Stressful Life Events in Preschoolers: A Cross-Cultural Study.


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ABSTRACT This cross-cultural study compared the lives of Chinese children and British expatriate children, assessed the children's perception of potentially stressful life events, and examined the relationship between the children's cognitive maturity and their adjustment skills. Subjects were 25 British preschool children living in Singapore and 25 local Singaporean Chinese children between the ages of 4 and 6 years. The two stressors examined in this study were separation anxiety and relocation anxiety. Four measures used were the Children's Life Events Inventory, children's self-report of a potentially stressful life event, the Teacher Rating Scale of Children's Adaptive Behavior, and the Teacher Rating Scale of Children's Cognitive Maturity. Analysis showed that the two cultural groups appeared to be experiencing both qualitatively and quantitatively different potentially stressful life events. British expatriate children experienced more stressors, had more difficulty adapting to new situations or events, and were less cognitively mature than Singaporean Chinese children. No gender differences in children's perceptions of separation anxiety were found. The measures used in this study can assist parents and teachers in identifying children most vulnerable to stress. (MM)
STRESSFUL LIFE EVENTS IN PRESCHOOLERS:
A CROSS-CULTURAL STUDY

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STRESSFUL LIFE EVENTS IN PRESCHOOLERS: A CROSS-CULTURAL STUDY
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Research literature on the incidence of childhood stress has shown that it has increased dramatically in recent years. Weisberg (1988) reported that when studies of children's lives in the 1950's are compared with those of the present decade they show that "today children spend less time each day with adults, watch television a great deal, depend more upon their peers, grow up lonely and with more stress". This is also supported by a documented increase in the number of children with working mothers, the increase in child abuse and the increase in single-parent homes (Brenner, 1984).

Many recent publications, including those of Honig (1986), attest that during the course of development all children will experience some form of stress. Such research has shown stress to be associated with various physical and psychological problems affecting children. From birth, young children have to cope with a number of everyday experiences which are in some way stressful. Due to the rapid social changes and resulting pressures placed on families there has been an increase in the instability in the child's environment and disruption in the family.

There are, of course, possible negative implications of this type of social change and its accompanying economic growth. It is the extent to which the latter can impose stress on the population, hence causing potential disruptions to family functioning - the life events of children in particular. For instance: the increase of women in the workforce - this can result in an unstable home environment with children and the elderly not being cared for in the traditional way; rise in income - since the rise is not uniform and is very much related to the type of employment one occupies, both parents may feel pressured to go out to work to provide the family with the luxuries a modern society has available; change in family structure - there is a trend, encouraged possibly by a combination of western influences and housing policies in Singapore, towards nuclearization of the family. This places more pressures on the family since there are less wage-earners per household, narrower socialization experiences for the children, less domestic assistance and security than in the traditional Asian extended family structure (Clammer, 1985).

Furthermore, as Thomas (1989) highlights, in countries where there are few natural resources, there is always a high premium put on developing human potential and one of the effects of this is the stress children experience in order to achieve in school, in the home and other environments.

According to Hold-Cavell et al (1986), "with the entry into a kindergarten (preschool class) a child may start a new period in his life, which is characterised by a regular separation from parents for at least 4 hours per day, and the occasion to meet a large group of peers with a more or less developed social structure. In the new situation in which the child finds himself he has to acquire a lot of information concerning the play materials, different locations and - most important for the child - the existing relationships between the more established group members. Furthermore he has to create himself new relationships with the group".
Thus, it may be useful to look closely at the child-rearing practices of the cultural groups being discussed in this study, formulate an "idealised profile" of both a Chinese preschooler and British Expatriate preschooler respectively and drawing attention to the "significant others" available to these children.

