

A SOCIAL DEVELOPMENT ASSESSMENT SCALE FOR MEXICAN
CHILDREN

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CHAPTER ONE

Introduction

Success in adult life often depends upon the development of skills needed to adapt to a variety of social settings. Developing appropriate social skills depends upon various influences during childhood, thus it is important to know how children develop socially.

The purpose of the study is to validate, in a preliminary fashion, a measurement scale able to assess the social development of 4-year-olds in Mexico. It is intended to construct a reliable, valid instrument to be used in educational and clinical settings as a diagnostic or decision making tool for early intervention.

The study is embedded in the field of human development, which refers to the scientific study of the quantitative and qualitative changes through the life span (Cole & Cole, 1997).

Social development refers to the set of behaviors that a child displays in situations that involve others. The term is used with reference to the ability to make and sustain relationships, which relate to social adjustment and acceptance within the peer culture. In addition, there is an intra psychological component which includes feelings related to social situations such as the sensation of being accepted by others; as well as the thoughts and judgements of the person, such as the awareness of one's social status.

Traditionally, developmental psychologists have attempted to describe behaviors across different life stages in order to establish group norms against which one could compare growth, maturity or the presentation of expected milestones. Furthermore, studies in this field try to explain why behaviors occur, how they can be modified, the degree in which they can predict future adult behavior, all of the above with the intention to learn how to foster a healthy psychological development (Stone & Church, 199; Seifert &

Hoffnung, 1997)

The study of child development has gone through significant changes in recent years. Seifert and Hoffnung (1997), claimed that children were not considered genuine members of society for many years. During the 19th and 20th century the growing recognition of the importance of childhood led to new methods in the approach to children. The recognition of a child's specific developmental needs replaced the old notion that children will become adults by taking adult like tasks in the community. Indeed, several authors such as Gesell and Piaget observed their own children, and reported their psychological changes across time in their well known child biographies. As underlined by Stone and Church, (1979) in the 60's, child development became a field of intense study with an emphasis on cognitive development.

The field of developmental psychology expanded three clearly identified areas of knowledge: physical, cognitive, and social development. The latter is the main focus of this study, since the importance of social development has become more obvious by contrast with the previous years. According to Hartup (1992), social development is nowadays considered not only a good predictor of future adaptive functioning, but a predictor of cognitive development as well.

The statement above is reinforced by McClellan and Katz (1993) who claimed that unless children achieve minimal social competence by about the age of six, they have a high probability of being at risk of poor mental health, school drop out, low achievement, other school difficulties and poor employment history. Similarly, Eaters & Sroufe, (1983) argue that the main task of preschool children is to develop early social interactions, under the assumption, that these social skills will enhance other competencies. Pelligri (1985) asserts that a child's social and dramatic play will somehow foster traditional literacy; and

Zigler & Trickett (1978) go as far as to argue that social competence should be the primary measure of the success of any childhood intervention program.

The realization of the current need to evaluate social development in pre-school children requires valid and reliable measurement scales since fostering social skills, detecting the child with developmental social delays and evaluating social developmental milestones seem to be logical tasks to improve children's general well being and future development.

Conceiving social development in a more complex perspective that includes behaviors, feelings and thoughts requires appropriate strategies to measure and evaluate a child's social development. When analyzing a child's social development, in addition to estimating the quality and quantity of peer interaction, one must also consider the thoughts and feelings of the social players. That is, one must take into account the judgments and thoughts of others toward a particular child, and the feelings and thoughts of that particular child toward others.

Indeed, authors such as Pelligri & Glickman (1991), and Green et al. (1980) have argued that information to assess social development should be obtained not only from direct observations of target behaviors, but from information given by parents, care takers, teachers and others in contact with the child. In addition, it demands the development of valid and reliable instruments that are pertinent to the theoretical stand taken and are also adequate for the target population.

In sum, the recent interest of scholars in social development has led to the consensus that its evaluation in early years might be as useful as assessing cognitive development (for example reading or writing) in the preschool years. However, to adequately measure social development one must possess valid and reliable scales.

Statement of the problem.

After a thorough search for instruments used in pre-school settings and of recent research related to the area, one can conclude that in Mexico, there is a lack of systematic assessment procedures and scales useful for the detection of children with poor social adjustment. This fact hinders the possibility of early intervention to prevent future problems. In fact, in most Latin-American countries, the majority of strategies used to detect delays in social development are intuitive, clinical and unsystematic. Furthermore, no specific scales were found in current use in Mexican schools to assess children's social development.

The majority of available instruments are translations of popular scales from the United States. Measures of social development are commonly reported as scores in specific subscales of more general psychological development batteries for example Vineland.

Furthermore, there is a lack of instruments that take into account specific cultural factors involved in the phrasing of the items included in the instrument. Thus, the evaluation of social development risks the biases of clinical appraisal or the biases of the cultural differences embedded in instruments devised elsewhere.

Culturally appropriate scales are necessary since the way parents relate to children, the amount of freedom allowed, the expectations they have, among other events differ from one culture to another. Consequently standards of social adjustment vary with the cultural norms by which they are judged (García Coll & Magnuson, 1988). Appropriate assessment devices, therefore, must abide with cultural norms and this appears to be a very important factor in assessing the child's scholastic potential.

Purpose

The purpose of the study is to construct and validate an instrument to measure basic

social skills of Mexican children. It is intended to detect children with delays in social development at an age as early as 4 years. It is expected that teachers, psychologists, and other professionals can use such an instrument to appraise indicators useful to measure change over time or the impact of appropriate programs.

Objectives

1. To construct a scale of social development appropriate for 4-year old Mexican children
2. To establish its reliability, validity, and norms.

Importance of the study

Social skills emerge developmentally. That is, children become increasingly able to engage in effective social exchanges. Fein (1978) explains that there are a number of developmental sequences that can be observed throughout daily social exchanges, these require the coordination of several expressive behaviors.

Such sequences however are mediated by adult expectations. For example, in a given social setting, there are cultural and familial expectations of what social skills a 4-year old should have mastered. Furthermore, if this 4-year old attends a day care center or a kindergarten, s/he is likely to have been introduced to the peer culture, and s/he is expected to have learned enough social rules to interact with others. In Merida, at 4-years old the child usually leaves the Day Care Center to enter a Kindergarten, a less protected environment. Or as in many other cases children do not attend any day care center and are cared for at their homes and only enter the kindergarten at around the age of 3 or 4-years old.

Thus, evaluation scales that attempt to measure the construct of social development,

should consider the existing expectations for boys and girls and different life stages in different social settings

Historical and cultural studies have shown that early social development has had different connotational meanings to people of different times and societies where cultural needs, ecological demands, and concerns about infant health shape parental expectations for their young offspring (Harkness & Super, 1995).

This is why an instrument to measure social skills in Mexican children would be useful for parents, teachers, psychologist and other professionals. Such an instrument could be sensitive to detect problems in the acquisition of social skills. With early identification, intervention to help children develop their best potential social competence may reduce the risk of social maladjustment, and increase their chances of functioning as well-adapted adults in the future.

Limitations and delimitations of the study.

Although the resulting instrument developed during the study has demonstrated some desirable psychometric properties, and provides a founded guide for assessing social development in Mexican children, the final product version still requires further analysis. Hence, it provides a range of opportunities for future research. For example, it could be applied to different types of diverse populations and probably develop a set of norms for children of different ages.

The initial intention of the study was to develop an instrument capable of measuring performance in a set of observable social behaviors of 4-year old children. The recording of these observations in two different settings (home-school), was only expected to give a general picture of the child's social development state, in such a way that specific areas of problems could be identified. In such a way that help can be provided to improve

the social skills of the child, with the intend to enhance his/her probabilities for a better future adjustment.

