

A COUNSELLING INTERNSHIP AT THE DIAGNOSTIC  
AND REMEDIAL UNIT MEMORIAL UNIVERSITY WITH  
A RESEARCH STUDY ON CHILDREN'S SEPARATION ANXIETY

CENTRE FOR NEWFOUNDLAND STUDIES

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A COUNSELLING INTERNSHIP AT THE DIAGNOSTIC AND REMEDIAL UNIT  
MEMORIAL UNIVERSITY

WITH

A RESEARCH STUDY ON CHILDREN'S SEPARATION ANXIETY

BY

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## ABSTRACT

This Report consists of two parts. The first section is a description of an internship completed in the Diagnostic and Remedial Unit at Memorial University, St. John's, Newfoundland. It includes the rationale, a description of the setting, internship goals and the related professional activities performed to meet these goals. The second section describes the project which was completed as the research component of the internship. In order to test the hypothesis that separation anxiety decreases with the age of a child, a Derived Pictorial Experimental Paradigm was administered to 80 children in four different age groups.

Separation anxiety showed a decline with age with the main effects attributable to the youngest age groups (3-4 years of age). Even though this gradual decline is evident this study suggests that separation anxiety continues at a relatively high level for all age groups tested.

The results of this sample will be later used for comparison with Australian and Israeli samples. All of the results will then be used to develop a normed test to assess the levels of anxiety in young children.

## ACKNOWLEDGEMENTS

I would like to thank Dr. Marie O'Neil for supervising this internship and Dr. Glenn Sheppard for his assistance in the completion of the write-up of the project. I am also grateful to the staff at the Diagnostic and Remedial Unit for sharing their expertise during my internship. A special thank you to Elizabeth Maddox for typing, retyping and constant support.

To my good friend Sandra Taylor I offer many thanks, for without her continued encouragement and never-ending assistance this project would never have reached completion.

To my husband John I say thank you for your support, encouragement and love over the past two years. This report is dedicated to my daughter Rena who has arrived since the onset of this project.

## CHAPTER 1

### RATIONALE FOR INTERNSHIP

#### Introduction

An internship is an option available to graduate students in the Masters Degree Program in Educational Psychology at Memorial University. An internship supplies on the job experience with supervision by both a field supervisor and university supervisor. Supervised experiential training is seen as an important and vital aspect of the counsellor's education program. The practical experience gained from an internship is intended to provide the intern with the opportunity to develop competence and thus be able to function as a more independent counsellor. Such a supervised professional experience should also bring into focus the theoretical training received during the formal part of the program.

According to the Department of Educational Psychology at Memorial University, "the nature, the scope, and the specialization encompassed in the role of the counsellor require intensive training, a considerable portion of which should be devoted to supervised experiential training" (p. 1 ). The internship then appears to be a logical medium to provide the intern with more intense practical training. This internship option also offers the chance for the intern

to continue to develop skills in the area of psychoeducational assessment. There is no doubt that a school counsellor needs to acquire competence in this area. The demand for assessment services is a growing concern in our schools and has become evident through the increasing emphasis on the identification and programming for children with special needs.

The assessment process has been the subject of much discussion in recent years and the very foundations of assessment practices have been questioned. It is important then that the counsellor acquire the competency and skills needed to be successful in assessing children.

According to Sattler (1988), "tests and other assessment procedures are powerful tools, but their effectiveness will depend on your skill and knowledge. When wisely and cautiously used, assessment procedures can assist you in helping children, parents, teachers, and other professionals obtain valuable insights. When used inappropriately, they can mislead those who must make important life decisions, thus causing harm and grief" (p. 5).

The assessment process is a complex procedure and involves obtaining information from various sources which must be woven together to form a firm foundation for making decisions. It is obvious then that the clinician must master various technical and clinical skills.

As stated in Sattler (1988), the skills needed to be a competent clinical assessor include the ability to:

1. Evaluate and select an appropriate assessment battery.
2. Establish and maintain rapport with children.
3. Administer and score tests and other assessment tools by following standardized procedures.
4. Observe behaviour.
5. Interview parents, children, and teacher.
6. Perform informal assessments.
7. Interpret assessment results.
8. Translate assessment findings into effective interventions (formulate recommendations).
9. Communicate assessment findings both in writing and orally.
10. Read and interpret research in the field of clinical and psychoeducational assessment.
11. Understand laws and government regulations concerning the assessment and placement of special children (p. 7).

The internship option was chosen by this student to enhance the skills required for proper functioning in the highly demanding and challenging role of school counsellor. More specifically, the internship provided the intern with the opportunity to expand in all areas of the assessment procedure while working with many children who demonstrate a wide range of learning and developmental disorders.

### Setting for the Internship

The Diagnostic and Remedial Unit was chosen as the setting for this internship. In 1982 the Unit became a division within the Faculty of Education at Memorial University, and meets the requirements for internship settings as laid out by the Department of Educational Psychology.