**The Singapore Chinese Preschooler**

The up-bringing of the Chinese child is still influenced by Confucianistic principles where s/he is seen as the product of all the generations of his/her family from the beginning of time. The son is generally more highly valued than the daughter, with the eldest son being the most important child of all. The young Chinese child will not be expected to be independent as early as his/her British counterpart, except where it is a precursor to academic achievement. The most often referred to term used in connection with child-rearing amongst the Chinese community is "chiao-yang", with "chiao" (education) being emphasised more than "yang" (rearing) (Lin & Fu, 1989). Chinese parents tend to place a great deal of emphasis on academic achievement as a means for the whole family to achieve higher social status.

Due to Singapore’s housing policies the child may live in a nuclear family with just his/her parents and any siblings. This may be merely a subsystem of an extended family and many members of this may be involved in his/her upbringing, even if a full-time live-in maid (amah) is employed by the family. "Nowhere is the issue of stress more real than in the life of children at school in an urban environment, which is part of a society whose only resources are human beings and which must of necessity be developed to their fullest ... it is clear that Singapore schoolchildren are subjected to an array of stressful happenings during their school career. Homework, parental interest and concern, and high peer competition seem to be among the more cited types of stressors .... pupils who perceived their parents showing concern and interest in their schoolwork, career prospects and homework etc., were better motivated and performed better in school examinations ... these findings support the contention that press or eustress promotes improved levels of motivation and academic performance" (Thomas, 1985).

**The British Expatriate Child in Singapore**

The major cultural distinction of the British is their hyperindividualism. The young British child is encouraged by his/her parents to become self-reliant, self-sufficient, and to acquire a high degree of self-control. This is sometimes achieved at the expense of being able to maintain "mutually giving relationships", to tolerate dependence, and to integrate and express emotional experience.

Criticising performance may dominate the parent-child relationship. The family structure to which the child belongs will almost certainly be nuclear since family members in addition to the two parents and any siblings will have remained in the U.K. Many of the children will experience regular absence of one parent, usually the father, whose work will often take him/her to other countries in the Asian region.

The majority of the British families involved in this study employed a full-time, live-in maid (amah) who was responsible for many of the physical and emotional needs of the
children. This makes them unique from their counterparts in the U.K. where such luxuries are not so easily affordable.

Another factor which may be influencing the dynamics of the British Expatriate family is the observation that many of the mothers who pursued demanding, professional careers in the U.K. are unable to continue this in Singapore due to work permit restrictions. The young British child may therefore be witnessing an emotional crisis in the mother which hinders their ability to settle here. According to Phoenix et al., how women view themselves as mothers and evaluate their experiences of motherhood does not develop in isolation but is related to other aspects of their lives. How they feel about and interact with their children is likely to be affected by factors such as social class, employment opportunities and social support availability. Middle class mothers appear to have a greater commitment to sensitivity in facilitating their children's development. But when this involves putting aside their own interests and activities it increases the likelihood of frustration and their sense of loss of identity. (Phoenix et al., in press).

*Educational Context*

It is vital that a teacher should become familiar with possible stressors which may affect children so that they may be able to implement beneficial interventions. It is not expected nor is it appropriate that a teacher should assume the role of therapist, but the teacher is in a strong position to perform a therapeutic role. A teacher cannot assume the role of a child's significant other. As Burns (1982) states "while willingness to act as a significant other may improve, and unwillingness impair one's performance in that capacity, the role is always conferred, never assumed". Nevertheless, as a teacher has regular, extensive and intensive contact with a child for a large part of their waking day and for many days in the year, this allows great opportunity for observation and interaction with the child.

This means the teacher is armed with a great deal of information about each child in his/her care and if a positive child/teacher relationship exists, the child is likely to view the teacher as a potential source of support and thus a significant other. The teacher will be best able to prepare the child for or anticipate a possible future stressor in the child's life if the teacher is also well acquainted with the child's background. This does not mean prying into the child's home background but as Butler and Golding (1986) found, children from different cultural backgrounds have certain distinct behaviour patterns. The children will become prone to stress if the resultant expectations of the home environment are at odds with the expectations of school. The teacher's prior knowledge of cultural practices will serve to predict and hopefully avoid such exposure to stress on the part of the child.