It is not expected that this instrument is used for clinical purposes other than the one mentioned before. Neither this instrument is posed as a selective tool of any kind. Discretion is recommended in terms of its possible applications, and of course more research into its advantages and limitations is warranted as it is described later in chapter 5.

Glossary

Below, some definitions are given of a few terms that the researcher thought could be useful to help the reader to follow and consult in case of need .

Aggression:

Actions that are intended to harm another person or an object.

Attachment:

The strong and enduring emotional bond that develops between the infant and the caregiver.

Sociability:

The tendency to engage others in social exchanges.

Social Competence:

The degree to which children adapt to their social and home environments. The ability to make use of environmental and personal resources to achieve a good developmental outcome

Social responsibility:

Adherence to social rules and role expectations.

Social skills:

Behaviors that a child displays in interpersonal situations that lead him/her to solve

social tasks or function in society.

CHAPTER TWO

Review of Literature

The origins of social behavior can be observed in very young children. Different types of studies have analyzed the early foundations of social interactions: sensitivity to others, differentiation of self from others, interactions with mothers, responsiveness to siblings (Dund and Kendrick 1982, Waters et al.1979, McCoy et al., 1994).

From birth, interactive responses emerge and transform into more complex and coordinated social interactions. During the first year infants can distinguish and react appropriately to emotional expressions of caregivers. For example according to Haviland and Lelwica (1987) social behaviors such as gesturing and touching increase from six to twelve months.

The forms of social interactions after two years of age become increasingly varied. Children at this age show different degrees of social awareness, cooperative play, understanding the feelings of others and social norms. Dund and Kendrick(1982), reported that in their second year children show helpful and cooperative behavior and empathetic responses to the distress of others.

By the age of three children can marshal some very sophisticated reasoning about social relationships. Children understand the connection between their own actions and the other person's state of pain, anger or amusement. Their power of understanding and knowledge of social rules may be used in struggles to get their own way. By the end of the third year children not only recognize what others want but they grasp the idea that sharing is often expected from them (Dund and Kendrick, 1982).

According to Harris and Gross (1988) by four years of age children are taking into account the desires of others in predicting their emotional state. At this age children are

also involved in social exchange and sharing with their friends and peers is usually a very well mastered norm. Indeed, Strayer (1986), asserted that children at this age are more interpersonally oriented.

At this stage it also seems more likely that the child has had the opportunity to be involved in enough social interactions and would have mastered the required social skills to interact with peers and others. On the other hand at the age of four it is still early enough to detect and prevent any possible difficulty in social development. Also, it is more likely that the child would be involved in academic programs through which his/her social development could be monitored.

Theoretical approaches to Social Development

While some authors have disregarded the importance of social development others, to varying degrees, have given this a more significant role in their theories.

Personality theories

Psychoanalytic: Psychoanalysts and neo-psychoanalysts have not given social interactions any significant role in child development. Bloss (1967) is perhaps the only psychoanalytically oriented theorist to give developmental significance to children's peer relationships. For him peers become important in adolescence so he does not consider them important in early social development.

Sullivan (1953) characterized children's peer interactions during early childhood as organized around play and common activities. He argued that the peer system was essential for the development of a sense of well-being.

Indeed, most psychodynamic theorists – without specifically referring to social development- focus on the effects of the quality and intensity of the parent-child relationship as a precursor of social development. For example, Mahler (1968) stresses the importance

of the ‘symbiosis’ with the mother and the eventual need of the child to proceed into a struggle for separation and individuation, expanding their social sphere beyond the realm of parents in the quest for new attachments in the context such as peers and caretakers. In this perspective.

Cognitive developmental perspectives

Piaget (1932), suggested that children’s relationships with peers could be distinguished from their relationships with adults. Peer exchanges allowed children to actively explore their ideas. Peer relationships were portrayed as being balanced, egalitarian, and as falling along a more or less horizontal plane of dominance and power assertion. Thus in the peer context the child could experience opportunities to examine conflicting ideas and to negotiate and discuss multiple perspectives. These peer interaction experiences were believed to result in positive and adaptive developmental outcomes for children, such as the ability to understand the thoughts, emotions, and intentions of others.

Contemporary perspectives on the role of peer exchange for cognitive growth can be seen in the work of constructivist thinkers such as Azmitia (1988) and Hartup (1999). These writers introduced the notion that the quality of the relationships between the peers who are interacting with each other may contribute to cognitive and social-cognitive growth and development.

From this perspective, Vigotsky (1978) argued that cognition originates in social interaction and centers on children’s appropriation of cultural tools, goals and activities, which they internalize to become fully functioning members of their society. He developed the term ZPD “Zone of proximal development” to explain the significance of social interactions. The ZPD represents the distance between what the child could do independently and what he or she could do with collaboration or assistance of others.

Vygotsky indicated that assistance was typically provided by parents. More recently researchers such as Tudge (1992) and Rogoff (1990) have argued that the child's peers can also play the role of constructivist.

Learning and Social Learning Theories

For Bandura (1969) and other learning theorists, the social component of the learning process is in the social reward outcomes of imitation and the social desirability of the model. Bandura & Walters (1978) noted that children can learn novel social behavior by observing others. Therefore peers can act as models.

It can be observed that even though early theories gave social development limited significance, it seems that newer theoretical approaches tend to increasingly emphasize its importance.

Factors Influencing Early Social Development

The development of social skills, this is the behavior that leads the child to solve social tasks and achieve social success, will enable the child to engage and sustain social interactions and will result in the acquisition of certain degree of social competence.

Hartup (1989) regards this ability to develop social competence as one of the most important developmental tasks in early childhood. The development of social competence has been related to later adjustment and academic achievement. In fact, Wentzel (1991) asserts that social competence in childhood is a powerful predictor of academic achievement. On the other hand, Coie and Dodge (1988) stated that children who develop appropriate social skills are less likely to display current and future problems of adjustment. Only by understanding the nature of the developmental process is it possible to understand the links between early adaptation and later disorders (Sanchez, 1986).

Research has found some important factors that could influence early social

development, such as parenting style, attachment, and siblings.

Firstly, Dishion (1990) found a relation between the family ecology and the rejection or acceptance by peers. Pettit, Dodge & Brown (1988) have stressed the importance of considering the family relationship factors to develop social competence in children. Baumrind (1971) analyzed the effects of different parenting styles on children's social interactions. During preschool years the parenting style is an important issue, since it would affect the child social abilities. Children at this age usually test the limits their parents impose on their behavior. They have a strong desire to control their own environment. The way their parents respond to this is important. Parents tend to have different beliefs and styles of parenting. Understanding the parents' style of authority will lead us to understand the child's way of relating to others.

Baumrind (1971) analyzed how parenting styles influence children's behavior. She found that children of authoritative parents tend to be self-reliant, self-controlled, and able to get along well with their peers. These children tend to have a higher degree of psychosocial maturity. On the other hand, children of authoritarian parents tend to have poorer peer relations and poorer school adjustment.

Secondly, the child's experiences with the parents, and the extent to which parents have been reliable and predictable in their care and accessibility in the past, determines the quality of another important factor, attachment.

The quality of attachment would determine the child's willingness to engage and benefit from social interactions. The basis for trust in relationships with others would develop from early attachments. If the child has a secure attachment, it is more likely that s/he would be willing to interact with others outside the family. Secure attachment also favors exploratory behaviors, which would also increase the likelihood of social

interactions.

The most compelling evidence that the quality of the child's social development is a reflection of the underlying quality of the parent-child relationship has been explained by Bowlby (1969) attachment theory. Even when Bowlby's theory has been strongly criticized by feminist researchers we cannot deny his influence in this area of study.

