

# Prevention Concerning Mental Health: The Adolescent's Perspective

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**Objective:** To examine several subjective components of adolescents' behaviour concerning mental illness prevention.

**Method:** Adolescents' knowledge, their attitudes and subjective norms, as well as their thoughts about how they would concretely handle a psychological problem were measured. A self-administered questionnaire was completed by 438 male and female adolescents in grades 8 and 11.

**Results:** Gender and age differences were revealed: girls and older adolescents were more attuned to prevention. Further, the influence on young people of peers and parents was also apparent.

**Conclusion:** Adolescents perceive prevention concerning mental health as important.

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**Key Words:** mental health, prevention, promotion, adolescent, perspective

Statistics concerning the extent of psychological problems in children are overwhelming. It is estimated that, at any one time, 10% to 11% of all children and adolescents in the United States (US) need psychological or psychiatric treatment (1). In a pilot study for the Quebec Child Mental Health Survey, Bergeron and others (2) found that overall prevalence estimates according to DSM-III-R criteria ranged from 12.7% to 19.1%. Prevention of mental illness within this age group is thus of prime importance, since available intervention resources are unlikely to meet the needs of such a large number of children. Furthermore, adolescence is an optimal period for prevention because it is the stage in life that can most readily permit modification of internal and interpersonal life.

Prevention has become a priority in the reorganization of mental health resources. In current mental illness prevention programs, the focus on illness has been replaced by the promotion of good mental health. The strategy of such programs is to emphasize life style and to provide a competence model of health (3-5). This approach may prove to be quite

effective among adolescents considering that a recent Canadian study revealed that adolescents are more concerned about mental health than mental illness (6). According to Blum (7), adolescents' life styles and their tendency to take risks contribute strongly to mortality and new morbidities such as depression, substance abuse, and physical and sexual abuse. To date, however, adolescent mental health programs have often been too abstract and have failed to take into account the beliefs and experiences of adolescents themselves (8). As pointed out by a US Joint Commission on Mental Health of Children (9), preventive programs must be planned with youth, not for youth, and they must be developmentally tailored so as to match strategies to adolescents. There is a lack of consensus about these programs, however. While they foster changes in individuals through the development of competence to prevent symptoms (primary prevention), many people remain pessimistic about the possibility of changing life styles. These people, mostly clinicians, emphasize secondary prevention instead (intervention after symptoms have appeared, according to Caplan's concepts of prevention [10]).

A large number of adolescents report a lack of knowledge concerning mental health (11,12). The only information available about adolescents' perspectives on prevention pertaining to mental health is, in fact, from studies focusing primarily on physical health. In those studies, some important gender and age differences among adolescents have been observed. For example, Parcel and others (11) suggest that adolescent girls give more importance to prevention than do boys. They see their problems as more serious than boys do and are thus more inclined to ask for help. In addition, preventive behaviours among adolescents decrease with age

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(13), while drug problems and suicide rates increase tremendously from early to late adolescence (14). Older teenagers are less inclined to ask for help (15) and are more influenced by the health habits of their peers, especially in regard to drug use (16), than younger adolescents. In a sample of tenth- to twelfth-graders, an individual's drug use was strongly associated with peer drug use (17). These findings are related to many factors such as culture and life cycle of the family as well as that of the individual. Different results for adolescents of different ages, for example, suggest the importance of the passage of time in explaining multiple changes (biological, cognitive, psychosocial) occurring during this period (18).

Because information concerning adolescents' perspectives on prevention of mental health is scarce, a pilot study was designed to address the issue. The subjective axis of mental illness prevention was assessed through the adolescents' perceptual construct of prevention. Because adolescents' life style seems important for their mental health and because more than one determinant of behaviour is needed in the study of prevention (12), the model proposed by Fishbein in Ajzen and Fishbein (19) appeared particularly suited to our study. This model takes various components of behaviour into account: cognitive (beliefs, knowledge), attitudinal, normative (peers' norms), and behavioural. According to Ajzen and Fishbein (19), individuals will tend to behave in a particular manner if they feel that the behaviour is important (that attitude is itself derived from beliefs and knowledge about the behaviour) and if they think the people they value feel the same way (in adolescence, the influence of the peer group is particularly important). Thus, according to the model, attitudes and norms are good predictors of actual behaviour.

