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Chapter 4

Coping Skills Among Adolescent Suicide Attempters: Results of a Multisite Study

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Objectives: A multisite study was undertaken to advance our understanding of how coping skills, depression, and suicidal ideation are related among adolescents who attempt suicide. Two hypotheses were postulated: productive coping and nonproductive coping would be associated, respectively, with lower and higher depression scores when age, sex, and stressful life events (SLEs) were controlled; and productive coping and nonproductive coping would be associated, respectively, with the presence and absence of suicidal ideation when age, sex, and SLEs were controlled.

Methods: Participants were 167 adolescents (13 to 17 years of age) hospitalized for attempting suicide in 5 pediatric departments across France. Four instruments were administered: the Kiddie Schedule for Affective Disorders and Schizophrenia—Present and Lifetime Version, the Adolescent Coping Scale, the Life Events Questionnaire, and the Columbia-Suicide Severity Rating Scale. Descriptive analyses and univariate and multiple regression models were completed.

Results: Both hypotheses were confirmed. Focus on the positive emerged as a significant variable in both models; depression emerged as a significant variable in the suicidal ideation model. The only sex difference observed was that girls made greater use of wishful thinking and seek social support.

Conclusions: These findings suggest that coping skills are important mechanisms through which depression and suicidal ideation are maintained after attempting suicide. In intervening with adolescents who have attempted suicide, it may be useful to emphasize cognitive work geared to looking on the bright side, positive thinking, and fighting depression.

Habiletés d'adaptation chez des adolescents ayant fait une tentative de suicide : résultats d'une étude multisite

Objectifs : Une étude multisite a été entreprise afin d'approfondir notre compréhension de la relation entre les habiletés d'adaptation, la dépression et l'idéation suicidaire chez les adolescents qui tentent de se suicider. Deux hypothèses ont été émises : l'adaptation productive et l'adaptation non productive seraient respectivement associées aux scores de dépression faibles et élevés, après contrôle pour l'âge, le sexe, et les événements stressants de la vie (ESV); et l'adaptation productive et l'adaptation non productive seraient respectivement associées à la présence et à l'absence d'idéation suicidaire, après contrôle pour l'âge, le sexe, et les ESV.

Méthodes : Les participants étaient 167 adolescents (de 13 à 17 ans) hospitalisés pour une tentative de suicide dans 5 départements pédiatriques de France. Quatre instruments ont été administrés : la *Kiddie Schedule for Affective Disorders and Schizophrenia—Present and Lifetime Version*, *l'Adolescent Coping Scale*, le *Life Events Questionnaire*, et la *Columbia-Suicide Severity Rating Scale*. Des analyses descriptives et univariées, et des modèles de régression logistiques ont été effectués.

Résultats : Les deux hypothèses ont été confirmées. « Se centrer sur le positif » s'est révélé être une variable significative dans les deux modèles; et la dépression s'est avérée être une variable significative dans le modèle d'idéation suicidaire. La seule différence selon le sexe observée était que les filles prenaient davantage leurs rêves pour des réalités et cherchaient un soutien social.

Conclusions : Ces résultats suggèrent que les habiletés d'adaptation sont d'importants mécanismes par lesquels la dépression et l'idéation suicidaire sont maintenues après une tentative de suicide. En intervenant auprès d'adolescents qui ont tenté de se suicider, il peut être utile de mettre l'accent sur le travail cognitif axé sur une vision optimiste, une pensée positive, et une lutte contre la dépression.