The Unit originated in 1971 to screen children for learning disabilities for research purposes. In 1972 a remedial component was established. Children with learning and other developmental disabilities are referred from medical and educational sources from every part of the Province of Newfoundland and Labrador.

The functions of the Diagnostic and Remedial Unit are as follows:

1. Assessment of children with problems ranging from learning disabilities to pervasive developmental disorders.
2. Provision of short or long-term remedial tutorials for a limited number of the children assessed.
3. Consultations with parents, teachers and other professionals regarding future programming.
4. Participation in the Special Education Degree programme by teaching:
  - a. Education 3650, Practicum in Special Education;
  - b. Education 4540, Augmentative Communication;
  - c. Education 3630, Nature and Characteristics of Learning Disabilities.
5. Supervision of field placement students from the Faculties of Education, Psychology, and the School

of Social Work, both at the undergraduate and graduate levels.

6. Presentation of workshops to parents, teachers and other professionals on topics such as "Remedial Reading Strategies", "Augmentative Communication" and "Effective Parenting".
7. Involvement in interdisciplinary consultation and assessment with professionals from the Janeway Child Health Centre and the Children's Rehabilitation Centre.
8. Provision of a limited travelling service to outlying regions of the province for consultations and assessments.
9. Involvement in research. A staff member is presently coordinating Newfoundland's commitment to the Bliss-Tel Project which is investigating Blissymbol telecommunication.

The referrals in 1989 reflected the changing needs of school boards in the Province. The majority of referrals were for in-depth psychoeducational assessment with the initial assessment done at the student's home school.

During 1989, 182 children were seen in the Unit; 75 percent were for assessment and programming suggestions; 25 percent returned for varying periods for remedial programming.

During this internship services were provided by a full time staff of five, consisting of a Director, three Specialized Teacher Diagnosticians and a Secretary. Dr. Marie O'Neill, Ph.D., Clinical Psychologist, provided the overall supervision for the internship. Gertrude Andrews, Acting Director, and Jane Green, Consultant for augmentative communication, served as field supervisors in particular



aspects of the interns professional activities.

### Internship Goals

As stated in the Department of Educational Psychology (1975) paper on the internship program the purpose of the internship is to provide an extension of the practicum and to develop a flexible program that provides:

1. For the development of competencies for each trainee based on his/her needs, previous experiences, and future vocational plans.
2. For practical experiences that will bring into focus the theoretical training received during the formal part of the program.
3. For practical experiences that will enable the trainee and the department to evaluate the trainee's ability to effectively work in his/her chosen field.
4. Opportunities for the trainee to evaluate his personal behaviour modalities and work toward making any necessary changes.
5. For feedback from the internship setting to the department regarding strengths and weaknesses of its students so that program improvements can be implemented.
6. For the development of research and problem solving skills appropriate to the needs of the student and the setting, considering the nature of his placement and his vocational plans.

In keeping with these broad goals, this intern developed specific goals which were directly related to the particular internship placement; these are stated as follows:

Goal 1: To gain understanding and become more knowledgeable in the area of learning disabilities.

Activities performed to meet this goal are as follows:

1. Discussions were held with professionals who are knowledgeable in the area of learning disabilities. These professionals included the staff at the Diagnostic & Remedial Unit and others at the Janeway Child Health Centre, St. John's, Newfoundland.
2. The intern observed specialized teachers instruct children with reading disabilities, language disorders and children with autistic tendencies.
3. The following films in the area of Augmentative Communication were viewed:
  - a. "I Love My Computer" produced by Instructional Media Services.
  - b. "Talk is Not a Four Letter Word".
  - c. "I Can't See What You're Saying".

Goal 2: To become proficient at administering and interpreting a variety of methods of evaluation used in the psychoeducational assessment of disabilities and disorders which affect children's school performance and development.

Activities performed to meet this goal are as follows:

1. Tests in a number of areas of concern were administered. Selection of appropriate tests were based on the individual needs of each child being assessed. The tests and the frequency of administration are presented in Table 1.
2. The manuals of the tests administered were read and the intern observed many of the tests being administered by other professionals. This was accomplished through direct observation during a testing situation and through viewing tapes.

Table 1  
Frequency of tests administration during the Internship.

Tests	Frequency
KeyMath Diagnostic Arithmetic Test	4
WISC-R, Wechsler Intelligence Scale for Children - Revised	10
WAIS-R, Wechsler Adult Intelligence Scale - Revised	8
Wepman Auditory Sequential Memory Test	5
Wepman Auditory Memory Span Test	5
Wepman Auditory Discrimination Test	5
VMI, Developmental Test of Visual Motor Integration	2
SORT, Slosson Oral Reading Test	2
PPVT, Peabody Picture Vocabulary Test	1
PPVT-R, Peabody Picture Vocabulary Test, Revised	2
PIAT-R, Peabody Individual Achievement Test, Revised	3
WRAT-R, Wide Range Achievement Test, Revised	2
TOWL, Test of Written Language	1
Raven's Progressive Matrices	3

Goal 3: To become familiar with remediation strategies which can be implemented with children experiencing different types of problems.