In this study, the antecedents of behaviour outlined by Fishbein were examined in regard to gender and age. Primary prevention was the main focus. Because coping with stress is an important mental health concern to adolescents (11), this aspect of prevention (which relates to both primary and secondary prevention) was also explored in regard to adolescents' ability to acknowledge psychological problems and stresses and to find ways to overcome them. Acknowledgement of problems, as well as the appropriate handling of them, does promote adolescents' mental health. Although Fishbein's model has been used previously to measure these components of human behaviour, it has never been applied specifically to adolescents' mental health.

In accordance with prevention models, an emphasis was put on positive aspects of mental health instead of focusing on mental illness. For example, the teenagers were asked to define mental health rather than mental illness and to give their opinions about overcoming psychological problems instead of serious mental illnesses.

## Method

### *Sample and Procedure*

The original sample consisted of 486 teenagers from 2 public high schools. Subjects were living in a middle-class, suburban area of Montreal. Since cultural issues were not the

focus of the study, the homogeneity of the sample was increased by including only those teenagers whose parents were both born in Quebec and whose spoken language at home was mainly French ( $n = 438$ ). Students were met in their classrooms during regular school hours, and arrangements were made to assess all subjects during the same time period.

The 438 subjects were distributed evenly between 2 grades (grade 8,  $n = 218$ , mean age = 14.0 years,  $SD = 0.69$ ; grade 11,  $n = 220$ , mean age = 16.7 years,  $SD = 0.47$ ) and genders (233 girls and 205 boys). The marital status of the parents did not differ according to either age ( $\chi^2(4) = 2.05$ ) or sex ( $\chi^2(4) = 1.49$ ). Missing data were minimal and were distributed evenly in all parts of the questionnaire; means were computed with the remaining data.

### *Measures*

A 4-part, self-administered questionnaire was used to examine antecedents of mental health behaviour. All but the second part of the questionnaire was developed specifically for the study. The students were first asked to define mental health. The responses to this open-ended question were categorized along dimensions used in previous research (20) to define mental health within 1) a positive versus negative dimension (someone is secure versus insecure); 2) an objective versus a subjective dimension (someone who is autonomous versus someone who feels happy); and 3) a biopsychosocial dimension, which includes 7 categories (biological, psychological, social, biopsychological, biosocial, psychosocial, biopsychosocial). Two independent judges coded the responses along each of these 3 dimensions (interrater agreement was 86%).

The second part of the questionnaire consisted of 3 vignettes depicting an adolescent (the same sex as the subject) with a psychological problem, namely, a family problem, a drug problem, and a depression problem (Table I). These vignettes were preadministered to many adolescents of various ages and reworded to ensure that they were perceived as psychological problems. Each problem was followed by a list of 26 statements reflecting beliefs and knowledge that might contribute to an individual's ability to overcome psychological problems. This list was developed by Knapp and Karabenick (21) and modified by Furnham and Henley (22). Since this measure was intended for use with adults, a few items were modified to make them more appropriate for adolescents. The subjects rated the importance of each contributor on a 10-point scale (0 = not important at all; 9 = extremely important). Cronbach's alphas were 0.85, 0.89, 0.90 for the family, drug, and depression problems, respectively, indicating that the scale was internally consistent.

The third part of the questionnaire consisted of a list of preventive behaviours (Table II). This list was derived from interviews with normal adolescents, from Zins and Ponti (23), and from Jessor (5). A few common beliefs about prevention were added to the list, resulting in a final list of 19 behaviours. Cronbach's alpha for all 19 behaviours was 0.79, indicating good internal reliability. Upon reading the list, the subjects rated on a 5-point scale (1 = not important at all; 5 = essential)

Psychological Problem	Vignette
A family problem	Luc is a boy your age who lives with his mother who is separated. Luc's relationship to both his parents is not good. He had refused to see his father regularly and now they do not even talk to each other. Luc's mother works at night and she has a boyfriend. Luc and his mother rarely talk to each other; there is a distance between them. Luc is upset by his family situation.
A drug problem	Pierre is a boy your age who drinks and smokes dope regularly. According to him, this is not a problem. His school marks are not bad, he has many friends and he is very popular.
A depression problem	Gilles is a boy your age who is sad. He has many problems at home, at school, and with friends. Gilles wonders if life is worth living. He is withdrawing more and more.