Suicidal behaviours are a major public health problem. For decades, suicide has remained one of the leading causes of death in the the Western world's adolescent population.[1] In France, suicide rates among young people have been relatively stable for 30 years. Suicide rates among 15 to 19 year olds vary between 5.5 per 100 000 in 1980 and 4.5 per 100 000 in 2007, with an important sex ratio of 1 girl:3 boys, respectively, (2.1 and 5.9 per 100 000, respectively).[2] In Canada, suicide rates among male adolescents (aged 15 to 19 years) showed a general trend from 19.0 per 100 000 in 1980 to 12.1 per 100 000 in 2008.[3] Conversely, among female adolescents (aged 15 to 19 years), suicide rates increased during the same period, from 3.7 per 100 000 to 6.2 per 100 000.[3] In Quebec, during the 1990s, there was a progressive increase of suicide rate among adolescents (aged 15 to 19 years) peaking in 1999 with a rate of 10 per 100 000 for girls and around 30 per 100 000 for boys. In 2010, this rate was divided by 3 for girls and boys, 3.7 and 10.6 per 100 000, respectively.[4] However, in both countries, suicide attempts are constantly increasing.[5,6] The mental disorder most strongly associated with suicide is MDD with a contribution exceeding 60%.[7,8] In the light of the latest literature,[9–12] depressive disorders and suicidal behaviours can be considered to derive from the complex interactions across biological, psychological, familial, social, and cultural factors. Breton et al[13] have proposed an integrative theoretical model in community and clinical settings where depression and suicidal behaviours in adolescents are products of the interactions between risk and protective factors. A detailed description of this model is presented in a companion paper.[13]

Coping skills are one of the protective factors identified as potentially involved in the suicide process.[14,15] Against this background, we undertook a study focused specifically on coping to gain a better understanding of its role in depression and suicidal ideation in adolescence.

Clinical Implications

- Our results suggest that it could be interesting to develop psycho-educational interventions targeting productive coping strategies for the treatment and prevention of adolescent depression.
- Our results help to better understand and prevent suicide after a suicide attempt.

Limitations

- Our study presents typical limitations of a cross-sectional study.
- Our study is also limited by the Berkson bias.

Abbreviations

BDI	Beck Depression Inventory
DSM	Diagnostic and Statistical Manual of Mental Disorders
MDD	major depressive disorder
SLE	stressful life event

Coping Skills Studies

According to the model developed by Frydenberg and Lewis,[16] 2 coping styles are distinguished: functional (productive) and dysfunctional (nonproductive). According

to these authors, there are 10 functional coping strategies for facing a problem directly and 8 dysfunctional coping strategies for solving problems by way of distancing or avoidance.[17] The role of coping skills in depression and suicidal behaviour has been explored in various studies[18,19] in community samples of young adults, in community samples of adolescents,[10,20–23] and in the clinical population of adolescents.[24–27] In recent studies[18,19,23] of a community sample, productive coping strategies were found to be negatively associated with depression and suicidal behaviour. In a prospective study, Nrugham et al[23] demonstrated that coping, defined as 3 stable, yet modifiable traits, varied in part by age, depression, and suicidal behaviour. In clinical population studies that have examined the relation between nonproductive coping strategies and adolescent depression, it has been suggested that the use of emotion-focused coping[24,25] or avoidant coping[25,27] was linked to higher levels of depressive symptoms. Conversely, problem-focused coping was found to be negatively associated with depression in both community and clinical samples.[18,27] In a broad literature review, Speckens and Hawton[28] concluded that adolescents with a history of suicidal behaviour presented more with problem-solving deficits than adolescents without. In addition, the literature[18,20–22] indicates that an association exists between suicidal behaviour and coping skill deficits even after controlling for current depression.

Differences in coping with mood disorders have been reported as well between the sexes. Li et al[27] showed that girls with depression used more emotion-focused and ruminative coping than boys. In adult populations, studies by Yamada et al[29] and Nolen-Hoeksema[30] indicated that men were more likely to engage in distracting behaviours that dampened their depressive mood, whereas women were more likely to amplify their mood by ruminating. According to the literature review by Christensen and Kessing,[31] the general tendency was for men to distract themselves using active coping strategies, whereas women used strategies involving the expression of emotion. It has been suggested that these factors of a cognitive nature could explain sex differences regarding depression and suicidal behaviours in adolescence.[32,33] It might be that girls and boys tend to cope differently and that the coping styles adopted by girls put them at greater risk of experiencing depression and suicidal ideation. However, most studies have not taken sex into consideration. Further, few studies have been carried out with clinical adolescent populations, clinical features have not been defined clearly enough, and semi-structured diagnostic interviews have rarely been used.

