a nonthreatening and comprehensive method of investigating the therapists' knowledge about play, it limited their comments to what they believed about play in particular scenarios.

Restatement of study design

This study examined the impact of participation in a research project on play on the continuing education of the occupational therapists involved. Eight occupational therapists who were involved in the pilot research project and a matched group of eight occupational therapists who were not involved were interviewed. Qualitative research methods were used to determine the benefits or deterrents to the clinicians' continuing education.

CHAPTER FOUR: RESEARCH FINDINGS

Overview of Chapter

First, how the therapists' comments, which described various aspects of play, compared with the items on the Test of Playfulness, are summarized. Next, the findings from the scenarios of play of able-bodied children and children with physical disabilities, respectively, about play, good play, the role or value of play, and environmental and gender influences on play, are presented. Then, the findings about the similarities and differences in the play of children with and without disabilities, play assessment and intervention are reported. Last, the changes in thinking and behaviour of the participant group due to participation in the pilot play project and possible future research topics are presented.

Scenarios of Play of Children who are Able-Bodied

Each of the occupational therapists interviewed was asked to recount a scenario where she had seen a child who was able bodied playing well. The playfulness study nonparticipant group described two scenarios with children playing alone, three of groups with two children, one of a group with three children, and two of groups with four children. Five of the scenarios took place at home, one at daycare, one outside the home, and one at a cottage. The children's ages ranged from 1.5 to 8 years.

The scenarios of play of children who were able bodied, described by the playfulness study participants, consisted of two with children playing alone, four of groups with two children, and two of groups with three children. Four of the

scenarios took place at home, one at a baby-sitter's home, two at a playground, and one at a beach. The children's ages ranged from 2 to 10 years.

Play of Children who are Able-Bodied

When discussing how they knew the scenarios they had described were "play," all of the nonparticipants and five of the eight participants referred to the fun and enjoyment they had perceived from the children through laughter or facial expressions. They stated that they knew it was play because the children were happy, gleeful, and having a good time. One nonparticipant stated, "It was fun. I always think of play as fun." Six of the eight nonparticipants and three of the participants believed it was play because it was self-initiated; one therapist said, "It was the children's choice of where they wanted to be and with whom." Four nonparticipants and two participants described the play as being child or self-directed with the children having their own plan and agenda. They believed the children had their own idea of what to do, were entertaining themselves and were in control of their movement. Several therapists stated they believed what they had observed had been internally motivated, coming from the children; "...not something they had to or should do." Two participants and one nonparticipant believed it was play because, "...it transcended reality and was magical; the children were pretending and role playing." A nonparticipant commented, "They were using imagination...they knew it was pretend, it was play." The same complement of therapists thought it was play because it was free, spontaneous, and unstructured. One therapist from each group believed the activity was play

because toys were involved.

The remainder of the nonparticipants believed the activity they observed was play because it was creative, it was social and interactive, and the child was learning. One nonparticipant remarked, "It was play...it was their day-to-day routine things." Another commented, "...there was no purpose or need to come up with an end product."

When the participant group was discussing how they knew the scenarios they were describing were play, four participants commented that it was play because the children did not want to stop or leave; they were motivated to continue with what appeared to be a fun activity. Two participants believed they had observed play because the children were engrossed in the activity. They stated that the children themselves interpreted the activity as play and demonstrated this by either by saying it was play or by giving the message they were playing by acting the role from the pretend scenario. The remainder of the reasons given for knowing the scenario was play included that the children were "going from one activity to another," they were not requesting adult input, and they were challenging their skills and the rules and "doing some problem solving." One therapist stated it was "instinctive or a gut feeling" that what was observed was play.

Table 1 lists the descriptors given by both the nonparticipants and the participants to characterize play and shows how many times the responses were given by members of each group. When the responses were compared to the items on the Test of Playfulness it was noted that the playfulness study participant group

Table 1

Therapists' Perceptions of Play in Scenarios of Play of Children who are Able-Bodied

Participants	Nonparticipants	Descriptors of play	ToP
5	8	1. Fun, enjoyable, children laughing, happy, gleeful, having a good time.	B
3	6	2. Self-initiated, internally motivated, children's choice of what they wanted to do, of where they wanted to be and with whom.	B
2	4	3. Child directed, self-directed, children had own plan and agenda, were entertaining themselves, and were in control of their own movement.	B
4		4. Child motivated to continue, did not want to stop, not bored, not leaving.	B
2	1	5. Transcended reality, magical, imaginative.	B
2	1	6. Free, spontaneous, unstructured.	E
2		7. Engrossed, hard to get child's attention.	B

(table continues)

Participants	Nonparticipants	Descriptors of play	ToP
1	1	8. Productive, learning while doing.	
1	1	9. Using toys and other objects.	B
2		10. Child says it is play or gives the message it is play by acting a role.	B
	1	11. Interacting with others.	B
1		12. Moving from one activity to another.	B
	1	13. Did not have to come up with an end product.	
1		14. Not requesting adult input.	E
	1	15. Creative.	
1		16. Child challenging own skills.	B
	1	17. Doing day to day routine things.	
1		18. Problem solving.	
1		19. Child challenging rules.	B
1		20. Therapist instinct, gut feeling.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

referred to five more descriptors of play behaviours or environmental influences, that were items on the test, than did the nonparticipant group.

Good Play of Children who are Able-Bodied

Having fun, looking happy, and enjoying the activity was also the most often stated definition of good play. Good play was believed to be characterized by laughter, smiles, appearing happy and content, feeling good about oneself, and having a spirit of play. Another common theme that emerged from five of the nonparticipants and four of the participants was that good play was a cooperative activity between different ages where there was negotiation and an absence of conflict, fighting, arguing, or screaming. A nonparticipant described this by saying, “Good play to an adult is if there’s no arguing, it’s nice and smooth, they’re cooperating, they’re happy, there’s no conflict in the play.”

Five of the participants and two of the nonparticipants believed that if the children were engrossed, engaged, involved, interested, and focused their attention on the activity then it was good play. They believed good play included having an idea in mind, carrying through with it and being occupied by the play.

The social aspect of being part of a group and positive interaction, with dialogue or connection between the players, was a shared theme among two of the nonparticipants and four of the participants. Four nonparticipants and two participants believed that playing independently, entertaining themselves, and not asking for adult involvement characterized good play. Three nonparticipants and two participants believed good play meant the children were in control of the play

situation; that it was an activity they chose to do which was self-initiated and was either self-directed or had shared direction. The children set the plan and changed it as they wished.

Three nonparticipants and two participants stated it was good play because the children were using their imagination, pretending, creating whole scenarios, and role playing natural roles. Keeping the flow of the play was also considered a sign of good play by three nonparticipants and two participants. The children moved easily from one activity to another and between solitary and group play, and there was continuous play as the children followed each other's directions. Four participants and one nonparticipant cited continuing the play by choice, repeating activities, and not wanting to stop as being indicative of good play. Two therapists in each group believed being able to move freely in a safe and comfortable environment and being comfortable with the activity characterized good play.

Success with the activity, being proud of oneself, and being satisfied with the activity was given twice by nonparticipants and once by a participant as a descriptor of good play. One nonparticipant and two participants viewed good play as being productive, constructive, and having direction. There was purpose to their play in imagining a certain situation, wanting to achieve an end goal, or wanting to complete a task.

The remainder of the responses were unique to an individual therapist. One nonparticipant believed the scenario observed showed good play because "the children were using their physical skills well." One participant noted persistence

Table 2

Therapists' Perceptions of Good Play in Scenarios of Play of Children who are
Able-Bodied

Participants	Nonparticipants	Descriptors of good play	ToP
6	6	1. Having fun, enjoying themselves, happy, getting pleasure, not appearing anxious, smiling, appearing content, having a spirit of play.	B
4	5	2. Cooperating, no conflict, negotiating.	B
5	2	3. Engrossed, engaged, involved, interested, focused, good attention to activity.	B
4	2	4. Interactive, dialogue or connection between the players, social.	B
2	4	5. Entertaining self, playing independently, not seeking adult assistance.	
2	3	6. In control of play situation, self directed or shared direction, chose activity, set plan, made changes.	B

(table continues)

Participants	Nonparticipants	Descriptors of good play	ToP
2	3	7. Pretend play, using imagination, role playing.	B
2	3	8. Kept flow, continuous play, moving from one activity to another.	B
4	1	9. Continued play by choice, did not want to stop, repeated activities.	B
2	2	10. Free movement within a safe, comfortable environment.	E
1	2	11. Successful and satisfied with activity, proud of self.	
2	1	12. Productive, purpose to the play, constructive, has direction.	
1		13. Persisting to learn.	B
1		14. Matched belief of what had been good play for self as a child.	
	1	15. Used physical skills.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

with activities and believed the child was learning from this in the scenario described. Another participant believed the scenario observed was good play because “it matched a personal belief” of what had been good play for this therapist as a child.

Table 2 lists the descriptors used by both the nonparticipants and the participants to characterize good play and shows how many times the same responses were given by members of each group.

Role or Value of the Play for Children who are Able-Bodied

Five of the nonparticipants and participants determined that the role or value of the play was the opportunity to engage in imaginary or pretend play, to establish one’s identity and to practise this role. One participant stated that play provided. “...a forum to try out different roles without actually being serious about anything, without fear of failure, I guess the fear of being laughed at, because they’re just playing.” Another participant described the value of play as having “...the opportunity to pretend to be someone else and to try something new.”

Five of the nonparticipants and four of the participants believed that play helped develop social skills, especially peer relationships. They believed play was the medium through which children could develop social interactive skills, to get to know each other, and learn to play well together. Getting pleasure from the play, having fun, being happy, and enjoying oneself was also cited as being a value of play.

Two therapists in each group stated the scenarios they described provided

physical, emotional, and cognitive outlets, ways to expend energy, let feelings out and express oneself. A nonparticipant said about the child in her scenario, “It’s (play) an outlet for all of those things that are going on inside him...if he didn’t do those things he would feel cranky, pent up.”

Gaining self-esteem through a sense of accomplishment or through having the opportunity for leadership was believed by one nonparticipant and two participants to be a value of play. One nonparticipant and two participants believed developing fine motor, gross motor, and motor planning skills and learning the abilities of the body were values of play. Learning to cooperate, negotiate, make decisions, and take turns was cited by one nonparticipant and two participants as being valuable.

Developing problem-solving skills was believed to occur in two of the nonparticipants’ scenarios. One therapist in this group believed the role or value of the play was “...to learn to weed out noise and obstacles and integrate the vestibular stimulation quickly and control the movement.” Other learning that was noted by individual nonparticipants included learning new skills by challenging oneself, “...learning cause and effect,” and “...learning from the environment how water moves or what happens when sand is wet.” Having the freedom and time to explore materials with little structure or guidance was believed to be valuable by one nonparticipant. One therapist believed the role or value of the play was that “...it was productive” and had been chosen and initiated by the child.

Individual participants believed the role or the value of the play included “...learning from an older child,” “...learning tolerance from a younger child,”

being a child's occupation, and being a way to forget other issues and find enjoyment. Developing spatial relations, directionality and a sense of rules and boundaries, and providing different types of play which were seen as "...healthy alternatives to watching television" were other values of play cited by individual participants.

What the occupational therapists, from both the nonparticipant and participant groups, determined was the role or value of play is summarized in Table 3.

Environmental Influences on the Play of Children who are Able-Bodied Non-Human Factors

Aspects of the non-human environment which five of the nonparticipants and one of the participants commented on included lots of readily available, easily accessible, structured, and unstructured play materials. Having lots of play materials available and accessible and having a variety that included creative media was believed to influence play. One participant stated, "...just being in a playroom with lots of toys...gets kids excited...(they had) a tickle trunk that was full of adventure and different ideas." After further describing the scenario she commented, "I think that's an exciting thing about play...that you can use the same materials, you can be in the same place but the play doesn't have to be routine it can be new."

