Interactions between Temperament and Expectations of Classmates as Predictors of Social Support amongst Lower Secondary School Girls

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ABSTRACT
One hundred thirty six lower secondary school girls were interviewed to find out how interactions between their temperaments, and what their classmate's expected of their general behaviours, generally predicted social support levels. An important part of this study is the testing of the 'Goodness-of-Fit' model. Results indicated that the better the fit between classmate's demands and the student's temperament, in terms of mood and distractibility, the more social support they tended to have in class. Implications of the results would indicate that paying attention to schoolwork tasks, and having a positive disposition is important for getting social support from classmates.

Key words: Goodness-of-Fit model, social support, temperament, school psychology
INTRODUCTION

Friendships offer consensual validation of interests, hopes, and fears, bolster feelings of self-worth, provide affection and opportunities for intimate disclosure, promote the growth of interpersonal sensitivity, and offer prototypes for later romantic, marital and parental relationships (Sullivan 1953). In times of crisis, the child’s network of significant people offers support through comfort, companionship and rebuilding the child’s sense of self. Inevitably having friends is an important predictor of child mental health (Kupersmidt et al. 1990; Lustig et al. 1992). However, there is still a lack of information on how social support is acquired. A theory of friendship acquisition with genetic overtones has been proposed. This paper examines the roles of innate characteristics of being able to fit in with one’s classmates otherwise known as ‘Goodness-of-Fit’ as a predictor of social support from classmates.

Social support is described in two ways. First as the continuing social aggregates that provide individuals with opportunities for feedback about themselves and for validation of their expectations of others (Caplan 1974). A second is the information that leads a person to believe that she or he is cared for and loved, esteemed and valued, or belongs to a network of communication and mutual obligations (Cobb 1976).

Support from friends and peers is an important predictor of children’s adjustment. A lack of social support from peers, or social rejection by peer group, has is one of the best predictors of academic failure and school dropout (Kupersmidt et al. 1990; Parker & Asher 1987). Within the peer group children test out ideas and receive feedback from peers, during which respect, equality and reciprocity are developed (Furman & Burhmeister 1985; Hartup & Sancilio 1986; Lewis & Feiring 1989).

Interactions lead to occasional problems and the behaviours of children often determine whether they will make friends or be neglected. When children do not listen, are more hostile and aggressive, and seek to control their peers, they are rejected by their peers (Rubin & Coplan 1992). Alternatively, rejected children who use negative problem-solving styles like internalising their social difficulties with peers by withdrawing socially, report loneliness (Asher et al. 1990). Such children may attribute social isolation to external cues out of his/her control and withdraw away from everyone (Crick & Ladd 1993).

Sometimes, children may lack social support because the skills required for making friends are just not part of their temperamental make-up. Temperament is the behavioural style of the individual (Thomas & Chess 1981). It comprises those behavioural attributes that show some overall degree of consistency at any one time over various, although not necessarily all, life situations. It does not reflect motivation or ability. If the child is biologically predisposed to have a low arousal threshold for social stimulation through
peer companionship, then they may not react to their peers in a manner which promotes interaction. While this view has been proposed through work on babies (Kagan et al. 1984), there may be some applicability to older populations.

There is some evidence to show that having a more difficult temperament is associated with lower social support. The role that temperament plays in predicting social support levels must be important considering that studies indicate that up to 50% of our temperaments are inherited from our parents (Bouchard 1984). However it would be naive to study the effects of temperament on social support in isolation. Aspects of the child’s temperament inevitably interacts with significant other in the surrounding, and the results of interactions subsequently would determine whether other children would want to be their friends.