Activities performed to meet this goal are as follows:

1. The intern read for comparison a number of reports on children who were assessed at the Diagnostic And Remedial Unit. These included reports written

by the clinical instructors of the Diagnostic And Remedial Unit.

2. The intern did some assessment on and worked with a university student who has mild cerebral palsy. Results and remediation suggestions were discussed with the field supervisor.

Goal 4: To become more competent in carrying out a comprehensive psychoeducational assessment. This included:

- a. Collecting relevant information such as history, including medical history, from parents and teachers.
- b. Selecting of appropriate assessment instruments and procedures.
- c. Conducting comprehensive testing and assessment.
- d. Analyzing and interpreting results of such assessments.
- e. Translating the findings into effective suggestions for remediation.
- f. Knowing when to refer.

Activities performed to meet this goal are as follows:

1. Completed assessments and comprehensive reports were written on five children.
2. Discussions were held with the field supervisor concerning these assessments.
3. The intern observed full psychoeducational assessments done by Dr. Marie O'Neill. The intern then read the completed reports and attended case conferences.
4. The intern worked with teachers and parents of a number of children who had been referred and assessed.

Goal 5: To provide remedial instruction to a child who was assessed by the intern and found to need specific remediation strategies.

Activities performed to meet this goal are as follows:

1. Individual remedial instruction was provided to a child based upon a full assessment done by the intern.
2. The child was seen by the intern at the Diagnostic and Remedial Unit for a total of 14 hours. During that time the child was involved in specific reading activities with the intern.
3. Meetings with the parents of the child were held on five occasions.

Also, during the course of these meetings, remediation strategies used by the intern were discussed. Materials were provided to the parents to supplement remediation strategies used by the intern in working with the student. The final meeting with the parents was held to discuss the progress of the child and to make suggestions for the coming school year.

4. The intern also met with the child's principal and teachers to discuss the child's progress over the summer and to plan reassessment.

Goal 6: To complete a research project which would comply with the requirement of the internship while also proving useful to the intern in her role as a school counsellor.

A description of the project completed by the intern is presented in the second part of this paper.

### Conclusion

The Diagnostic & Remedial Unit is an excellent internship setting for a student in the Educational Psychology Masters Program. The Unit provided the intern with the opportunity to gain knowledge and experience in the areas of assessment, remediation, counselling and consultation. The practical experience gained from this supervised internship has improved the intern's skills and competence in the field of Educational Psychology.

The intern was also afforded the opportunity to work in the area of clinical psychology. Exposure to neuro-psychological assessments was made possible through Dr. Marie O'Neill's work with the Janeway Child Health Centre.

The intern worked as a professional member of the Diagnostic & Remedial Unit staff, under the direct supervision of Dr. Marie O'Neill. Other members of the staff served as field supervisors during different aspects of the internship.

## CHAPTER 2

### RESEARCH PROJECT

#### Introduction

In order to fulfill the requirements of an internship in the graduate degree program of the Department of Educational Psychology, Memorial University, the intern is expected to complete a research project. In this internship a study to measure separation anxiety in children was carried out. This Chapter describes the study, the sampling procedures, the instruments used and gives a description of the procedures.

#### Statement of Purpose

The purpose of this study was to examine developmental changes of separation anxiety in a sample of 80 children. The results of this sample will be later used for comparison with Australian and Israeli samples. All of the results will then be used to develop a normed test to assess the levels of anxiety in young children.

### Rationale

Separation anxiety in infancy, a major developmental task of that period, has been the focus of many researchers. Empirical investigations have addressed the general ethological hypothesis, viewing attachment as a mediator to the survival of the species (Bowlby, 1973). Concerns over separating from the figure of attachment is considered a threat to survival, hence one of the earliest forms of anxiety. By definition, separation anxiety is aroused by the absence of the attachment figure, attachment being its explanatory concept (Ainsworth, 1963; Ainsworth, 1964; Ainsworth and Bell, 1970; Stayton, Ainsworth and Main; Bretherton and Waters, 1985).

As the child progresses from focal attachment to separation and individuation (Bowlby, 1969), experimental findings confirm a decrease in separation anxiety by the end of the second year (Stayton et al. 1973). Some studies also noted that the intensity of the expressed concern over separating is affected by conditions under which it occurs. The intensity of the separation anxiety is higher throughout infancy when parting from the caretaker involves being 'left alone', without the presence of a substitute to mitigate the separation. In contrast, infants show less intense reactions when the separation is mitigated by adult companionship (Stayton et al., 1973). In infancy one sees



two aspects of concern related to parting from the caretaker; "unmitigated-separation-anxiety" associated with being "left-alone" and "mitigated-separation-anxiety", tempered by companionship. The question further arises whether unmitigated and mitigated separation anxiety can be differentiated throughout childhood. A study of four year old children's differential death and separation anxiety reactions to separation stressors pointed to higher unmitigated separation anxiety under the stressor condition (Halpern, 1985).