There are also educational grounds for teachers becoming more involved on more aware of stress intervention strategies. Stress interferes with the learning process by diverting a child's attention from schoolwork. Also stress can be responsible for a breakdown in classroom management where the child's stress response may involve withdrawal, aggression, and refusal, all of which interfere with the general routine and organisation of the classroom environment. This stress response is merely the child's way of coping. As yet, there appears to be no formal assessment procedure available to teachers for identifying a pre-school child's vulnerability to stress.
Aims of the study

The main goal of the study is to design an instrument, consisting of a series of measures, which can be used in an educational setting to indicate which children may be most vulnerable to stress and hence find a potentially stressful event, such as starting school, particularly distressing. The adults involved with an identified child can thus be alerted and provide a preventive programme for the child.

In addition, the study will investigate possible cultural effects, that is, to what extent the potentially stressful life events experienced by the children differ, both quantitatively and qualitatively, as a result of different child-rearing practices. This suggests that alternative coping strategies will have to be employed according to cultural group membership.

Specifically, the purpose of the main study is four-fold:

1. To investigate what life events the groups of children are being exposed to.
2. To compare the occurrence of these life events between the two groups.
3. To assess the children's perception of a potentially stressful life event.
4. To assess if there is any relationship between the children's cognitive maturity and their adjustment skills.

Two Potentially Stressful Life Events

Separation Anxiety

When children start kindergarten/nursery school they will be forced to separate from their mother or main caretaker often for the first time. Separation anxiety may occur as a potentially stressful life event for the majority of children since school provides the first opportunity to match their skills against peers from outside of the family. The school represents the outside world, which is capable of evaluating one's adequacy. (Chandler, 1985).

Investigations have been made into children's responses to a) separation from their mothers during the birth of a sibling (Field & Reite, 1984): b) separation from their peers during transfer to a new school (Field, 1984): and c) temporary separation from parents due to work commitments. Starting a new school, or even a new class in the same school is stressful for children (Anderson & Fulton, 1987) since, for example it is the place where they first have to decide whether or not to obey certain rules. This can become even more difficult when they are under pressure from their peers and make decisions without the prior knowledge or help of adult family members.

Temporary Separation occurs in many expatriate families. Father is absent, sometimes for months at a time in connection with his work. Although research has shown that when children are aware of the reason and duration of absence of one or
other parent, stress responses are minimal, repeated absences can lead to accumulated stress. As Brenner (1984) states:

"When separations occur repeatedly, the resulting stress may be left unresolved for years. Each reunion brings renewed hope, a period of satisfaction, and then another wrench as the relationship is pulled apart. Some children cope with the tension by becoming unusually manic and aggressive; others become withdrawn, depressed, and tearful. Some express hostility toward family members by regressing or by doing poorly in school".

2 Relocation Anxiety

An additional potential stress point, which is particularly relevant to the children from the various expatriate communities which exist in Singapore, is relocation anxiety. Families today are very mobile and children can live in several different neighbourhoods during the first 18 years of their lives.

In this study only one stressor, namely separation anxiety on starting school, is being assessed since it is an experience common to all the subjects in the study. In addition, only two cultural groups have been selected: the Chinese group being representative of the largest cultural group to have lived in Singapore and the British group being a sub-culture as a result of their expatriate status. Since the British expatriate group belong to families where the parents have been recruited for their professional skills, the subjects belonging to the Chinese group have been selected on the basis of their parents’ social economic status being matched with that of the parents of the British group. Furthermore, the children selected for the study are between the ages of 4:00 and 5:11 years. This is because very little previous research has been undertaken with children of this age and it is the age when they are most likely to start school or kindergarten for the first time. Also younger children have been shown to be most vulnerable to stress. Indeed, as Rutter (1981) found in his studies on hospitalization, children between the ages of six months and four years of age exhibited the most distress.