The Goodness-of-Fit concept derives from the view that the person-context interactions depicted within developmental contextualism involves ‘circular functions’ (Schneierla 1957), that is, person-context relations predicated on others’ reactions to a person’s characteristics of individuality; as a consequence of their characteristics of physical and behavioural individuality, people evoke differential reactions in their significant others; these reactions constitute feedback to people and influence their further interactions (and thus their ensuing development). The Goodness-of-Fit concept emphasises the need to consider both the characteristics of individuality of the person and the demands of the social environment, as indexed for instance by expectations or attitudes of key significant others with whom the person interacts (e.g. parents, peers, or teachers.) (Lerner et al. 1991). These expectations are known as demands. If a person’s characteristics of individuality match, or fit, the demands of a particular social context then positive interactions and adjustments are expected. In contrast, negative adjustment is expected to occur when there is a poor fit between the demands of a particular social context and the person’s characteristics of individuality.

To summarise, the literature review suggests that behaviours that result from interactions between the child and peers determine friendships. However some of these behaviours are part of the child’s temperamental make-up. As little research has been done on the role that ‘Goodness-of-Fit’ interactions between the child’s temperament and their peers, have in social support acquisition, this study seeks to discover the important components of this interaction that predict social support.

**METHODOLOGY**

**SAMPLE**

The sample consisted of 136 Form 2 female students from a government secondary school. The girls were from nine different classes. The average
age of the students was 14 years. The school is multi-racial (i.e., Malays, Chinese, Indians and other races) and is within an urban environment. In the sample, there were 93 (72%) Malays, 4 (3.3%) Indians, 31 (24%) Chinese and 1 (0.7%) other races.

METHOD

A single survey was used to obtain the information from the subjects. The questionnaires were administered as part of a larger project which involved presenting a social skills programme to the subjects. The questionnaires were administered prior to the presentation of the programme. The questions were administered by one Clinical Psychologist and nine Master of Arts (Clinical Psychology) trainees. In all cases, the questions were read out to the subjects by the questionnaire administrators. The questionnaires were all translated from English into Bahasa Malaysia by a Clinical Psychologist and further scrutinised by another Clinical Psychologist and three other Clinical Psychology interns who were all fluent in Bahasa Malaysia and English.

MEASUREMENT INSTRUMENTS

Social Support The Social Support Scale for Children [Sss-c] (Harter 1985) measures perceived support and regard across four domains: parental support, classmate support, teacher support and close friend support. The scale consists of 24 items which children respond to on a four-point scale. The internal consistency for each of the four sub-domains ranges from 0.72 to 0.82 (Harter 1985). The scale yields four separate sub-domain mean scores. The higher a score obtained, the greater the indication of perceived support. For the purposes of this study, only the classmate scale was utilised. For the purposes of this study, only the social support from classmates subscale was used. It consisted of six questions.

Temperament The Dimensions of Temperament Survey-Revised [Dots-r] (Windle & Lerner 1986) is a 54-item self-report survey designed to measure temperament. It yields nine sub-scores of temperament which are activity level-general, activity level-sleep, approach/withdrawal, flexibility/rigidity, mood, rhythmicity-sleep, rhythmicity-eating, rhythmicity-daily habits, and task orientation. A four choice response format, ‘usually false’, ‘more false than true’, ‘more true than false’, and ‘usually true’, is used with each item. Higher scores are generally indicative of a better temperament. Overall reliability for the Dots-r dimensions with elementary school children ranges from 0.54 to 0.81 (Windle & Lerner 1986).
Demands  The Dimensions of Temperament Survey-Revised: Ethnotheory questionnaire (Lerner 1983) uses a four-choice format with high scores indicating greater difficulty of interaction. The response alternatives are 1 = most wanted and therefore not difficult, 2 = want somewhat and therefore only a little difficult, 3 = want only a little and therefore somewhat difficult, and 4 = do not want at all and therefore very difficult. If an item is considered not to be important or relevant to the parent then the corresponding response would be 'not difficult'. Internal consistency coefficients (Cronbach alphas), short-term stability coefficients are 0.7.

