Early cognitive theorists have emphasized the link between what people say to themselves and how they feel and behave. This study investigates the relationships between self-talk (what people say to themselves with particular emphasis on the words used to express thoughts and beliefs about oneself and the world to oneself) and significant others' positive and negative statements. A sample of 675 elementary school children in three middle classes completed two inventories, along with demographic items. The results of correlational analysis revealed that children who perceived that significant others talk positively to them appeared to have higher positive self-talk and lower negative self-talk than children who reported that significant others say negative things to them. The statements by significant adults seemed to have a differential effect on both positive and negative self-talk depending on sex. For boys, parental statements played a predictive role for positive and negative self-talk whereas for girls, teachers' statements were predictive for both types of self-talk. Negative statements by other children were significant predictors of negative self-talk for both boys and girls. (RJM)
Early cognitive theorists emphasised the link between what people say to themselves and how they feel and behave. However, confusion exists in the literature as to what terminology should be used to describe the self-talk phenomena and how it should be defined. Self-talk, in this study, is defined as what people say to themselves with particular emphasis on the words used to express thoughts and beliefs about oneself and the world to oneself.

Self-Talk in Elementary School Children

Three recent studies have investigated positive and negative self-talk in elementary school children. Manning (1990) used an experience sampling method to investigate the positive, neutral and negative self-talk of 94 children in Grades two through five. An average of 15% of the self-talk responses were classified as positive (indicating optimism, encouragement, praise, or hope, e.g., I am a fast worker, I can do this), 17% were negative (indicating pessimism, discouragement, insults, lack of hope or despair e.g., I’ll never get this right, I’m not going to do this), and 68% were neutral or task related. Positive and negative self-talk were not related to sex, grade, socio-economic status but negative self-talk was related to Verbal IQ (r=-0.51) and the Iowa Language test (r=-0.57). Additionally, teachers rating of behaviour on a 3-point scale (1=excellent, 2=average, 3=poor) was found to be related to positive self-talk (r=-0.39) and to negative self-talk (r=0.62).

Kamann and Wong (1993) studied the self-talk of 10 learning disabled and 10 normally achieving children in Grade 4-7. Self-talk was measured by discussing the child’s recollection of their self-talk in response to a past mathematical exercise or test and also by taping the children’s think-aloud verbalisations during a real mathematical problem-solving situation. The findings suggested that the learning disabled children used significantly less positive self-talk (20.5% vs 45.5%) and more negative self-talk (47.9% vs 18.3%) when compared to controls.

Burnett (1994) used an interview format to measure the positive and negative self-talk responses to nine hypothetical situations using 105 Grade 4-7 children. Examples of positive self-talk were "I am proud of myself", "You/I can do it", "Be confident" while "I am a bad child", "I should have done better", "Stupid me" were examples of negative self-talk. Small but significant correlation coefficients were found indicating that the generation of positive self-talk was positively related to self-esteem and negatively related to depression in a non-clinical sample of children. Interestingly, the same support was not found for the reverse relationships for negative self-talk.
Within the school context, teaching children positive self-talk strategies has been used to enhance children's writing (Solley & Payne, 1992), to increase on-task behaviour (De Hass-Warner, 1991), and to reduce maths anxiety in children with learning difficulties (Kamann & Wong, 1993). The results of the studies noted above suggest that what children say to themselves has some impact on their learning and general psychological development.

Aims of the Study

The research studies described above attest to the relationship between self-talk and children's self-esteem, behaviour and affective states. Additionally, extensive behaviour modification research has highlighted the impact of others' positive statements, such as praise and verbal reinforcement, and negative statements, such as criticism and verbal punishment, on children's behaviours. However, the impact of perceived positive and negative comments by significant others such as parents, teachers, siblings and peers on children's self-talk has not been investigated. This study aims to investigate the relationships between self-talk and significant others' positive and negative statements.