According to Bowlby (1969) the development of attachment goes through four phases. At first, the baby would show no specific interest in its parents. But, the infant's behavior would have some influence on the adults around it. From 3 to 7 months the infant would start showing preference for those who are gratifying. It is after seven months that parents become important. First attachments are formed at this stage. This stage will end at 30 months, when the child will start the goal corrected partnerships.

Ainsworth (1979), identified three different types of attachment (Secure, avoidance, resistant or ambivalent) each of them leading to different types of behavior in the children. Secure attachment (Ainsworth & Bowlby, 1991) leads to a child able to feel fine when the parents leave but also show interest or satisfaction when they return. This will allow the child to engage in other activities when the parents are not around without any fear or rejection to the parents when they return.

More evidence of the importance of attachment in the development of social skills is found in different studies. Waters et al (1979) concluded that the quality of attachment would predict competence and acceptance in the peer group. Lamb (1978) mentioned that attachment is important in three ways: a) the infant's trust in its parents can be generalized to others; b) securely attached infants are willing to become actively engaged with other aspects of the environment, maximizing the benefit from extensive social experiences; c) children would be more likely to interact with their parents without fear or weariness.

Lieberman (1977) found that the social competence of the children was related to the quality of the attachment between mother and children, and the amount of experience that the child had had with peers. Liberman et al (1999) found that father availability was related to children having less conflict with their friends.

Inconsistent or rejecting parents are more likely to create insecure attachments and this could have deleterious consequences for children's social relationships with peers (Cohn, 1990).

The parents, especially the mother, have a great influence on the child's social competence. One of the most important characteristics of the mothers' of competent children is that they interact sensitively with their children. They also experience pleasure in these interactions. Stone and Church (1979) suggested that children who grow up in supportive environments are likely to be better adjusted.

And thirdly, if parents are important agents of socialization so are siblings. The great majority of children have at least one sibling. Interactions with siblings contribute to develop the child's understanding of the needs and feelings of others. According to Azmitia & Hesser (1993) siblings are considered agents of cognitive and social development. Siblings spend a significant amount of time together. The positive quality of their interactions and the high degree of mutual imitation suggests that they enjoy each others company and are interested in each other's behavior. Hartup (1989) believes that the mismatch between their competencies encourages the acquisition of skills. Children's experiences with siblings provide a context in which interaction patterns and understanding skills may generalize to relationships with other children (McCoy et al., 1994)

As these studies report the family as a whole contributes to the social and cognitive development of the child and his/her entrance to the peer group. The early social

development of the child will be the result, as has been mentioned, of the combination of many factors such as parenting styles, early attachments and interactions with siblings. All of these variables together with the child's personality and the specific settings where he/she is expected to interact with others will have a tremendous impact on his/her early social development.

Implications of early social development

When children first go to the preschool they enter a strange environment, strange peers and adults will soon become important in their lives (Hinde, Stevenson-Hinde & Tomplin, 1985). Research has shown that some behaviors are characteristic of children who are more popular among their peers. Popular children are skilled at initiating and maintaining qualitatively positive relationships. Putallaz (1983) has found that popular children, when entering new peer situations, are more likely to share the frame of reference of the ongoing playgroup. They are less likely to draw unwarranted attention to themselves, they are not disruptive of the group's activity. Coie et al.(1982) detected that popular children are perceived as friendly, sociable, helpful and sensitive

On the other hand, Coie & Copersmidt (1983) confirmed that the most commonly associated behavioral correlate to rejected children is aggression. Shyness may be another related behavior.

These early social relationships will have a long-term effect on their adjustment. Cohn, (1990) emphasizes that children who are actively disliked by their peers are more likely to display long term difficulties in adjustment. Howes and Phillipsen(1998) found in their longitudinal study that children who were more aggressive as preschoolers, were more aggressive still at nine years old. At risk children have also been found to have higher probabilities of a number of negative outcomes including delinquency, criminality,

dropping out of school or needing mental health services.

Ladd (1990) states that 20 to 30% of the school age population experiences adjustment problems in the classroom and are at risk of interpersonal, emotional and career difficulties later in life. Having friends and being liked by peers seems to be a good predictor of future adjustment.

It may be that any sort of peer rejection is stressful to such an extent that children would be at a heightened risk for later maladjustment regardless of the chronicity of the stress (DeRosier et al. 1994).

Matas, et al. (1978) believe that we can assume that there is coherence in personality development over time and that early assessments predict the presence of later developmental difficulties. As mentioned before there are difficulties and advantages that have been found to be related to social development and also the variables that could influence early social development. From this evidence comes the assumption of the importance of early social development assessment.

Assessment of early social development.

Green, Forehand, Beck and Vosk (1980) found in their research evidence the importance of assessing children's social competence from four different perspectives: peers, teacher, the child and objective behavior measures. Pelligri and Glickman (1991) in comparison accept the importance of assessing social competence with peer nominations, behavioral measures and teachers ratings but instead of the child's own assessment they show preference for standardized testing.

There are various methods of assessing social development, qualitative and quantitative, standardized, clinical and ethnographic. For example, in a qualitative view, a common method of obtaining a measure of peer acceptance is the peer nomination

technique. In this technique children are asked to nominate a specified number of classmates according to certain criteria. This approach had its roots in the work of Moreno (1934) who believed that interpersonal relationships and experiences should be understood via consideration of two fundamental aspects of interpersonal experience: attraction and repulsion.

From a quantitative perspective, Brofenbrenner (1943) made some methodological advances so that by the late 1950's researchers had developed an index of child's status in the peer group (low status, high status and average).

Even projective techniques have been used to evaluate social skills: for example Perry (1979) developed a conceptualization of the sociometric status in preschool children. Using a modified picture questionnaire he classified children into four categories: Popular (high social impact – positive social preference); Rejected (High social impact – negative social preference); Amiable (Low social impact – positive social preference); Isolated (Low social impact – negative social preference).

Following Peery several new sociometrical classification taxonomies were developed. According to Rubin et al. (1998) the most frequently used is the one developed by Coie et al. (1982). The labels he used were: a) popular: children who received many positive nominations and few negative; b) rejected: children who received few positive nominations and many negative; c) neglected: few positive and negative nominations; d) average: children who received an average of positive and negative nominations; e) controversial: children who received many positive and negative nominations.

Classifying children into the rejected status has been found both a reliable and a valid means of identifying children at risk (DeRosier, Kupersmidt & Patterson, 1994)

A modification of the peer nomination technique is adapted for preschoolers by

Asher et al, in order to increase the reliability of this technique. They use a Likert-type scale to rate each classmate according to some specified criteria.

Recent research indicates the importance of distinguishing between sociometrically rejected and sociometrically neglected children. Coie et al. (1982) indicate that rejected children exhibit more serious adjustment problems in childhood and in later life. A method for identifying neglected children is a combination of the positive nomination technique and rating scale measures (Asher & Dodge, 1986).

Despite the various approaches to assess social skills, in this study an eclectic approach is to be taken, in an attempt to develop a standardized instrument. This approach has been taken for the following reasons:

The age of the children is one factor that strongly influenced this decision. Relationships at the age of four are short lasting therefore the sociometric method would not bring any valid information. Projective techniques on the other hand have to be used by an expert, which is not the intention of this study.

For the reasons mentioned above, a checklist directed to record observable behaviors is to be constructed as a basis for the instrument to be developed. In fact one checklist will be directed to parents for them to report their observations about the child's social behavior at home and another will be directed to teachers to report the child's behavior at school.

Properties of a social development checklist.