Calculating 'Goodness-of-Fit'  The ‘Goodness-of-Fit’ concept is based on the assumption that for a child to derive social support, then her personal temperament must fit with the ‘general or overall’ demands of her temperament by her classmates. Naturally, there are a variety of behaviours which are observed by the classmates and hence six different aspects of Goodness-of-Fit may be calculated. Larger Goodness-of-Fit scores imply greater dissatisfaction with the class’s overall temperament, thus allowing more opportunity for conflict. The major areas are: general activity-general, approach withdrawal, mood, distractibility, daily habits-rhythmicity and flexibility / rigidity.

Average rather than total sub-scale scores are used due to the discrepancy between number of items making up the Dimensions of Temperament (Windle & Lerner 1986) and Ethnotheory Questionnaire (Lerner 1983) sub-scales. The following steps were taken to derive a Goodness-of-Fit score for each of the sub-scales.

1. Derive the mean ethnotheory (demand) sub-scale scores for general activity-general, approach withdrawal, mood, distractibility, daily habits-rhythmicity and flexibility / rigidity for each class.
2. Obtain the mean temperament score for general activity-general, approach withdrawal, mood, distractibility, daily habits-rhythmicity and flexibility / rigidity for each student.
3. Calculate the difference between the average mean ethnotheory sub-scale score of each class and the individual temperament sub-scale score for each student. The larger the difference score, the poorer the fit between classmate’s demands and the student’s temperament.

Statistical Procedures

The purpose of the analysis was to observe the way in which problem-solving styles and Goodness-of-Fit predict social support from classmates. The dependent variable was social support from classmates and the independent measures were measures of problem-solving style and Goodness-of-Fit.
All the measures were measured on a continuous scale whose descriptive data are described in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support – classmates</td>
<td>2.86</td>
<td>0.43</td>
<td>2.83</td>
<td>1.0 - 3.83</td>
</tr>
<tr>
<td>Goodness-of-Fit</td>
<td></td>
<td></td>
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<tr>
<td>Approach withdrawal</td>
<td>-0.01</td>
<td>0.48</td>
<td>-0.01</td>
<td>-1.07 - 1.20</td>
</tr>
<tr>
<td>Mood</td>
<td>-0.85</td>
<td>0.55</td>
<td>-0.96</td>
<td>-1.93 - 0.63</td>
</tr>
<tr>
<td>General activity level</td>
<td>-0.28</td>
<td>0.49</td>
<td>-0.28</td>
<td>-1.44 - 1.21</td>
</tr>
<tr>
<td>Rhythmicity - Daily habits</td>
<td>0.25</td>
<td>0.54</td>
<td>0.19</td>
<td>-1.21 - 1.56</td>
</tr>
<tr>
<td>Flexibility - rigidity</td>
<td>0.65</td>
<td>0.47</td>
<td>0.65</td>
<td>-0.78 - 1.99</td>
</tr>
<tr>
<td>Distractability</td>
<td>-0.1</td>
<td>0.52</td>
<td>-0.13</td>
<td>-1.71 - 1.37</td>
</tr>
</tbody>
</table>

RESULTS

The purpose of this study was to find out how interactions between temperament and expectations that classmates have of the child behaviour, predict levels of social support. The interactions were derived from Goodness-of-Fit calculations. To estimate if relationships exist between Goodness-of-Fit and social support, a linear regression was conducted.

To obtain an indication of which aspects of Goodness-of-Fit between temperament and demands of classmates predicted social support, all the sub-scale measures of Goodness-of-Fit were initially regressed on social support from classmates. Twenty-three percent of the variance in self-reported social support from classmates was accounted for by measures of Goodness-of-Fit, $F(6, 129) = 6.454, p < 0.01$ (Table 2). Only Distractability and Mood significantly predicted social support from classmates. Subjects who were like their classmates expectations in terms of their distractibility and mood, were more likely to have more social support from their classmates.

