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<td>Chan Wei Meng and Lim Kam Ming</td>
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Coping Behaviours of Adolescent Students in Singapore

Chan Wei Meng and Dr Lim Kam Ming

Types of coping behaviours

Coping is defined as the cognitive and affective responses used by individuals to manage stress (Folkman & Moskovitz, 2004). Lazarus and Folkman (1984) proposed two types of coping behaviour: 1) problem-focused coping - finding the most effective way to solve the problem or to control the source of the stress and 2) emotion-focused coping - efforts to manage emotional responses to stress. Frydenberg and Lewis (2002) stated that these coping processes are not intrinsically good or bad. They can be considered as productive or non-productive depending on the context in which they occur.

Age effects in coping behaviours

Previous studies found conflicting effects of age as significant factors in how adolescents cope with stressful situations. The "growth hypothesis" postulates that older adolescents are more likely to use problem-focused coping mechanisms (Krishnan, 1999; Seiffge-Krenke & Shulman, 1990; Stern & Zevon, 1990). However, other studies did not support the "growth hypothesis": Older adolescents used more emotion-focused coping as compared to younger adolescents (Frydenberg & Lewis, 1993; Spirito, Stark, Grace & Stamoulis, 1991).

Gender effects in coping behaviours

Male adolescents were more likely to use problem-focused coping strategies as compared to the females who tended to rely on emotion-focused coping processes (Brems & Johnson, 1988; Lee, Chan & Yik, 1992). However, other studies found no significant gender differences in coping behaviour (Hamilton & Fagot, 1988; Krishnan, 1999).

Coping behaviours of foreign students in Singapore

The number of foreign students increased from 50,000 to 66,000 in the past three years (EDB News, 2005, January 19). It is expected that up to 150,000 foreign students will be studying in Singapore by 2012 (EDB News, 2005, June 28). The 33,000 students from the People's Republic of China (PRC) form the biggest group of foreign students in Singapore. The next largest group is from Malaysia, with over 8000 students (The Straits Times, 2005, December 3).

Despite the continued growth in the education industry, there appears to be a lack of local research on how these foreign students cope in Singapore.

Purpose of study

This study had 3 aims: to examine the effects of 1) age, 2) gender and 3) nationality on the types of coping behaviour used by PRC Chinese, Malaysian and Singaporean students in Singapore to solve schoolwork and interpersonal relationships problems.

Method

Participants
One hundred fifty students with ages ranging from 13 to 20 years old (M=16.86, sd=1.36) who were staying in a boarding school in Singapore voluntarily participated in the study. These students were enrolled in various secondary schools and junior colleges in Singapore. Data from 4 students,

however, were discarded as incomplete. The sample consisted of 51 PRC Chinese, 40 Malaysian and 60 Singaporean students.

Materials
Part 1 of the Revised 26-item Adolescent Coping Inventory (Adolescent Coping Inventory, 2002). The use of paired items for coping with schoolwork and interpersonal problems was 1 ("never true") to 5 ("habitually true"). A five-scale representation represents the 2 types of coping.

Item

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<th>Type of Coping</th>
<th>Item</th>
<th>Cronb</th>
<th>Stand</th>
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</table>

A five-scale representation represents the 2 types of coping.
however, were found to be incomplete and discarded. The final sample of 146 students consists of 75 male and 71 female students (51 PRC Chinese, 46 Malaysians & 49 Singaporeans).

Materials
Part 1 of the questionnaire assessed respondents’ gender, age, nationality, race and educational level. Respondents also answered one question that assess if they were experiencing problems with their schoolwork or interpersonal relationships or both types of problems concurrently.

Part 2 of the questionnaire consisted of the Revised Adolescent Coping Behaviour Scale (RACBS), adapted from the Adolescent Coping Behaviour Scale (Khoo, 2002). The RACBS assesses respondents’ use of problem-focused or emotion-focused coping to manage schoolwork and interpersonal relationships problems. The 26-item RACBS comprised of 6 problem-focused coping behaviour items and 6 emotion-focused coping behaviour items for schoolwork problems, and another set of 6 problem-focused items and 6 emotional-focused items for interpersonal relationship problems. In addition, there was 1 open-ended item for respondents to indicate other ways for coping with each of the 2 types of problems.

A five-point Likert scale, with “5” representing that behaviour is “used a great deal”; “4” - “used often”; “3” - “used sometimes”; “2” - “used very little”; and “1” - “never used at all” was used in the RACBS. Higher scores reflect a higher likelihood of the respondent in using a particular coping approach.