The selection of the items to form the checklist was based on those behaviors that according to the research findings, have been found to be relevant in the distinguish those children, whose social development is adequate for his/her age level in contrast to those whose social development is not adequate. These behaviors were also appropriate for this

particular age level.

The items chose as result of this selection will be discussed in chapter three.

Reversibility and prevention

In our society there are children with different types of problems, most of these problems are reversible. Early detection is an important element. The sooner we can detect a problem the more we can do to overcome it.

There are situations where a child grows up lacking environmental stimulation. Others grow up where the parents neglect their children, and yet, others where the child may have a difficult temperament. All of these circumstances could stop the child from developing adequate social skills. If we were able to identify as early as four years a social development problem we would have more possibility to reverse it. Furthermore, if we could detect a problem when it is in its initial stage and do something to correct it, we could prevent future and greater difficulties.

The Mexican Institute of Social Security (IMSS)

The Mexican Institute of Social Security (IMSS), is a national health care system with centers all over Mexico. They are in charge of providing medical and support services to people employed and without other medical coverage. Actually, the system is supported by the compulsory fee that anyone that employs a person in Mexico should contribute to the IMSS. The main functions of this institution are

- Medical care and Health promotion.
- Support the mother-child care.
- Provide pensions for the elderly and retired worker.
- Train in different technical and artistic fields.

- Promote of activities such as: sports and culture.

The Department of Economic and social welfare of the IMSS has among their main goals the service of the day care centers for children of working mothers. Children can attend these centers from 43 days until they are 4 years old. The IMSS has 19 Day Care Centers in Merida , and should open two more centers in the year 2000. Children are cared for between the hours of 7 a.m. until 3 p.m. in some establishments and from 7 a.m. to 5 p.m. in others. They are divided into sections according to their age level. During the day they are fed and provided with school type activities to promote their development in all areas. The people working in these centers are specially trained for this type of work. Each center has teachers, a nurse, a psychologist, a nutritionist and dental and medical care. Most important, services at these centers are free of charge and tuition free.

CHAPTER THREE

Methodology

Purpose of the study

The purpose of the study was to construct and validate a preliminary version of an instrument to measure basic social skills of 4 years old Mexican children in the state of Yucatan. It is expected that teachers, psychologists and other professionals can use such an instrument to appraise indicators of social development when attempting to detect children with delays in this specific domain. Furthermore, the instrument should also be useful to measure change over time and the impact of appropriate intervention.

Objectives

1. To construct a social development instrument appropriate for four year old Mexican children.
2. To establish the basic primary psychometric properties of such an instrument.

Subjects

The instrument is intended for 4-year old Mexican Children with the following characteristics and limitations for future generalization:

1. Children are from the urban areas of the Yucatan (one of the 33 states of the Republic of Mexico)
2. These are children attending a day care center, which belongs to the Instituto Mexicano del Seguro Social .
3. These are children from lower to middle social class sectors, with both parents at work.

4. For this study, the exclusion criteria were the presence of an obvious disability and an obvious medical conditions affecting their social development.

Design and Development of the Instrument

In order to design the final version of The “Early Social Development Measurement” (ESDM), three preliminary versions of the instruments were developed during the course of the study to select appropriate items and establish their psychometric properties. Procedures carried out will be depicted in this section, as well as the mechanism for their construction and revision. The aim of this section is to provide the reader with the sequence, process and changes during the construction of the instrument. Likewise, information on participating subjects in each stage will be included as indicated in the previous section.

Stage I: Initial Checklists

The researcher and her advisors found that no theoretical model revised was comprehensive enough and satisfactory to sustain the development of the scale for Mexican children. Thus, it was decided that a collection of frequently quoted behaviors, indicative of social development in the literature, were to constitute the initial database for the process. The start point was then, a list of items related to observable and measurable behaviors frequently quoted in the literature to describe 4 year old children. No importance was given to whether such statements depicted adequate or inadequate social conduct. Actually, the list was based largely on research identifying elements of social competence in young children and on studies in which the behavior of children well-liked by their peers has been found to be different when compared to that of those less well-liked children(Coie et al. 1982, Putallaz, 1983). Table 3.1 presents the original items and their correspondent theoretical source(s).

Table 3.1

List of original items

| Item | References |
|--|-------------------------------|
| 1. Play and work independently from adults | Lamb (1978) |
| 2. Cries when left at school | Lamb (1978) |
| 3. Tries to get attention from adults | Putallaz & Gottman (1981) |
| 4. Asks for help from teacher* | Putallaz & Gottman (1981) |
| 5. Looks for teachers approval* | Putallaz & Gottman (1981) |
| 6. Likes helping teacher* | Putallaz & Gottman (1981) |
| 7. Interacts with adults that come to the class/ house | Waters (1979) |
| 8. Goes with other adults when requested by teacher or parents | Waters (1979) |
| 9. Chooses to be with adults rather than children | Lamb (1990) |
| 10. Shows signs of being afraid of adults | Lieberman (1907) |
| 11. Interacts voluntarily with father** | Lamb (1990) |
| 12. Sleeps over with grandparents or other relatives** | Waters et al (1979) |
| 13. When he/he is out of the house, initiates conversations with other adults** | Waters et al (1979) |
| 14. Shows interest in other children | Coie (1982) |
| 15. Approaches other children | Coie (1982) |
| 16. Plays with other children | Newcombe & Bukowsky (1983) |
| 17. Is accepted by other children | Hartup (1991) |
| 18. Participates in conversations with other children | Putallaz (1983) |
| 19. Listens to other children | Putallaz & Gotman (1981) |
| 20. Attacks other children verbally | Hartup (1991); Newcombe(1993) |

| Item | References |
|---|-------------------------------|
| 21. Attacks other children physically | Hartup (1991); Newcombe(1993) |
| 22. Tries to dominate peers | Newcombe & Bukowsky (1983) |
| 23. When in a group his/her behavior is disruptive | Newcombe & Bukowsky (1983) |
| 24. Shows preference for one friend | Hartup (1999) Putallaz (1983) |
| 25. Appears to be shy | French (1990) |
| 26. Other children invite him/her to play | Rubin et.al (1999) |
| 27. Waits for his/her turn in group activities | Coie (1982) |
| 28. Shares toys | Coie (1982) |
| 29. Follows game rules without need to be reminded | Coie (1982) |
| 30. Defends his/her rights in front of other children | Newcombe & Bukowsky (1983) |
| 31. Is capable of reaching an agreement with other children | Black an Hazen (1990) |
| 32. Shows tolerance to frustration | Newcombe & Bukowsky (1984) |
| 33. Is intimidated by other | Coie & Dodge (1988) |
| 34. When he/she goes to the park, interacts with other children | Newcombe & Bukowsky (1983) |
| 35. Likes to invite friends to his houses | Coie et al. (1982) |
| 36. Likes to go to friends' house | Coie et al.1982) |
| 37. In family gatherings plays with other children | Newcombe & Bukowsky (1983) |
| 38. Helps other children when they are in difficulty | Newcombe & Bukowsky (1983) |
| 39. Interacts with children from other groups | Newcombe & Bukowsky (1983) |
| 40. Is destructive with toys and other belongings | Newcombe (1993) |

Note. * = items used only for teachers; ** = items used only for parents.

The initial work was also directed to determine who were to provide information about the children. Teachers, parents and peers have been mentioned in the literature as possible fundamental informants. Achenbach et al (1987), reported that the correlation between reports of children's behavior between different types of informants under different situations is much lower than similar informants in similar conditions. That is parents and teachers observe the child in different contexts.

Thus it is important to appraise both settings: home and school where normal social behaviors of children occur and collect information from parents and teachers who are usually the adults present in those settings. Rubin et al. (1998) mentioned that teachers rather than external observers can provide useful and rich data concerning low frequency social exchanges that may contribute towards the quality of a child's peer relationships.