Six participants and two nonparticipants believed that space had an impact on the play with the activity being adapted to the space available. They believed

Table 3

Therapists' Perceptions of the Role or Value of Play in Scenarios of Play of
Children who are Able-Bodied

Participant	Nonparticipant	Descriptors of the role or value	ToP
5	5	1. Provided a forum to try out different roles through pretend/imaginary play.	B
4	5	2. Opportunity to develop social skills, to practise interaction skills in play.	B
3	3	3. Provided fun, enjoyment, pleasure.	B
2	2	4. Provided a physical, emotional, and cognitive outlet - way to expend energy, let things out and express self.	
2	1	5. Opportunity to improve self-esteem through accomplishments.	
2	1	6. Opportunity to develop fine and gross motor skills and abilities of the body.	
2	1	7. Opportunity to cooperate, negotiate, make decisions.	B
	2	8. Opportunity to develop problem-solving skills.	
	1	9. Provided challenge to learn new skills.	B

(table continues)

Participant	Nonparticipant	Descriptors of the role or value	ToP
1		10. Provided occupation, activity that is much of a child's day.	
1		11. Provided a forum to forget other issues and enjoy self.	B
	1	12. Opportunity to learn cause and effect.	
	1	13. Provided the freedom and time to explore play materials with little structure or guidance.	E
1		14. Being outside and exploring, learning from the environment, provided a healthy alternative to T.V.	E
1		15. Opportunity to learn from an older child and learn tolerance of a younger child.	
	1	16. Activity was productive - chosen and initiated by the child.	B
1		17. Opportunity to develop spatial relations and directionality.	
1		18. Opportunity to develop a sense of rules and boundaries.	E

(table continues)

Participant	Nonparticipant	Descriptors of the role or value	ToP
1		19. Opportunity for quiet, independent play versus group at daycare	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.
The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

that a big open area encouraged gross motor play and a smaller space encouraging fine motor, sit down play. Five nonparticipants and one participant believed that being in a comfortable environment influenced play. The novelty of the activity and the setting was believed by one nonparticipant and two participants to be important. One therapist in each group cited being in a safe environment and having good weather for outdoor play as influencing the play.

Familiarity of the environment was believed to be important by three nonparticipants. Other non-human factors believed by individual nonparticipants to influence the play were being in a well lit room, having the play space structured in a way that "...the children were in close proximity to each other," and being in an unstructured and "...peaceful environment." Having lots of time to play was believed by two participants to influence the play. In one participants' scenario, the play equipment was believed to be "...directing the play to be active."

Human Environment

An aspect of the human environment which one nonparticipant and two participants believed had influenced the play was being with familiar playmates. No other comments were shared themes between the two groups.

Nonparticipants stated that in three of the play scenarios the human environment factors of rules and structure had an impact. There was an expectation that the child choose an activity, "...stick to it a while," and then put it away. Two nonparticipants referred to the supportive environment where there were other children and adults to imitate and lead. In one scenario at a cottage the

nonparticipant felt the “isolated environment,” where, “...no other children could enter the group play to set the rules,” positively influenced the play. Individual nonparticipants believed that familiar people, and “...a good fit with the child and the environment” were important factors.

Participants stated that in three of the scenarios the human environment factor of having permission to play in certain areas had an impact. Three participants commented that the children felt free to make decisions on the direction of the activity. Having another child to play with who was familiar was thought to be influential in two scenarios. Other human environment factors believed by individual participants to influence the play included having no adult direction or interference, no distractions and “...a well matched peer” with whom they had “...a history of playing well together.”

The environmental factors which the occupational therapists from the nonparticipant and participant groups determined were influencing the play in the scenarios of play of children who were able-bodied are summarized in Table 4. The nonparticipant group made a few more references to factors in the non-human environment which influenced the play than did the participants and the participant group referred to one more aspect of the human environment.

Gender Influences

When prompted to discuss gender influences, half of the nonparticipants and six of the participants believed that gender had no influence in the scenarios they described. Most felt the activity was gender generic and something they had

Table 4

Therapists' Perceptions of Environmental Influences in Scenarios of Play of
Children who are Able-Bodied

Participant	Nonparticipant	A. Non-human Environmental Influences
7	5	1. Lots of play materials available and easily accessible including unstructured, creative media.
6	2	2. Space.
1	5	3. Comfortable.
2	1	4. Novel activity
	3	5. Familiar environment.
2		6. Lots of time.
1	1	7. Good weather.
1	1	8. Safe.
	1	9. Well lit.
	1	10. Play area structured so that players are in close proximity.
	1	11. Unstructured.
	1	12. Peaceful.
1		13. Playground equipment directing the play to be active.

(table continues)

Participant	Nonparticipant	A. Non-human Environmental Influences
		B. Human Environmental Influences
	3	1. Some expectations, rules and structure.
3		2. Freedom to make decisions on direction of activity.
3		3. Permission to play.
2	1	4. Familiar playmates.
	2	5. Supportive playmates.
	1	6. Freedom to choose the activity.
	1	7. No other children entering the play group to set the rules.
1		8. No distractions.
1		9. Well matched peer.
1		10. No adult direction/interference.

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

seen both boys and girls doing. They commented that they thought the children would have done the same things had the gender of the players changed or the types of toys been different. They also believed that age was more of a factor than gender in the play they had observed.

Three of the nonparticipants and one participant believed girl play was more gentle, had more verbal interaction and sharing, and did not stretch the boundaries as far. They described boy play as being more active and more aggressive. One nonparticipant said, "I think there's something there that's innate, that directs them to different activity." Two of the nonparticipants and one of the participants wondered if the play might have been different if the gender of the playmates had been different. They wondered if the gender specific roles would have been assigned differently or if the activity level of the play would have changed.

One nonparticipant and two participants believed the gender influence came from the parents. In one scenario the father engaged in rough housing play with the child and the mother involved the child in quiet play. In another scenario the child had only gender specific toys to choose from. One of the participants commented that she believed, "...personality rather than gender influence a person's type of play and whether or not they are willing to try new things." A nonparticipant stated, "I think parents do shape because of their stereotypes."

The therapists' perceptions of gender influence are summarized in Table 5. Most of the therapists did not believe gender had any influence on the play in the scenarios they had described. One quarter believed girl play was more gentle and

Table 5

Therapists' Perceptions of Gender Influences in Scenarios of Play of Children who are Able-Bodied

Participants	Nonparticipants	Gender Influences
6	4	1. No influence.
1	3	2. Girl play believed to be more gentle with more verbal interaction and sharing.
1	3	3. Boy play believed to be more active and aggressive.
1	2	4. Wondered if the play would have been different if the gender of the playmates had been different.
2	1	5. Gender influence was from the parents.

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

less active than boy play. A few talked about the parental influence on the type of play and choice of toys.

Scenarios of Play of Children with a Physical Disability

Each of the occupational therapists interviewed was asked to recount a scenario where she had seen a child with a physical disability playing well. The study nonparticipant group described two scenarios where the children were playing alone, four scenarios of groups with two children, one scenario of a group with four children, and one scenario of a group with five children. Two of the scenarios took place at home, two at the treatment center, two outside schools, one in a school classroom, and one at a daycare. The children's ages ranged from 2.5 to 10 years. One nonparticipant stated, "There's a problem right away, even thinking about a disabled child who is playing well" but then was able to think of a scenario.

The study participant group described one scenario of a child playing alone, three scenarios of groups with two children, one of a group with three children, one of a group with four children, and one of a group of five children. Four of the play scenarios took place in school classrooms, one at a playground, one at a daycare, and one at home. The children ranged in age from 2 to 8 years.

Play of Children with a Physical Disability

When discussing how they knew the scenarios they had described were play, six of the eight nonparticipants and seven of the participants referred to fun

and enjoyment. They commented that the children were having fun, and exhibiting joy through smiling, laughing, “hooting and hollering.” Three nonparticipants and two participants believed it was play because the children were using their imagination, and were escaping from reality. Two therapists in each group stated it was play because the children were interested and involved in the activity. They were engaged and occupied in the play. Interacting with other children and being part of the group was believed to indicate play by two therapists from each group. One nonparticipant and one participant commented that they believed what they had observed was play because the children had initiated the activity.

Three nonparticipants believed the scenario was play because the activity was spontaneous and the children participated freely. “The children were doing it because they wanted to.” Two nonparticipants said it was play because the child called it play. One stated, “It was his own definition...I’m playing with my friends...did you watch me playing baseball?” The rest of the reasons given for knowing the scenario was play were said by one nonparticipant each. They believed the activity they observed was play because it was unstructured, “...there was no goal,” no adult direction, the activity was “leisure” and “self-initiated” and the “...children did not want to stop.”

Three participants believed that being motivated to do and continue the activity was indicative of play. Being self-directed, using toys and people in the activity, and having a goal-oriented sense of purpose to the activity was considered a sign of play by two participants. The remainder of the reasons given included, “...no expectations placed on the children,” they initiated the play, they were being

Table 6

Therapists' Perceptions of Play in Scenarios of Play of Children with Physical Disabilities

Participant	Nonparticipant	Descriptors of play	ToP
7	6	1. Fun, enjoyable, happy, evidence of joy.	B
3	2	2. Imaginary/pretend activity, escape from reality.	B
2	2	3. Engaged, interested, involved, occupied.	B
2	2	4. Interacting with other kids, part of the group.	B
3		5. Motivated to do the activity and to continue it.	B
	3	6. Spontaneous, participated freely, doing it because they wanted to.	
2		7. Using toys and people in activity.	E
	2	8. Child called it play.	B
2		9. Sense of purpose to activity/goal directed.	
2		10. Self-directed.	B
1	1	11. Self-initiated.	B

(table continues)

Participant	Nonparticipant	Descriptors of play	ToP
	1	12. Child's choice	
1		13. Child acting as leader.	B
1		14. Child being a participant.	
	1	15. Unstructured activity.	E
	1	16. No goal.	
1		17. Developmentally appropriate activity.	
	1	18. No adult direction.	E
1		19. No expectations placed on child.	E
	1	20. Leisure activity.	
	1	21. Child not wanting to stop.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

leaders and participants, and "...their play was developmentally appropriate."

Table 6 lists the descriptors given by both the nonparticipants and the participants to characterize play and lists how many times the same response was given by members of each group.

Good Play of Children with a Physical Disability

Six therapists in each group believed having fun, laughing, being happy and satisfied and enjoying the activity signified good play. Five nonparticipants and two participants believed that playing cooperatively, participating, and sharing the direction of the activity indicated good play. Being intent on the task, absorbed, interested, and involved in it was cited by three nonparticipants and two participants. Two believed that having autonomy over play was important. The children were directing the play, entertaining themselves, and playing independently. Two nonparticipants and one participant believed good play was self-initiated and there was freedom to choose the activity. One participant commented, "When someone is playing well I think it really is intrinsically motivated. I think there can be external factors but I think to be really excited about play, it's coming from inside, it's sort of shining from the inside out." One nonparticipant and two participants believed they had observed good play because the children had been using their imagination. One therapist in each group believed using creativity was indicative of good play.

Four nonparticipants believed good play was characterized by interaction with peers. One stated, "I think you base it on what a child (without a disability)

would do...they would interact with their other little peers and you wouldn't see them playing in isolation with another child in the room. They're going to be interacting with them in some way." Two nonparticipants believed that since the children continued with the activity that it was good play. Individual nonparticipants believed that exhibiting flexibility, manipulating objects, and having "a smooth, continuous movement from one activity or toy to the next" indicated good play.

Three participants referred to challenging physical, cognitive, and social skills as characterizing good play. Individual participants believed that learning from the play, being a leader, "burning off energy," and "doing naughty things" were characteristics of good play. One nonparticipant stated, "I think when it's good play it's just really that there's a spirit of play that comes from the individual...he was alive because he was playing, because he was having fun." Table 7 lists the descriptors given by both the nonparticipants and the participants to characterize good play, in the scenarios of children with physical disabilities, and shows how many times the comments were made by members of each group.