For female subjects, female names were used and texts were modified accordingly.

the importance they gave to each preventive behaviour as a means of preserving or enhancing their mental health (attitudes towards prevention). On a similar scale, they rated the importance they thought their peers would give to the same behaviours (subjective norms).

In the last part of the questionnaire, the students were given a list of related mental health issues relevant to their age. To gauge their need for information on mental health, they were asked to choose 3 items about which they felt the need for most information and to choose their preferred means of obtaining that information from a specific list.

The face validity of the entire questionnaire was evaluated by a group of mental health professionals. The questionnaire had been previously piloted on 24 adolescents, and test-retest reliability for 17 of the 24 subjects who completed the questionnaire twice over a 4-day interval was high ( $r = 0.89$ ).

## Results

### Definition of Mental Health

A small proportion of adolescents (11%) were unable to define mental health at all. Younger adolescents were more likely than older adolescents to be unable to give a definition ( $\chi^2(1) = 5.89, P < 0.05$ ).

**Positive-Negative Dimension.** Of the subjects who did give a definition, 57% conceived mental health as a positive entity distinct from mental illness or any other negative attribute; 24% of subjects gave a definition including both positive and negative aspects of the construct. There were no significant differences according to age ( $\chi^2(2) = 2.63, P > 0.05$ ) or gender ( $\chi^2(2) = 3.51, P > 0.05$ ).

**Objective-Subjective Dimension.** Among the adolescents who defined mental health, 51% gave an objective definition, while 21% gave a subjective definition. The remaining adolescents (28%) included both subjective and objective components of the concept in their definitions. There were no significant sex differences ( $\chi^2(2) = 2.70, P > 0.05$ ), but older adolescents more often gave definitions including both objective and subjective aspects ( $\chi^2(2) = 28.44, P < 0.05$ ).

**Biopsychosocial Dimension.** There were no significant differences between boys and girls ( $\chi^2(6) = 6.76, P > 0.05$ )

on the biopsychosocial dimension, but again a significant difference was found for age ( $\chi^2(6) = 28.52, P < 0.05$ ). Younger (grade 8) students more often gave biological definitions, while older (grade 11) students focused more on the social aspect, twice as frequently emphasizing the more integrated biopsychosocial dimension.

### Overcoming Psychological Problems

Ratings of importance for the 26 contributors for each of the 3 problems are presented in Table III. The great variability between mean ratings (1.6 to 7.8) indicates that the contributors are considered of differing importance both within and between the problems.

To examine in more detail the differential importance of

Preventive Behaviours	Mean
1. To be active physically	3.86
2. To look for peer approval	3.54
3. To resist peer pressure to take drugs	3.90
4. To go to bed early	3.45
5. To engage in activities that make one feel competent	4.12
6. To refrain from alcohol abuse	3.93
7. To appear strong and invulnerable	3.05
8. To express one's own feelings and ideas	4.26
9. To look for perfect school marks	3.67
10. To confide in someone	4.14
11. To have hobbies	4.40
12. To develop problem-solving skills	4.30
13. To pursue goods and belongings excessively	2.85
14. To foresee and prepare for difficulties ahead	3.97
15. To let go	4.26
16. To have friends	4.72
17. To know oneself	4.34
18. To try to please everyone	3.12
19. To get along with one's parents	4.46

Contributors	Problems		
	Family	Drug	Depression
1. How hard the person tries	6.48	7.08	6.69
2. How much willpower (inner strength) the person has	6.80	7.20	7.10
3. How lucky the person is	2.67	2.16	2.71
4. Whether the person gets help from a school social worker or counsellor	6.92	6.55	7.10
5. Whether the person gets help from someone at the local health centre	5.48	6.37	6.28
6. Whether the person gets help from a family doctor	4.39	5.25	5.08
7. Whether the person makes a phone call to a hot-line for adolescents	5.91	5.92	6.91
8. Whether the person gets help from an adolescent psychiatrist	6.23	5.94	6.85
9. The person's general ability to overcome problems	6.07	5.92	5.90
10. Whether the person believes it is possible to eliminate the problem	6.91	7.14	7.28
11. How embarrassed the person feels about having the problem	5.62	6.52	6.44
12. How damaging the problem is to the person's self-esteem	4.93	5.42	5.51
13. How much eliminating the problem would please others	3.00	3.36	3.54
14. How much the person understands about the underlying reasons for the problem	7.24	7.20	7.23
15. How much self-control the person has	6.83	7.11	6.92
16. Whether the person confides in his (her) mother	7.83	6.24	7.18
17. Whether the person confides in his (her) father	6.99	6.18	7.12
18. Whether the person confides in his (her) friends	6.67	6.84	7.54
19. Whether the person gets help from one of his (her) teachers	5.40	5.24	6.19
20. How intelligent the person is	3.78	4.02	4.01
21. How much the person believes in God	1.86	1.62	1.91
22. How much the person stays away from others with similar problems	1.85	4.63	2.91
23. Whether there is something wrong with the person's brain or nervous system	2.61	2.94	2.66
24. Whether the person's mother and/or father have a similar problem	4.80	4.11	4.20
25. Whether the person and his (her) parent(s) get professional help together	6.26	5.60	5.69
26. Whether the person joins a self-help group for youth	6.43	6.78	7.01