Parents, as well, seem to be natural informants due to their daily interactions with the child. Arguably, the inclusion of the parents perspective is often made under the assumption that they are able to observe the same type of behaviors as the teachers but in a different context and provide information that the teacher would not be able to observe.

Peers were discarded because of the targeted age group, and because collecting information at this age from adults may be more efficient and less time consuming.

Thus, it was important at some moment in time, during the construction of the instrument, to decide whether the information of both sources (parents and teacher) was to be more useful than either source considered alone. The utilization of one checklist instead of two had important cost – effect considerations. The intention of having observers reporting from two different settings was to have an enlarged sample of the child behaviors, rather than a sample of the child's behaviors in one exclusive setting.

At this initial stage, the main purpose of the study was to determine whether items were culturally appropriate for the target population and if wording and grammatical construction of items was clear, unequivocal and easy to understand.

For this purpose, two checklists were initially developed using the 40 items originally selected. Depending upon their context specificity and targeted behaviors, 36 items were included in the parents checklist whereas 33 items constituted the teachers' list. (see table 3.1).

Description of the Initial Checklists

The initial checklists use a yes / no / beginning to, point scale. The checklists were divided, for organizational purposes, into two sections: "interaction with adults" and "interaction with other children". Under "interaction with adults" there were 10 items in both checklists, and under "interaction with other children" there were 26 in the parent' checklist and 23 in the teacher's checklist. (see Appendix A).

Subjects.

For this initial stage, as it is recommended by the Standards for Educational and Psychological Testing (1999), it was decided to invite a group of six experts to revise the checklists. Experts were invited considering their different perspectives and approaches in addition to their knowledge and experience.

Participants subjects were two pre-school teachers, 2 child psychologists and two sets of parents of four-year-old children. Professionals have a minimum of 5 years of experience working with 4 year olds.

Procedures.

The main investigator set an individual appointment with each participant, except in the case of the parents where both spouses were interviewed at the same time. Interviews

lasted about 30 minutes and a standard format was used to conduct the revision. A brief explanation of the purposes of the interview and the aims of the study was followed by the written response to the instrument(s) and the discussion on the clarity, relevance and wording was carried out. The researcher took notes of all relevant comments. Teachers and parents reviewed only their respective checklists, whereas both psychologists respondent and commented on both checklists.

Results

In general, suggestions were made regarding the response scale, the use and number of items and their clarity, as follows:

1. To use a 5 point Lickert type response scale and rephrase some items so they could be answered with such a scale.
2. To eliminate some items that were contained in others. For example: "shows interest in other children" was contained in "plays with other children."
3. To balance both subscales by including an equal number of items in each.
4. The cultural relevance of the items was stressed and the importance of the inclusion of items such as "spends the night over at grandparents" and "likes to invite friends to his/her house" was emphasized.
5. The wording on 2 items was modified to enhance their clarity.
6. Information on whether to use one or the two checklists, was unavailable.

Therefore, the researcher decided to continue using both scales and leave the decision for the next stage.

Stage II. Modified Version of the Instrument

Description of the Instrument

- As a result of the first stage, a modified version was elaborated using 25 items for each checklist and a 5 point Lickert scale (see Appendix B). The original division based upon the interaction with adults or peers was changed clustering items in 5 subdivisions of 5 items each with the purpose of having a better presentation and an initial idea of what dimensions of social behaviors could be measured with this instrument. For testing purposes, 5 areas were established a-priori- considering both the results of the first stage and the advisors comments: Independence, Initiative, Acceptance, Cooperation and Conflict resolution. Of course it was expected to test empirically the five conceptual dimensions for assessing social development.
- Furthermore, this second instrument had 23 items that could be observed in both home and school settings. Only two items were different for parents and teachers (see table 3.2).

Additionally, in order to enrich the information for the study, demographic data about the family was required in the checklist for parents.

Table 3.2 depicts the pre-established dimensions and its theoretical support and the items included in this modified version.

Table 3.2

Description and explanations of the categories used in the second version of the checklists.

| Dimension | Definition | Items |
|---------------------|--|---|
| <u>Independence</u> | Behaviors that show autonomy and willingness to interact with others apart from their parents or teachers. According to various researchers the quality of attachment would determine the likelihood of children engaging in social interactions with others | <ol style="list-style-type: none"> 1. Cries when left at school. 2. Asks for help to do chores. 3. Seeks adult approval. |

| | | |
|------------------------------------|---|--|
| | <p>different from parents. Waters et al (1979) stressed that insecure attachment would be shown by the child not willing to separate from the parents and significant adults. This would result in detriment of social interactions with peers. Socially popular children are less likely to draw environmental attention to themselves. This is they do not act out behaviors in order to call adult attention.</p> | <p>4.Spends the night over at relatives. * 4.Asks for parents.** 5.Prefers the company of adults to children.</p> |
| <p><u>Initiative.</u></p> | <p>Skills to initiate and maintain positive relationships with others. Friendliness. Putallaz(1983), found that when entering the peer situation popular children are more likely to share the frame of reference of the ongoing group. Popular children are usually perceived by others as friendly.</p> | <p>6. Initiates conversations with visitors. 7.Approaches other children 8.Plays with other children 9. Initiates conversations with other children. 10. Likes to invite other children to his/her house.* 10. Responds to other children when requested</p> |
| <p><u>Acceptance.</u></p> | <p>This derives from other children' perception of the targeted child. A child is accepted when he/she is accepted and chosen by other children in daily activities. Other children perceive popular children as helpful and sensitive. Popular children are chosen by others to play with them. Children who are actively disliked by their peers are more likely to display long term difficulties in adjusting.(Waters,1979)</p> | <p>11.Is accepted by other children. 12. Other children invite him/her to their houses.* 12. Other children invite him/her to play.** 13. Other children make fun of him. 14. Is other child's favorite friend. 15. Is ignored by other children.</p> |
| <p><u>Cooperation.</u></p> | <p>Ability to share and play in the company of other children. Popular children are said to understand the needs and feelings of others. By the end of the third year of age children generally understand that sharing is expected from them (Dund and Kendrick, 1982)</p> | <p>16. Shares toys with other children. 17. Helps other children in problems. 18. Offers help to adults. 19.Waits for his/her turn. 20. Is capable of getting to an agreement with other children,</p> |
| <p><u>Conflict Resolution.</u></p> | <p>Refers to the child's characteristic way of approaching and solving problems. Popular</p> | <p>21. Attacks verbally other children.</p> |

children are commonly disruptive of the group's activity (Coie et al. 1982). The most commonly associated behavioral correlate of rejected children is aggression (Coie and Copersmidt, 1983). Aggressive preschool children continue to be so in elementary school (Howes and Phillipsen, 1998)

- 22. Attacks physically other children.
 - 23. Tries to dominate other children.
 - 24. When in groups his/her behavior is disruptive.
 - 25. Is destructive with toys and other belongings.
-

*Items used only in the parents' checklist. **Items used only in the teachers' checklist.

Subjects.

For this stage it was decided to use a conventional sample of 30 children attending any of the 19 different day care centers belonging to the IMSS in the city of Merida.

In order to control for age, the sample was determined by selecting a four-month period (September 1st to December 31st 1999) in which all children having their fourth birthday within this period will be included in the study until the quota of 30 was completed. Assessment was performed within a week or two of their birthday.

In this stage, the 30 children assessed came from 11 different different Day Care Centers. There were 11 different teachers and 30 parents who responded to the instruments.