Role or Value of the Play for Children with Physical Disabilities

The role or value of the play in four of the nonparticipant's and five of the participant's scenarios was believed to be developing social interaction skills through peer interaction, playing together, and building rapport. Two of the nonparticipants and five of the eight participants also felt doing the activity independently, possibly with the activity or environment adapted was an important

Table 7

Therapists' Perceptions of Good Play in Scenarios of Play of Children with Physical Disabilities

Participant	Nonparticipant	Descriptors of good play	ToP
6	6	1. Fun, pleasurable, enjoyable, expressions of fun, getting satisfaction.	B
2	5	2. Playing cooperatively, participating, sharing direction of play.	B
2	3	3. Absorbed in task, interested, involved.	B
	4	4. Interacting with peers.	B
2	2	5. Child directed, playing independently.	B
1	2	6. Free to make choices.	E
1	2	7. Self-initiated.	B
3		8. Challenging physical, cognitive, and social skills.	B
2	1	9. Using imagination.	B
	2	10. Stuck with activity.	B
1	1	11. Using creativity.	
	1	12. Smooth, continuous movement from one activity to the next.	B
1		13. Burning off energy/healthy.	

(table continues)

Participant	Nonparticipant	Descriptors of good play	ToP
	1	14. Manipulating objects.	
1		15. Learning from play.	
1		16. Being a leader.	B
	1	17. Exhibiting flexibility.	
1		18. Doing naughty things.	B

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

outcome. Enjoyment and the wish to keep playing was used to describe the role or value of the play in three of the nonparticipants' and one of the participants' scenarios. Two in each group believed the role or value of the play was in developing and improving motor skills. Four nonparticipants and one participant believed that building confidence, self-esteem, and feelings of competence and acceptance within the group were important outcomes of play. Two nonparticipants and one participant believed learning cooperation and turn taking was the role or value of the play in the scenarios they described.

Three nonparticipants referred to the opportunity to pretend or role play as the value of the play in the scenarios they described. Developing problem-solving skills and using internal motivation to explore and manipulate objects were each stated twice as being the role or value of play. One nonparticipant stated, "He really needs to go check out and explore and manipulate objects and experiment with these objects." "Learning to risk by playing with competitive peers" was also cited by one nonparticipant.

In the participant group having the opportunity to challenge one's skills and practise something difficult was believed to be valuable by two therapists. The remainder of the responses were given by one participant each. They included, developing leadership skills, "...learning to respect the rules and boundaries," learning to initiate play and having an opportunity to build on academic learning. The therapists perceptions, of the role or value of play for children with physical disabilities, are summarized in Table 8.

Table 8

Therapists' Perceptions of the Role or Value of the Play in Scenarios of Play of
Children with Physical Disabilities

Participant	Nonparticipant	Descriptors of the role or value	ToP
5	4	1. Developing social skills through peer interaction.	B
5	2	2. Doing activity independently.	
1	4	3. Building confidence and self-esteem.	
2	2	4. Fun, enjoyment.	B
2	2	5. Developing motor skills.	
	3	6. Opportunity to role play.	B
1	2	7. Learning cooperation, turn taking.	B
	2	8. Developing problem-solving skills.	
	2	9. Using internal motivation to explore and manipulate objects.	
2		10. Challenging own skills.	B
1		11. Developing leadership skills.	B
1		12. Learning to respect rules and boundaries.	E
	1	13. Learning to risk by playing with competitive peers.	E

(table continues)

Participant	Nonparticipant	Descriptors of the role or value	ToP
1		14. Learning to initiate.	B
1		15. Building on academic learning.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

Environmental Influences on the Play of Children with Physical Disabilities

When discussing the nonhuman environmental influences on the play described, having the activity or the environment adapted or modified was referred to three times by nonparticipants and twice by participants. The same complement of therapists commented that having a free play time influenced play. Two therapists in the nonparticipant group and one in the participant group believed that having the space to play and accessible play materials influenced the play.

Being in a comfortable and familiar setting was cited three times by nonparticipants as a non-human environmental influence. One nonparticipant believed that having a, "well lit room" was a non-human environmental influence, and one believed the fact that, "...the play was happening at the treatment centre" had an influence. Two participants believed that having lots of play materials available influenced the play. One participant commented that having, "...the play area structured so that the players were in close proximity" made a difference to the play.

A human environmental factor believed to influence the play by one nonparticipant and two participants was having other children to play with. One therapist in each group cited having familiar playmates, no adult intervention or expectations, no distractions, and the other children being accepting of the child's disability as influencing the play. Individual nonparticipants cited being "developmentally on par" with playmates, and having "a parent present" as having influenced the play.

An aspect of the human environment believed to influence the play by two

Table 9

Therapists' Perceptions of Environmental Influences in Scenarios of Play of
Children with Physical Disabilities

Participant	Nonparticipant	A. Non-human Environmental Influences
3	2	1. Adapted activity or environment.
2	2	2. Free play time.
3	2	3. Accessible play materials.
	3	4. Familiar setting.
	3	5. Comfortable.
1	2	6. Lots of play materials available.
2		7. Space.
1		8. Play area structured so that players are in close proximity.
	1	9. Well lit.
	1	10. Treatment centre.
		B. Human Environmental Influences
2	1	1. Other children to play with.
2		2. Freedom to choose activity.
1	1	3. Familiar playmates.
1	1	4. No adult intervention or expectations.
1	1	5. Other children accepting of disability.

(table continues)

Participant	Nonparticipant	A. Non-human Environmental Influences
1	1	6. No distractions.
	1	7. Child felt secure because parent was there.
1		8. Adult permission to do the activity.
	1	9. Developmentally on par with playmates.
1		10. All same age and sex.
1		11. Right number of children for the activity.

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

participants was having the freedom to choose the activity. The remainder of the influences described were stated by one participant each. They included: adult permission to do the activity, the right number of children for the activity, playmates being the same age and sex, and the other children being accepting of the disability. One participant talked about physically, but unobtrusively, assisting the child to maintain his body position for play and described herself as, "...a quiet part of the environment that allowed him to play."

The environmental factors which the occupational therapists, from the nonparticipant and participant groups, determined were influencing the play in the scenarios of play of children with physical disabilities are summarized in Table 9. The participant group discussed two more aspects of the human environment that influenced the play than did the nonparticipants.

Gender Influences

When prompted to discuss gender differences, half of the nonparticipants and seven of the participants believed that gender had no influence in the scenarios of play they had described. Two nonparticipants and one participant commented that there was some stereotyping in the children's play in the way they assigned certain roles to specific genders. Examples given included the children being engaged in traditional sexual stereotyped activities, with boys doing more sports and girls pretending to cook. Two nonparticipants referred to groups of boys which they believed female players would not have been allowed to join.

The gender influences which the occupational therapists, from the

Table 10

Therapists' Perceptions of Gender Influences in Scenarios of Play of Children with Physical Disabilities

Participant	Nonparticipant	Gender Influences
7	4	1. No influence.
	2	2. Same sex groups.
1	2	3. Sexual stereotyped activity.

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

nonparticipant and participant groups, determined were influencing the play, in the scenarios of play of children with physical disabilities, are summarized in Table 10.

Less gender differences were noted in the scenarios of play of children with physical disabilities described by the participant group.

Similarities in the Play of Children With and Without a Physical Disability

When prompted to consider the similarities in the scenario of play of the child who was able-bodied and the scenario of play of the child with a physical disability that they had described, five of the nonparticipants and two of the participants stated that the activity was fun and enjoyable. Half of the nonparticipants and two of the participants believed that the children's internal drive, need, and desire to play and to explore was the same. One participant stated, "Kids with physical disabilities have all the same intrinsic feelings that other kids have."

A similarity noted by two of the nonparticipants and half of the participants in comparing the two play scenarios was that the play involved social interaction with peers and the need to be part of a group. It provided the same opportunity for both the children who were able bodied and the children with a disability to vocalize and socialize.

The imaginary part of play, the escape from reality, was identified as being the same three times by the nonparticipants and twice by the participants. One nonparticipant added, "And even the type of things that they would do with the objects are very similar if they have the physical capability."

Half of the nonparticipants and one of the participants believed that they received the same benefits of learning and practicing skills in play. One of the nonparticipants and two of the participants believed the similarities were that the children attended to and were involved and engaged in the activity. One nonparticipant and two participants believed the cooperation and negotiation and the children wanting to play was the same. Similarities stated by one participant in each group included that the children were self-directed, the play involved making choices, and that through the play the children gained a sense of accomplishment and increased self-esteem.

A similarity seen by two participants was that the play was self-initiated. Similarities seen by one nonparticipant included, that the children were participating in “tidying up,” using objects in play, and being active. They had accessible play materials and appeared to feel secure.

Two of the participants noted that in each scenario there was there was little adult direction and the children wanted to try to do new things. Similarities commented on by one participant included that “...the play was continuous, ongoing and spontaneous,” it involved familiar and same age peers, a familiar setting and activity, and the children, “...developed their play skills and used their physical and cognitive abilities to the maximum level.”

The similarities between the scenarios of play of the children who were able-bodied and the play of the children with physical disabilities are summarized in Table 11. Although the number of comments overall were similar, the participant group gave four more ideas of what was the same in the play as did the

Table 11

Therapists' Perceptions of Similarities in Scenarios of Play of Children with and without Physical Disabilities

Participant	Nonparticipant	Descriptors of similarities	ToP
2	5	1. The activity was fun, enjoyable, pleasurable.	B
4	2	2. Involved social interaction.	B
2	4	3. Involved internal drive to play and explore.	
2	3	4. Involved imaginative play, escape from reality.	B
1	4	5. Same benefits of learning from play.	
2	1	6. Involved attending, engagement.	B
2	1	7. There was cooperation and negotiation	B
2	1	8. Children wanted to play.	
1	1	9. Provided a sense of accomplishment, increased self-esteem.	
1	1	10. Involved making choices.	
1	1	11. Self directed; decided when to end their play.	B
	2	12. Play was self-initiated.	B

(table continues)

Participant	Nonparticipant	Descriptors of similarities	ToP
2		13. Little parental or adult direction.	E
2		14. Children wanted to try new things.	B
1		15. Play was continuous and ongoing.	B
	1	16. Participated in tidying up.	
1		17. Play was spontaneous.	
	1	18. Used objects in play.	
1		19. Played with same age peers.	E
1		20. Played with familiar playmate.	E
	1	21. Play was active.	
1		22. Familiar setting and activity.	E
1		23. Used their physical and cognitive abilities to the maximum level.	B
1		24. Independence.	
	1	25. Accessible play materials.	E
	1	26. Children felt secure.	B
1		27. Developed play skills.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

nonparticipant group.

Differences in the Play of Children With and Without Physical Disabilities

During the interview the therapists were also prompted to discuss the differences in the play in the two scenarios they had described. Half of the therapists in the two groups identified that the children who were able-bodied had more variety in their play. They could explore and experience all kinds of play. The children with physical disabilities could not change activities easily and could not do the full range of activities.

Five of the nonparticipants and two of the participants believed the children who were able-bodied had a lot more choice in their play as they could choose their toys and play situation. The choices of the children with physical disabilities were limited by toys not being accessible and by the children's limited mobility. Four participants and two nonparticipants remarked that the children who were able-bodied could keep the flow of the play and could make quick and easy transitions from one type of play to another. They found that in the play of children with physical disabilities, the flow was often broken as the children needed help to change the play focus and there was a slower transition from one type of play to another.