Sample and Instruments

From a potential population of 98 children who satisfy the operational definition of a British expatriate child, 25 were selected randomly (using random numbers tables) and matched with a group of 25 local Chinese children by age, S.E.S., gender, family size, position in family and level of cognitive ability.

The measures used in the main study are:

1 The Children's Life Events Inventory (CLED)

The CLED to be used lists 30 potentially stressful life events which might occur during the life of a child. It is a modification of Coddington's (1972) list of the life
events of primary school age children. It will be presented to each child’s parents in a checklist format. Parents will be asked to indicate which events have been experienced by their child.

2 A child’s self-report of his/her perception of a potentially stressful life-event

A projective technique is employed to estimate the relative stressfulness of an event namely starting school.

Presentation: a story was selected which depicted the main characters of the story in a potentially stressful situation - starting school. The story was adapted according to the culture, gender and ethnic background of the child so that identification with the main character of the story may be optimised. There are four versions of the story:

1 Predominantly Chinese characters with main character being female.
2 Predominantly Chinese characters with main character being male.
3 Predominantly European characters with main character being female.
4 Predominantly European characters with main character being male.

The story is read by the researcher to each child selected, on an individual basis. Following the story reading the child is asked to select the face which matches the way they felt when s/he experience this event, from the ‘Faces Scale’. A record is also kept of the face they choose for the main female character, the main male character and for themselves in the same situation as the characters of the story. The response is non-verbal, as the child is being asked to point to the most appropriate face on the Faces Scale.

The Face Scale has been used by Anderson (1988) in his work with stroke patients and their carers. He chose it as the least complicated way stroke patients, most of whom are speech impaired, might express their satisfaction with life. This is a 7-point scale which has been shown to be both valid and reliable (Andrews & Withey, 1976). A 5-point scale was chosen for use with young children since the degree of differences between the faces on a 7-point scale was felt to be too subtle.

3 The Teacher Rating Scale of Children’s Adaptive Behaviour

Based on the Preschool Behaviour Questionnaire by Behar & Stringfield (1974) this instrument provides descriptive data which may be used to discriminate groups of children potentially vulnerable to stress. It has been chosen since it is designed specifically for use with pre-school children. The respondent may be a teacher or a parent, whose responses to the same instrument may be compared. The questionnaire consists of a checklist of thirty items and three scales.
Teacher Rating Scale of Children's Cognitive Maturity

The Teacher Rating Scale of Children's Cognitive Maturity was validated and its reliability ascertained by comparing these scores with the percentile scores from the cognitive assessment of the child using the British Abilities Scales subtests. The items are selected on the basis of British curriculum guidelines for skill, concept and attitude development during a child's first year at a British primary school.

Results

The Children's Life Events Inventory (CLEI)

A comparison of the mean scores (Tables 1 & 2) shows that the largest differences between the means occur for the variables LE (total number of life events reported on the CLEI), TAB (teacher's rating of each child's adaptive behaviour) and the three cognitive measures (NS, CD and TCM). Here the BEC (British Expatriate Children) group are seen to be experiencing, on average, more potentially stressful life events, more difficulty adapting to new situations/events, and performing less well cognitively than the SCC (Singaporean Chinese Children) group. It is noteworthy however, that the range of scores for these variables is much wider for the BEC group than the SCC group. This is illustrated by the minimum and maximum scores and may account to some extent for the differences in the mean scores.

It is interesting to note that this age effect does not extend to the RTS scores. That is, for both the SCC group and the BEC group, there did not appear to be any marked difference in response to the story, regardless of whether the child was 52 months old or 73 months old.