Developmental separation anxiety studies with very young children rely on assessment methodologies not appropriate for use with older children. Those studies which rely exclusively on verbal materials or on overt acknowledgements or expressions of feelings have given conflicting results in evaluating anxiety in young children (Spinnetta, 1974). Typically, studies of anxiety levels in very young children whether conducted in laboratories or by naturalistic observations, have used overt behaviors as indices of anxiety (Moore, 1964; Rheingold and Eckerman, 1970; Ainsworth and Bell, 1970; Ainsworth et al., 1978). However, such measures of apprehension over separation have been found inappropriate beyond infancy. Children as young as 2 - 4 years prefer to express overtly their distress over separation through verbal communication with the mother (Maccoby and Feldman, 1972). A variety of verbal measures

have therefore been used (Reynolds and Richmond, 1978; Milos and Steve, 1982; Main, Kaplan and Cassidy 1985) as indices of separation anxiety with children who have developed speech.

Among the various methodological problems associated with verbal approaches, however, are the younger child's poor ability to give a reliable self-report, respond directly to questions relating to emotions, and finally the young child's tendency to deny negative feelings, sadness and generally to take distance from negative affects (Glasberg and Aboud, 1982). One aspect common to all methods of assessing developmental separation anxiety is the fact that no one method is suitable across a wide age range. However, Fischer (1980) and Sugarman (1987) point to the importance of designing the same task and context when testing developmental hypotheses.

Some of these difficulties have been addressed by a pictorial adaptation of Spielberger's (Spielberger et al., 1973) State-Trait Inventory for Children (STAIC). This is a unitary measure to assess anxiety, which also bypasses self-referents and overt verbalizations of concerns in 3 - 15 year olds. A pictorial adaptation of Spielberger's STAIC, is the Derived Pictorial Experimental Paradigm (P.E.P.) (Appendix B). This was used in assessing the vicissitudes of death anxiety (Halpern and Palic, 1980; Halpern and Palic, 1984), and separation anxiety in children 3 - 15

years of age (Simon, 1983; Halpern, 1985; Halpern, Ellis and Simon, 1986), and has been found useful in cross cultural studies (Halpern, Ellis, Simon, Marmor and Peleg, 1986; Halpern, Ellis and Marmor, 1987).

This study focuses on the developmental changes in separation anxiety in children ranging from 3 years to 15 years. As well it looks at the differential affect that unmitigated and mitigated separation situations has on children in that same age range.

### Sampling Procedures

The Conception Bay Centre Roman Catholic School Board was contacted to seek its permission to conduct this study with 60 children in schools within its jurisdiction. Also, a director of a preschool in the St. John's area was contacted to seek permission to conduct research with 20 children who were enrolled in the school. This study was conducted with 80 children in the Province of Newfoundland and Labrador, Canada.

A letter of explanation and a consent form was presented to the Superintendent and the director of the preschool (Appendix A) and to parents of children who

participated in this study (Appendix A). Upon approval being granted by the Superintendent visits were made to the schools and contacts were made with principals and teachers of students that were of the appropriate age ranges for this study. The teachers were informed of the conditions necessary for participation and they in turn sent the letter of explanation to the corresponding parents of the children that were selected for this study. These parents were asked to sign a consent form and return it to the school in the enclosed envelopes. Children who were granted parental permission for participation were consulted on an individual basis and presented with the Pictorial Experiential Paradigm and the stimulus cards.

A visit was made to a preschool located in the St. John's area and teachers were asked to send home a letter of explanation and a consent form to parents. Parents were asked to return the completed consent form to the preschool. Parents who granted permission for their child to participate were contacted by the examiner and arrangements were made for the examiner to visit the home where the interview with the child took place. During the visit the Pictorial Experiential Paradigm and the stimulus cards were presented to the child.

The following conditions had to be met in order for a student to qualify for participation in this study. Consultation with parents and teachers determined whether

the conditions were met. Children were excluded who had been recently separated from caretakers for various reasons or where separation was contemplated through any one of the following: a move to a different community, emigration, hospitalization or serious illness. Children whose grandparents had died during the previous year or who had experienced separation from close friends and pets were not included. Data was collected in the middle of the school term to insure that the beginning of the term or anticipated end of the term was not evoking some separation stress for the children. The subjects for this study were divided into four age groups as follows: 3 - 4 year olds, 7 - 8 year olds, 10 - 11 year olds, and 14 - 15 year olds. Sixty of the 7 - 8 year olds, 10 - 11 year olds, and 14 - 15 year olds, were selected from the Conception Bay Centre Roman Catholic School Board; the remaining twenty students from the 3 - 4 year old group were selected from a daycare centre in the St. John's area. This information is found in Table 2.

Table 2  
Participants in study by age and sex.