Two therapists from each group found that the children who were able-bodied could keep up to the group in their scenarios but the children with a physical disability could not. Two from each group also believed the children who were able-bodied had more control over their own play. They could make their

own choices and were not dependent on the cooperation of others. The children with physical disabilities were believed to have less control over their play as their playmates were more likely to bring them toys, speak, and make choices for them.

Three nonparticipants and one participant believed the play was less structured for the children who were able-bodied and more structured and therefore more like work for the children with physical disabilities. One nonparticipant and two participants commented that play was easier for the children without disabilities as they did not have to put as much energy into their play. One participant stated, "I'm always inspired by these kids, because they're always doing amazing things. They're really working hard and not really appreciating it...it's hard work just to play." It was also found that the children with physical disabilities, in their scenarios, had communication difficulties and therefore had more trouble interacting.

The same complement of therapists believed that the children who were able-bodied were self-directed more often. They could direct their own play and change to a new activity whenever they wanted, whereas with the children who were physically disabled it was believed that others often directed their play and they were often dependent on others to change to a new activity. It was noted, however, that if the child could communicate they could direct imaginative play.

Two nonparticipants and one participant determined that the children who were able-bodied had the same rules as the other players and were flexible to adapt to changing rules and other's needs. The children with physical disabilities needed to have the rules and activities modified by the group in order to join the play. The

same complement of therapists stated that a difference in their play scenarios was that the children who were able-bodied could manipulate the same toys as their same age peers whereas the children with physical disabilities often could not. One therapist from each group identified the activity level as being different. They found that the children with physical disabilities engaged in less gross motor, active play. One therapist from each group believed the play of the child who was able bodied had few limits on it, whereas, the play of the child with a physical disability was limited to what was within reach, to what someone brought to the child, or to what the child asked for. The remainder of the differences were identified by one group or the other.

In the nonparticipant group, three believed the children who were able-bodied initiated play more often. They did not need to be guided or redirected to the play and it was easier for them to initiate play. The opposite was believed to be true for the children with disabilities. Three nonparticipants talked about the way the children with physical disabilities had less opportunity and ability to play by themselves. They commented that the child who was able-bodied could go and get the toys and play with them whenever they wanted to but the child with a physical disability, needed assistance to get toys and set up the activity before they could play independently.

Three therapists also believed that the child who was able-bodied had more success experiences in meeting the goal of the play since they had the physical ability to do a lot more things to feel good about. Two nonparticipants said a difference in the play was that the children with a physical disability were more

isolated, less interactive, and less spontaneous because the play needed to be set up for them to participate. Their play needed to be facilitated more by others. One nonparticipant found that the child who was able bodied, "...could stick with activities longer, had a longer attention span and needed less direction" than the child with a physical disability.

Another nonparticipant remarked that the child who was able-bodied "...was consistently happy or joyful," whereas the child with a physical disability was, "...less joyful and less consistently happy." She stated the child who was able bodied was able to engage "...in a mix of manipulative and imaginative play" in one of the nonparticipant's scenarios, whereas the child with the physical disability needed "...to rely more on imagination." Another nonparticipant cited as a difference the inability of the child who was physically disabled and not mobile to approach peers to play and therefore being, "...dependent on others to come to him."

One nonparticipant believed the child who was able bodied experienced "real play" and she defined that as "...play that's fair, even and with a peer." She believed that the child with a physical disability experienced real play less often, that the play was "...less often fair or even."

Frustration was also commented on as a difference in one set of scenarios. The therapist believed that the child with a physical disability was "more frustrated" since he knew what he wanted to do, but "...physically could not do it." One nonparticipant had used a scenario of play of a child with a physical disability at a treatment center and noted that some of this child's play was in

therapy and therefore, "...more controlled and not as free" as the child who did not have therapy. She added that in therapy, "We probably push the child to play longer, just one more, one more always. I don't find myself doing that with (my children)."

In one set of scenarios the child who was able bodied could be competitive and the child with a physical disability was less able to compete. Being able to play with anyone the child wanted and continuing to be happy with his play abilities was foreseen for the child who was able-bodied, whereas there was a question of whether "...the child with a physical disability might become less happy with his play abilities over the years" and might be "...more confident and happy on a segregated sports team." The benefits of play were believed to be less for the child.

One nonparticipant found that the child who was able bodied could take on any role in play and was "...likely to take on the protector, adult, director, or nurturing mother role towards a peer with a disability." The child with a physical disability was limited to adopting a role within his physical abilities and was "...more likely to take on the baby, follower role" with peers who did not have a disability. One other difference noted by one nonparticipant was that the child who was able bodied had "...more options of how to get the message across" to peers that they wanted to play.

One participant identified a difference that was more positive for the child with a physical disability in her scenario and that was that "...the child had more opportunity for leadership." Another participant cited the opposite. In her

scenario, the child with a physical disability had "...less opportunity for leadership" as "...a lot of movement was involved in the play." One participant found that in the play of the child who was able-bodied there was no need to adapt the environment, but that the child with a physical disability had "...learned to adapt the environment and engage others" to access the play. Another participant discussed the difference in the development of the play skills. She believed that as motor, cognitive, sensory motor, visual motor, and other skills developed there was normal development of play in the child who was able-bodied. In her scenarios the child who was able-bodied "...was more assertive" than the child with a physical disability, who became "...an object of another child's play as opposed to being a player."

The nonparticipant group made almost twice as many comments overall regarding differences as did the participant group. The nonparticipant group noted 16 more differences in comparing the scenarios of play of the children who were able-bodied and the play of the children with a physical disability than did the participant group (see Table 12).

Views on Whether or Not Children with a Physical Disability Can Play as Well as Able-bodied Children

Six of the eight nonparticipants and five of the eight participants commented on whether or not they felt children with physical disabilities could play as well as children who were able-bodied. Five of the participants and two of the nonparticipants stated that they could play as well, two of the nonparticipants

Table 12

Therapists' Perceptions of Differences in the Play of Children with and without
Physical Disabilities

Participant	Nonparticipant	Able bodied	Physically disabled	ToP
4	4	More variety in play.	Less variety in play.	
2	5	Lots of choice.	Fewer choices	
2	4	Quick and easy transition from one type of play to another.	Slower transition from one type of play to another.	B
2	2	Can keep up to group.	Physically cannot keep up to the other children.	
2	2	Control own play.	Have less control over play.	
1	3	Less structured	More structured.	E
2	1	Play is easy.	Have to put more energy into their play.	

(table continues)

Participant	Nonparticipant	Able bodied	Physically disabled	ToP
1	2	Same rules for all.	Need rules (activities) modified by the group.	E
2	1	Can interact with peers.	Children with communication problems have difficulty interacting.	B
	3	Self-initiate play more often.	Self-initiate play less often.	B
	3	Can play independently.	Need assistance to set up the activity for playing by themselves.	E
	3	More success experiences in play.	Less success experiences in play.	
2	1	Direct own play.	Often play is directed by other children.	B
1	2	Can manipulate same toys as same age peers.	Often cannot manipulate the same toys.	

(table continues)

Participant	Nonparticipant	Able bodied	Physically disabled	ToP
1	2	Less isolated, more interactive, more spontaneous.	More isolated, less interactive, less spontaneous.	
	2	Play less facilitated.	More intervention needed.	E
	1	More gross motor, active play.	Less gross motor, active play.	
	1	Few limits on play.	Play limited to what's within reach, what someone brings to child, etc.	E
	1	Stick with activities longer.	Do not stick with activities as long.	
	1	Joyful.	Less joyful.	B
1		Less opportunity for leadership.	More opportunity for leadership.	B
1		More opportunity for leadership.	Less opportunity for leadership.	B

(table continues)

Participant	Nonparticipant	Able bodied	Physically disabled	ToP
1	1	Mix of manipulative and imaginative play.	Need to rely more on imaginative play.	B
	1	Can approach peers.	Dependent on others to come to them if they are not mobile.	B
	1	Experience play that's fair and even with a peer.	Less often experience play that's fair and even.	
	1	Less frustrated - can do what they want.	More frustrated - know what they want to do but physically can't do it.	
	1	No therapy.	In therapy - play more controlled , not free.	
1		No need to adapt environment.	Children learn to adapt environment.	E
		Normal development of play skills with	Development of play affected if other skill areas do not develop	

(table continues)

Participant	Nonparticipant	Able bodied	Physically disabled	ToP
1		normal	normally.	
		development in		
		other areas.		
		Able to assert self	Less able to be	
		in play.	assertive.	
	1	Competitive.	Less able to	
			compete.	
	1	Will continue to	May over the years	
		be happy with	become less happy	
		play abilities.	with play abilities.	
	1	Can play with	May later feel	
		anyone.	happier and more	
			confident in	
			segregated sports.	
	1	Great benefits of	Benefits not as great	
		play.	due to limitations in	
			play.	

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

said no, and one of the nonparticipants said it depended on the disability.

One common theme between the nonparticipant and participant groups was that children with physical disabilities could play as well as able-bodied children in terms of having fun and getting enjoyment from an activity. One participant believed children with a physical disability had "...less variety in their play," but if they knew what was within their capabilities, chose those things to play with and used them in the best way they could, they could be successful and enjoy the play. She stated, "If they had a choice of doing an activity that they liked and were physically able to do then I think they could get the same degree of pleasure and joy out of the activity they chose."

One nonparticipant believed that it would need to be "...imaginative play and an activity they liked and were physically able to do" in order for the children with physical disabilities to get joy and satisfaction. Another common theme was environmental influence. A nonparticipant believed the children with physical disabilities could play as well as the children who were able-bodied "...if the environment was set up so that they could make choices," have control and have access to what they needed. A participant referred to the pilot research project saying that it had shown "...that children with physical disabilities could be as playful" when environmental barriers were removed.

One therapist in each group believed that children with mild to moderate disabilities could play as well as children without a disability. The participant commented that the children in this category who were "verbal and ambulatory," who had had the chance "...to get around and explore as other children did" would

have similar play skills as their able bodied peers.

One therapist in each group believed that the children with physical disabilities could play as well as able-bodied children if they had the verbal and social skills. The nonparticipant believed this was necessary to be accepted by their peers and fit in. The participant commented that children with physical disabilities played as well as their able-bodied peers if they had learned to "...control the play situation and could tell their peers that they wanted to join the play and what they needed assistance with to make this possible." One nonparticipant stated that there were "not many children" with physical disabilities who could play as well, and one participant commented that she had "...not often seen children controlling the play and playing as well" as their able bodied peers.

Two nonparticipants stated that children with physical disabilities could not play as well as children who were able-bodied. One commented that children with physical disabilities did not "...have as many avenues available to them" and were not as independent. The other nonparticipant believed that "the more severely involved the child (the greater the physical limitations) the more play became structured" and there was not "...the freedom to reach out, to move around the environment, to make choices and to express needs."

One participant believed that the children with physical disabilities could play as well as children who were able-bodied because play depended more on, "...having a playful personality" than it did on having "...the physical and cognitive skills." She stated, "Play is very unique to each individual and so it doesn't really matter what your body type is like, what your gender is, you'll find

play for yourself if you want to.”

The nonparticipant group put more emphasis on what skills and abilities the children with physical disabilities needed to have in order to play as well as children without a physical disability. The participant group commented more on play behaviours, playfulness, and the environmental supports that needed to be present in order for the children to play as well as their able-bodied peers.

Assessment of Play

The therapists in both groups provided scenarios of themselves assessing the play of a child with a physical disability. Both groups had a variety of settings for observing play including the school or daycare classroom and playground, home, and a treatment centre.

Two nonparticipants stated that they did not assess play by itself but looked at it in the first assessment when they were watching the children for other things. One commented that she did not assess play as she did “...not use a standardized assessment.’ Another nonparticipant stated she looked “...at play to figure out how to support the teacher.”

