РОЗДІЛ І. ТЕОРЕТИКО-МЕТОДОЛОГІЧНІ ПІДХОДИ ДО ПРОБЛЕМИ ОСОБИС-ТІСНОГО ЗРОСТАННЯ

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SIGNIFICANCE OF RELATIONSHIPS AND PSYCHOSOCIAL ADAPTATION DURING ADOLESCENCE

This study examines associations between different aspects of romantic involvement and psychosocial adaptation during adolescence. 901 students (432 boys, 469 girls) aged 12 to 17 years, who have been involved in at least one romantic relationship, answered questionnaires aimed at measuring ten parameters of romantic involvement (interest, age at the time of the first romance, average age of the partners, number of romantic relationships, number of broken hearts, average duration of relationship, duration of a recent, more significant relationship, time spent each week out of the school in this relationship, current romantic status, sexually active or not) and four indices of psychosocial adjustment (performance at school, body image, self-esteem, behavioural problems). The results demonstrate that it is possible to accurately predict poorer performance at school based on stronger romantic involvement, which is more significant for younger adolescents (ages 12 to 14) than for older ones (ages 15 to 17). Body image and self-esteem are positively and significantly related to greater involvement in romantic relationships, and boys differ from girls in terms of self-esteem parameters. Finally, behavioural problems are significantly associated with greater romantic involvement at all ages. The significance of correlation between variables ranges from weak to moderate, depending on age and gender (r ranging between 0.13 and 0.40) and the regression equations account for a generally modest portion of the total variance (6.3% to 11.7%). Differences attributable to age and gender refer to interaction effects concerning only few parameters. The results obtained are discussed in the context of psychosocial development in adolescence.

Keywords: adolescence, attachment relationships, psychosocial adaptation.

Romantic relationships and psychosocial adaptation in adolescence

Adolescence is a developmental period marked by numerous individual and social transitions, including changes in relations with the opposite sex, emerging romantic relationships (Sippola, 1999). Initiation to heterosexual relationships ranks among the central highlights of adolescents' development (Havighurst, 1972; Erikson, 1959; Sullivan, 1953). The substantial array of burgeoning new emotions experienced by youths on a daily basis appears to be partly attributable to heterosexual reality and romantic involvement (Wilson-Shockley, 1995; Larson, Clore and Wood, 1999). Adolescence is an ideal period for studying youths' ability to adapt to social transitions, particularly regarding romance (Sippola, 1999) since it is equally associated with opportunities for growth and risk of teenage maladjustment (Erikson, 1959, 1968; Sullivan, 1953). Despite the importance of romantic relationships during adolescence, the scientific community is just beginning to determine their role in development (Feiring, 1999; Shulman and coli., 1997). Information remains fragmented at best, with the significance of youths' well-being and social adjustment remaining poorly understood to-date (Maccoby, 1990; Paul and White, 1990; Sippola, 1999). The purpose of this study is to provide answers to these issues by studying the connection existing between the importance of romantic involvement and psychosocial adjustment between ages of 12 and 17.

Opportunities for Growth and Risk Factors

First romantic relationships presuppose the integration of new social roles. They can alter youths' feelings of self-competence during adolescence (Darling and coli., 1999). However, from a general standpoint, activities initiated by the opposite sex, with or without romantic involvement, are perceived by most partners as pleasant and enriching steps of the social experience (Richards and coli., 1998; Csikszentmihayli and Larson, 1984). Such