Age in years	Male		Female	
	N	%	N	%
3 - 4	8	10	12	15
7 - 8	10	12.5	10	12.5
10 - 11	10	12.5	10	12.5
14 - 15	11	13.75	9	11.25

N = 80

### Instruments

This study is taken from the previous developmental studies carried out by Halpern et al., 1983. The method, instruments and scoring of this present study are a direct replica of that conducted by Halpern et al. and reported in the paper entitled Developmental Changes in Separation Anxiety in Childhood<sup>1</sup>.

The apparatus is identical to that used in studies on death anxiety (Halpern & Palic, 1984) and to that examining the course of separation and death anxiety in children (Halpern et.al., 1983). At no point was an attempt made to devise a new "scale". This derived experimental paradigm is described in detail in the four areas of the apparatus:

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Paper presented at the 21st International Congress of Applied Psychology, Jerusalem, 1986.

- a. The stimulus of separation anxiety with the pictorial additions.
- b. The abbreviation of the Mood Adjective List describing feelings associated with the stimulus.
- c. The Intensity Rating of each adjective by means of a Pictorial Derivation of the verbal scale.
- d. The scoring which yields the final measure of separation anxiety.

The Pictorial-Aided Stimulus: The stimuli for separation anxiety are pictorial representations of parting situations, in addition to stimulus words. They consist of pastel colored artist's drawings depicting a child, either male (M) or female (F), being left by parents "with-a-sitter" (1 - S) and a youngster being "left-alone" waving good-bye to departing parents (2 - S). The situations are concomitantly labelled verbally with the statement: ... mummy and daddy are going out ... the child is "left with a sitter" or "is left alone". Stimulus situations 1 - S and 2 - S define respectively "mitigated" and "unmitigated" separation.

Brief Mood Adjective List: Six adjectives describe the feelings of the child depicted in the stimulus situation. They are presented in a fixed order as follows: "pleased, afraid, good, disturbed, happy, worried". They were chosen for high familiarity in the youngest age group as having highest reliability in the Hebrew STAIC standardized instrument for five to six year olds and found reliable in the pictorial paradigm used to study death anxiety in the

same age groups (Halpern & Palic, 1984). As in the Australian, English speaking sample, the adjective "disturbed" was replaced by "upset" for this present sample.

Pictorial Derivations of Intensity Ratings: Paralleling the STAIC method, the intensity of each of the six mood adjectives is rated along a continuum. The verbal scale with which three year olds could not cope was modified to include pictorial materials. A strip of seven cartoon-like colored faces, ranging in expression from extreme positive, a broad smile, to extreme negative, a deep frown, are used for intensity ratings. The position of the face chosen on the continuum to describe each adjective defines the intensity of the anxiety: the more negative the face chosen the more intense the anxiety.

Scoring: Separation anxiety is defined by the score obtained from the intensity rating of the adjectives describing the feelings of the child depicted in the separation scene. The choice of the broadest smile earns the lowest score of one, which defines low anxiety; the choice of the extreme frown earns a score of seven which defines high anxiety. For each stimulus situation, a total score of six shows minimum anxiety. Forty-two is the maximum possible score, assuming that each one of the six adjectives for the stimulus situation receives a rating of



seven, making the possible range of scores obtained in this experimental paradigm: 6 to 42.

### Procedure

This study involved the presentation of two stimulus cards representing mitigated and unmitigated situations to twenty 3 - 4 year olds, twenty 7 - 8 year olds, twenty 10 - 11 year olds and twenty 14 - 15 year olds. Each of the participants viewed the stimulus cards and considered six mood adjectives (pleased, afraid, good, upset, happy and worried) that were presented sequentially by the researcher (Brief Mood Adjective List). They then indicated their reaction to the stimulus cards by making a selection from a strip of seven cartoon-like colour faces ranging in expression from extreme positive; a broad smile, to extreme negative; a deep frown (Pictorial Derivations of Intensity Ratings). The stimulus cards were presented by the researcher to each child individually. Children in the 3 - 4 year old group were seen in their own homes; the mothers being present in the home, but not in the same room as the child. The parents were completely uninvolved in the examiner/subject interaction. The older groups of children, namely, the 7 - 8 year olds, the 10 - 11 year olds and the

14 - 15 year olds were seen in the school setting. In order to ensure that the procedure was clear, each group was given a brief example of using the Pictorial Derivation for Intensity Rating. The examiner verbally presented to each child a situation which he/she was likely to find favorable or unfavorable. The child was required to rate his feeling of "like"/"dislike" of the situation presented by means of pointing to one of the seven cartoon-like faces. Once the examiner was sure each child understood the procedure, the administration of the assessment protocol proceeded in the prescribed fashion.