Comments regarding play assessment from the participant group included one therapist saying she needed “...to remind (herself) while looking at a child’s play that play is the goal.” None of the participants were hesitant to provide a scenario where they assessed play, with three commenting that they just could not decide which play assessment they would describe. One therapist remarked that she assessed “...an aspect of the play, the social interaction,” when she assessed

children at schools. Several therapists commented that they had been using the Test of Playfulness (ToP) as a checklist since the pilot research project. One participant commented that she assessed play "...fairly casually for a while and then I was introduced to the play scale (ToP) and that's when I really started looking at play and had a tool to do a critical analysis of how a child is playing."

The therapists in both groups described what they were looking at or looking for during the play assessment they described. Five nonparticipants and all of the participants stated that they looked at the interaction. This included how the children were playing together, how they were using their verbal or body language skills, whether or not they entered into other children's play or played alone, and whether or not they were accepted by their peer group. One participant stated she was "...looking at the individual and then looking at the individual in relation to the other kids in the group."

Both groups also looked at interests--whether or not the child was interested in a variety of things and whether or not the child was aware of and watched the other players. Another shared theme was that both groups assessed the children's motor skills. Many of the nonparticipants listed the fine motor and gross motor skills that they were observing at length while the participant group mainly referred briefly to both together. Four nonparticipants and two participants looked at how the children were manipulating objects.

Both groups observed the children for indications that they were enjoying themselves, were happy and satisfied and getting pleasure from the activity. Laughing or other facial expressions were believed to be important indicators.

Both groups looked at whether or not the play was meaningful and had an intention or goal, with one participant believing the play should be "...exploratory or imaginative rather than just repetitive."

The environment was looked at by both groups in terms of the accessibility of the toys, play materials, and space. One nonparticipant looked at the familiarity of the environment and one participant observed the "...openness of the environment to give the child the opportunity for free play."

Both looked at whether the children were directing the play or needed adult intervention and they observed the children's attention span. One nonparticipant and two participants commented on observing the challenge of activities, with the nonparticipants commenting on whether or not the toys were within the children's capabilities and the participants observing the behaviour of whether the children looked for or avoided challenging activities. Two nonparticipants and one participant observed the children's visual attention to the toy.

One nonparticipant and two participants looked at what the children did with free time. Other items observed by one nonparticipant and one participant included the children's behaviour during play, the type of play, and the level of independence and creativity. One therapist in each group commented that they valued teacher report as part of the play assessment.

Two therapists in the nonparticipant group observed whether or not the children were making choices or just using the closest toy. Individual nonparticipants looked at whether or not the children were benefiting from the

activity, exploring, keeping up to the peer group, and appearing to be able to hear during the play.

Five of the participants observed what the children did with the play materials and how they incorporated them into play. Four participants assessed the engagement in the play. Two therapists in the participant group observed the amount of activity and movement in the play. Two assessed the flow or adjustment from one activity to the next. The remainder of the items being observed were reported by one therapist each. They included the children's ability to understand instructions, to physically reach the toys, the children's playfulness, the ability to generalize skills to play, "...the blocks and barriers to the (children's) play," whether or not the play was successful, whether or not the children continued with the activity, whether or not the children sought adult attention, the motivation for the children to be involved, the familiarity of the situation and the playmates, the control the children had over the play, whether or not others approached the children, whether or not the children made changes to the environment to accommodate themselves, and whether or not that particular observation time was "...typical of the child's play."

There was more hesitancy from the nonparticipant group to provide scenarios of play assessment as they questioned whether or not they were assessing play since they did not use a standardized test or look at play by itself. The participants appeared to be more confident that they did assess play and made more comments about not feeling they knew enough about what to do with the results of their assessments. One participant expressed frustration at not being able

Table 13

What Therapists Reported They were Looking At or For in the Assessment of Play

Participant	Nonparticipant	Looking at or for:	ToP
8	5	1. Interaction - verbal, body language, approaching other children or alone.	B
3	4	2. Interest.	
2	5	3. Motor skills - fine motor and gross motor.	
2	4	4. Manipulation of objects.	
5		5. What child does with play materials.	B
3	2	6. Indication of enjoyment, satisfaction, laughing.	B
3	2	7. Meaningful activity - constructive use of materials.	
3	2	8. Environment - accessibility of play materials, opportunity for free play.	E
2	2	9. Directing the play or needing adult intervention.	B
2	2	10. Attention span.	
4		11. Engagement in the play.	B

(table continues)

Participant	Nonparticipant	Looking at or for:	ToP
1	2	12. Initiating play.	B
1	2	13. Visual attention to the toy.	
2	1	14. What child does with free time.	
2	1	15. Challenging activities.	B
1	1	16. Behaviour.	
1	1	17. Type of play - imaginary, quiet, active.	B
1	1	18. Level of independence/dependence.	
1	1	19. Teacher report.	
1	1	20. Creativity in the play.	B
	2	21. Making choices.	
2		22. Amount of activity/movement.	B
2		23. Flow/adjustment from one activity to the next.	
2		24. Comparing play to that of a child who is able-bodied.	
	1	25. Benefiting from the activity.	
	1	26. Ability to explore.	
	1	27. Keeping up with peer group.	
	1	28. Hearing.	
1		29. Ability to understand instructions.	
1		30. Can child physically get toys.	

(table continues)

Participant	Nonparticipant	Looking at or for:	ToP
1		31. Playfulness.	B
1		32. Generalization of skills to play.	
1		33. Blocks/barriers to play.	E
1		34. Successful.	
1		35. Continuing with activity.	B
1		36. Seeking adult attention.	E
1		37. Motivation to be involved.	
1		38. Familiarity of situation and playmates.	E
1		39. Control.	B
1		40. Typical of child's play.	
1		41. Did others approach child.	
1		42. Did the child make changes to the environment to accommodate self.	E

Note: The Participant and Nonparticipant columns show how many times the response was given by which group of therapists.

The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment

“...to use the Test of Playfulness yet” as a recognized tool. Many participants were using the ToP as a checklist. There was more emphasis from the nonparticipant group on assessing the physical aspects of play, both in motor skills and the physical environment (see Table 13).

Play as Treatment or Treated Play

The therapists in both groups were prompted to recount scenarios where they had either used play as a treatment or treated play. Most chose to discuss a time when they used play as a treatment first and some went on to think about a time when they had treated play. One participant commented, “It’s interesting that you should ask if we treated play because it’s, according to the COPM (Canadian Occupational Performance Measure) and the occupational performance model it falls in there for sure. We treat everything else but we don’t treat play.”

Using play as treatment appeared to have the same meaning to all the therapists. They all described using a play activity to achieve a specific goal which was most often a motor goal. The therapists in both groups spoke of setting up the room with activities aimed at developing a particular skill. For example, they might use an imaginative play activity and allow the child to take the lead to get a particular movement of the arm.

Two of the participants also talked about using play to look at some of the components of play, (e.g., the children’s ability to take turns or follow instructions and rules). One participant commented that although the session goal was to improve a physical skill the overall goal was “...to improve school work, self-care,

and play.”

Seven of the nonparticipants and five of the participants responded to the prompt “treated play.” One nonparticipant stated, “I guess I see treat play as almost contradictory...if you’re treating play is it really play? If play is supposed to be spontaneous or play is supposed to be something that is the choice of the child how much do we intervene?”

One of the participants chose to discuss how she “treated play” first and stated, “A lot of feedback that I gave to the daycare resource teacher and the teachers, instead of using words like gross motor, because they were very focused on that sort of fragmentation of developmental skills...I was trying to get them to think of play in a global sense.” She continued on to say that they had not noticed the child, “...wasn’t joining play groups or that other children weren’t playing with him.” She pointed out that it was “...very important that he learn how to approach groups of children and how to hold his own within those groups and how if someone approaches him he can respond appropriately.”

Several of the therapists in each group stated that they were addressing components of play, usually through consultation to teachers and parents rather than direct treatment of the child. One participant stated that she treated play by “...setting up the environment to make it accessible, to make the child able to initiate something on their own while working on some social skills, or setting up a group situation, or giving an EA (educational assistant) some strategies around encouraging interaction between the child and their peers directly.”

Two of the nonparticipants discussed how they addressed the physical

dysfunction, the attention to the activity, the position of the toys, and the interaction with the toys and the other children. Initially they stated they were using “play as a treatment” but then stated perhaps they were “treating play.” As one nonparticipant commented, “I guess you’re kind of working on play because if you enhance those (the child’s skill) then the play will get better.”

Most of the therapists in both groups referred to setting up the environment to allow the child to play better. They discussed making the environment accessible and adapting the activity to allow the child to be more interactive and independent. Therapists in both groups believed they could treat play or components of play by modelling and providing other strategies to parents, teachers, or educational assistants. They believed they could make play better by indicating ways of allowing the child to have control of the play by making choices, by role playing or facilitating the child to approach and enter a play group and by focusing on the play rather than the physical skills. One nonparticipant stated she was “...working out ways to enhance or facilitate a playful environment.”

One therapist in each group pointed out the difficulty in talking about play in relation to the school-aged child. They commented that neither the schools nor the Home Care programs, through which their therapy services were funded, accepted play as an important goal. These agencies wanted to hear that the therapists goal was to improve fine motor control, visual perception, and social skills.

Although more of the therapists in the nonparticipant group initially

stated that they did not treat play, they did describe consulting to others regarding suggestions to promote play much the same as the therapists in the participant group. Both groups seemed less confident in their comments regarding treating play than they had been regarding the assessment of play.

Promoting Play

One therapist in each group stated that she had promoted play by giving the child choices and following the child's lead. Both groups referred to setting up or adapting the environment for success. One participant talked about "...making the play materials accessible" and "...positioning or supporting the child physically" so that the child could take the lead in the play. One nonparticipant discussed adapting the toys so that the child with a disability could "...join in: for example using crayon holders, slant boards, or dycem to hold the toys in place." Fun was also mentioned by one therapist in each group. The nonparticipant spoke of "demonstrating fun" and the participant advocated using "...an approach of playfulness with songs or something that created an atmosphere of fun."

A therapist in the nonparticipant group promoted play with a child, who was in a wheelchair and had a severe disability, by "...putting something on her tray that would attract others and give them something to interact with her about." She also suggested that the child "...bring toys to school that she could control and initiate" and that she "...use special seating on the floor if the others were playing on the floor." Another nonparticipant believed that along with offering suggestions about how to facilitate play she should "...discuss with parents that

Table 14

Therapists Suggestions for Promoting Play

Participant	Nonparticipant	Suggestions for promoting play	ToP
*	*	1. Giving the child choices.	
*	*	2. Following the child's lead.	
*	*	3. Setting up or adapting the non-human environment - making the toys accessible; using crayon holders, slant boards, dycem; positioning/special seating; designating a room as a playroom.	E
*	*	4. Demonstrating fun, playful approach.	B
*	*	5. Promoting interaction through: putting something on wheelchair tray to attract others to the child and give them something to interact about; modeling and facilitating peer interaction.	B
*	*	6. Initiating play through: having children bring toys that they can control and initiate; modeling and facilitating initiating play with a peer.	B

(table continues)

Participant	Nonparticipant	Suggestions for promoting play	ToP
	*	7. Discussing with parents that play is a child's work.	
	*	8. Encouraging free play in different environments.	
	*	9. Introducing playful competition to older children.	
	*	10. Teaching peers how to read the child with a physical disability's body language or other play cues.	B
*		11. Facilitating attempt at more challenging activity.	B
*		12. Demonstrating giving play cues: laughing or responding to continue the play.	B
*		13. Showing a child how to do a play activity and allowing child to complete it.	
*		14. Introducing an imaginative, fantasy framework.	B

(table continues)

Participant	Nonparticipant	Suggestions for promoting play	ToP
*		15. Assisting daycare teachers to recognize opportunities for facilitating play in their setting.	