activities have been associated with a perception of selfcompetence and strong intrinsic motivation (Mannell and Kleiber, 1997). Indeed, it is in mixed contexts that adolescents report the highest levels of stimulation, feeling more attractive, competent and important in life (Richards and coli., 1998). Experiencing a steady, romantic relationships involves several social advantages, such as an additional source of social support (Furman and Buhrmester, 1992; Connolly and Johnson, 1996), better self-esteem (Long, 1989) and security in one's sexual identity (Samet and Kelly, 1987). However, among 12-14-year-olds, heterosexual relationships are predictable indicators of positive evaluation only among boys and girls who feel at ease in the presence of the opposite sex (Darling and coil., 1999). Likewise, while self-esteem among boys appears to rely more on the number of girls present in their acquaintances, girls' self-esteem is more directly influenced by their well-being in relation to the opposite sex (Darling and coli., 1999). One notes that at the onset of adolescence and in a context of heightened awareness of body image, cross-sex networks can also induce a lowering of selfesteem among some youths (Leaper, 1994; Simmons and Blyth, 1987; Darling and coli., 1999), more often among girls than boys (Maccoby, 1990). At the onset of puberty, girls overall tend to experience lower self-esteem and body image than boys (Papillon, Marcotte and Cloutier, 2000; Graber, Petersen and Brooks-Gunn, 1996; Tobin-Richard and coli., 1984). Adjustment to a heterosexual reality is harder for girls (Maccoby, 1990). During adolescence, the image girls have of themselves is particularly dependent on their perception of their heterosexual attractiveness (Archer, 1992); and, same-sex friendship sometimes becomes more strained, conflicting and competitive, when girls start dating boys. Conversely, boys more often see their popularity and social prestige enhanced by the emergence of romantic relationships (Miller, 1990; Berndt and Hoyle, 1985; Zimmer-Gembeck, 1999). This may explain the fact why boys seem to be less vulnerable to changes in self-esteem related to romantic involvement. In summary, if a heterosexual context can be energising and act as a source of personal valorisation for some youths, the reality of the situation appears to be experienced differently by boys and girls.

On the other hand, emerging romantic involvement during adolescence has been associated with certain psychosocial problems hindering youths' well-being and functioning. The emergence of active sexuality, which can be predicted on the basis of involvement in romantic relationships (Phinney and coli., 1990; Scotte-Jones and White, 1990), constitutes a developmental zone fraught with potential risks. Several hazards are inherent in such relationships, including the possibility of unwanted pregnancy, sexually transmitted diseases and an increased likelihood of sexual violence. As a group, sexually active youths present a psychosocial image that differs from youths who are not, showing less conformist behaviour

and personal characteristics predisposing them to experience greater problems of adjustment. In comparison with sexually active adolescents, youths entering their twenties without any experience in sexual intercourse are often white, from an intact family and with strong religious convictions. They are more ambitious with respect to schoolwork, score higher on intelligence tests and are less likely to use drugs and commit legal offences (Irwin and Shafer, 1992). In Quebec however, the information gathered by Cloutier and colleagues (1994) does not confirm these observations. In their survey, sexually active youths presented the same levels of personal well-being, were just as ambitious and motivated to pursue their education, had had no run-ins with the authorities and for the most part were not engaged in high-risk sexual behaviour. However, teenage pregnancies are associated with tremendous risks for the life trajectories of young mothers and their children (Cloutier, 1996), such as financial problems, dropping out of school and shouldering the responsibility of a child who in turn is exposed to a greater risk of experiencing adjustment difficulties (Cloutier and Villeneuve, 1988; Blau and Gullota, 1993). Likewise, girls run a greater risk of being subjected to sexual violence than boys (Rickel and Hendren, 1993; Cloutier and coli., 1994; Bergman, 1992), and sexual violence is more frequently observed in very young teenage couples (Burcky, Reuterman and Kopsky, 1988; Makepeace, 1987). Finally, romantic involvement during adolescence is linked to the risk of romantic deceptions and break-ups, which can lead to serious heartbreak among youths (Larson, Clore and Wood, 1999). According to a survey conducted in Canada, more than 50% of youths have experienced two to four episodes of heartbreak since the onset of romantic relationships (Lafleur, Drolet and Trottier, 1999). Yet a broken heart can have serious emotional repercussions and lead to at-risk behaviour: boys may commit suicide (Hanigan, 1987; D'Amours, 1995), consume more alcohol and drugs (Eiiany, Wortley and Adlaf, 1992) become depressed and lose interest in scholastic performance (Lafleur, Drolet and Trottier, 1999); and girls may yield more easily to the sexual pressures of future partners in order to avoid another break-up (Interviews, 1996; in Drolet, Lafleur and Trottier, 1999).

Overall, and as summarized in Table 1, research data indicates that romantic involvement during adolescence can have positive and negative effects on adolescent wellbeing and functioning.

The Importance of the Time at which Romantic Involvement Begins

The time at which romantic involvement begins in an individual's development can be instrumental in understanding the course of psychosocial adjustment experienced by youths. Some authors have observed that youths initiating romantic involvement at a later date stood apart from those who experience the reality of romance earlier (Connolly and coli., 1999; Fairing, 1999). In particular,

Table 1.