the 26 contributors, a principal components analysis (using VARIMAX rotation) was computed on the 26 variables for each problem. In 2 problems (family and drug problems), 5 factors had an eigenvalue above one. In these 2 cases, the 5 factors accounted for 53% and 58% of the variance, respectively, and were almost identical in their structure. For the depression problem, the factor structure yielded a universal factor accounting for most of the variance, making differential analysis impossible. For the family and drug problems, the first factor was labelled *professional help*, since items loading highly on this factor related to obtaining help from outside the family or outside the circle of friends. The second factor was labelled *inner control* and included items relating to willpower and self-control. The third factor was labelled *fate/avoidance*; items loading on this factor indicate that luck, belief in God, and avoidance of people with the same problem were considered important to overcoming the problem. The fourth factor was labelled *receiving help from parents or friends* because the corresponding items related to confiding in parents or friends. The fifth factor, labelled *self-*

consequence, reflected the problem's impact on the subject. These 5 factors were somewhat comparable to those found by Furnham and Henley (22), who named their factors *inner*

Factors	Family Problem	Drug Problem	<i>t</i> Level
1. Professional help	5.90 (4)	6.00 (4)	1.23
2. Inner control	6.73 (2)	7.00 (1)	3.73 <sup>a</sup>
3. Fate/avoidance	2.60 (5)	3.09 (5)	6.96 <sup>a</sup>
4. Receiving help from parents or friends	7.16 (1)	6.41 (2)	6.60 <sup>a</sup>
5. Self-consequence	5.97 (3)	6.41 (2)	4.59 <sup>a</sup>

Numbers in parentheses are the ordered ranks for the importance of each factor.  
<sup>a</sup>*P* < 0.05.

**Table V**  
**Means by Sex and *t* Values from the *t* Tests of the Totalled Factor Scores**

Factors	Family Problem		<i>t</i> Level	Drug Problem		<i>t</i> Level
	Female	Male		Female	Male	
1. Professional help	6.13	5.58	3.00 <sup>a</sup>	6.29	5.56	3.51 <sup>a</sup>
2. Inner control	6.64	6.82	1.19	6.96	6.92	0.23
3. Fate/avoidance	2.46	2.81	2.05 <sup>a</sup>	2.93	3.34	2.26 <sup>a</sup>
4. Receiving help from parents or friends	7.27	7.04	1.26	6.41	6.43	0.11
5. Self-consequence	5.92	5.93	0.06	6.50	6.23	1.36

<sup>a</sup> $P < 0.05$ .

control, understanding/help, avoidance, physical basis, and fate.

To examine if these factors were differentially important for the 2 problems, the mean score of the items loading 0.40 or higher on a given factor was computed and divided by the number of items. The means and the *t* values from paired *t* tests of the total factors scores are shown in Table IV. The ordered rank for the importance of each factor is also indicated, showing that the importance given to a factor depends on the type of problem experienced.

Tables V and VI include data on the effects of gender and age on perceptions of the importance of contributors. Obtaining professional help for family or drug problems was seen as significantly more important by girls, while boys believed more in fate and the use of avoidance to overcome these problems (see Table V). As shown in Table VI, older adolescents valued confiding in parents or friends for both problems more highly than younger adolescents did. They also rated inner control and self-consequence for the drug problem and professional help for the family problem more highly than the younger subjects. Younger adolescents were more likely to perceive the family problem as fate, and they tended to endorse the use of avoidance to deal with family difficulties.