Note: The Participant and Nonparticipant columns show which group of therapists gave the response as indicated by the asterisk. The ToP column indicates when the responses were items on the Test of Playfulness, B = behaviours, E = environment.

play is a child's work.” Other suggestions to promote play made by nonparticipants included encouraging free play in different environments, introducing “...some playful competition for older children” and teaching “...the peers of a child with a physical disability how to read the child's body language or other play cues.”

Modeling and facilitating peer interaction about “...how to join in the play”, as well as, “...prompting the child to ask another child to attempt a more challenging activity requiring two people,” were believed to be important for promoting play in one of the participant's scenarios. Other suggestions for promoting play given by the participants included, laughing or responding to continue the play, “...introducing an imaginative, fantasy framework,” designating a room as a playroom with a variety of accessible activities, and “...showing a child how to do something and allowing the child to complete the activity.” One participant discussed her role in assisting “...daycare teachers to recognize the many opportunities for facilitating play” in their setting. Another noted, “You can prompt and facilitate all kinds of play...but whether or not it would come together would be dependent on the child and their developmental readiness.” The therapists suggestions for promoting play are summarized in Table 14.

Comparison of Participant and Nonparticipant Comments with the Test of Playfulness

All of the therapists' responses to the interview prompts were summarized in Tables 1-14. A column in the table, titled ToP (Test of Playfulness), indicated

whether or not the responses were items on the test and if they were, whether they came from the play behaviours section of the test or from the environment section.

The tables are a visual representation of how many descriptors of various aspects of play, that were items on the Test of Playfulness, each group provided. The author believed that more reference to play descriptors, that were items on the Test of Playfulness, by the participant group than the nonparticipant group, indicated that the participants had learned about play behaviours and environmental influences on play from the playfulness study and had retained their knowledge about the test.

First, therapists were prompted to discuss how they knew the scenarios they described, of able-bodied children, were play. When the responses were compared to the items on the Test of Playfulness, it was noted that the playfulness study participant group referred to five more descriptors of play behaviours or environmental influences than did the nonparticipant group.

Next, they were asked to describe how the scenarios of play of able-bodied children indicated good play. The participant group referred to one more descriptor of play behaviour, that was an item on the test, than did the nonparticipant group. The therapists indicated what they believed was the role or the value of the play in their scenarios. The two groups of therapists each gave the same number of responses that made reference to play behaviours or environmental influences that are items on the test. When prompted to discuss the environmental factors that influenced the play of the able-bodied children, the nonparticipant group made a few more references to factors in the non-human

environment which influenced the play than did the participants and the participant group referred to one more aspect of the human environment.

The therapists then discussed the play of children with physical disabilities. When the descriptors to characterize their play were compared to the items on the Test of Playfulness, it was noted that the playfulness study participant group referred to two more descriptors of play behaviours, than did the nonparticipant group. When discussing good play of children with physical disabilities, both groups referred to the same number of play behaviours and environmental factors, that were items on the test. The therapists indicated what they believed was the role or the value of play in their scenarios. The participants made reference to two more play behaviours, that were items on the test, than did the nonparticipant group. When discussing the environmental factors that influenced the play, the participant group discussed two more aspects of the human environment than did the nonparticipants.

The similarities between the scenarios of play of children, with and without physical disabilities, were discussed. The participants mentioned three more similarities, that were items on the Test of Playfulness, than did the nonparticipants. When the therapists discussed the differences between the scenarios, the nonparticipants noted many more differences, including three more references to play behaviours or environmental influences than did the participant group. When commenting on whether or not children with physical disabilities can play as well as able-bodied children, the participant group commented more on play behaviours and environmental supports than the nonparticipant group.

When discussing the assessment of play, the participant group reported assessing nine more of the behaviours and aspects of the human environment, that were discussed in the pilot research project and are items on the Test of Playfulness, than did the nonparticipant group. When discussing play intervention and the promotion of play, the participant group referred to four more items on the test than the nonparticipants.

Overall, the participant group did make more reference to items on the Test of Playfulness than did the nonparticipant group.

Changes in Thinking

Evidence of changes in thinking due to participation in the pilot research project was gathered from the interviews. Five of the eight participants commented that participation in the pilot research project led them to reevaluate and recognize the value and importance of play for children with a physical disability. They stated that the project had reinforced their previous beliefs that children should be happy in their play and that the play should be more child-directed than adult-directed.

Five stated that their thinking had changed because they had been given an assessment tool to identify what to look at which gave play more structure. The scale helped them clarify and define the components of play and good play, and by repeatedly using the assessment tool, they believed they internalized their new learning about play. They spoke of having broadened their definition of play by learning more about play behaviours with respect to playfulness.

Several referred to the opportunity to discuss the play videos with colleagues as important in developing their thoughts about play. They also stated that the outcome of the study which showed that children with physical disabilities could achieve high playfulness scores had a great impact on their thinking about the importance of play for these children. One participant stated that the outcome that "...stuck in (her) mind was that the children with a physical disability can achieve an optimal play level, which I think would surprise a lot of people." She went on to state that when people asked her about the children she was working with she would reply, "They're kids and they can play, they're just kids and they want to laugh and have fun and play."

Most of the participants believed their thinking had changed regarding environmental influences. They referred to the pilot project finding that a child with a disability could be as playful as a child who was able bodied given the proper environment. They also commented that involvement in the project increased their awareness about how the environment had an impact on play.

Many of the therapists talked about the pilot project, and in particular the assessment tool, as helping to shape their thinking about play and the occupational therapist's role in play. They spoke of increased awareness of the importance of play for itself and as a goal rather than as a means of meeting other therapy goals. That is, there was more awareness of the need to really look at a child's play and what the play was about rather than just seeing the physical components. One therapist stated that occupational therapists needed "...to think of the skills as supporting play with play being the outcome."

Many referred to the fact that since play is the child's occupation and the occupational therapist's mandate is to restore, maintain, or develop occupational performance it was good to have new thinking about how to intervene in this area. They discussed having more confidence in knowing how to assess play by taking play behaviours and environment into account, and having some idea of how to promote and facilitate play. One therapist remarked that she needed "...to think more about how well children manage out on the playground at recess" and the possibility of intervening by adapting the human or non-human environment so they might have "...more successful play experiences." Another therapist noted that the pilot research project had led her to believe she should "...spend less time on developing physical skills and more time on finding successful play activities or hobbies that the child could do year after year."

Change in thinking occurred for a few of the participants around the use of videotaping for assessment. They believed the pilot research project had demonstrated how powerful videotaping was for assessment purposes as they noticed more each time they watched the tape. They found they could focus more easily on such things as the play cues the children were giving and their reactions to the environment than they could when they were assessing in person. They also thought the results of the assessment were more accurate since they could stop the videotape. Two participants stated they realized, at the training session, how subjective assessing play is. Although everyone saw the same video, they expressed different perspectives and different personal values of what constituted play and good play.

Changes in Behaviour

Evidence of changes in behaviour due to participation in the pilot research project was gathered from the interviews. The most common change in behaviour reported by the participants was the amount of talking they were doing about play with the people to whom they were consulting. They stated that the assessment tool had provided them with a play vocabulary, a common way of talking to their colleagues. One participant reported that she was "...finding it easier to explain the importance of observing play" and stated she expressed wanting to look at such things as "...how the child was doing in that particular environment, how the child was making choices, how the child was participating, how successful was the child and how playful." Another therapist commented that when she discussed play in school meetings she believed it provided "...a more holistic look at the child's needs." She identified specifics of "...what needed to be changed in the environment" and commented on the child's "involvement in play."

Many of the therapists referred to changes in their behaviour regarding the assessment of play. They reported that they were making a point of observing play more often and were going to see the children in their natural settings to assess their play. They commented that they were looking at play more comprehensively since learning about the Test of Playfulness which provided them with a vocabulary and schema to assess play. One therapist stated she was "looking more in-depth at things like mastery and accomplishment as being important to self-esteem" and was identifying "mischief as a play factor rather than bad behaviour."

Another participant commented,

Before I was looking at were they busy with a toy or could they be independent, how did they interact with their peers. And now, I mean I certainly have a long way to go to learn the tool more, and learn more about play, but now I think I'm looking more at... what kind of choices are the children making, what kind of activities are they choosing, how well are they motivated internally, how attentive are they to play... I guess it's more of a qualitative difference... how well are they interacting with their peers, in what way are they interacting with their peers, how is the environment helping or hindering their play and I think before I would have had short yes or no answers and now I'm looking at specifics, at quality.

Another change in behaviour involved intervention in the area of play.

Several of the therapists stated that since learning about how to assess the components of play, they were developing goals for their clients related to play. That is, their goal was to improve play rather than to improve a particular skill. They were looking at the children's skills, abilities, and disabilities in terms of how they fit into the children's play and looking for ways to support play and encourage the children to play better.

In therapy, a few participants reported giving the children less direction and therefore more control over their play. They were leaving more room for free play in a less structured environment and observing what the children chose to play with, how they played, and how long they continued with the activity. One

therapist presented an interesting dilemma she thought occupational therapists faced. She believed that in order to promote play she needed to be "...playful and have fun as part of the play frame," but wondered if parents or teachers would view her as "not working" and would therefore, "...not consider either play, or her role in promoting play, important."

The last theme that emerged regarding behaviour changes involved report writing. Participants stated that they were documenting their observations about play more often since the Test of Playfulness had provided them with descriptors to use and since they had altered their thinking to have and document goals related to play.

Self Report Questionnaire

At the end of the interview all of the therapists were asked to complete a brief questionnaire. Therapists' responses are listed in Table 15.

All of the participants and five of the eight nonparticipants indicated that they had read occupational therapy literature in the previous 2 years about play. Most commented that they had read both the Canadian Journal of Occupational Therapy and the American Journal of Occupational Therapy. Five of the participants and three of the nonparticipants had read literature other than that pertaining to occupational therapy and cited parents magazines and neurodevelopmental therapy journals as the main sources.

All of the participants indicated that they had been to inservices regarding play as did two of the nonparticipants. One of the nonparticipants stated she had

Table 15

Self-Report Questionnaire: The Yes Responses of the Participants and Nonparticipants

Questions		Y-P	Y-NP
1	Have you read any O.T. literature in the past 2 years about play?	8	5
2	Have you read any other literature in the past 2 years about play?	5	3
3	Have you attended any inservices about play?	8	2
4	Have you attended any conferences about play?	3	0
5	Have you attended any presentations about play?	6	3
6	Are you familiar with the work of Anita Bundy on play?	8	1
7	Have you added to your knowledge about play or play research since June, 1994?	6	0
8	Do you comment on play in your assessment reports?	8	5
9	Do you assess play?	5	6
10	Do you design treatment programs to promote a child's play?	5	7
11	Have you used any research findings in play to help you decide the intervention?	5	2

(table continues)

Questions		Y-P	Y-NP
12	Do you feel research regarding play is important for O.T.'s?	8	8
13	Have you been involved in a research project on play as a clinician?	8	0
14	Have you been involved in a research project on play as an investigator?	1	0
15	Do you feel you have time to be involved in a research project on play?	6	8
16	Do you feel your employer would support your request to be part of a research project on play?	7	8
17	Do you feel involvement in a research project on play is a good method of continuing your professional education about play?	8	8
18	Do you think you could learn as much from participating in a research project on play as you could from attending a conference on play?	8	8

Y = Yes

P = Participant

NP = Nonparticipant

been to an inservice which one of the investigators of the research pilot study had given and another talked about an inservice that covered the work of Bundy, the developer of the Test of Playfulness. Only three of the participants had attended a conference on play. One nonparticipant commented that play conferences were usually "...geared to early childhood education teachers." Six of the participants and three of the nonparticipants had attended presentations about play at a conference. All of the participants and one of the nonparticipants indicated that they were familiar with the work of Anita Bundy. Six of the participants indicated that they had added to their knowledge about play or play research since the date the pilot research project had ended.