Table 1: Singaporean Chinese Children: Profile of Mean Scores (SCC)

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>N</th>
<th>MEAN</th>
<th>STD DEV</th>
</tr>
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<td>TAB</td>
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<td>69.49</td>
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<td>CD</td>
<td>33</td>
<td>86.55</td>
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<td>TCM</td>
<td>33</td>
<td>80.97</td>
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Table 2: British Expatriate Children: Profile of Mean Scores (BEC)

<table>
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<tr>
<th>VARIABLE</th>
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<th>STD DEV</th>
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</thead>
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<td>2.68</td>
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<td>TAB</td>
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<td>10.54</td>
<td>7.48</td>
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<td>RTS</td>
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<td>1.04</td>
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<td>CD</td>
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<td>77.54</td>
<td>23.59</td>
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<td>TCM</td>
<td>39</td>
<td>77.46</td>
<td>19.30</td>
</tr>
</tbody>
</table>

Key:
LE - Potentially Stressful Life Events
TAB - Teacher Rating of Adaptive Behaviour
RTS - Response to Starting School Story
NIF - Number of Children in Family
PIF - Position of Subject in Family
NS - British Abilities Scale Subtest - Number Skills
CD - British Abilities Scale Subtest - Copying
TCM - Teacher Rating of Cognitive Maturity

The results illustrate cultural differences in the number of life events reported by the British Expatriate (BEC) and Singapore Chinese (SCC) groups of children. This qualitative difference may be accounted for to some extent by the nature of the BEC group. The expatriate status of the family seem to be providing additional sources of stress - for example, absence of father, strained marital relations. Only by repeating the study with a matched group in the U.K. could such a postulation be investigated.
Table 3: Life Events Experienced By British Expatriate and Singapore Chinese Children

<table>
<thead>
<tr>
<th>LE</th>
<th>BEC No.</th>
<th>BEC %</th>
<th>SSC No.</th>
<th>SCC %</th>
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Key:
LE - Life Event
BEC - British Expatriate Children
SCC - Singaporean Chinese Children

From Table 3 it can be seen that Starting School (LE1) has obviously been experienced by all the children. Mother starting work (LE2) and the birth of a sibling (LE3) was more often experienced by the SCC group than the BEC group. It is worth noting here that the reason for the difference shown for mother starting work may be due to the nature of an expatriate lifestyle for women in Singapore. Many women are unable to pursue their careers here due to work permit restrictions. It would be expected that should the study be repeated with a resident British group of subjects in the U.K. many more children would have working mothers. Thus the difference here is not cultural per se.
Few children in either group had experienced loss of job by parent (LE7), visual problems requiring glasses (LE10), marital separation of the parents (LE12), poor report from school (LE19), change in acceptance by peers (LE22), siblings leaving home (LE23), hearing problems (LE24), or the death of a sibling (LE29). No children in either group had experienced divorce of parents (LE13), marriage of parent to a step-parent (LE25), death of a close friend (LE26), death of a parent (LE27), or had a visible deformity (neither acquired - LE28 nor congenital - LE30).

Although many more BEC have experienced moving house (85%) and changing school (82%) than SCC (52% and 45% respectively) these differences were not statistically significantly different. However, the weighting in terms of how potentially stressful the moves may have been to each group would be expected to be against the BEC group. Their experiences of moving would have involved frequently a change in cultural environment, a change in climate and uprooting of family ties in a different country.

The addition of a third party to the family (LE16), for example a grandparent was experienced significantly more by the SCC group than by the BEC group (prob > F=0.0117). This difference is again made more likely by the expatriate status of the BEC group, distanced by considerable miles from family ties. Knowledge of cultural practices in the U.K., however, would still suggest that an extended family was less likely for the BEC group.

LE20 (Learning difficulties in school) was reported significantly more often by parents of the BEC group of children than those of SCC (prob > F' =0.0001). This result may be explained by differences in expectations of the parents in each group. Although both groups of parents tended to have high aspirations for their children, the fact that the BEC group were already attending primary school because of the British system, while the SCC group were in pre-primary classes according to the Singaporean system may have reflected the parental response.

It is shown that for LE31 (Family moving to a new country), significantly more of BEC had experienced this life event than SCC (prob > F=0.0001) although many of them had been born in Singapore. This finding again is not truly a cultural difference but merely a result of the nature of the expatriate lifestyle of the BEC group. There appears to be no particular pattern in the reporting of total life events for each group, as many children are seen to be scoring the minimum score as well as the maximum score in each case.

