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Developing Resilience: The Role of Teachers

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Abstract

The study of resilience is more hopeful than investigating the maladaptation of children at risk. Resilience keeps students functioning when they confront adversities and life's challenges. Teachers need to focus on developing a protective mechanism by which students have a belief and power in themselves to deal with changes and difficulties. Teachers can nurture and strengthen these protective processes, and thereby enhance resilience. They can provide opportunities for students to experience success and can enable them to develop essential social and problem-solving skills. The present paper reports a study on resilience of secondary students in Singapore. Preliminary findings show a significant correlation between students' perception of school and teachers. This paper discusses the implications of this finding and the role teachers can play to build resilience. Werner and Smith (1992) wrote, "Resilient students are planners, problem solvers and picker-uppers". To develop resilience in students, teachers can create a learning environment, communicate actively, develop problem-solving skills, teach students to be adaptive, and provide opportunities for self-efficacy.

Introduction

"Today I was a counselor, a disciplinarian, a lecturer, a nurse, a coach and a facilitator of knowledge...Today I was a TEACHER." Teachers in schools have a significant influence on child and adolescent development (Wang, Haertel & Walberg, 1990). The experiences of students in school affect them in various ways either by exacerbating or by protecting them from debilitating consequences. Rutter (1987) explains that schools can be protective because they promote self-esteem and self-efficacy. Teachers can develop protective factors for students, such as having a supportive relationship with at least one person and using problem-solving skills in daily life (Bernard, 1991). These protective factors help students have a belief and power in themselves to deal with changes and difficulties. Teachers can nurture and strengthen these protective factors, and thereby enhance resilience. They can provide opportunities for students to experience success which enable them to develop essential social and problem-solving skills. Yet the role of teachers has received relatively little consideration in the study of resilience.

Resilience

A study of resilience is more hopeful than investigating the maladaptation of children at risk. Resilience keeps students functioning when they are confronted with adversities and life's challenges. Rutter (1987) stresses the need to focus on the "steeling" or protective mechanism by which children maintain their self-esteem and self-efficacy in the face of adversity. Self-esteem is a belief in oneself and self-efficacy is having the internal power to deal with changes and difficulties. Rather than a static factor, resilience is a *process* by which students can overcome failure or adversity and bounce back. Interestingly, people who face childhood adversity or problems and bounce back may do better later in life than someone whose childhood was relatively easy (Garmezy, 1991).

Resilience in one domain of life may not translate to other domains. Some students may show resilience with peer conflicts, but not with academic achievement. The reverse may be true as well. Luthar and Zigler (1991) suggest that urban ninth Graders considered to be academically resilient may show signs of emotional maladjustment. This paper focuses on resilience from a positive perspective where students strive to do well academically and socially *in schools*.

What determines how much students can experience before giving up differs. Some students give up after much stress while others give up after a little incident. The former may have had more opportunities to take a risk, fail, and bounce back. The latter group may have had little experience of picking themselves up after failing. These experiences of successfully bouncing back develop self-efficacy...the "I CAN" do it attitude.

Resilient students tend not to seek formal professional help, but turn to those they have grown to trust or see regularly, such as grandparents, older siblings and friends, and teachers. Students who have succeeded despite their problems very often have one person who can create a pathway to resilience, rather than leave success to fate or to character traits (Shapiro and Brownlee, 1996; Werner and Smith, 1992).

Method

Subjects

Four secondary schools in Singapore participated in this study. The subjects were 1174 students from Secondary one to Secondary four (aged from 13 to 16 years). They were in the special, express and normal streams.

Instrument

A questionnaire with 60 items was employed in this study. This questionnaire was used by Mau (1992) in a similar study conducted in Hawaii. These items were to measure different aspects of students' feelings and perceptions about their school life.

Procedure

Questionnaires were administered to heterogeneous classes during the school day. After the instructions were read aloud and explanations given, the questionnaires were distributed. The questionnaires were self-administered when students responded at their own pace. Most students completed the questionnaire within 20 minutes.