All of the participants and five of the nonparticipants reported commenting about play in their assessment reports. Therapists from both groups stated that they commented on play but not always under the heading of play. Five of the participants and six of the nonparticipants marked that they assessed play. Two of the nonparticipants commented that it was not a formal assessment.

Five of the participants and seven of the nonparticipants indicated that they designed treatment programs to promote children's play. Two nonparticipants commented that the play was promoted in order to accomplish other treatment goals. One participant commented that she "...gave ideas for promoting play at school, home, and preschool" but believed she did not "spend enough time" focusing on play. One of the participants who responded negatively stated that she had "...given suggestions for promoting play" but had been emphasizing that "...play would help the child gain skills." She no longer believed she was

promoting play because she had not emphasized that play was the goal.

Five participants and two nonparticipants indicated that they had used research findings about play to guide their interventions. The only person to add a comment regarding this was one of the participants who stated she had increased her knowledge about the environment and the importance of the environment in play from the pilot research project.

All of the therapists agreed that research regarding play was important for occupational therapists. None of the nonparticipant group had been involved in a research project on play either as a clinician or an investigator. All of the participants had been involved in the pilot research study on play and one had been an investigator in another project on play.

In response to the question of whether or not they had time to be involved in a research project all but two therapists said yes. One participant stated her “time fluctuated” and the other indicated that although she did “not have the time” she wanted “to be involved.” All but one therapist stated that their employer would support their request to be part of a research project on play. The same participant who stated her time fluctuated answered that “...the support would also depend on time.”

Every one of the therapists indicated that involvement in a research project on play was or would be a good method of continuing their professional education about play. The nonparticipant group commented that in a research project, the therapists were provided with background information and readings and were pulled up-to-date on a topic. This literature and the results from the study could

then be used to support their clinical choices. They also believed that research was a good way to focus on one subject, to read about it, and look at it in a different way. They believed that when they participated in research projects as part of their practice, they looked more closely at what they were doing, it's impact on clients, and that this sometimes led to alteration of their practice.

The participants often referred to the pilot research project. They commented on the value of being involved, being hands on, having timelines, having an opportunity to share ideas and having the leadership of the investigators. One participant believed that "...being part of a group of people with similar interests asking questions and bringing up ideas was the best environment for learning and professional development." One participant stated she had "...definitely learned a lot about play assessment" through doing the scoring of the videotapes and participating in the educational session of the project. Another participant referred to it as "interesting and exciting" and stated that it had "...opened (her) eyes up to a new aspect of O.T." and a new way of thinking.

All of the therapists in both groups indicated that they could learn as much from participating in a research project on play as they could from attending a conference on play. Most of the therapists added the comment that they believed they could learn more from being involved in a research project than they could from going to a conference. Most talked about research being "hands on" learning and they believed they learned more by doing than by listening. Most commented that conferences provided them with theory, were good starting points, and generally gave them bibliographies but left them responsible for applying the

theory to practice. They found it difficult, as one of the therapists explained, "...to bridge the gap between hearing something at a conference and putting it into practice." They also stated that a conference needed to have a practical session in it in order for them to learn, but they often found that they did not get the same intensity from a conference as from research and they found it hard to apply as there was nobody to provide assistance.

Participation in a research project was believed to be better than attending a conference about play because of its ongoing nature. The therapists commented that doing something over and over again in a research project helped them to assimilate and accommodate the new information and to feel comfortable continuing to use the new knowledge in their clinical work. Getting direct feedback from clients was thought to help change thinking and broaden perspectives.

In summary, most of the therapists interviewed indicated that they were informally assessing play, commenting on play in their assessment reports, and designing treatment programs to promote play. All of the therapists believed play research was important, that involvement in play research was a good method of continuing their professional education about play, and that they could learn as much or more from participating in a research project on play as they could from attending a conference about play.

Possible Future Play Research

The nonparticipant group was prompted to discuss what play research they

believed needed to be done. One theme to emerge was understanding the play of the child with a physical disability. The following research questions were suggested:

- What are the similarities and differences between the play of children who are able bodied and children who have a physical disability?
- Can a child who is able bodied and a child who is disabled play equally well?
- How does the more involved child show play?, and
- How does the degree of disability affect a child's play?

Another theme discussed by several therapists involved play and families. They believed research needed to look at what play meant to the family and the child and whether or not they perceived it as important. One therapist wanted to know "...the number of hours children typically spend in free play" in order "...to show the parents and encourage them to focus on play." Another nonparticipant thought research could find out if there was "...spontaneous play or just time for therapy." She believed research could focus on "...how the families engage in play with their children who have disabilities versus a control group."

Research about play assessment and intervention was referred to by several nonparticipants. One therapist thought research "...could tell therapists if (they) needed to intervene." The rest of the research questions involved how to intervene. The therapists wanted to know how to facilitate play to help children with disabilities socialize, fit in, participate, and have successful play experiences. The examples they gave included how to facilitate: initiating play with nonverbal children, having control over the environment, engaging in independent and

interactive play, and reading playmates' play cues. One therapist wanted research "...to direct what should be looked at in play and another wanted research to support focusing on play in treatment sessions."

Another theme to emerge regarding possible play research was looking at the environment. This included both the physical set up and the people in the environment. One nonparticipant thought research could help "...identify how to get more playful behaviour" and another wanted to know "...whether or not changing the environment actually could help a child develop play behaviours."

The relationship between age and play was also cited as a research direction by two nonparticipants. They questioned "...how children moved from one stage to another" and "...whether or not the stages needed to be consecutive." They wondered if research could answer whether "...age appropriate or developmentally appropriate activities" would be more beneficial in improving play.

Play research was believed to be important by all the nonparticipants. Two stated that there was a need to educate and increase awareness of the importance, necessity, value, and limitlessness of play. The participants were not prompted to discuss their play research ideas but several did make suggestions during the interview. Several therapists believed more research was necessary to define the role of occupational therapists with play. They also wanted research to guide them regarding how to treat play including how to make play a priority. One participant defined her role by saying, "I think the next challenge will be to see how well I can influence the development of play with the kids that I'm working with." Ideas that

came out of the play research project included looking at the play of children who were verbal compared to those who were nonverbal and children who were ambulatory compared to those who were not, and looking at the cultural differences in play. One participant expressed that more play research was needed to provide therapists with "...the opportunity to talk about play, to share scenarios, and to share ideas about play...to give it (play) the status it deserves."

One theme common to both groups was the need to know how and when to intervene and what intervention to provide regarding the play of children with physical disabilities.

CHAPTER FIVE: DISCUSSION

Chapter Overview

First, an overview of the study is presented. Second, a synthesis of the research findings is provided. Next, the implications for research and theory and further directions for research are discussed. Last, implications for practice are suggested.

Overview of Present Study

This study evolved from a previous research project which introduced eight occupational therapists to the Test of Playfulness. This scale compared the playfulness of children with physical disabilities with age matched able-bodied peers and found little difference between the two groups. The children with physical disabilities who achieved high playfulness scores played in environments which were very conducive to their play (Gaik & Rigby, 1994). The information provided through the pilot project, reflected shifts in thinking about play, from play being a medium for intervention to play being important in and of itself. The pilot project highlighted the importance of looking at play behaviours and the relationship between the child and the environment. This study examined the impact of participation in the play research project on the continuing education of the occupational therapists involved.

For this study, eight therapists, who participated in the pilot research project, and a matched group of eight therapists, who were not involved in the pilot research project, were interviewed between 9 and 12 months after completion

of the project. They were asked to talk about scenarios of play they had observed and were given interview prompts to determine how they defined play, good play, the role or value of the play, environmental influences, and gender influences. Similarities and differences in the play of children with and without disabilities, play assessment, treatment, and play research were also discussed. The interviews were transcribed and coded. Common themes and themes particular to one group or the other were identified. Interviews were also analyzed for evidence of transformative learning.

The overall results of the study demonstrated that: (a) their thinking had changed about play; (b) according to self report, they had used this new knowledge in their clinical practice; and (c) the participants remembered the items on the Test of Playfulness and could use them in describing various aspects of play. The study suggested that the play research project was a good format for continuing the participants' education about play.

Synthesis of Research Findings

The comments from the playfulness study participant group were compared with those from the nonparticipant group with regards to what constituted play and good play, what the role or value of the play was for children with and without disabilities, and what were the environmental factors that influenced play. The participant group made more references to descriptors of play behaviours and environmental factors, that were items on the Test of Playfulness, than did the nonparticipant group.

Differences in how the two groups viewed play became clear when similarities and differences in the play of children with and without a disability were discussed. The participant group found more similarities in the play, several of which were items on the Test of Playfulness, than did the nonparticipant group.

When discussing the differences in the play in the scenarios of children with and without a physical disability, the nonparticipant group made almost twice as many comments as did the participant group. Specifically, the nonparticipant group noted 16 more categories of differences. This was the only time the nonparticipants made more references to play behaviours or environmental influences than did the participant group. This appears to indicate that the participants were cognizant of the results of the pilot study and were more aware of similarities, (e.g., in intrinsic motivation, internal control, suspension of reality, and human and non-human environmental influences). The fact that they saw many less differences could be related to the pilot study result which stated that children with physical disabilities could have similar scores in playfulness as their able bodied peers given the right human and non-human environmental supports. The pilot research project may have made significant impact when the participants discovered that even a child with severe cerebral palsy could be very playful.

This perspective contradicts the bulk of the literature regarding the play of children with disabilities which has primarily focused on their difficulties with play. Only four studies were found that demonstrated that children with physical disabilities could have successful play experiences (Beegly & Cicchetti, 1987; Bundy, 1989; Jennings et al., 1988; Stewart et al., 1993). All of the participants

and two of the nonparticipants, who commented on whether a child with a physical disability could play as well as a child who was able bodied, said “yes” they could. Two of the nonparticipants did not feel they could play as well and one of the nonparticipants said it depended on the disability. The nonparticipant group put more emphasis on what skills and abilities the children with physical disabilities needed to have in order to play as well. The participant group commented more about play behaviours, playfulness, and the environmental supports that needed to be present in order for the children to play as well as their able-bodied peers.

Play assessment was another area where differences in perspectives between the playfulness study participants and nonparticipants were evident. The nonparticipant group was more hesitant to provide scenarios of play assessment and questioned whether or not they were assessing play since they did not use a standardized test or analyze play by itself. The participant group appeared more confident that they did assess play and followed that with a reference to not knowing enough about intervention. Many of the participants commented that they were using the Test of Playfulness as a checklist. The nonparticipants emphasized assessing the physical aspects of play, both in motor skills and the physical environment. The participant group also assessed these factors, as well as many more play behaviours, that were items on the Test of Playfulness, and aspects of the human environment. The participants mentioned often, how much they valued having an assessment tool to guide them in what to observe in play. In the literature review it was noted that most of the assessment tools documented the development of play skills and compared them to what could be expected at

each age level, some reviewed play preferences, a few analyzed the play environment and two addressed play behaviours (Rigby, Elliott & Oster, 1993).

There was some inconsistency between what the therapists had discussed in the interviews and how they answered the self-report questionnaire regarding assessment. It appeared to reflect an uncertainty about what they needed to be doing in order to feel that they were assessing play. One would assume that since, on the questionnaire, one less participant reported that they were assessing play than nonparticipants, perhaps a few of the participants believed that if they were not going out specifically to assess play in a client's natural setting, with a standardized assessment tool, that they were not truly assessing play.