Results show that the hospitalization of child is related (LE14) to poor report from school (LE19) - this would be expected since absence from school for hospitalisation would mean the child would be behind on school work; increase in arguments between parents (LE11) is related to increase in arguments between child and parent (LE21) - this is not unusual since disharmony in the home does not usually exclude any family members; addition of a third party to family (LE16) is related to the death of a sibling (LE29) as bereavement in a family often includes the involvement of an extended family, for support purposes even in Western cultures.
Teacher's Rating of Children's Adaptive Behaviour

It can be seen that most children in the SCC group are scoring between 0 and 6 (63.6%) on the Teacher's Rating of Children's Adaptive Behaviour (TAB) while the majority of those in the BEC group are scoring between 3 and 12 (61.7%). Thus the teachers of the BEC group were more likely to report maladaptive behaviour in a child than the BEC group. These differences do suggest cultural diversity both in terms of teacher response and the child's response to stress.

There was not found to be any relationship between the child's score on the TAB and his/her reporting of starting school as a potentially stressful life event overall. It may be that the Faces Scale was not a powerful enough self-report measure or that the child remembers stressful events in a discrete way i.e. once parsed it is no longer threatening and hence no longer viewed in negative terms.

Similarly no relationship was found between the TAB score and the number of Life Events or the PIF or the RTS score. The lack of relationship between TAB and total LE score is interesting. This suggests that the cumulative effect of many different life events may not be predisposing a child to poor coping skills, but perhaps the intensity of one or another life event is responsible. An explanation could be that the child's temperament could be a factor and thus a measure of this should be incorporated into the stress assessment system.

From application of the General Linear Models statistical procedure both gender and cultural differences are detected in the responses the teachers made. Males were generally given higher scores i.e. were observed as being less able to cope with novel situations/events, exhibited more maladaptive behaviour than the females in their peer group. The cultural differences were that the teachers of the BEC were observing more maladaptive behaviour than the teachers of the SCC. In fact the maximum scores for BEC were 39 compared with a maximum score of 17 for the SCC (mean score BEC = 10.5 and SCC = 5.7).

Teacher's Rating of Cognitive Maturity (TCM)

Most children in the SCC group (72.7% of them) are scoring between 75% and 100% on the Teacher's Rating of Each Child's Cognitive Maturity (TCM) compared with the BEC group scoring mainly (79.8% of them) between 66% and 100%. Similarly, the SCC group are shown to be scoring between the 67th and 95th percentile for their age (57.7%) on the Number Skills Subtest of the British Abilities Scales, while the BEC group seems to be scoring between the 61st and 86th percentile for their age (61.6%).

Once again, the SCC group are shown to be scoring between the 78th and 97th percentile for their age (81.9%) on the Copying Subtest of the British Abilities Scales while it is shown that the BEC group has been scoring between the 71st and 99th percentile for their age (74.5%). This result cannot really be generalized to the wider population since the sample size was relatively small and the average ages for the BEC group were slightly older than the SCC group. More pertinent to this study, the wide age range of the subjects (52 to 73 months) is not reflected in a wide range in cognitive maturity and did not appear to show any relationship to the responses made to the potentially stressful life event.
Although a similar number of children in each group scored very highly, SCC performed better overall at this assessment than the BEC. There was shown quite a strong relationship between the scores for the TCM and those for the CD (+0.54695 p < 0.0001) and NS (+0.45147 p < 0.0005). In fact this relationship was stronger than that for CD and NS (+0.40054 p < 0.005).

There were no cultural differences recorded though there were gender differences with females generally scoring higher than males particularly within the SCC group.

Children's Perception of a Potential Stressor

In response to the Starting School Story using the Faces Scale (RTS) the SCC group selected mainly a "very happy" face (60.6%) or a "very sad (12.1%). The BEC group meanwhile, selected mainly a "very happy face" (64.1%) or a "little bit happy" face (17.9%). It can be seen that no relationship was found between the child's TCM score and his/her perception of separation anxiety. The results of the test procedure show that there are no significant gender differences in the child's perception of separation anxiety within the two cultural groups.