Aim and Hypothesis

Against this background, we undertook a multisite study to advance our understanding of how coping skills, depression, and suicidal ideation are related among adolescents who have attempted suicide. Based on our literature, we postulated 2 hypotheses: productive coping and nonproductive coping would be associated, respectively, with lower and higher depression scores when age, sex, and SLEs were controlled; and productive coping and nonproductive coping would be associated, respectively, with the presence and absence of suicidal ideation when age, sex, and SLEs were controlled.

Methods

Participants

Our study sample consisted of adolescents aged 13 to 17 years admitted to a hospital pediatric department for attempted suicide and enrolled in our multisite longitudinal study of tertiary prevention of suicidal behaviour among French adolescents, titled "Evaluation of different postdischarge follow-up strategies used with adolescent suicide attempters." Five recruitment and follow-up care sites were involved in the project: Rouen University Hospital, Amiens University Hospital, Compiègne Public Mental Health Facility, Meaux General Hospital, and Creil General Hospital. Under French national clinical practice guidelines, all children and adolescents taken to emergency departments for attempted suicide must be hospitalized. The event qualified as an attempted suicide if it met the World Health Organization's definition.[1] Accordingly, suicidal intent had to be front and centre. This same definition was used in the recent study by Posner et al[34] to quantify severity of suicidal ideation and behaviour. In France, adolescents who perform acts of self-harm without suicidal intent are not routinely hospitalized. Consequently, they were not included in our study. Patients had to meet the following inclusion criteria:

1) 13 to 17 years of age at admission;
2) absence of prominent mental retardation or organic brain damage;
3) able to understand study procedures and undergo entry assessments safely;
4) discharge to a residence within reach of follow-up contacts and assessments; and
5) provide written informed consent for study participation and additional consent provided by parents or guardians.

From January 2011 to July 2012, 219 adolescents were eligible for the study. Among these, 167 (80%) participated in the study. The sociodemographic characteristics of the overall sample are presented in Table 1.

Procedures

Data were collected through self-administered questionnaires and face-to-face interviews. Consent was obtained from both the adolescents and their parents or guardians. An informative and age-appropriate memo was handed out to the adolescents and a separate one to the parents. Entry assessment was performed over more than one interview to avoid exhausting the patients. The interviewers were psychiatrists and psychiatric residents with more than 2 years of clinical experience in psychiatry. They received training before conducting the assessments. All assessments were individually reviewed by our study group. Participants were informed that their responses

Table 1 Sociodemographic and clinical characteristics, total sample (*n* = 167)

Variable	*n* (%)
Sex	
Boys	32 (19.0)
Girls	135 (81.0)
Age group, years	
13–14	70 (42.0)
15–17	97 (58.0)
Living arrangement	
With biological parent	78 (46.5)
With mother or father only	49 (29.5)
With mother or father with spouse	28 (17.0)
Other	12 (7.0)
Repeated grade at school	
Yes	64 (39.0)
No	103 (61.0)
Axis I diagnoses (DSM-IV-R)	
Major depressive disorders	49 (32.0)
Adjustment disorder with depressed mood	45 (25.0)
Anxiety disorders	38 (22.0)
Posttraumatic stress disorders	6 (3.5)
Psychotic disorders	1 (0.5)
Substance-related disorders	11 (7.0)
Oppositional defiant disorder	18 (10.0)
Disruptive behaviour disorder	7 (4.2)
Alcohol abuse	11 (6.6)
Suicide method	
Intoxication	142 (85.0)
Phlebotomy	11 (7.0)
Strangulation	9 (5.0)
Other	5 (3.0)
Previous suicide attempts	
1	9 (5.5)
2	12 (7.0)
≥3	15 (9.0)

DSM = Diagnostic and Statistical Manual of Mental Disorders

would remain confidential and that they could withdraw from the study at any time without consequences for their treatment. The study was approved by the Nord-Ouest I (Rouen University Hospital, Rouen, France) Group Ethics and Medical Research Committee.