Procedure
Students from The People’s Republic of China, Malaysia and Singapore staying in a boarding school were randomly selected in equal numbers from the student name list provided by the school office. Students were assured that their responses will be kept anonymous and confidential and that their participation was strictly voluntary.

Results & Discussion
Reliability of Measures
The Cronbach’s alpha reliability coefficient for the 26-item RACBS was 0.82. The Cronbach alpha and standardized item alphas of all sub-scales revealed values of above .70 (see Table 1), a standard considered to be a reliable scale (Hair, Anderson, Tatham & Black, 1995).

Revised Adolescent Coping Behaviour Scale – Schoolwork
An exploratory factor analysis was conducted on the 12 items schoolwork parameter of the RACBS using principal components extraction with varimax rotation. The analysis yielded two factors with eigenvalues exceeding unity, and the factor solution accounted for 48.47% of the total variance.

The first factor accounted for 25.52% of the variance and comprised the 6 items from the emotion-focused coping subscale (eigenvalue = 3.06). The pivotal item for the first factor was item 3 – “blame others” – is

<table>
<thead>
<tr>
<th>Table 1 Reliability of RACBS</th>
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<tbody>
<tr>
<td><strong>Type of Problem</strong></td>
</tr>
<tr>
<td>Item</td>
</tr>
<tr>
<td>Cronbach alpha</td>
</tr>
<tr>
<td>Standardized item alpha</td>
</tr>
</tbody>
</table>
symptomatic of emotion-focused coping. The second factor accounted for 22.94% of the variance and consisted of the 6 items from the problem-focused subscale (eigenvalue = 2.75). The pivotal item for factor 2 was item 8 - "think of various ways to solve the problem" - is representative of active problem-focused coping. The results show that the two factors represent empirically separate and internally consistent constructs.

Revised Adolescent Coping Behaviour Scale - Interpersonal Relationship
To examine the factor structure of the interpersonal relationship parameter of the RACBS, an exploratory factor analysis was conducted on the 12 items using principal components extraction with varimax rotation. The analysis indicated factor loadings of a large majority of items on two major factors which accounted for 49.81% of the total variance.

The first factor accounted for 25.83% of the variance and comprised the 6 items from the problem-focused coping subscale (eigenvalue = 3.10). The pivotal item for the first factor was item 22 - "keep working at the cause of the conflict" - is representative of active problem-focused coping. The second factor accounted for 23.98% of the variance and consisted of 5 items from the emotion-focused subscale (eigenvalue = 2.88). The pivotal item for factor 2 was item 17 - "blame others" - is symptomatic of emotion-focused coping. The third factor, item 23 on the emotion-focused subscale - "wish a magician like David Copperfield can make the problem disappear" has a strong association with wishful thinking that is also symptomatic of emotion-focused coping. This factor accounted for 8.91% of the total variance (eigenvalue = 1.07). These results supported the suggestion of two factors representing empirically separate and internally consistent constructs.

Types of problems experienced
Table 2 shows the percentage of concerns with schoolwork or interpersonal relationships. Overall, schoolwork was the most prevalent singular problem (43.8%). The least common problem was interpersonal relationships (6.8%). However, 21.2% of the students reported that they faced problems with both schoolwork and interpersonal relationships while 25.3% of them reported no problems. A small number, 2.7% reported they have other problems other than those related to schoolwork and interpersonal relationships.

Among the three nationalities, the percentage of PRC students with only schoolwork problems (60.9%) seemed to be greater than their Malaysian (39.2%) and Singaporean students. The type of problems faced by the students was significantly related to their nationalities, X2 (6, N = 146) = 19.52, p < .05. The strength of the relationship was .26.

<table>
<thead>
<tr>
<th>Types of Problems</th>
<th>PRC</th>
<th>Malaysian</th>
<th>Singaporean</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schoolwork</td>
<td>60.9%</td>
<td>39.2%</td>
<td>32.7%</td>
<td>43.8%</td>
</tr>
<tr>
<td>Interpersonal relationships</td>
<td>10.9%</td>
<td>2.0%</td>
<td>8.2%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Schoolwork and Interpersonal relationships</td>
<td>13.0%</td>
<td>19.6%</td>
<td>30.6%</td>
<td>21.2%</td>
</tr>
<tr>
<td>No problems</td>
<td>15.2%</td>
<td>37.3%</td>
<td>22.4%</td>
<td>25.3%</td>
</tr>
<tr>
<td>Others</td>
<td>0%</td>
<td>2.0%</td>
<td>6.1%</td>
<td>2.7%</td>
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Table 2 Students' Current Concerns

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(32.7%) peers. However, 30.6% of the Singaporean students (30.6%) reported having problems with both schoolwork and interpersonal relationships, as compared to only 19.6% of the Malaysian and 13% of the PRC students. Overall, 37.3% of the Malaysians reported no problems at all as compared to their Singaporean (22.4%) and PRC peers (15.2%).