Results

Sub-Scales

A factor analysis was performed on the pupils' responses to the items in the questionnaire and four factors relevant to the discussion of the present paper were obtained. Descriptive names were assigned to these factors: *Meaningless of School*, *Teachers*, *Powerlessness*, *Normlessness*. All these sub-scales have "negative" meanings since they measure the negative feelings or perceptions directly. The higher the score on these sub-scales, the more negative perceptions or feelings the students reported. An alpha reliability test was performed on each sub-scale and the results are shown in Table 1.

Table 1. Reliability estimates of sub-scales.

<i>Sub-Scale</i>	<i>Alpha Reliability</i>
Meaningless of School	.801
Teachers	.779
Powerlessness	.575
Normlessness	.762

Based on the results of factor analysis and the alpha reliability test, we obtained four sub-scales related to the focus of the present paper. Except for the sub-scale of *Teachers*, the other three sub-scales can be considered as the measures of the students' mental structure of resilience.

Stream difference

Three sub-scales, *Powerlessness*, *Normlessness*, and *Meaningless of school*, are considered as three components in the mental structure of students. MANOVA was performed on these dependent variables by the independent variable of stream. The analysis showed that with the use of Wilks' Lambda criterion, the combined dependent variables were significantly different by different streams (Wilks' Lambda = .96, $F_{(6, 2552)} = 7.97, p < .01$).

The follow up ANOVA for each dependent variable showed significant differences on the sub-scales of *Meaningless of School* and *Powerlessness*. There is no significant difference found in the sub-scale of *Normlessness*. The group means and the relevant significant test results of the students in different streams on these sub-scales are shown in Table 2.

Table 2. Mean scores and F test result on sub-scale of the students at different streams.

<i>Sub-scale</i>	<i>Mean</i>			<i>F ratio</i>
	<i>Special</i>	<i>Express</i>	<i>Normal</i>	
Powerlessness	9.78	10.10	10.25	4.79**
Normlessness	2.69	2.80	2.86	1.47
Meaningless	16.31	16.15	14.43	11.96**
Teachers	15.04	15.99	15.54	10.85**

Note: ** means F ratio is significant at 0.01 level.

On the sub-scale of *Teachers*, the mean scores of the students in different streams and the relevant significant test results are also shown in Table 2. Post hoc (Tukey) test was performed on the sub-scales with significant differences. On the sub-scale of *Powerlessness* the significant difference was found between the students in the Special Stream and in the Express Stream. On *Meaningless of School*, the significant difference was found between students in the Normal Stream and either students in the Special or Express Streams. On the sub-scale of *Teachers*, a significant difference was found between students in the Special and Express Streams. The post hoc test showed a significant difference between the Special students and the Express students.

The results on the sub-scale of *Normlessness* showed that almost all secondary students in this sample follow norms. They have a positive attitude about social and school norms. Compared to the students in the Express and Normal streams, students in the Special stream appear to have stronger feelings about their own ability to deal with things happening in the world. In addition, they have a more positive perception of their teachers. In contrast, they showed more negative feelings and perceptions to school life than students in the Normal stream who showed the most positive feelings about school. One explanation could be that students in Normal streams have a curriculum which teaches applied skills related to their future occupations.

Level difference

Another interesting question is whether students in different secondary levels have different scores on the four sub-scales. In the present study, the subjects are from Secondary One to Secondary Four. From a developmental view, the present study is a cross-sectional one. MANOVA showed a very significant difference among secondary levels on the general

structure of resilience (Wilks' Lambda = .86, $F_{(9, 2745)} = 19.37$, $p < .01$). The follow-up multiple ANOVA was performed on each dependent variable. The group means and the relevant test results are shown in Table 3.

Table 3. Mean scores and F test result on sub-scale of the students at different Sec.

<i>Sub-scale</i>	<i>Mean</i>				<i>F ratio</i>
	<i>Sec 1</i>	<i>Sec 2</i>	<i>Sec 3</i>	<i>Sec 4</i>	
Powerlessness	9.68	10.10	10.17	9.86	3.46*
Normlessness	2.51	2.68	3.12	2.74	12.24**
Meaningless	14.11	15.65	17.66	17.02	54.60**
Teachers	14.30	15.64	16.70	15.35	26.20**

Note: * means F ratio is significant at 0.05 level, and ** at 0.01 level.