Measures

Interview

The Kiddie Schedule for Affective Disorders and Schizophrenia—Present and Lifetime version is a well-established, semi-structured diagnostic interview. It serves to assess current and past episodes of axis I psychopathology in children and adolescents according to the criteria of the DSM-IV-TR. The original English language version has shown good metric qualities at diagnostic level (interrater reliability range of 93% to 100%; test–retest: 0.74 to 0.90).[35] The interview was translated into French by Mouren-Siméoni et al.[36]

Questionnaires

A detailed description of each instrument and its psychometric properties is presented in a companion paper (Labelle et al[37]). The Adolescent Coping Scale is used to assess specific behaviours adopted to deal with SLEs. It comprises 79 items (plus 1 open-ended question) that serve to rate 18 coping strategies falling under 3 coping styles: productive coping (focus on solving the problem, work hard to achieve, focus on the positive, seek relaxing diversions, and physical recreation); nonproductive coping (worry, wishful thinking, not coping, tension reduction, ignore the problem, self-blame, keep to self, and seek to belong), and reference to others (seek social support, invest in close friends, social action, seek spiritual support, and seek professional help).[16] The Life Events Questionnaire[38] is a 39-item instrument used to assess recent SLEs in adolescents, 14 to 18 years old. The BDI[39] second edition is a questionnaire that assesses severity of depression symptoms. This scale comprises 21 items rated on a 4-point scale. Scores can range from 0 to 63. Item 9 was used to identify adolescents at high or low risk for suicide. The Columbia–Suicide Severity Rating Scale was used to quantify severity of suicidal ideation and behaviour.[34] This scale allows for assessment of suicidal behaviour and suicidal intentionality. It was completed by the clinician based on clinical interviews conducted with the adolescents.

Statistical Analyses

All statistical analyses were performed using the R statistical package, version 2.12.2.[40] The significance level alpha was set at 0.05 and all statistical tests were 2-tailed. Descriptive analyses of the study's variables were carried out: means and standard deviations were calculated for the quantitative variables; frequencies and percentages for the qualitative variables. Groups were compared with the Student *t* test. Associations between quantitative variables were measured with Pearson's correlation. As part of multivariate analyses, a first linear regression model was run to examine the BDI-II score and a second logistic regression model was run to study the suicidal ideation group variable. These regressions were run on the coping variables that proved statistically significant in univariate analyses, while adjusting for the variables age, sex, and SLEs. Before applying a multivariate regression on our dataset, the corresponding power was calculated. For that, we considered a significance level of 0.05 and a sample of 10 predictors. This yielded a power of 0.94. The adjusted R^2 for model 1, the linear regression, is

Table 2 Pearson correlation between coping and depression, total sample (n = 167)

	Beck Depression Inventory-II	
Adolescent Coping Scale	*r*	*P*
Productive coping (total score)		
Focus on solving the problem	–0.21	0.007
Work hard to achieve	–0.36	<0.001
Focus on the positive	–0.36	<0.001
Seek relaxing diversions	–0.24	0.002
Physical recreation	–0.14	ns
Nonproductive coping (total score)		
Worry	0.19	0.02
Wishful thinking	0.14	ns
Not coping	0.56	<0.001
Tension reduction	0.47	<0.001
Ignore problem	0.11	ns
Self-blame	0.47	<0.001
Keep to self	0.37	<0.001
Seek to belong	0.11	ns
Reference to others (total score)		
Seek social support	–0.14	ns
Invest in close friends	–0.13	ns
Social action	–0.02	ns
Seek spiritual support	0.12	ns
Seek professional help	0.05	ns

ns = not significant

0.47, which indicates a good model fit (there is no R^2 for logistic models. Although there are pseudo R^2, they do not evaluate the same thing).

In addition, we created for our study a current depressive disorders group that met all of the DSM-IV-TR criteria for MDD or adjustment disorder with depressed mood.

Results

Descriptive Analyses

The number of adolescents from each centre was uneven, with 50% deriving from Rouen, 24% from Amiens, 15% from Compiègne, 4% from Meaux, and 7% from Creil. However, the participants did not differ across sites in terms of age, sex, or presence of an internalized or externalized disorder. The 52 eligible adolescents who did not participate in the study did not do so for the following reasons: adolescent refused (n = 37), parent refused (n = 9), and consent withdrawn during hospitalization (n = 6). The sociodemographics of those who declined participation were roughly comparable with those of the participants regarding mean age (14.6 years for participants, compared with 15.1 years for nonparticipants) and sex (79% female participants, compared with 76% female nonparticipants). During hospitalization in the pediatric departments, nonparticipants were evaluated by a senior psychiatrist. The following diagnoses were formulated: MDD or adjustment disorder with depressive symptoms (60%), anxiety disorders (34%), oppositional-defiant disorder (14%), and substance-related disorders (7%).