SUMMARY OF FINDINGS

1. The two cultural groups taking part in the study appear to be experiencing both qualitatively and quantitatively different potentially stressful life events. Although the children do not always perceive starting school as potentially stressful in negative terms (as evidenced in their responses to the Faces Scale), the teachers' perceptions of their ability to cope with new situations or events are often contradictory. Teachers of the British Expatriate group of children were more likely to report incidences of maladaptive behaviour although along with their Singaporean counterparts were more likely to report such behaviour in their male pupils than female pupils of the same age. The teachers of the Singaporean Chinese group of children generally perceived the females in their charge as being more cognitively mature in addition to their greater adaptability.

2. Additional findings of the study were that the range and frequencies of the scores for most of the measures, particularly adaptive behaviour and cognitive maturity, were much wider for the British Expatriate group than for the Singaporean Chinese group. This may, as mentioned earlier account for the cultural differences in adaptability scores and cognitive scores where the Singaporean Chinese group are performing consistently better than the British Expatriate children. The final result relates to family structure. More females in the British Expatriate group belonged to families of three or more children than either males in the same group or their Singaporean Chinese peer group.

3. British Expatriate Children experience more stressors, have more difficulty adapting to new situations or events and, on average, are less mature cognitively than the Singaporean Chinese children in the study. Two effects that may be influencing these
findings are first, parental and teacher expectations and hence responses may have been affected by the fact that the BEC group were already attending primary school while the SCC group were in pre-primary classes (due to disparity between education systems operated in the schools under study). The second is the age effect which may have lowered the cognitive scores of the British Expatriate Children. The differences observed in cognitive performance may well not be a cultural factor but one merely to do with distribution of age of the subjects.

No relationship was found between the child’s cognitive maturity and the perception of the given stressor. There are no gender differences in a child’s perception of the stressor (separation anxiety). There was no relationship found between the teacher’s perception of the child’s coping strategies when faced with a stressor and the child’s perception of the stressor, separation anxiety.

The Teacher’s Rating Scale for Cognitive Maturity is satisfactorily validated by the strong positive relationship between its scores and those of the British Abilities Scale subtests. No cross-cultural differences or relationships within groups were identified between the teacher’s perception of the child’s coping skills and the number of stressors the child had experienced or the child’s position in his/her family. There was a negative relationship between the teacher’s perception of a child’s coping skills and the teacher’s rating of a child’s cognitive maturity.

CONCLUSIONS

1. The findings of this study show that a teacher needs to be aware of a child’s vulnerability to stress which may be predicted from ratings of academic performance and general school functioning. Not all children are eager to go to school. Some have fears both real and imagined. This is a problem for the school, as an organisation to deal with when defining its own ethos.

2. The screening instrument designed in this study can assist parents and teachers in identifying children most vulnerable to stress. It can be utilised as part of the normal procedure for screening preschool children. It should:

   • identify the stressors in the child’s life history to date;

   • explore how the child perceives these life events or situations (such as potentially stressful event of starting school targeted in this study);

   • assess the effects of stressors experienced by the child by recording medical history, social and school functioning;

   • make behavioral observations of the child’s adjustment to specific stressors (as shown in the teachers ratings in this study);
and (poignant to this study), record cultural group membership. When planning the curriculum possible cultural implications should be considered so that children from different cultural groups have an equal opportunity to improve their performance. It may be necessary to adapt different approaches to teaching and learning to accommodate cultural differences.

The screening instrument used in the present study fulfilled the above criteria but some aspects were measured more effectively than others. There were both qualitative and quantitative differences between the two cultural groups. This could be explained to some degree by differing family functioning and child rearing styles dictated by culture and also perhaps by the unique situation of the British group. It would be interesting to ascertain to what extent the British group experienced more and different stressors because of their expatriate status. Additionally, it is suggested that, the intensity of certain potentially stressful life events such as relocation to a new country may have been greater for the BEC group.