Opportunities for Growth and Risks Associated with Romantic Involvement

Opportunities for Growin and Risks Associated with Romanic Throtrement				
Opportunities for Growth	Associated Risks			
	Threat to self-esteem			
 Development of relational skills 	Changes to existing friendship			
 Development of personal and sexual identity 	Source of interpersonal stress			
Development of greater social maturity	Decrease in the amount of energy directed towards other			
 Source of motivation and stimulation 	spheres of individual development (for example school or			
 Diffusion of stress during adolescence 	career)			
 Additional source of interpersonal support 	Risk of experiencing a break-up			
 Acquisition of social status 	Possibility of teenage pregnancy			
 Source of self-esteem 	Contracting a sexually transmitted disease			
 Development of a capacity for intimacy 	Sexual, physical and verbal violence			
	Increased risk of behavioural problems			

youths involved in heterosexual relationships are more precocious in terms of sexual maturation; they experience lower self-esteem and are more subject to stress (Simmons and coli., 1979; Simmons and Blyth, 1987). Among other things, precocious romantic involvement has been associated with a decline in academic performance and earlier distancing from parents (Feiring and Lewis, 1991; 1993). It is also associated with higher alcohol and drug consumption and psychological and behavioural problems (Brown and Theobald, 1996; Cauffman and Steinberg, 1996). Similarly, premature stability in romantic relationships has been linked to a greater risk of experiencing academic difficulties and emotional problems (Neeman, Kojetin and Hubbard, 1992), even more so when the romantic relationships are initiated and maintained outside the school environment (Sroufe, Carlson and Shulman, 1993). For the most part, these observations concur with risks associated with precocious sexual activity during adolescence (Irwin and Shafer, 1992). On the other hand, youths involved in romantic relationships at an earlier date differ in terms of social competence and popularity (Bukowski, Sippola and Hoza, 1999; Neeman, Hubbard and Masten, 1995). More precisely, having more friends on average, including friends of the opposite sex, has been associated with a higher frequency of romantic relationships and a more precocious introduction to such relationships in individual development (Connolly and Johnson, 1996). Conversely, a lack of social skills demonstrated by excessive shyness or blatant lack of selfconfidence can also interfere with the transition towards heterosexual relationships. All in all, the time at which romantic involvement begins appears to be linked both to the psychosocial functioning of youths in terms of social competence, personal well-being, academic performance and the risk of possible behavioural problems.

Two studies among those documented address the connection between the importance of romantic involvement and psychosocial adjustment during adolescence according to several measurement criteria and from a longitudinal standpoint (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbruner and Collins, 2001). Neeman, Hubbard and Masten (1995) documented the psychosocial adjustment trajectory of 205 youths based on their level of involvement in romantic relation-

ships. According to this study, romantic involvement defined by youths' interest and dating relationships is associated with greater social competence at the onset of adolescence (8-12 years of age), but also with more behavioural problems. Early romantic involvement is a likely predictor of an increase in behavioural problems and a decline in academic performance during the latter stages of adolescence. Between 14 and 19 years of age, romantic involvement remains a predictor of greater social competence, but is also negatively associated with functioning at school and at work, and behavioural problems remain more frequent among youths who are romantically involved. On the other hand, between 17 and 23 years of age, psychosocial adjustment is not linked to the degree of romantic involvement, although for many youths, difficulties appearing during early adolescence tend to persist. The results illustrate that for the majority of youths, romantic relationships are initiated during the second part of adolescence. As stressed by the authors, it is conceivable that precocious heterosexual involvement may fall within a general trend to act "older than one's age" and to associate with youths who are on average older and more often engaged in antisocial behaviour. However, this study does have certain limitations, measurement do not always distinguish clearly interest from actual involvement in romantic relationships, and it fails to consider gender differences (Neeman, Hubbart and Masten, 1995).