The relation between coping skills and sex was investigated as well. No significant difference emerged between boys and girls on total scores for productive coping, nonproductive coping, and reference to others coping. However, a significant difference was observed on 2 coping strategies. Girls made greater use of wishful thinking (t = 2.24, df = 83.7, $P < 0.05$) and seek social support (t = 2.53, df = 87.6, $P < 0.05$).

Univariate Analyses

First, the relation between coping skills and depression was examined. Productive coping (total score) was correlated with lower depression scores (r = –0.29, $P < 0.001$) whereas nonproductive coping (total score) was correlated with higher depression scores (r = 0.41, $P < 0.001$). No significant correlation was found regarding reference to others (total score).

Second, an analysis was carried out to verify the differences in means between coping styles and presence or absence of suicidal ideation among adolescents hospitalized for attempted suicide. Adolescents who no longer had suicidal

Table 3 Student *t* test between coping and presence or absence of suicidal ideation, total sample (*n* = 153)

Adolescent Coping Scale	No (*n* = 48) Mean (SD)	Yes (*n* = 105) Mean (SD)	*t*	*df*	*P*
Productive coping					
Focus on solving the problem	52.5 (17.7)	52.3 (15.2)	0.060	75.1	ns
Work hard to achieve	65.8 (16.3)	59.3 (16.6)	2.248	87.2	0.03
Focus on the positive	58.6 (18.7)	48.3 (15.1)	3.244	70.7	0.002
Seek relaxing diversions	80.4 (18.1)	73.5 (19.7)	2.085	91.2	0.04
Physical recreation	65.9 (25.5)	59.6 (24.7)	1.409	83.4	ns
Nonproductive coping					
Worry	52.1 (17.0)	50.9 (16.2)	0.402	82.1	ns
Wishful thinking	48.6 (13.7)	49.8 (17.3)	0.433	105.4	ns
Not coping	42 (16.3)	51.7 (16.8)	3.337	88.3	0.001
Tension reduction	44.3 (15.5)	53.3 (16.9)	3.223	93.4	0.002
Ignore problem	48.7 (17.4)	48.7 (16.3)	0.001	79.7	ns
Self-blame	51.3 (17.3)	58.5 (19.4)	2.271	83.9	0.03
Keep to self	58.9 (20.3)	65.0 (19.7)	1.712	83.6	ns
Seek to belong	55.1 (13.2)	57.3 (15.6)	0.861	98.6	ns
Reference to others					
Seek social support	53.9 (20.7)	50.9 (18.9)	0.857	79.3	ns
Seek professional help	37.3 (18.0)	40.8 (17.6)	1.081	83.1	ns
Invest in close friends	64.0 (16.4)	58.6 (17.5)	1.829	91.4	ns
Social action	29.4 (8.0)	31.5 (11.8)	1.251	120.5	ns
Seek spiritual support	28.8 (18.7)	30.6 (16.4)	0.570	76.7	ns

ns = not significant

ideation made greater use of a productive coping style ($t = 2.32$, $df = 73.1$, $P < 0.01$) than those who had suicidal ideation. Those who still had suicidal thoughts were more likely to present a nonproductive coping style ($t = 2.34$, $df = 84.7$, $P < 0.01$) than those who were no longer having such thoughts. No differences were noted with respect to reference to others coping. Tables 2 and 3 present differences in univariate analyses between coping skills and MDDs and suicidal ideation, respectively.