Female children were presented with stimulus cards depicting a female child; male children were presented with stimulus cards that depicted a male child. The first stimulus card that was presented to each child depicted parents parting from a child in the presence of a sitter; this situation describes the mitigated separation. The second stimulus card that was presented to each child depicted parents leaving a child unattended; this situation describes the unmitigated separation. While the child looked at the picture of the first situation the examiner said, "You see here the mother and father are leaving their child with a sitter: they are waving good-bye ...". Immediately following this, each of six mood adjectives was read. The examiner stated "...we do not know how this child feels about this. Does ("F" or "M", "he"/"she") feel, for

example, "good" (mood adjective). After a response of "yes"/"no", the subject was shown the Pictorial Derivation for Intensity rating, which is the strip of seven faces representing the continuum of a smile to frown. They were then asked to point to the "face" that showed how "good/not good" the M/F feels. The procedure was repeated for each of the six adjectives in the Mood Adjective List before proceeding to the second stimulus card. Upon presentation of the second stimulus card the researcher noted to the child that the parents in this picture were leaving the child unattended. The same procedure as was used for the first stimulus card was followed for the second stimulus card.

## Results and Discussion

The responses to the two stimuli-situations "left with sitter" and "left alone" define respectively "mitigated" and "unmitigated" separation anxiety.

Intensity responses to the two separation card stimuli were analyzed in order to assess the differential effect of the two separation anxiety stimulus situations across the sample of 80 children in the 4 age groups (Table 3).

To test the hypothesis that the condition of mitigated versus unmitigated separation affects anxiety, as assessed

Table 3  
Separation anxiety ratings for mitigated and unmitigated conditions. (N=80)

Ratings	Mitigated									
	P		A		G		U		H	
	N	%	N	%	N	%	N	%	N	%
1	5	6.3	9	11.3	6	7.5	4	5	12	15
2	15	18.8	15	18.8	14	17.5	13	16.3	11	13.8
3	13	16.3	17	21.3	16	20	19	23.8	14	17.5
4	16	20	17	21.3	12	15	13	16.3	10	12.5
5	19	23.8	11	13.8	14	17.5	16	20	13	16.3
6	8	10	5	6.3	15	18.8	8	10	8	10
7	4	5	6	7.5	3	3.8	7	8.8	12	15

Ratings	Unmitigated									
	P		A		G		U		H	
	N	%	N	%	N	%	N	%	N	%
1	5	6.3	0	0	2	2.5	3	3.8	7	8.8
2	5	6.3	6	7.5	6	7.5	8	10	7	8.8
3	9	11.3	10	12.5	16	20	12	15	4	5
4	4	5	15	18.8	9	11.3	11	13.8	5	6.3
5	19	23.8	20	25	24	30	17	21.3	21	26.2
6	17	21.3	13	16.3	15	18.8	15	18.8	13	16.3
7	21	26.2	16	20	14	17.5	14	17.5	23	28.8

Notes: P = Pluased; A = Afraid; G = Good; U = Upset; H = Happy; W = Worried.

by the pictorial paradigm, F tests for the two separation conditions were calculated.

Overall, it appears that the absence of a sitter significantly affected separation anxiety scores. Mean intensity scores in response to the two separation anxiety cards under the two experimental conditions of mitigated/unmitigated were compared. As can be seen in the scores obtained and as F tests show ( $F = -5.07$ ;  $p = .000$ ), there is a significant difference; separation anxiety is

higher when the separation situation is unmitigated as opposed to mitigated (Table 4 and Figure 1).

However, when individual groups were compared, it was evident that the main effect is attributable to the 3 - 4 year group. Other groups do not show a significant difference for the two conditions (Table 4).

This study also looked at the developmental effect of separation anxiety in both experimental situations in the four age groups. The intensity ratings of the adjectives, describing the unmitigated situation showed a decrease in

Table 4

Separation anxiety mean scores, standard deviations and F-values for mitigated and unmitigated conditions. (N=80)

Mitigated		Unmitigated		DF	F	p
X	SD	X	SD			
22.9125	8.115	29.4000	8.459	79	-5.07	0.000

the means across the four age levels, as can be seen by Table 5.

In looking at the mitigated condition the developmental effect was observed for the three older groups (Figure 1). These groups showed a decline in mean intensity scores for the mitigated experimental condition. The 3 - 4 year old age group, however, yielded a significantly lower mean score for the mitigated situation.

Table 5  
Separation anxiety mean scores, standard deviations and F-values for mitigated and unmitigated conditions in each of the four separate age groups. (N=20)

Condition	Mitigated		Unmitigated		DF	F	p
	X	SD	X	SD			
3 - 4 years old	17.3500	5.081	36.0000	2.991	19	-12.21	.000
7 - 8 years old	28.6500	6.515	31.4500	6.669	19	-1.56	.136
10 -11 years old	23.4000	8.574	26.1500	10.163	19	-1.08	.294
14 - 15 years old	22.2500	8.006	24.0000	6.981	19	-.60	.434