All of the therapists in both groups stated that they used play as a treatment modality. They described using play to achieve a specific performance goal. More of the nonparticipants than participants stated that they did not "treat play." Both groups, however, stated that they provided suggestions to parents and community agencies to promote play. Both groups seemed less confident in their comments about play treatment than about play assessment. Some of the therapists in each group spoke of addressing components of play. The participant group gave a few more suggestions for promoting play that addressed play behaviours and environmental factors than did the nonparticipant group. Both groups were giving suggestions in consultation that focused on improved performance in play as the end goal. Few of the therapists were stating that play was the goal, preferring instead to talk about component parts of play (e.g., social interaction). These views on intervention concurred with recent literature identifying the need to

change thinking among occupational therapists from focusing on performance skills and developmental levels to observing the play behaviours and the relationship between the child and the environment (Bundy, 1993; Ferland, 1994). More emphasis was being placed on promoting play and on changing the human and non-human environment rather than on changing the child. Again an inconsistency was noted in comparing the interview information with the self-report questionnaire. Two more nonparticipants than participants stated that they were designing treatment programs to promote play. Perhaps the participants had become more aware of assessing play itself and believed they had not designed a treatment program to promote play if the overall goal had not been play. The nonparticipants may have responded on the basis of other treatment goals being accomplished through play and promoting play to facilitate other skills.

All of the playfulness study participants identified changes in their thinking about play which they related to participation in the pilot research project. Many believed that the project had led them to reevaluate and recognize the value and importance of play for children with physical disabilities. They stated that their previous beliefs that children should be happy and directing their own play were reinforced.

Many remarked that the assessment tool had provided more structure when observing natural play. The scale helped them clarify and broaden their definition of the components of play, good play, and playfulness. Most commented that involvement in the project increased their awareness about how the environment influenced play. They also spoke of an increased awareness of the importance of

play for itself and as a goal or outcome rather than as a means of meeting other performance goals. They determined that there was a need to really look at what the children's play was about rather than just seeing the physical components. Many discussed having more confidence in knowing how to assess children's play as well as how to promote and facilitate play. This was very important to the therapists since play is viewed by this profession as the children's occupation or productive activity and the goal of the occupational therapist's intervention, in this area, should be competence in play. A few of the participants commented that the pilot research project had demonstrated how powerful videotaping was for assessment purposes (i.e., reviewing information).

As was deemed important in the literature on transformative learning, several opportunities were provided in the pilot research project, to challenge assumptions and to discuss and reflect with other occupational therapists on the new information being presented. The participants stated that they had realized at the training session how subjective it was to assess play. Although they had all seen the same video, they expressed different perspectives and different personal values of what constituted play and good play. They had other opportunities to discuss their views about play in small groups, with new perspectives being developed after watching the videos of play scenarios and after hearing the preliminary study results. Several stated that learning that children with physical disabilities could achieve high playfulness scores had a great impact on the importance they gave to the assessment of play and intervention.

There was also evidence of self reported changes in behaviour due to

participation in the pilot research project. Many of the therapists reported that they were talking more about play with colleagues and in consultation to parents and people involved with the children in the community. They commented that the assessment tool provided them with a vocabulary to use to describe play. It was believed to be easier to explain the importance of observing play and to provide a more holistic look at children's needs. Many therapists reported observing play more frequently and comprehensively in the children's natural settings since learning about the Test of Playfulness. Many participants noted changing their focus during observation, from mainly observing physical skills to also observing play behaviours and a wider range of environmental influences. Several therapists stated that they had started developing goals with their clients related to improving play and were looking for ways to support and facilitate play. Even in therapy sessions, therapists were applying their new knowledge by leaving room for more free play in a less structured environment, and by giving the children less direction. Report writing had also changed as a function of the pilot project with participants documenting their play observations more frequently, using more descriptors of play and documenting goals related to play.

All of the therapists believed they could learn as much, and many stated they believed they could learn more, from participating in a research project on play than they could from attending a conference on play. They all believed that involvement in research was a good method of continuing their professional education. The aspects of a research project that therapists perceived as being beneficial included, (a) up-to-date literature; (b) activity based; (c) timelines;

(d) opportunities to share ideas, to question and do critical analysis; and (e) the leadership of the investigator. They valued involvement in research that they could apply to their practice.

Most believed that conferences provided theory but that it was difficult to bridge the gap to clinical practice unless there was a comprehensive practical session. Doing something over and over again in a research project helped them assimilate the new information and feel comfortable in applying their new knowledge to their clinical work. Getting direct feedback from clients was believed to help change thinking and broaden perspectives.

Further Directions for Current Research

The results of this study demonstrated that being involved in the playfulness study was enough of a change agent to produce differences on self report, in both the thinking and behaviour of the participants. The participants believed that what they had learned was important and had altered their thinking on play, and they reported that they were able to apply the new learning to their practice. The pilot study had demonstrated that the Test of Playfulness was valid for measuring qualities of playfulness for eight children with physical disabilities. Even though the sample size was small in the pilot study and the children who were videotaped all had cerebral palsy, the therapists in this study believed they had learned how to assess play behaviours and the environmental factors influencing the play, and seemed to feel it could be generalized to a broader population. Further research of the use of the Test of Playfulness with children

with a variety of diagnoses of physical disabilities appears to be warranted. The environmental implications to play and playfulness also appear to be very important and should be studied further.

Storytelling or describing scenarios, appeared to be an effective means of obtaining information regarding what the participants had learned and could, at least verbally, apply to their practices. A further check of whether or not the playfulness study participants were able to transfer their new learning into practice could include shadowing the therapists while they consulted to families or community agencies.

Implications for Practice

The therapists in this study remembered most of the items on the Test of Playfulness 9 months to a year after the playfulness study was completed. They could also verbally describe how they had incorporated what they had learned from the training sessions, test and results into their practice. This implied that there was a need for this information, that it was valuable, and that the therapists did not have a better alternative for assessing play behaviours and environmental influences. Their frustration with the project was that the test was in the developmental stage and was not ready to be used as a standardized tool. There was much enthusiasm for the project both in terms of providing occupational therapists with a new way of viewing play and for its promise as an assessment tool.

This study found that participating in the playfulness study had been an

effective method of professional development. The research project had provided an opportunity for transformative learning to occur as time was available to question basic assumptions and for critical discourse about these assumptions (Brookfield, 1990). The fact that, (a) everyone was learning new information together, and (b) there were no right or wrong answers, provided a comfortable, supportive environment in which to learn and challenge ideas. The investigators were available to answer questions throughout the study, and at the end of the project the results were presented and further discussed.

This study highlighted the need to increase awareness among occupational therapists about what is already known about play. Several of the research questions asked by the nonparticipant group have already been, at least to some extent, reported in the literature. The study suggests that in order to learn about play assessment and intervention participation in a play research project, or in a conference with a strong practical component and structured to promote transformative learning, would benefit the learner.

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Appendix A
TEST OF PLAYFULNESS (ToP)

Name: _____ Age: _____ Tape: _____ Rater: _____	EXTENT 3 = Almost always 2 = Much of the time 1 = Some of the time 0 = Rarely or never NA = Not Applicable	INTENSITY 3 = Highly 2 = Moderately 1 = Mildly 0 = Not NA = Not Applicable	SKILLFULNESS 3 = Highly skilled 2 = Moderately skilled 1 = Slightly skilled 0 = Unskilled NA = Not Applicable
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ITEM	IN			OUT			COMMENTS
	EXT	INT	SKILL	EXT	INT	SKILL	
Is actively engaged.							
Appears self-directed. Decides what to do & how to do it.							
Appears to feel safe.							
Demonstrates obvious exuberance, manifest joy.							
Tries to overcome difficulties, barriers, or obstacles to persist with an activity.							
Actively modifies complexity/ demands of activity.							
Engages in mischief or commits a minor infraction of the implicit or explicit rules.							
Repeats actions, activities; stays with same basic theme.							
Engages in process aspects of activity.							
Pretends.							
Incorporates objects or other people into play in novel, imaginative, unconventional, or variable ways.							
Engages in challenges (motor, cognitive, or social).							
Negotiates with others to have needs/ desires met.							
Plays with others.							
Plays interactively with others.							
Assumes leadership role.							
Enters a group already engaged in an activity.							
Initiates play with others.							
Teases or jokes with others (verbal or nonverbal).							
Clowns.							
Shares playthings, play equipment.							

ITEM	IN			OUT			COMMENTS
	EXT	INT	SKILL	EXT	INT	SKILL	
<u>Gives</u> facial, verbal, and body <u>cues</u> appropriate to the situation and that say, "This is how you should act toward me."							
<u>Responds</u> to others' facial or body cues.							
<u>Maintains</u> cohesiveness of play frame.							
OVERALL PLAYFULNESS							

	EXTENT	INTENSITY	SKILLFULNESS
	3 = Almost always 2 = Much of the time 1 = Some of the time 0 = Rarely or never NA = Not Applicable	3 = Highly 2 = Moderately 1 = Mildly 0 = Not NA = Not Applicable	3 = Highly skilled 2 = Moderately skilled 1 = Slightly skilled 0 = Unskilled NA = Not Applicable

ENVIRONMENT

Please comment on elements of the human (e.g., caretakers, playmates) and non-human environments (e.g., space) in terms of their relative promotion or detracting from this child's play/playfulness.

	PROMOTES	DETRACTS FROM
Intrinsic Motivation	human-- nonhuman--	
Internal Control	human-- nonhuman--	
Suspension of Reality	human-- nonhuman--	
Reading Cues	human-- nonhuman--	

Appendix B

Therapist Demographics:

Name: _____

Please circle:

Years in practice:

- 1 - 5
- 6 - 10
- 11 - 15
- 16 - 20

Years of experience working with children with cerebral palsy between the ages of two and ten:

- 1 - 5
- 6 - 10
- 11 - 15
- 16 - 20

Education:

- Diploma
- Bachelor's degree
- Master's in O.T.
- Master's in another field

Appendix C

Interview Prompts for Playfulness Study Participants:

How would you describe play?

What do you think is the role or value of play?

How would you describe good play for an able-bodied child?

How would you describe good play for a disabled child?

How does the play of a disabled child differ from the play of an able-bodied child?

How is it the same?

How do you, as a therapist, assess play?

How do you, as a therapist, treat play and/or use play as a treatment?

What could we do as therapists to promote play for our clients?

Give an example of a statement you might make regarding a child's play.

Tell me about your experience during our play research project.

Do you think your answers to the questions about play would have been different before the play research project?

How has it changed your thinking?

Why has it changed your thinking?

How has it affected your clinical practice?

Appendix D

Interview Prompts for Playfulness Study Nonparticipants:

How would you describe play?

What do you think is the role or value of play?

How would you describe good play for an able-bodied child?

How would you describe good play for a disabled child?

How does the play of a disabled child differ from the play of an able-bodied child?

How is it the same?

How do you, as a therapist, assess play?

How do you, as a therapist, treat and/or use play as a treatment?

What could we do as therapists to promote play for our clients?

Give an example of a statement you might make regarding a child's play.

Have you been involved in research projects involving play or the assessment of play?

If no, what do you think a research study could find out about play?

If yes, what effects has being involved in a research project had on you and your practice?

Appendix E
Self-Report Questionnaire

SELF REPORT QUESTIONNAIRE			
		Yes	No
1	Have you read any O.T. literature in the past two years about play?		
2	Have you read any other literature in the past two years about play?		
3	Have you attended any inservices about play?		
4	Have you attended any conferences about play?		
5	Have you attended any presentations about play?		
6	Are you familiar with the work of Anita Bundy on play?		
7	Have you added to your knowledge about play or play research since June, 1994?		
8	Do you comment on play in your assessment reports?		
9	Do you assess play?		
10	Do you design treatment programs to promote a child's play?		

11	Have you used any research findings in play to help you decide the intervention?		
12	Do you feel research regarding play is important for O.T.'s?		
13	Have you been involved in a research project on play as a clinician?		
14	Have you been involved in a research project on play as an investigator?		
15	Do you feel you have time to be involved in a research project on play?		
16	Do you feel your employer would support your request to be part of a research project on play?		
17	Do you feel involvement in a research project on play is a good method of continuing your professional education about play?		
18	Do you think you could learn as much from participating in a research project on play as you could from attending a conference on play?		