### Preventive Behaviours

As shown in Table II, the mean importance ratings of the 19 preventive behaviours are relatively high (mean = 3.86). These ratings were factor-analyzed. The root-one criterion and scree test yielded 5 factors accounting for 54% of the variance. Factor 1 was labelled *positive outlook/active approach*. Items loading on this factor related to having a positive view about preventive behaviour and being active. Items loading on Factor 2, labelled *communication/self-knowledge*, related to understanding and expressing oneself and having relationships. Factor 3 was labelled *approval*, since many loading items suggested the need to please others. Factor 4 was labelled *drug prevention*, as the 2 items loading on this factor were related to drugs and alcohol. Items loading on Factor 5, labelled *invulnerability*, included showing strength and fearlessness.

The mean score of items loading 0.40 or higher on a given factor was computed and divided by the number of items, yielding the rated importance means of the totalled factor scores and their rank of importance (Table VII). Girls gave significantly more importance to self-understanding and expression, whereas boys favoured social approval (Table VIII). To be positive and active and to understand and express oneself were considered more important behaviours by older adolescents than younger ones (Table IX).

There was a significant correlation ( $r = 0.52$ ,  $P < 0.05$ ) between adolescents' attitudes towards preventive behaviours and their perceived peers' attitudes towards the same behaviours (subjective norms), suggesting an association with peers' attitudes in prevention. The subjective norms yielded no significant gender differences ( $t(422) = 1.24$ ,  $P < 0.05$ ), but an age difference was observed ( $t(423) = 3.89$ ,  $P < 0.05$ ). Older adolescents thought that their peers considered prevention more important than younger adolescents.

### Information about Mental Health

The mental health issues for which adolescents believed they needed the most information were choosing a career (26% of the subjects), controlling stress (11%), and getting along with parents (9%). Other items less often chosen were depression in adolescence, how to gauge one's own mental health, how to control emotions, and suicide in adolescence. The distribution of responses did not show any significant difference between boys and girls ( $\chi^2(13) = 20.80$ ,  $P > 0.05$ ), but was significantly different between younger and older adolescents ( $\chi^2(13) = 48.11$ ,  $P < 0.05$ ). Younger adolescents wanted more information about how to get along with parents, whereas older adolescents wanted more information on stress control. Their preferences for getting that information were from a friend (25% of the subjects), from parents (24%), and from a mental health specialist (23%). Other sources less often chosen included a resource person in school, school courses, and the media. Family doctors and clergymen were rarely chosen. The distribution of choices did not show any significant gender difference ( $\chi^2(13) = 15.14$ ,  $P > 0.05$ ), but a significant age difference was found ( $\chi^2(13) = 61.83$ ,  $P < 0.05$ ). Younger adolescents preferred to obtain information from their parents, while older ones stated their preference to receive information from a mental health specialist.

**Table VI**  
**Means by Grade and *t* Values from the *t* Tests of the Totalled Factor Scores**

Factors	Family Problem		<i>t</i> Level	Drug Problem		<i>t</i> Level
	Grade 8	Grade 11		Grade 8	Grade 11	
1. Professional help	5.51	6.22	3.91 <sup>a</sup>	5.84	6.07	1.12
2. Inner control	6.43	6.98	3.60	6.65	7.23	3.44 <sup>a</sup>
3. Fate/avoidance	2.84	2.44	2.29 <sup>a</sup>	3.21	3.03	0.97
4. Receiving help from parents or friends	6.74	7.55	4.61 <sup>a</sup>	6.18	6.65	2.08 <sup>a</sup>
5. Self-consequence	5.87	5.98	0.54	6.17	6.59	2.12 <sup>a</sup>

<sup>a</sup> $P < 0.05$ .

## Discussion

This study reveals some interesting findings with regard to individual differences and developmental aspects of prevention in mental health. These findings are very important in understanding adolescents' perspective concerning prevention and could contribute to the development of social policy regarding adolescent mental health. For example, the results may help to identify areas suitable for mental health promotion and education.

The concept of mental health was defined by a significant proportion of the subjects as separate from mental illness. This suggests that for adolescents, the concept is becoming separate from the myths and misconceptions that still plague mental illness (24). No gender differences were found in conceptualizations of mental health, but there was an important change between early and late adolescence. More often, younger adolescents could not give an accurate definition of mental health and focused primarily on its biological dimension. Older adolescents held a more global conception, thus confirming what Eiser (25) had found for the concept of health in general.