Method

Sample

A sample of 675 elementary school children attending three middle class schools in a large metropolitan area in Australia completed the Self-Talk Inventory (STI) and the Significant Others' Statements Inventory (SOSI). Girls constituted 50% of the sample and the mean age of the total sample was 9.5 years with a range from 7 to 13 years. The sample comprised 144 from Grade 3 (mean age=7.6 years), 135 from Grade 4 (8.6 years), 141 from Grade 5 (9.5 years), 130 from Grade 6 (10.5 years), and 125 from Grade 7 (11.5 years). The mean number of siblings was 1.9 with a range from 0 to 9 and 36 were only children. Some 86% lived with both parents, 11% lived with their mother, 2% lived with their father and 1% lived with their grandparents or someone else.

Instrumentation

Self-Talk Inventory (STI)

The majority of the items used in the STI originated from the study reported by Burnett (1994) in which 105 children in Grades 4-7 (mean age=9.8 years, 62% female) in five elementary schools were interviewed about what they would say to themselves in response to imagined situations. The transcripts were analysed and the children's responses were classified as positive, negative or neutral self-talk. The three most commonly used positive and negative self-talk statements given for each of the nine hypothetical situations were determined and used to form the Self-Talk Inventory (STI). A tenth situation dealing with social interaction was
added to the scale to overcome an identified shortfall in this area. The STI asked children whether they would say each of the 60 statements (3 positive and 3 negative for each of the 10 situations) to themselves in response to the imagined situations using a Yes (3), Sometimes (2), and No (1) response format.

**Significant Others' Statements Inventory (SOSI)**

A whole class discussion which focused on the positive and negative statements that parents, teachers, peers and siblings say to children was facilitated, audiotaped and transcribed using a Grade 4 and a Grade 6 class. On the basis of these discussions five positive and five negative statements which children perceived that their parents, teacher, peers and siblings say to them were selected and included in the SOSI giving a total of 40 items. The SOSI asks children how frequently they perceive that the four groups of significant others say positive and negative statements to them using an Often (3), Sometimes (2), Never (1) response format.

**Procedure**

The 60-item STI and the 40-item SOSI together with demographic items were administered to the students at school by an experienced research assistant using standardised procedures. Children were encouraged to seek help if they experienced any difficulties with reading any of the words. The data were analysed using the following statistical procedures: Factor Analysis, Coefficient Alpha, Pearson Correlations and Multiple Regression.

**Results**

**Scale Development**

Factor Analysis of the 60-item STI indicated the presence of one general positive self-talk factor (e.g., Just stay calm, Everything will be OK, It’ll work out, I’ll do well) and one general negative self-talk factor (Everyone will think I’m hopeless, This is going to be awful, I’m going to muck this up, I’m hopeless). The reliability coefficients for the resultant 17-item Positive Self-Talk Scale (PSTS) and the 16-item Negative Self-Talk Scale (NSTS) were 0.89 and 0.86 respectively. Factor Analysis of the 40 item SOSI revealed 8 factors with eigenvalues greater than 1. Only 3 items did not load above 0.4 on the hypothesised scales. The subscales of both the STI and SOSI have sound construct validity as determined by factor analysis and adequate (above 0.65) to high (0.89) reliability with the exception of the 3 item Teachers' Negative Statements whose alpha coefficient of 0.59 suggested marginal reliability.
Relationships

Pearson correlations using the boy's, girl's and total samples were computed between the perceptions of significant others' statements and the two types of self-reported self-talk. It was hypothesised that self-reported perceptions of positive statements by significant others would be positively related to positive self-talk and negatively related to negative self-talk while self-reported perceptions of negative statements would be negatively related to positive self-talk and positively related to negative self-talk. The resultant pattern of correlations supported what was hypothesised with the exception that perceived negative statements made by teachers and peers were found to be unrelated to positive self-talk for the total and boys samples. For the girls, negative statements perceived to be made by parents and peers were not related to positive self-talk. For the boys, positive statements made by siblings was not related to negative self-talk. The size of the correlations indicated that small to moderate univariate relationships existed between the dependent variables.