In relation to this sample we had 15 girls and 15 boys. The eighty six percent of them were children of married couples. Only 7% were not living with both parents at the moment of the test. In relation with the parent's level of education 50 % of the fathers had a professional degree whereas the other 50% had some technical training. In the case of the mothers, only 33% had a professional degree and the remaining 67% were secretaries.

Of course, children sampled were automatically excluded from further analysis in the following stage.

Procedures

At this point in time, first contact was made with the General Coordinator of the IMSS Day Care Centers. Directors of the different Day Care Centers were informed about their participation in the study. Each Director was contacted by phone and a meeting was arranged to explain the purpose of the study and their required participation.

Directors were in charge of identifying those children whose birthdays were within the period of study and of notifying the researcher. With information collected from every center, a calendar was elaborated to determine the day of the application of the checklist for both, the parents and the teacher.

To standardize the time for data collection the instruments were administered within a two weeks period prior the participant's birthday. The researchers delivered an envelope with a letter for teachers and parents explaining the purposes of the study, the confidential character of the information and provided the name and phone number of the main researcher in case they needed clarifications or had questions. Each director was in charge of administering the checklists contained in the envelope to the teacher and to one or both of the parents –usually from her office when parents came to collect the child. Within a week following the child's birthday, the researcher collected the envelopes with the completed questionnaires inside. All instruments were coded and processed for analysis.

Results.

The first statistical analyses were carried out to determine Pearson's correlation between the teacher's and the parent's evaluation of the same child in order to decide the usefulness of both checklists. Pearson's correlation coefficient was considerably low (.20). In addition responses for parents and teachers were analyzed individually and as a group. When approaching individual cases in 7 (23%) cases, differences in scores were higher than

10 points. In 30 (66%) of cases the differences were less than 10 points, whereas only in 3 (10%) of cases were the scores exactly the same between parents and teachers. However, approaching differences as groups there were no statistical differences for the mean of parents 74.37 (SD 7.15) and for the mean of teachers 73.23 (SD 7.49).

Considering the above, a decision was made to use both scales in the assessment of the child's social behavior under the tenant that a more comprehensive picture of the child's social behavior was to be obtained from two qualitatively different social settings, the home and the school.

Futhermore some important modifications were made in terms of the content of the checklists:

- To contemplate behaviors that could be abserved in both contexts (home-school). Items were substituted by others which were similar to the extent that the same checklist was to be used with parents and teachers in this final version.
- The labels for the five subdivisions of the checklist were removed since they may be misleading and give an appraisal of the child's behavior as a general area (such as "independence") rather than responding to each specific item. These categories were to be used at the end as a way of analyzing the information. At this point it was decided to let the factor analysis of the result s to determine the best way to arrange the different categories or areas of behavior in the checklist for the final profile.

The resulting version could be found in appendix C, the process of validation and the findings consequent to its administration.

CHAPTER FOUR

RESULTS

This chapter presents the results from administering the third version of the instrument to both parents and teachers as well as the analysis of these results.

Final Instrument.

Validation of the scale was carried out using the checklist resulting from previous stages. As described before, this was a single list to be administered to both parents and teachers (Appendix C). The checklists for parents and teachers had differences in the wording of some items to guarantee context specificity. For example, items such as ‘When adults visit the home (or school) were different for parents or teachers. Nonetheless, it was assumed they were measuring the same behavior shown by the same child in different contexts.

The checklists contained 25 items without any grouping or subdivision. To record the answers again 5-point Lickert scale was used.

Subjects.

The target population were children enrolled in a day care center in the city of Merida in September of 1999 (the beginning of the school year). Since age was a controlled variable, targeted groups were those groups called “maternal 3”. These groups were made up of children who were to become 4 years old during the school year, during the period between September 1999 and August 2000.

In total, there were 512 children enrolled in all 19 day care centers at the beginning of the school year. A conventional sampling method was used again, by simply assessing children within two weeks of their birthday until the quota was filled. Parental consent was required for the children to be part of the study. To establish sample size, the following

formula was used

$$N = Z^2pqN / Z^2pq + (e^2)(N - 1)$$

The sample size was established at 154 children. This estimate provided a reliability of 90% and a standard error of .5%.

Characteristics of the sample

Of the 154 children assessed, eighty-two (53%) were boys and seventy-two (47%) were girls. All of them, were almost exactly 4 years old. Fifty five (39%) were the only child in the family. Sixty one (43%) had only a brother or a sister, with the same probability of this sibling being older or younger than the targeted child. In 45% of the cases the siblings were no more than two years older or two years younger than the participant child. Only thirty eight (18%) had more than one sibling.

At the time of data collection, the majority of parents were married (84%), only 5% were divorced, 5% separated, and 6% were unmarried single mothers.

Regarding parental education, only eight (5%) of the mothers had at least a bachelor's degree, in contrast, fathers had at least a bachelor's degree in thirty six cases (24%). Both parents were working when the instrument was applied (this is a requisite for admitting the child to the day care center). Parents were more likely to be employed in clerical jobs and one third of the mothers were secretaries.

Procedures

Children were selected from the lists of attendance and a calendar was elaborated to determine the day of the most feasible administration of checklists. The principal investigator visited the school within a two week period prior to the child's birthday and administered the checklist to the teacher. Once having the information from the teacher, she proceeded to give the parents' checklist to the director of the center, who in turn,

arranged for the parents to complete the form in her office. Parents usually responded to the instrument when they collected their child. Completed instruments were retrieved 2 or three days later. In four cases though, information from parents was lost in the process. Regarding data from parents, in the majority of cases (92%) only one parent responded to the instrument, usually the mother (86% of cases).

Results from Stage four

Comparison of parents and teacher responses

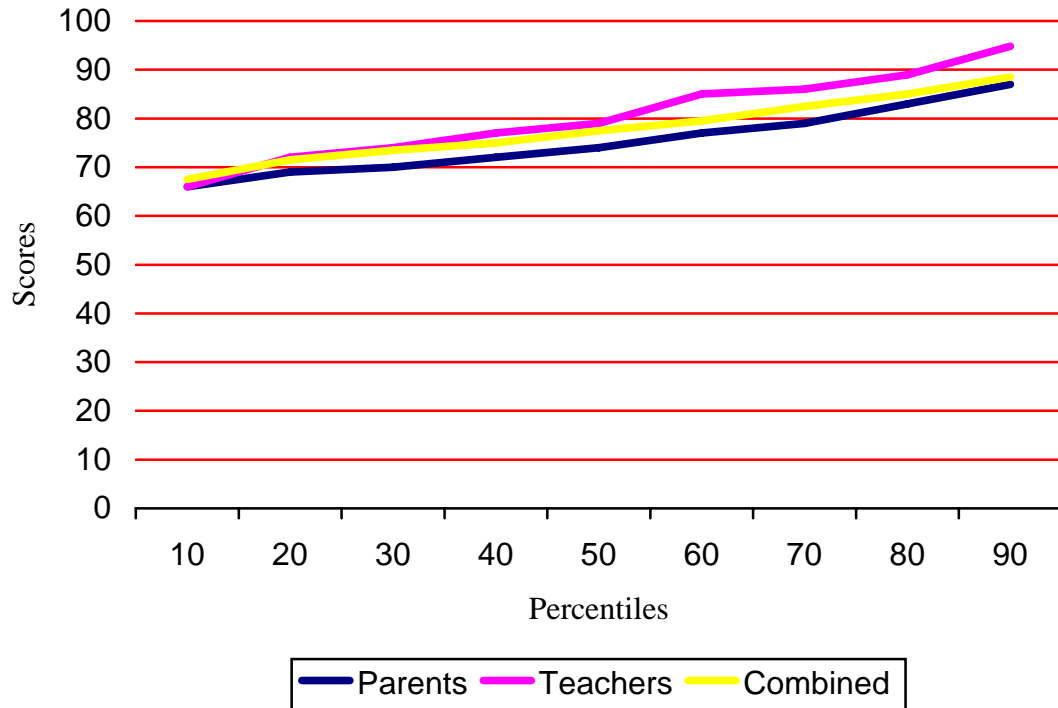
Since both checklists had the same scale (0 – 125), means were compared for teachers and parents using a t-test for independent samples, which showed statistically significant differences between the scores ($t = -3.20$; $P = >.002$). The mean for the parents was 76.23 ($sd = 10.48$) and for teachers, the mean was 81.15 ($sd = 15.56$). As shown by the data, parents tended to underestimate their child's social competence in comparison with teachers (or viceversa). In addition, Pearson's correlation coefficient between the scales, showed a positive, low and a statistically significant relation ($R = .26$, $p = .005$). Therefore, it can be inferred that although both scales measured the same phenomenon, by using both there is an additive effect that weighs the evaluation of teachers and parents and adds more information than any one scale used alone.