From Table 3 we can see that the students in Sec 1 showed the most positive feelings and perceptions on all sub-scales and became less positive at Sec 2 and Sec 3. However, in Sec 4 students tended to move toward a positive direction.

Post hoc (Tukey) tests supported parts of the above estimates. It was found that on *Powerlessness*, the only significant difference was between Sec 1 and Sec 3. On *Normlessness* the Sec 3 students significantly showed negative tendency than the students in the other levels. On *Meaningless of School*, except between Sec 3 and Sec 4, all differences between two levels was found significant. On *Teachers*, except between Sec 2 and Sec 4, a significant difference was found between all the other levels.

It is possible that when students enter secondary school as Sec 1 students, they are unfamiliar with their new school life. Although there is a transition from primary to secondary school, these Sec 1 students may not realise the increased amount of academic work because the curriculum is a new one. When these students enter Sec 2 or Sec 3, they have more work to do, have adjusted to the new school and feel and perceive the school differently from negative perspectives. In Sec 4 they have adjusted to secondary school life and their feelings and perceptions become more positive.

Gender Difference

MANOVA showed a very significant difference between male and female students on the general structure of resilience (Wilks' lambda = .95, $F_{(3, 1113)} = 20.38$, $p < .01$). The follow up multiple ANOVA was performed on each dependent variable. The group means and the relevant test results are shown in Table 4.

Table 4. Mean scores and F test result on sub-scale of the students at different streams.

<i>Sub-scale</i>	<i>Mean</i>		<i>F ratio</i>
	<i>Male</i>	<i>Female</i>	
Powerlessness	9.77	10.02	3.15
Normlessness	2.66	2.79	2.73
Meaningless	14.64	16.59	61.80**
Teachers	15.28	15.55	1.54

Note: ** means F ratio is significant at 0.01 level.

The only significant difference between male and female students was found on *Meaning of School*. The females perceive the school life more negatively. In other studies relevant to gender differences of Singapore students, male and female students usually do not show any performance differences (e.g., Cheng, 1997; Seng & Tan, 1998); but show differences about feeling and self-evaluations (e.g., Liu & Cheng, 1998; Tan, Khor, & Cheng, 1998).

The relationship between Teachers and other factors

In the questionnaire there are a few items asking pupils to describe their own achievement in math, English, science and mother tongue subjects. The total score of these self-descriptions can be treated as a factor of *Self-Perception of Achievement*. For studying the relationship between teachers and the other different factors in schools, a Pearson correlation was conducted and the results are shown in Table 5.

Table 5. Correlation coefficients between the factor of Teacher and other factors related to resilience of students.

Factors	Correlation coefficient with the factor of <i>Teachers</i>
Meaning in School	.548**
Belief in Oneself	.228**
Norms	.297**
Self-Perception of Achievement	.286**

Note: ** means $P < .01$.

The correlation coefficients between the factor of *Teachers* and each of the other factors are all positive and very significant. This means that students' perception of their teachers is highly related to the school resilience factors measured in the present study. As students perceive their teachers more positively, they find school more meaningful, have a stronger belief in themselves that they can overcome problems, are more likely to follow school norms, and feel more confident about their academic achievement. In other words, when students perceive teachers more positively, they may have the self-esteem and self-efficacy to be resilient in schools.

From the discussion of the study results we can see that teachers play a very important role in the development of students. This paper suggests four ways in which teachers can develop resilience by providing meaning and structure to the lives of their students.

Suggestions for Teachers

Four Ways for Teachers to Develop Resilience

(1) Create a learning environment

How to create a school environment that students will succeed in largely due to their own abilities and efforts? The importance of reinforcing a sense of personal control is basic to resilience (Henderson and Milstein, 1996). Teachers can create a learning environment that reinforces students' belief that mistakes and failures are not only acceptable, but to be expected, and are seen as best ways of learning. Resilient children assume realistic ownership for their achievements and failures. They possess a sense of inner control over what is happening in their lives. So teachers can nurture students to stretch to their full potential by encouraging them to try over and over again. Students are more apt to try in a non-threatening environment where teachers encourage questions and allow students to make mistakes. When students have a sense of security, they can more easily take in cognitive information and have the confidence to take risks.