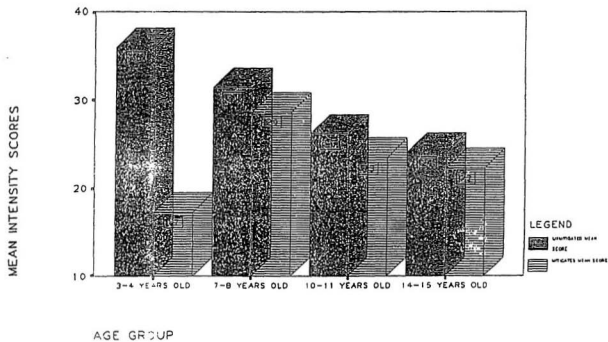
The downward trend for "mitigated" and "unmitigated" separation anxiety, appears to be similar for the three older groups tested and for the 3 - 4 year old age group in the unmitigated situation, thus supporting the developmental hypothesis.

In the mitigated situation a similar decline is not seen when the 3 - 4 year age group is included because of the significantly lower score obtained by this group.

#### Pictorial Materials and Facial Expressions in Assessing Anxiety

The present study of the development of separation anxiety used procedures which by-passed overt self-reporting and exclusive reliance on verbal stimuli or responses. It allowed for the examination of a wide age range in the study of separation anxiety with a single experimental paradigm

Figure 1 MEAN SEPERATION ANXIETY SCORES ON THE TWO STIMULUS CARDS  
FOR THE FOUR AGE GROUPS



adaptable to assess also the development of other anxieties in a parallel fashion (Halpern, 1985). The pictorial additions used to assess the intensity of anxiety rely on the use of facial expressions. Facial expressions have been considered central in studies of emotions in early childhood. They are thought to be a basic universal phenomena emerging with invariant regularity in different cultures. (Izard, 1971; Borke, 1973). Experiments show that young children can identify certain emotions through facial expressions as presented in various media, including pictorial materials; three year olds could match correctly pictures of faces expressing such affects as "sad; happy and angry" (Izard, 1982; Walden & Field, 1982; Felleman et al., 1983; Reichenbach & Masters, 1983; Bullok & Russell, 1985).

#### Separation Anxiety Across Age Levels

Separation anxiety shows a decline with age in a sample of 80 children ranging in age from 3 to 15 years. Children appear to be somewhat less sensitive to separation stressors as they grow older. This had been expected from common sense and impressionistic observations.

Looking at separation anxiety in the youngest age group, one would expect to find it at an overt level when compared to the other older groups. The decline in anxiety



was found to be very gradual over the four age groups. These findings suggest that separation anxiety remains a concern even for the 14 year old child, though not always overtly expressed.

This study shows that separation anxiety continues at a relatively high level for all age groups even though a gradual decline with age is evident.

#### Mitigated and Unmitigated Separation Anxiety

Against the background of infancy studies (Stayton et al., 1973) which found higher intensities in separation anxiety when no adult was present, this study distinguishes between "unmitigated" separation anxiety for stimulus situations which involve being "left alone", and "mitigated" separation anxiety for stimulus situations involving being "left-with-sitter". Findings for children ranging in age from 3 to 15 years show different levels of separation anxiety, depending on whether parting is "mitigated" or "unmitigated". "Unmitigated" separation anxiety shows a higher intensity than the "mitigated" separation anxiety. As Bowlby (1973) postulated, the concern over being left alone causes the risk of danger; this is a fear which can be regarded as a basic adaptive response.

The findings of this study suggest that the three older

groups tested continue to experience a great deal of anxiety even when a sitter is present. According to Stayton et al. (1973) "being left alone is an earlier and even more potent activator of danger than mere separation from the caretaker" (p. 218).

In view of the significantly lower "mitigated" separation anxiety scores in the 3 - 4 year old group, which indicates the child's relative ease in parting from the caretaker, one may speculate a total absence of separation anxiety by the teenage years. It is rather surprising then that the anxiety level for the three older groups in the "mitigated" situation is more intense than the youngest group tested.

Separation anxiety seems to be an important concept for all children even though society may expect children to be more independent and part from their caretakers with little concern. This study's findings lead us to appreciate the anxiety which children may experience. The fact that older children were able to express their concern suggests that they responded honestly and indicates that children view these feelings as acceptable. The findings of this sample raises many questions about the developmental process and its implications for an etiological evolutionary theoretical framework.

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**Appendix A**  
**Letters of Correspondence**

## Letter to Superintendent

1990 05 24

Mr. Hubert Furey, Superintendent  
Conception Bay Centre  
Roman Catholic School Board  
P.O. Box 70, Avondale, C.B.,  
NF AOA 1B0

Dear Mr. Furey:

I am presently a graduate student in the Department of Educational Psychology at Memorial University. As partial requirement for my internship, under the supervision of Dr. Marie O'Neil of the Diagnostic and Remedial Unit, I am conducting a cross-cultural study of Developmental Changes in Separation Anxiety in Childhood. This study is not intended to look at children who have experienced separation anxiety. In fact, children with high anxiety, as reported by teachers or parents, will be excluded, as well as those who have been separated recently from caretakers for various reasons or where separation is contemplated through any one of the following: a move to a different community, emigration, hospitalization or serious illness. Children's whose grandparents had died during the previous year or or who have experienced separation from close friends and pets will not be included.