Multivariate Analyses

We ran a linear regression model to analyze the data from the overall sample to illustrate how coping skills predicted depression, using the relevant variables to emerge from the univariate analyses and adjusting for sex, age, and SLEs (total score). Three nonproductive coping strategies (not coping, tension reduction, and self-blame) yielded significant regression coefficients ($P < 0.01$; $\beta = 0.23$, SE = 0.53; $\beta = 0.17$, SE = 0.052; and $\beta = 0.13$, SE = 0.48, respectively). However, only 1 productive coping strategy was significant: focus on the positive ($\beta = –0.12$, SE = 0.046; $P < 0.05$). Interactions with sex, age, and SLEs were not significant.

We ran a second logistic regression model to examine how coping strategies might predict the second dependent variable, namely, presence or absence of suicidal ideation. First, the statistically significant coping styles—productive coping and nonproductive coping—were entered in univariate analyses, adjusting for age, sex, SLE total score, and depression. As expected, the variable depression proved highly predictive of suicidal ideation ($\beta = 1.4$, SE = 0.458; $t = 3.108$, $df = 111$, $P = 0.001$). Productive coping (total score) was found to have a significant protective effect ($\beta = –0.48$, SE = 0.017; $t = 2.706$, $df = 111$, $P = 0.006$). However, nonproductive coping (total score) did not prove a significant risk factor in the multivariate analysis ($\beta = 0.03$, SE = 0.021; $t = 1.669$, $df = 111$, $P = 0.095$). Next, the same logistic regression model was run with the coping strategies that proved significant in the univariate analyses: work hard to achieve, not coping, tension reduction, self-blame, focus on the positive, and seek relaxing diversions. Depression and focusing on the positive emerged as significant variables in the model. Table 4 presents the associations between coping strategies and the dependent variable, adjusted for sex, age, SLEs, and depression.

Discussion

The univariate analyses show a strong association between nonproductive coping (total score) and depression; that

Table 4a Linear regression on depression (BDI-II score) in adolescents who attempt suicide (*n* = 167)

Variable	Estimate	SE	*t*, *df* = 139	*P*
Sex	–0.76	2.253	0.338	0.74
Age	–0.734	0.607	1.209	0.23
Stressful life events	0.568	0.355	1.597	0.11
Seek social support	–0.058	0.064	0.91	0.36
Focus on solving problem	0.011	0.08	0.137	0.89
Work hard to achieve	–0.109	0.076	1.446	0.15
Worry	0.08	0.057	1.396	0.17
Invest in close friends	–0.059	0.061	0.97	0.33
Wishful thinking	–0.042	0.059	0.702	0.48
Not coping	0.238	0.06	3.956	<0.001
Tension reduction	0.178	0.063	2.81	0.006
Self-blame	0.138	0.056	2.45	0.02
Keep to self	–0.034	0.057	0.603	0.55
Focus on the positive	–0.127	0.066	1.917	0.05
Seek relaxing diversions	–0.012	0.056	0.217	0.83
Physical recreations	–0.01	0.04	0.24	0.81

BDI = Beck Depression Inventory

Table 4b Logistic regression on suicidal ideation in adolescents who attempt suicide (*n* = 153)

Variable	Estimate	SE	*t*, *df* = 111	*P*
Age	–0.009	0.159	0.060	0.95
Sex	–0.162	0.602	0.270	0.79
Stressful life events	–0.072	0.092	0.783	0.43
Depressive disorders	1.506	0.494	3.049	0.002
Focus on the positive	–0.034	0.016	2.124	0.03
Seek relaxing diversions	–0.013	0.013	0.991	0.32
Work hard to achieve	0.007	0.019	0.039	0.97
Not coping	0.025	0.017	1.475	0.14
Tension reduction	0.021	0.018	1.217	0.22
Self-blame	0.004	0.016	0.280	0.78

adolescents with suicidal ideation make greater use of nonproductive coping; and that participants who no longer had suicidal thoughts made greater use of productive coping (focus on the positive, work hard to achieve, and seek relaxing diversions). Further, in the logistic regression model, 3 coping strategies are predictive of depression: not coping, self-blame, and tension reduction. Nondepressed adolescents make greater use of productive coping (total score) and productive coping strategies, such as focusing on the positive, working hard to achieve, focusing on solving the problem, and seeking relaxing diversions than they do of nonproductive coping. However, in the multivariate analyses, only focusing on the positive proved a significant predictor of depression and suicidal ideations.