Therefore, it was decided to use scores from both scales combined and evaluate their psychometric properties.

Total Scale

Total scale is calculated by adding and dividing with two both scales. As such, the mean for the sample was 78.69 ($sd = 13.02$). Figure 1, illustrates the percentile cuts for the distribution of scores for parents, teachers and combined.

Figure 1.

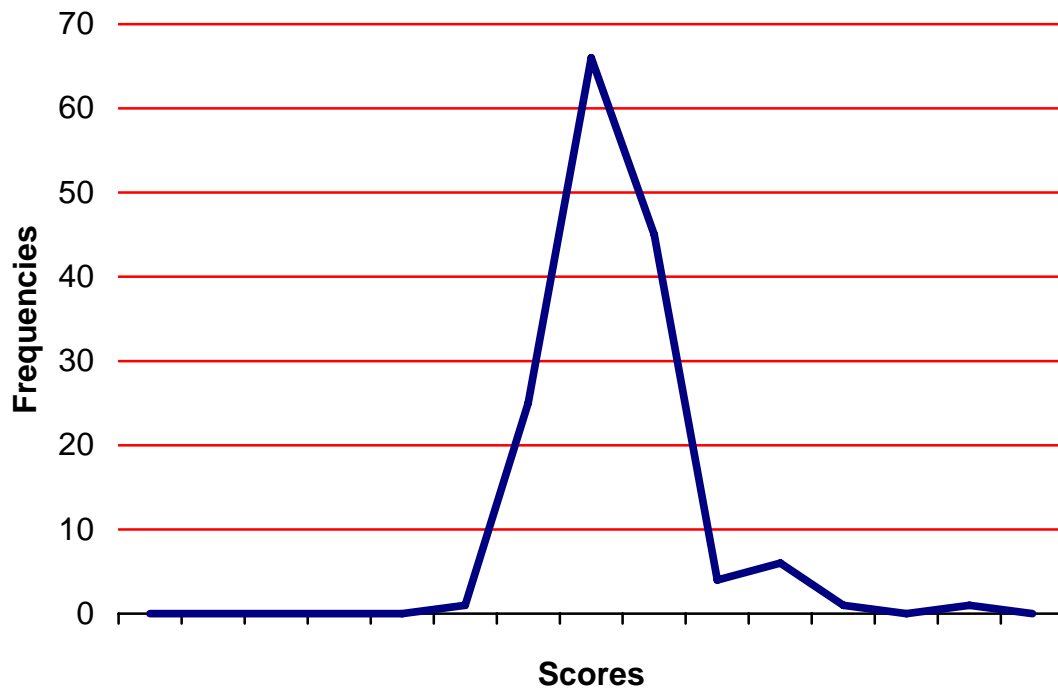
Percentiles of the three scales.

As it can be observed in the figure, using the combined score provides a more weighted assessment of the child.

The following figure illustrates the frequency distribution of the combined scale, it will be used to analyze the properties of the measured construct.

Figure 2.

Frequency distribution of the combined scale.



It can be observed, that the variance of scores is very small ($sd = 13.02$). In scale from 1 to 150, the lowest score was 57, whereas the highest was 136. This calls for a reconsideration of the 5-point Likert scale used, since it is possible that a dichotomous yes/no scale may lead to a more normalized distribution of scores. Furthermore, when the frequency of responses were analyzed per item, the most frequently chosen option was 3 (occasionally). This seems to question again the appropriateness of the 5-point Likert scale to assess the construct and support the yes/no response format.

It will be shown in later analyses that when data was put into a 'yes/no' format, the construct validation process seemed to make more sense than using raw data as originally planned.

Reliability

The Cronbach Alpha coefficient was calculated for both parents ($\alpha = .44$) and

teachers ($\alpha = .54$) The combine scores was ($\alpha =$). Individual scales showed a relatively low internal reliability perhaps because of the different factors related to social development. **(Insert table around here)**

Some significant correlation were found. But they were low. Since they refer to the same behavior in differet contex some correlation is expected.

Factor analysis

In order to explore the construct validity of the instrument a factor analysis test with a varimax rotation was carried out with the following conditions

- 1) An average from both parents and teachers was used as an item response estimate, since it has been previously demonstrated that this is a pondered estimate of the two.
- 2) Items were converted in a yes/no scale by marking no (1,2 & 3) and yes (4,5). The following table illustrates factors yielded after the ananalysis.

Table

Factor Analysis Results

| Item/Factor | I | II | III | IV | V | VI | VII |
|--|------|------|-----|----|---|----|-----|
| Attacks physically other children | .831 | | | | | | |
| Is disruptive when interacting in a group | .823 | | | | | | |
| Attacks verbally other children | .768 | | | | | | |
| Tries to dominate friends | .731 | | | | | | |
| Is destructive with toys and other objects | .628 | | | | | | |
| Seaks approval from adults | .453 | | | | | | |
| Starts conversations with other children | | .887 | | | | | |
| Approaches other children | | .842 | | | | | |
| Plays with other children | | .792 | | | | | |
| Responds to questions from other children | | .647 | | | | | |
| Speaks with adults that visit the | | .428 | | | | | |

| Item/Factor | I | II | III | IV | V | VI | VII |
|---|---|----|------|------|------|------|------|
| school-home | | | | | | | |
| Offers to help the teacher-parent | | | .733 | | | | |
| Can get to an agreement with other children | | | .687 | | | | |
| Helps other children in need | | | .685 | | | | |
| Shares toys with other children | | | .671 | | | | |
| Waits for turn | | | .604 | | | | |
| Other children invite him/her to play | | . | .470 | | | | |
| Other children make fun of him | | | | .756 | | | |
| Prefers to be with adults rather than with children | | | | .639 | | | |
| Is not the favorite friend of another child | | | | .423 | | | |
| Cries when left at school | | | | | .834 | | |
| Asks for parents | | | | | .650 | | |
| Is not ignored by other children | | | | | | .775 | |
| Is accepted by other children | | | | | | .606 | |
| Asks teacher-parent for help to do homework | | | | | | | .844 |

The analysis yielded 7 factors, 3 of which clustered 5 items each. By examining their contents the following proposed labels can be suggested for future research.

Factor I: Disruptive behavior.

This factor relates to negative behaviors that usually create conflict with other children and are mainly violations of other children's rights. Aggressive behavior towards others underlies this factor. The items considered to measure this factor are :

1. Attacks physically other children
2. Is disruptive when interacting in a group situation
3. Attacks verbally other children
4. Tries to dominate friends
5. Is destructive with toys and other objects

The item “Seeks approval from adults”, although it was described as part of this factor, due to its very low its lack of relation to the other will not be considered as part of this factor.