DISCUSSION

This study sought to find out how the relationship between the student’s temperament and their classmates expectations of the student’s behaviour, predicted social support from their classmates. Analyses of the data indicated that differences between Goodness-of-Fit in areas of mood and
TABLE 2. Summary of ordinary least squares multiple regression analysis for goodness-of-fit predicting social support from classmates (N = 136)

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>General activity level</td>
<td>-0.081271</td>
<td>0.073480</td>
<td>-0.092865</td>
</tr>
<tr>
<td>Approach-withdrawal</td>
<td>0.005409</td>
<td>0.082862</td>
<td>0.005972</td>
</tr>
<tr>
<td>Distractability</td>
<td>-0.160453</td>
<td>0.065914</td>
<td>-0.195355*</td>
</tr>
<tr>
<td>Flexibility-rigidity</td>
<td>-0.032544</td>
<td>0.074704</td>
<td>-0.035482</td>
</tr>
<tr>
<td>Mood</td>
<td>-0.288258</td>
<td>0.066038</td>
<td>-0.368592**</td>
</tr>
<tr>
<td>Rhythmicity-habits</td>
<td>-0.094066</td>
<td>0.065275</td>
<td>-0.117320</td>
</tr>
</tbody>
</table>

Note. $r^2 = 0.23 \ [F(6, 129) = 6.454, p < .01]$

* $p < 0.05$
** $p < 0.01$

distractibility predicted levels of social support. Thus the results seem to indicate that the better the fit between classmates’ demands and the student’s temperament in terms of mood and distractibility, the more support from classmates she reported she had. As a group, the Goodness-of-Fit measures account for about twenty three percent of the variance in predicting social support from classmates. While there are few studies of this nature that have been conducted, the theories proposed by Lerner et al. (1991) would suggest that these findings, support what has been hypothesised.

The results indicate that issues to do with how distractible a child is, and also their mood are the crucial factors that determine whether friendships are made in class. In terms of distractibility, it is understandable that the child would need to pay attention to their friends and also to the tasks that they are conducting for their friends to like them. Subsequently, the more that the classmates expect the child to be less distractible, and they actually are, the more pleasing to their friends they will be. In the event, their friends will reciprocate in a positive manner (Coie et al. 1982). Where mood is concerned, a positive mood or disposition is generally viewed positively and is one way in which friends are made. Thus, children who are expected to be positive in their mood and do so will naturally seem more approachable by their friends (Selman 1985). Naturally, the alternative holds, where a child who is perceived as sulky will seem less approachable to their friends and be less likely to be asked to participate in games or school activities by their peers.

Making friends and keeping them is one of the main reasons why studies on interactions between children are conducted. Friendships have been shown to be a protective factor against mental health problems amongst children (Bukowski & Newcomb 1987). Thus the results of this study further pinpoint two aspects of children’s behaviours and perceptions that need to
be considered when a child lacks friends. Efforts could be made, using
behavioural techniques, to help children pay attention to their friends and
also the tasks that they are concentrating on. Some social skills training
programmes teach listening skills as ways in which children may attend to
and recognise feelings in their peers (Petersen & Gannoni 1992). Goal
setting is a means by which the child can learn to concentrate on one small
task at a time and reward themselves for achieving small goals (Bernard &
Hajzler 1987). A more outwardly positive mood could be taught to children
by teaching them to smile, give and accept compliments, which are common
components in many adult assertiveness training programmes (Bower &
Bower 1980).

Naturally, there are limitations to this study. First and foremost concerns
the issue of age. As this study focussed on only Form 2 students, it is
difficult to speculate how these results generalise to other age groups and
if there are other Goodness-of-Fit factors which would be relevant. On that
note, one also wonders how these results would vary in terms of social
support from parents. The other limitation of this study concerns gender.
This study focussed only on females and future studies ought to be also
conducted on males.

To conclude, this study adds to the ever growing body of literature on
the role of temperament in friendship formation. It suggests that paying
attention to whatever the task is, and to those that around, and also having a
positive disposition is important for getting support from classmates. More
importantly, this study highlights the role that expectations of others play
in determining whether they are going to provide social support. Thus,
obtaining social support from classmates is not a task for one person. It
involves interaction between expectations and behaviours on both sides.

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