The results of our study reveal that adolescents perceive prevention in the area of mental health as important. The study was designed to measure adolescents' knowledge and attitudes toward both primary prevention (promotion of mental health through an appropriate life style and development of competence) and secondary prevention (coping mechanisms for a psychological problem). Some interesting links emerged between the 2 measures. *Communication/self-knowledge*, which ranked first among the factors connected to attitudes, was highly related to inner control and obtaining help from intimate people, both important strategies in overcoming psychological problems. This correspondence between 2 independent measures lends validity to our results. Displaying invulnerability and looking for social approval, 2 attitudes reflecting popular beliefs about prevention, were rated low, as was *fate/avoidance*, a factor related to popular beliefs about overcoming problems. This suggests that our adolescent population had some degree of sophistication in regard to prevention and was not unduly influenced by popular beliefs. This finding should be interpreted cautiously, however, as other factors such as the use of denial by the

adolescents may have been operative. Our data fit nicely, though, with Kutcher and others' (6) findings: adolescents engage by and large in healthy methods of dealing with stress.

Although boys and girls perceived mental illness prevention in a similar way, there were a few important differences. Girls viewed understanding and self-expression as more important; consequently, they were more inclined to indicate the importance of obtaining professional help when confronted with a problem. The reverse was true for boys, whose belief in fate and avoidance to overcome problems could explain why they placed less value on obtaining help. These data corroborate previous findings which suggest that in regard to their physical health (11) and to some aspects of mental health (22), girls have been found to attribute more importance to prevention. One has to take into account, though, that girls' help-seeking behaviour and their greater tendency to express distress can be attributed to issues other than prevention.

Our results did not confirm that younger adolescents place a higher value on prevention as was reported by Miller and others (13). In our sample, older adolescents gave more importance to prevention, had a more global conceptualization of mental health, emphasized a more active approach to prevention, and relied more on inner control and seeking help to overcome problems. Two important differences between Miller and others' study and the current one is that the former was carried out over 15 years ago and focused on physical health. In addition, the influence of peers was perceived in our study to be of greater importance to prevention by older adolescent subjects. These results deserve further exploration.

Adolescents' responses to problems were influenced by the type of problem on which they were asked to comment. For example, subjects attributed more importance to inner control for overcoming a drug problem, while they would rather talk to parents or friends for a family problem. One can argue that they perceived the drug problem as particularly personal and consequently more under the individual's control. The value placed on inner control did not, however, decrease the relative importance given to receiving help (professional help was of equal importance for both problems). It would appear that these adolescents did not believe they could handle a drug problem on their own. According to

Henley and Furnham (26), who reported similar findings, the 2 strategies are not mutually exclusive. Helpers may be a source of suggestions, but the successful implementation of their advice depends on the personal effort of the individual.

Friendship, which is so important in adolescence, can also play a major role in prevention concerning mental health. Talking with friends was rated as a major contributor to problem-solving and as the first source of information about mental health. The general influence of peers was also confirmed for both younger and older adolescents, and their usefulness in adolescent mental health programs is certainly an area worthy of further investigation.

Contrary to previous belief (27), the adolescents in this study perceived their parents as important to their mental health, particularly so in terms of problem-solving for older adolescents and as a source of information for younger ones. Younger adolescents also felt they needed information about their relationship with parents. These findings are given some validity by Kutcher and others (6), who found that adolescents would approach family members and friends for help with personal problems. The prominence attributed by our subjects to their parents' help is also supported by studies such as Offer and Offer's (28), which do not assume major psychological disruptions in family relations in adolescence but instead a continuing meaningful relationship between youth and their parents. In the first phase of adolescence, the younger subjects may need, however, to overemphasize autonomy from parents, while the older ones may have less need to demonstrate their independence. When in need of mental health information, younger adolescents indicated they would go to their parents. This kind of parental help is probably perceived by youngsters as less emotionally charged than other kinds of parental help.

It is interesting to note that family doctors were not perceived by many teenagers as a source of information concerning mental health. While family physicians may not be adequately trained to deal with adolescents' mental health problems, these physicians are often the first to be consulted by adolescents with various somatic complaints. These findings suggest a neglected area of education in the training of family physicians.