Factor II. Interaction

This factor relates to daily expected social interaction with other children and adults. Play and communication skills are important components of this dimension. In this factor the following items were considered:

1. Starts conversations with other children
2. Approaches other children
3. Plays with other children.
4. Responds to questions asked by other children
5. Talks to adults that visit the school-home.

Factor III. Cooperation.

This factor relates to a very desirable pattern of behaviors in the Mexican society, and relates to help and cooperation. This is also a factor that measures desirable social abilities.

The items considered in this factor were:

1. Offers to help parents-teacher
2. Can get to an agreement with other children
3. Helps other children in need
4. Shares toys with other children
5. Waits for his turn

The item “Other children invite him/her to play” was also included as part of this factor it will not be considered since it relates to other people perception of the child and not cooperative behaviors like the other items in this factor.

Factor IV and VI. Social acceptance.

These factors measure the degree to which the child is accepted by other children. Since the intention of questions in both factors relate to the same set of behaviors, it was surprising that they generated two different and apparently independent factors. Future studies should investigate the composition of this proposed dimension. However, since the sense and purpose of items seem to be alike, these factors are merged in the final version of the instrument into one single factor. The items included in this resulting factor would be:

1. Other children make fun of him
2. Prefers to be with adults rather than with other children.
3. Is the favorite friend of another child
4. Is rejected by other children (not accepted)
5. Is ignored by other children (not ignored).

Factor V: Attachment

This factor seems to measure problems with attachment, commonly seen in day care centers. Children with secure attachments as explained before, are expected to be more independent and to separate easily from parents. This behavior leads to a greater opportunity for interactions and an increased likelihood of not being afraid of others. From the items analyzed, only two were found to be related to this factor. However, because of the importance of the attachment element mentioned by authors such as Bowlby (1969), Waters (1991), Ainsworth (1964) and others, more items were included in this component until it is composed of five items. Three additional and new items were added to the 2 items resulting from the analysis.

1. Cries when left at school
2. Asks for parents.

3. Seems afraid of being abandon.
4. Shows difficulties to separate from parents in parties and parks.
5. Seems relaxed when left with other adults.

Factor VII

This factor is constituted only by one item related specifically to relations with adults, particularly demanding help from them. This item/factor will be removed from the final version.

Structure of the final version

Results reported above, provide some guidelines about the basis of the final version fo the scale:

- 1) It should collect information from both parents as well as teachers.
- 2) Scores from parents and teachers should be weighted and the result should be the addition of both scores.
- 3) A dichotomous yes/no response format would be more efficient to bring out the factors expected.
- 4) The instrument intends to measure social competence of children through 5 different dimensions: Disruptive behavior, Social interaction, Cooperation, Acceptance and Attachment.
- 5) 7 item are negative. This should be considered before coding. A general measure of social development should weight positive and negative responses.
- 6) Items should be presented randomly without any label.
- 7) Because of its recommended uses results will show in a profile of 5 different areas and also a general social development score.

The resulting instrument is shown in Appendix xxx

In chapter V, the rationale for the final version will be presented along with changes and additions to be tested in future research.

Additional information

Additional information was obtained by crossing results from the checklist with demographic information obtained. It seems that better scores were obtained by single children, followed by children with two or more siblings. The age of the sibling did not prove to have any influence on the scores but it seems that having a younger sibling enhances the social development of the child.

Children of divorced parents, contrary to what would be expected, seem to obtain better results. Children whose parents are only separated seem to get the lower scores. Having a mother who is a teacher seems to favor a better score in the checklist. In the case of the fathers, those falling into the category of professional-employed seem to have children with better scores. There were no differences found in relation with the age of the mother but some differences were found in the case of the parents' age. When the father is younger than 25 or older than 41, the children seem to obtain better scores.

CHAPTER V

FINAL VERSION AND DIRECTIONS FOR FUTURE RESEARCH

This chapters provides the rational for the final version of the instrument (APENDIX F).

General Charactersitics of the instrument

It consists of two checklists, for parents and teachers, in a yes /no format, consisting of 25 items directed to observe the same behavior in different settings (home and school).

The instrument intends to measure the following dimensions of social competence:

1. Interaction
2. Cooperation
3. Acceptance
4. Attachment
5. Disruptive behavior (negative)

It is assumed that the overall score provides an index of social competence for 4 year olds, regardless of gender but with the following specifications:

1. These are middle-middle and low-middle class children
2. They attend a day care center (typical children stay at nyhome). This mean that both parents work.

Norms

As far as this present study norms are not developed. The results of applying both checklists are only a general picture of the child social behavior. Since the sample were 4 year old children, it would be possible in the future to develop norms for preeschool children.

Uses of the ESDS

The ESDS has many potential uses in practical situations. It was not designed as a diagnostic instrument in the sense of fitting medical settings (DSM-IV criteria). However it provides information that many practitioners in schools and home or clinical environments may find useful. The following is a list of such applications:

Uses in Home, Preschool and Day Care Centers.

1. Knowledge of the child's level of social development may aid parents, teachers and day-care personnel in understanding the child's behavior with other children or adults.
2. Knowledge of the child's social development may aid parents, teachers and day-care personnel in finding the best ways to shape social behavior.
2. Knowledge of the level of social development may help parents and teachers in understanding the risks of children for future adaptive and academic problems.
3. Knowing the characteristics of the child's social behavior may help others to be more tolerant of the behaviors the child exhibits.
4. Knowledge of the level of social development may help parents, teachers and Day-care personnel to plan programs of intervention to prevent future problems
5. Evaluation of short and long term effects of intervention programs.

Research implications.

Many different interesting questions arise in the social development area. One of these is the antecedents for the different levels of social development. Another possible area of research would be the characteristics of the social development of the child at age four as a predictor of later development outcomes. Yet another different area of research would be the use of social development as a mediating variable in studies in which relations

with other variables are the primary interest, such as intelligence or temperament.

The changes in the resulting version of the checklists also need to be analyzed. The factor analysis may confirm the newly formed factors or suggest other further changes.

Administration and scoring

The following general guidelines for the administration of the checklist should be followed in order to help ensure the accuracy of the rating obtained,

1. Both forms (parents and teacher) should be completed in an environment in which the rater is free to concentrate on the behavioral statements presented. This may preclude having the day- care worker or teacher complete the form while supervising children at school or having the parent respondent attempt to complete the form while she/he has supervision responsibilities at home. Of course the rater's sense of the level of distraction in the environment is variable.
2. When multiple raters are used in one setting (e.g. both father and mother at home), the raters should complete the questionnaire independently. The researcher may wish to ensure independence by having the forms completed in his/her presence or by explaining the importance of such independence to the raters.
3. Ratings on the parents or the teachers' forms should be based on the behavior of the child during the last month. Even though the teacher or day care worker should have known the child for no less than three months.
4. The assessor should make sure that the rater has read the instructions carefully before beginning to make the ratings. If there are any questions, the directions should be read to the rater and clarified.
5. In cases in which the respondent cannot easily read the checklist, the assessor may

present the questionnaire orally.

Interpretation

The resulting scores from both checklists (parents and teacher) should be added for each factor individually and plotted in the given profile. A mark should be made in the corresponding number. In such a way, a general picture of the child’s social behavior will be depicted and those areas in which the child needs attention or coaching will be shown. From there a specific plan for each child can be derived when needed.

Disruptive Behavior

Conflictive

Non.confictive

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Interaction

Low interaction

High interaction

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Cooperation

Selfish

Sharing

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Acceptance

Rejected

Accepted

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Attachment

Unsecure

Secure

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

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