The child’s perception of these stressors was perhaps not explored fully enough. The Faces Scale was a successful measure in that the children identified well with the presentation of the faces and understood the nature of the 5 point scale i.e. degrees of happy or sad with a mid line on non-committal response (not happy/not sad as defined by the pilot study groups). They were also consistent in their labelling of the characters of the story along the scale. Labelling their own response to school, however, bore no relationship to the teachers rating of some of them on the scale of Children’s Adaptive Behaviour. This may have been due to the time lag between date of starting school and date of assessment, by which time they may have developed positive feelings towards school and not be able to distinguish between these and earlier negative feelings. There was evidence for this ability when considering siblings or peers. One male twin, for example, was able to relate how his twin brother had experienced a thoroughly miserable first day at school.

Some effects were common to both the British Expatriate children and the Singaporean Chinese children e.g. there were no cultural differences in their perception of starting school. However, effects that were significant included cultural differences in the number and type of stressors a child has experienced by the time a child enters school, with the British Expatriate children having poorer coping skills as reported by their teachers than the Singaporean Chinese children.

These differences may be explained by considering that the changes in family structure and child rearing practices for the British Expatriate group of children involved in this study may be sources of stress themselves. The changes have occurred as a consequence of:

a) their families relocation
b) the inclusion of a foreign maid as full-time help
c) the absence of the support of extended family and close friends
d) their being an expatriate i.e. temporary status

e) their living in a different culture

f) less access ability due to absent parent (usually the father)

g) many expatriate mothers being unable to pursue their careers due to work permit restrictions.

For the Singaporean Chinese child potential stressors may not all be from their immediate environment. Social change and its implications may well be impinging on their lives. Elkind's (1981) description of society today as being "hurried and hurrying" is probably befitting of today's Singapore since it has its own fair share of supermarkets, fast food restaurants, expressways and household electrical gadgets.

Certain events or stressors had been identified as being more common in one cultural group than the other. Singaporean Chinese Children were more likely to have experienced mother starting work and the birth of a sibling while the British Expatriate Children were more likely to have experienced moving house and changing school. Statistically significant differences were found for the following life events:

- Addition of a third party to family (e.g. grandparent)
  - more Singaporean Chinese Children had experienced this than British Expatriate Children. It is suggested that this would be a result of the isolation of the Expatriate group of children from their extended family and the Chinese tradition of involvement of additional family members in the raising of children.

- Learning difficulties in school
  - more parents of British Expatriate Children reported this than those of Singaporean Chinese Children. It may well be the case that the British Expatriate Child's vulnerability to stress also predisposes her/him to having learning difficulties on starting school.

- Family moving to a new country
  - Many of the British Expatriate Children had been born in Singapore yet significantly more of them had experienced this life event than Singapore Chinese Children.

**RECOMMENDATIONS FOR FUTURE RESEARCH**

- Screening preschoolers on entry would appear to be a useful course of proactive intervention by the class teacher. The screening would need to include a Life Events Inventory, such as the one used in this study, which may be adapted to suit the population of children targeted.
Using case studies would ascertain further possible cultural differences in child-rearing practices which may account for the groups studied here experiencing both quantitatively and qualitatively different stressors.

Expanding the use of the Faces Scale to other Life events may elicit more profound responses from the children. Unfortunately, the measures used to ascertain a child's perception of the stressor starting school, did not show to be a powerful indicator of vulnerability to stress.

Introducing another group of subjects for comparison would be interesting, particularly a sample of British children resident in the United Kingdom since this may indicate whether the British Expatriate children were found to be more vulnerable to stress than the local population because of their expatriate status.

Finally how prepared are the teachers in preschools? Future research can answer this question and provide guidelines for suitable inservice programmes for preschool teachers and relevant course units for trainee teachers in their professional preparation.

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