Our results must be interpreted bearing in mind the typical limitations of a cross-sectional study. Among these, we cannot infer that the variables considered in the study play an etiological role in adolescent depression and suicidal ideation. The limitations include the Berkson selection bias, whereby adolescents hospitalized for a suicide attempt may differ from those not brought to specialist care and from those attempters who eventually kill themselves. Second, the self-report methodology used could be subject to a recording bias, such as arises from social desirability. A third limitation of this research concerns the transferability of the results. Although the entire sample was derived from 5 urban areas of France, responses might not be transferable to other populations. Fourth, although the aim of the

Adolescent Coping Scale is to assess what adolescents usually do in SLEs, their responses could be influenced by recent SLEs and vary by hospital environment. To remedy these limitations, future research regarding coping skills should employ a longitudinal design and consider addressing how adolescents respond to stress in different contexts or circumstances.

The results obtained are in keeping with those of previous studies[13,18,19,24,25] that used different methods and populations. In the Canadian study by Breton et al,[13] nonproductive coping (total score) proved to be a key risk factor associated with severe depression among adolescents in community and clinical populations. These authors obtained similar results regarding productive coping strategies; they, too, found focusing on the positive to be the only coping strategy that acted as a protective factor against severe depression in clinical populations. Moreover, our results are in line with those of Consoli et al,[41] who identified working hard to achieve as the only protective factor against repeated suicidal behaviour.

Our study investigated the effect of coping skills on MDD and the presence of suicidal ideation surrounding attempted suicide. It is interesting to note that among the adolescents in our study, those without active suicidal ideation were the ones to make greatest use of productive coping skills. Also, positive coping skills were associated with lower levels of depression. Therefore, productive coping, which encompasses active and healthy coping skills, was found to protect against depression and suicidal ideation. This is in line with the findings of earlier studies.[13,23,41,42]

Very few significant differences emerged in our study in terms of sex and coping style. Though boys and girls differed on 2 specific coping strategies, namely, wishful thinking and seek social support, we did not observe a general tendency suggesting that boys were more likely to use active coping skills than girls, those involving the expression of emotion.[31] In the 2 multivariate regression models, SLEs (total score) did not prove a significant adjustment variable for predicting depression and suicidal ideation. This might seem to run counter to the data in the literature that suggest a close relation between recent SLEs and suicidal ideation in adolescence.[13,43,44] One possible explanation for this discrepancy is that the tool used to measure SLEs did not take account of violent events, such as sexual abuse. In this regard, Nrugham et al[42] observed a relation between exposure to violence and attempted suicide. More specifically, they found that violent life events (sexual abuse) were significantly associated with attempted suicide, whereas other traumatic events were not.

It is interesting to note that focusing on the positive proved a significant predictor of depression and suicidal ideation in our study of a clinical population of adolescents who attempted suicide. The notion of focusing on the positive falls within the sphere of positive psychology. It is the study of positive competencies and resources or what is right about people—their positive attributes, psychological assets, and strengths.[45] Recently, an exploratory study by Huffman et al[46] demonstrated that exercises centred on positive psychology proposed during a hospital stay yielded encouraging results. However, treatments that place an emphasis on boosting protective factors, such as positive affect, are not sufficiently developed in psychotherapeutic programs targeting suicidal behaviour in adolescence.[47]

Conclusion

Both our hypotheses were confirmed. The results showed that depressed adolescents who had attempted suicide made greater use of nonproductive coping than did nondepressed adolescents. Further, adolescents without suicidal ideation made greater use of productive coping and less use of nonproductive coping. Further, productive coping skills were found to be a potential protective factor against adolescent depression and suicidal ideation. These findings suggest that coping skills are important mechanisms through which depression and suicidal ideation are maintained after attempting suicide. Focusing on the positive emerged as a significant variable in both models, whereas depression did so only in the suicidal ideation model. In this light, it might be useful when intervening with adolescents to emphasize cognitive work geared to looking on the bright side, thinking positively, and fighting depression. The only sex difference found was that girls made greater use of wishful thinking and seek social support.

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