For 2 of the 3 problems presented to the adolescents, the data confirm the factor structures found by Furnham and Henley (22) concerning ways of overcoming problems. The difference between subjects' ages in their study (mean = 19 years, SD = 6.1) and in ours (mean = 15.4 years, SD = 1.5) could explain some of the differences in the factor analysis and the particular factor structure we found for the depression problem. Our subjects seemed to have been overwhelmed by this problem and tended to use most of the contributors listed to solve it. This may suggest that depression, which occurs relatively often in adolescence, is especially threatening and has a strong impact on this age group.

The topics that adolescents most wanted information about were useful in revealing their current preoccupations and stresses. In general, uncertainty about the future seems to be a prominent worry. In particular, adolescents were preoccu-

Factors	Mean (Rank)
1. Positive outlook/active approach	4.03 (2)
2. Communication/self-knowledge	4.39 (1)
3. Social approval	3.29 (5)
4. Drug prevention	3.91 (3)
5. Invulnerability	3.76 (4)

Factors	Mean		t Level
	Girls	Boys	
1. Positive outlook/active approach	3.98	4.08	1.53
2. Communication/self-knowledge	4.50	4.25	4.48 <sup>a</sup>
3. Social approval	3.17	3.42	3.16 <sup>a</sup>
4. Drug prevention	3.96	3.86	0.92
5. Invulnerability	3.80	3.71	1.26

<sup>a</sup>P < 0.05.

Factors	Mean		t Level
	Grade 8	Grade 11	
1. Positive outlook/active approach	3.83	4.22	6.18 <sup>a</sup>
2. Communication/self-knowledge	4.30	4.47	2.86 <sup>a</sup>
3. Social approval	3.31	3.28	0.37
4. Drug prevention	3.83	4.00	1.42
5. Invulnerability	3.70	3.82	1.61

<sup>a</sup>P < 0.05.

ped with choosing a career. Their need for information about how to control stress confirms that they are also under pressure.

Even in these times of fiscal austerity when the high cost of treatment makes spending on prevention programs more attractive, some clinicians are still indifferent to prevention. To respond to the population's needs, it is crucial to examine our current preventive programs and some of our clinical practices. In this regard, the present findings are of both theoretical and practical value in both the treatment of adolescents and in the planning of mental health programs for that population. Even though the study did not examine whether or not subjects actually practise prevention, knowing how adolescents understand the antecedents of preventive behaviour helps to define the areas suitable for education or

other intervention programs. The differential importance of contributors to overcome particular problems as a function of age and sex of the adolescents may also influence clinicians who treat adolescents. Furthermore, older adolescents, who believe more in inner control than younger ones do, are likely to be more receptive to modalities of treatment such as psychotherapy, which advocates inner control. Finally, the use of parents' resources to reach and treat their adolescents cannot be overlooked.

Because the sample was drawn from middle-class, French-Canadian, suburban adolescents, these findings may not be applicable to other Canadian or American cultural groups. Distinctive features of French-Canadian culture could explain the weight given to factors such as peers or family; it is probable, however, that a general, adolescent, North American culture also prevails among French-Canadian youth. Future investigations should include both adolescents living in Quebec and elsewhere in order to better circumscribe adolescents' perspectives on prevention concerning mental health, especially in regard to their social class and culture.

#### Clinical Implications

- Peers and friends are an untapped resource in reaching and treating adolescents' mental health problems.
- Parents are still a good resource for their adolescent's treatment.
- Older adolescents, especially females, could be more receptive to psychotherapy than younger adolescents, males in particular.

#### Limitations

- The study does not indicate whether adolescents do, in fact, practise prevention in regard to mental health.
- The influence of culture on adolescents' perception of prevention concerning mental health was not addressed.

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#### Résumé

**Objectif :** Examiner plusieurs composantes subjectives du comportement des adolescents dans une perspective de prévention des maladies mentales.

**Méthode :** On a mesuré les connaissances, les attitudes et les normes subjectives des adolescents, de même que leurs réflexions quant à la manière dont ils résoudreiraient concrètement un problème psychologique. Quatre cents trente-huit adolescents et adolescentes de 8<sup>e</sup> et de 11<sup>e</sup> année ont rempli eux-mêmes un questionnaire.

**Résultats :** Des différences d'âge et de sexe sont apparues : les filles et les adolescents plus âgés étaient davantage en faveur de la prévention. De plus, l'influence des pairs et des parents sur les jeunes était également manifeste.

**Conclusion :** Les adolescents perçoivent l'importance de la prévention en matière de santé mentale.