Besides creating a learning environment, which is non-threatening to students, teachers can focus learning on tasks that students complete. Students in task-oriented situations are more likely to change failures into challenges by trying harder. By dealing with their failure, they gain greater self-efficacy. Teachers then can teach students to develop the self-confidence and analytic skills to confront and solve problems while doing a task.

(2) Communication

Teachers can convey their own optimism and caring to students. Empathy is essential to understanding how students experience communicating with teachers. One way to develop this empathy is to have a warm, encouraging relationship with students by not severely criticising attempts at learning. Encourage by saying, "Why don't you do this?" or "I think you can do that...."

These comments help according to one student because "I wouldn't have thought positively of myself if other people, such as teachers, hadn't given me opportunities. I think self-motivation can only go so far" (Mau et al., 1998).

In teaching students, it is important not to humiliate or intimidate them (Mendler, 1992). If students are to assume responsibility for their actions and perceive rules as being fair, they must understand the purpose of the rules and contribute within reason to their formation. Moreover, they are aware of respective consequences of not following the rules or guidelines. Teachers can maintain a delicate balance between rigidity and permissiveness by communicating clear-cut regulations as well as logical and natural consequences.

Another student had a teacher in math that allowed him to be comfortable with her teaching style. "She taught me the value of studying and the value of getting an "A" by hard, hard work. But I also got to know her as a person" (Mau et al., 1998). So teachers can develop resilience by relating to students as teachers, counselors and mentors.

(3) Develop problem-solving and coping skills

When teachers teach problem-solving strategies such as requesting for help with assignments and spending more time to practice a skill, students become more resilient (Brooks, 1994). Less academically-resilient students may rely on counter-productive behaviors such as quitting, avoiding, cheating, denying or escaping.

Decision-making and problem solving skills can be taught so students can feel in control and in the process increase their sense of ownership and empowerment – important ingredients in strengthening resilience.

A junior-high girl often engaged in struggles with her parents about bedtime. Through problem-solving skills, she spoke to her parents and was permitted to select one evening each week when she could stay up 30 minutes later than usual (Straits Times, 1998)

Teachers who link their curriculum with events and people in the community show students how the skills of learning are related to the skills of living. Teachers can help students to better cope with real-life problems. They can teach students to recognize behaviours that are causing them trouble and then show them appropriate responses and resources. Moreover, teachers are well aware of the pressures placed on students to excel in schools. So they can show students various ways of effectively managing their time and dealing with these pressures and their stress.

(4) Sense of accomplishment

School success is often associated with good opportunities for students to exercise responsibility. Schools need to provide an ethos for students to exercise autonomy and responsibility and to achieve success in some areas of their lives (Stipek, 1997). Such success need not only involve high scholastic achievement, but include good teacher-pupil relationships, completing tasks and succeeding under difficult circumstances.

Resilient students often possess another protective factor: a talent. What seems key is not the level of talent, but involvement in an activity. Their sense of purpose and pride derived from this activity builds students' self-efficacy. Every student has some competence or talent which can be nurtured by teachers. This sense of achievement helps build their resilience.

Teachers can help by assigning long-term tasks that promote a sense of competence or self-efficacy. This does not come from only making students feel good about themselves, but from interacting positively with students as they overcome obstacles met on their tasks or projects. Students who receive “scaffolding” or assistance from a teacher will pursue and develop their own natural aptitudes and interests as well as have a “I can” attitude.

Moreover, teachers can develop resilience by having high expectations for excellence from students. Besides developing a “I can” attitude, teachers can also develop an attitude of “I will do my best.” With both high and realistic expectations for all students, teachers can encourage habits of working hard and a perseverance to bounce back from difficulties.

Summary

In this preliminary research of secondary school students in Singapore, resilience was examined using multiple scales. The present paper reported a study of the mental structures in terms of feeling in control of their lives, finding meaning in school and following norms. These dimensions were discussed in relation to gender, secondary school levels, streams and teachers. Since a strong relationship was found between resilient dimensions and teachers, we felt that teachers can play an important role in developing resilience in students.

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