Correlation Results

<table>
<thead>
<tr>
<th>Statements</th>
<th>Negative Self-Talk</th>
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<th>Positive Self-Talk</th>
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<tr>
<td></td>
<td>Total Boys Girls</td>
<td>Total Boys Girls</td>
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<tr>
<td>Parents' Positive</td>
<td>-.14 -.11 -.21</td>
<td>.31 .36 .26</td>
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<tr>
<td>Parents' Negative</td>
<td>.21 .27 .20</td>
<td>-.15 -.21 NS</td>
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</tr>
<tr>
<td>Teachers' Positive</td>
<td>-.18 -.16 -.23</td>
<td>.38 .34 .41</td>
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<td></td>
</tr>
<tr>
<td>Teachers' Negative</td>
<td>.14 .17 .15</td>
<td>NS NS -.11</td>
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<tr>
<td>Siblings' Positive</td>
<td>-.17 NS -.26</td>
<td>.29 .32 .26</td>
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<td></td>
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<tr>
<td>Siblings' Negative</td>
<td>.29 .32 .30</td>
<td>-.15 -.18 -.13</td>
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</tr>
<tr>
<td>Peers' Positive</td>
<td>-.22 -.23 -.26</td>
<td>.35 .37 .34</td>
<td></td>
<td></td>
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<tr>
<td>Peers' Negative</td>
<td>.22 .26 .19</td>
<td>NS NS NS</td>
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</table>

Stepwise multiple regression analyses were conducted on the total sample and separately for boys and girls. The results suggested that perceived statements by significant others accounted for an average of 20% of the variation in boys' and girls' self-talk. Slightly more variation was accounted for in positive self-talk than negative self-talk. For positive self-talk the impact of positive statements made by teachers and peers was noted in all three samples. Interestingly, the presence of positive statements by parents and the low rate of negative statements by parents were contributors to positive self-talk for boys but not for girls. These results suggest that teachers' positive statements appeared to have the strongest influence on girl's positive self-talk whereas the presence of parents' positive statements had the strongest impact on boy's positive self-talk. Negative statements made by siblings and peers together with a low rate of positive statements from peers were related to negative self-talk for the boy's, girl's and total samples. Low rates of positive statements made by teachers appeared to be associated with negative self-talk for the girls and total samples. While for boys, the presence of negative statements by parents appeared to be related to negative self-talk.
Discussion

The results of the correlational analysis confirmed the hypothesised pattern of relations. Children who perceived that significant others talk positively to them appeared to have higher positive self-talk and lower negative self-talk than children who reported that significant others say negative things to them. Additionally, children who perceived that significant others said negative things to them appeared to have higher negative self-talk and lower positive self-talk than children who reported that significant others say positive things to them. It seems that what significant other’s say to children is related to self-talk but further research is needed to confirm these exploratory findings in other children.

The results of the multiple regression confirmed the impact of positive statements by others on positive self-talk with positive statements from all significant others predictive of positive self-talk for the total sample. Interestingly, the statements by significant adults (parents and teachers) seem to have a differential effect on both positive and negative self-talk depending on sex. For boys, parental statements played a predictive role for positive and negative self-talk whereas for girls teachers statements were predictive for both types of self-talk. Boys with higher positive self-talk reported that their parents spoke to them positively and not negatively while boys with higher negative self-talk reported that their parents spoke negatively to them. Parental statements were not predictive of either type of self-talk for girls. For girls, positive statements by teachers were predictive of positive self-talk while low rates of positive statements by teachers were predictive of negative self-talk. Teachers’ statements were not predictive of either type of self-talk for boys. Also of note was the finding which indicated that negative statements by other children (siblings and peers) were significant predictors of negative self-talk for both boys and girls. These findings suggest that adults’ statements (parents for boys and teachers for girls) have a major influence on positive self-talk whereas other childrens’ negative statements significantly impact on negative self-talk.

References


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