Analysis of coping behaviours
A series of 2 x 2 x 3 (Gender x Age x Nationality) ANOVAs was conducted on types of coping behaviours for schoolwork and interpersonal problems. A median split was used to divide the sample into lower age and upper age groups. As there were no significant 2-way and 3-way interactions (maximum F-value=2.06, p=.13), only the main effects are discussed.

Gender effects on coping behaviours
There were no significant main effects of gender on both types of coping behaviours for both schoolwork and interpersonal problems (maximum F-value=1.62, p=.69).

These results are consistent with those of previous studies (e.g., Hamilton & Fagot, 1988; Krishnan, 1999) which found no significant gender differences in their choice of an emotion-focused or problem-focused coping strategy when dealing with daily stressors.

Age effects on coping behaviours
There were no significant main effects of age on both types of coping behaviours for both schoolwork and interpersonal problems (maximum F-value=3.85, p=.052). This study did not support the “growth hypothesis” that states that older adolescents are more likely to use problem-focused coping (Krishnan, 1999; Seiffge-Krenke & Shulman, 1990; Stern & Zevon, 1990).

Nationality effects on problem-focused coping
The main effects of nationality on problem-focused coping for both schoolwork and interpersonal problems were not significant (maximum F-value=.97, p=.38).

Nationality effects on emotion-focused coping
Significant main effects of nationality in the emotion-focused coping behaviours of adolescents for both schoolwork and interpersonal problems were found. Singaporeans and Malaysians were equally likely to employ an emotion-focused coping approach to solve schoolwork problems. In contrast, the PRC Chinese students (M=1.66, SD=.56) were less likely to use an emotion-focused coping approach to solve schoolwork problems as compared to both their Singaporean (M=2.19, SD=.75) and Malaysian (M=2.03, SD=.63) peers, F(2, 134) = 7.22, p<.05.

For interpersonal relationship concerns, Singaporeans (M=1.98, SD=.74) were more likely than their PRC counterparts (M=1.58, SD=.53) to adopt an emotion-focused coping behaviour, F(2, 134) = 5.05, p<.05.

Consistency of coping approach
Problem-focused coping approach for solving schoolwork problems was significantly correlated with problem-focused coping approach for solving interpersonal problems (r = .71, p<.01). Emotion-focused coping approach for solving academic problems was also significantly correlated with emotion-focused coping approach for solving interpersonal problems (r = .66, p<.01).

These results suggest that the adolescents who tended to use a problem-focused approach in dealing with schoolwork concerns are also highly likely to use the same approach to handle interpersonal problems. Likewise, adolescents who prefer emotion-focused coping would probably use the same coping method for schoolwork and interpersonal relationship problems.

Conclusion and Suggestions for Further Research
This study found that the PRC Chinese students were the least likely to use emotion-focused coping processes when
dealing with schoolwork and interpersonal relationship problems. The Singaporeans and Malaysians were both equally likely to use an emotion-focused coping mode in the face of academic difficulties with the Singaporeans being the most likely among the three nationalities to adopt emotion-focused approach when faced with interpersonal relationship problems.

Unlike other limited number of studies that examined coping behaviours between groups of a larger cultural distance such as that of Westerners versus Asians, this study compared sub-groups within the larger collective group of Asians comprising adolescents from the People’s Republic of China, Malaysia and Singapore. Even with a seemingly culturally similar Asian group of adolescents, there are significant differences in the use of emotion-focused coping approaches between these 3 sub-groups when dealing with both academic and interpersonal difficulties. The differences among these culturally similar groups suggest the need for customized school programmes in order to more effectively cater to the needs of different groups of adolescents.

Nevertheless, it should be acknowledged that the results of this study are based on only a limited sample of adolescent students from 3 countries. It may, therefore, be useful to include other nationalities for future research studies. Another suggestion for future research arises from a limitation of the current study, which is its sole dependence on a paper and pencil, self-report instrument for data collection. To better validate the data of future studies, information could be collected and triangulated from other sources such as peers, family members, parents and teachers.

References
The Straits Times. (2005, 3 December). Foreign students in Singapore – A class apart (pp. S1-S11).

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