This study has already been carried out in Australia and Israeli and is about to be done in Japan. Since the eventual aim is to norm the test, a Canadian sample is also required. These results will be compared with those already published from Australian and Israeli samples. The eventual normed test will be of use to guidance counsellors and other psychologists in assessing the levels of anxiety in young children.

The study proposed here will examine, with a single procedure, separation anxiety in four groups of children ranging in age from 3 years to 15 years in order to test the developmental hypothesis of its decrease with age. The sample of 80 children will comprise 20, in each of the following groups: 3 - 4 year olds, 7 - 8 year olds, 10 - 11 year olds and 14 - 15 year olds. An attempt will be made to include an equal number of males and females in each group.

The stimuli for Separation Anxiety are pictorial representations of separation situation in addition the stimulus word. The procedure for the study will involve a child being presented with colored drawings of separation



situations, and will be asked to assign one of the adjectives presented to describe the picture. It will take each child about 15 minutes to complete the task.

### Background Information on the Proposed Study

Separation anxiety in infancy, a major developmental task of that period, has been the focus of many researchers. Empirical investigations have addressed the general ethological hypothesis, viewing attachment as a mediator to the survival of the species (Bowlby, 1973). Concerns over separating from the figure of attachment is considered a threat to survival, hence one of the earliest forms of anxiety. By definition, separation anxiety is aroused by the absence of the attachment figure, attachment being its explanatory concept (Ainsworth, 1963; Ainsworth, 1964; Ainsworth and Bell, 1970; Stayton, Ainsworth and Main; Bretherton and Waters, 1985).

As the child progresses from focal attachment to separation and individuation (Bowlby, 1969), experimental findings confirm a decrease in separation anxiety by the end of the second year (Stayton et al. 1973). Some studies also noted that the intensity of the expressed concern over separating is affected by conditions under which it occurs. The intensity of the separation anxiety is higher throughout infancy when parting from the caretaker involves being 'left alone', without the presence of a substitute to mitigate the separation. In contrast, infants show less intense reactions when the separation is mitigated by adult companionship (Stayton et al., 1973).

Studies which rely exclusively on verbal materials or on overt acknowledgment or expression of feelings have given conflicting results in evaluating anxiety in young children (Spinetta, 1974).

Conclusion

It would be very much appreciated if you would allow students under the jurisdiction of your board to participate in the proposed study. As this is not a time consuming project on the part of the students, I hope you will consider my request for their participation.

Thank you for your time.

Sincerely yours,

Elaine Kufudi

## Letter to Parents

Dear Parent(s):

I am presently a graduate student in the Department of Educational Psychology at Memorial University. As partial requirement for my internship, under the supervision of Dr. Marie O'Neil of the Diagnostic and Remedial Unit, I am conducting a cross-cultural study of Developmental Changes in Separation Anxiety in Childhood. This study is not intended to look at children who have experienced separation anxiety. In fact, children with high anxiety, as reported by teachers or parents, will be excluded, as well as those who have been separated recently from caretakers for various reasons or where separation is contemplated through any one of the following: a move to a different community, emigration, hospitalization or serious illness. Children whose grandparents had died during the previous year or or who have experienced separation from close friends and pets will not be included.

I am hoping to include 4 groups of 20 children in each of the following age ranges: 3 - 4 year olds, 7 - 8 year olds, 10 - 11 year olds and 14 - 15 year olds. An attempt will be made to include an equal number of males and females in each group.

The procedure for the study is as follows: the child will be presented with colored drawings of separation situations, for example, a child being left with a sitter, and will be asked to assign one of the adjectives presented to describe the picture. It will take each child about 15 minutes to complete the task.

This study has already been carried out in Australia and Israeli and is about to be done in Japan. Since the eventual aim is to norm the test, a Canadian sample is also required. These results will be compared with those already published from Australian and Israeli samples.

Your cooperation in this matter will be greatly appreciated.

Sincerely yours,

Elaine Kufudi

I \_\_\_\_\_ give permission to my  
child \_\_\_\_\_ to participate in the above  
study.

Appendix B  
The Instrument

# Pictorial Experimental Paradigm for Separation Anxiety Assessment

## Scoring Sheet

Subject No.:	Name:	Birthdate:	Age:	Sex:				
Experimental								
Preparation:	Pleased	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Mitigated	Afraid	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Good	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Score	Upset	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Happy	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Worried	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Separation Unmitigated	Pleased	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Afraid	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Good	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Upset	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Happy	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Worried	(1)	(2)	(3)	(4)	(5)	(6)	(7)

Format devised by Halpern, E., Fallic, L., Simon, F. and Arkin, D.