A second study conducted by Zimmer-Gembeck, Siebenbruner and Collins (2001) documented the impact of romantic involvement on the psychosocial adjustment of youths at the age of 16, while taking into account changes in their functioning since the age of 12. A total of 167 youths from underprivileged homes were evaluated at the age of 12 and again at the age of 16 according to several psychosocial adjustment indices (for example, emotional health, internalisation, academic performance). The authors reported that an accumulation of several romantic experiences at the age of (over-involvement) was associated with more behavioural problems at all ages and a general decline in psychosocial functioning between the ages of 12 and 16. Conversely, they observed that the level of experience, defined by the seriousness and the duration of romantic relationships, and the quality of intimacy at the age of 16 were predictors of greater social competence and better self-concept at 16. This study also documented the fact that romantic involvement variables correlated differently with adjustment indices for boys and girls. More precisely, romantic over-involvement at the age of 16 was predictive of greater decline in emotional health and academic performance for girls aged 12 to 16, compared to boys. However, boys having experienced more romantic relationships by age 16 were prone to a greater increase in behavioural problems between age 12 and 16. From a general standpoint, and according to the work of Neeman and his colleagues (1995), the researchers observed a positive connection between social competence and the development of more committed and intimate romantic relationships. They also noted that a greater number of romantic relationships were associated with more adjustment problems at the age of 16, including behavioural problems, emotional problems, more interiorised difficulties and a decline in academic performance and motivation to attend school. Taken together, these studies underlined a need to evaluate multiple dimensions in order to ascertain the complexity of the links existing between psychosocial functioning and the characteristics of romantic involvement during adolescence.

Overview and Research Hypotheses

Despite its importance, the significance of romantic involvement during adolescence in the psychosocial functioning of youths is understudied (Maccoby, 1990; Paul and White, 1990; Sippola, 1999, Feiring, 1999) and the research rare considers multiple dimensions. Yet, the positive and negative repercussions resulting from romantic involvement during adolescence highlight the importance of including a range of psychosocial adjustment criteria and of considering the degree of romantic involvement from several angles. Likewise, the impact of romantic relationships on youths' functioning may depend on when they are initiated during the developmental period (Neeman, Hubbard and Masten, 1995; Sullivan, 1953; Erikson, 1959, 1968). Some information suggests that the transition towards romantic relationships is particularly demanding for girls, affecting their self-esteem more negatively (Maccoby, 1990). On the other hand, boys' social rating often increases with romantic involvement (Miller, 1990; Zimmer-Gembeck, 1999). On the whole, few of the studies addressing romantic involvement and psychosocial adjustment during adolescence have favoured a multidimensional approach adapted to the complex nature of the phenomenon. Some recent American studies diverge from this trend (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbruner and Collins, 2001), but none is supported by an equivalent in French-speaking Canada. This study addresses this shortcoming. Like the authors of other indepth research studies (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbrunner and Collins, 2001), a range of evaluation criteria was used to assess romantic involvement and psychosocial adjustment. The importance of the involvement and its relative precocity

are the cornerstone of our evaluation of romantic relationships. A total of ten parameters were selected to determine a profile of romantic involvement applied to youths: a) interest in romantic relationships; b) age at the time of the first romantic relationship; c) age of partners in relation to one's age; d) duration of romantic relationships (on average, most recent significant relationship); e) the number of broken hearts; f) the number of romantic relationships; g) time spent with the partner; h) current romantic status (has or does not have a romantic partner); and i) sexually active or not. Moreover, four indices serve to evaluate psychosocial adjustment: 1) academic performance, 2) body image, 3) self-esteem, and 4) behavioural problems. Three research hypotheses were formulated:

- 1- It is expected that romantic involvement will serve to predict lower academic performance (1a), better body image (1b), more positive self-esteem (1c), and more behavioural problems (1d).
- 2- It is expected that the strength of relations between romantic involvement and academic performance will vary according to the age. More particularly, we expect to observe a more marked decrease in academic performance for youths between 12 and 14, compared to youths aged 15 to 17.
- 3- It is expected that the strength of relations between romantic involvement and self-esteem will vary based on gender. More precisely, it is anticipated that only the self-esteem of boys will be positively associated with romantic involvement, compared to that of girls.

Method

Participants

The sample, as described in Table 2 (Age and grade at school correlated significantly (r = 0.90).), consisted of 901 youths (469 girls, 432 boys), 12 to 17 years of age¹ (average = 15,0 years; standard deviation = 1,4) and students at a high school in the City of Quebec. Respondents were enrolled either in the regular academic program (701 youths), the "individualised path" (61 youths) or the "International Studies Programme" (139 youths)². The sample was divided evenly between grades 7 and 11, with 173 youths in grade 7 (19.2%), 155 youths in grade 8 (17.2%), 207 youths in grade 9 (23%), 191 youths in grade 10 (21.2%) and 175 youths in grade 11 (19.4%). Most of the youths aged 12 to 14 were in grades 7 or 8 (69.7%), while most of the youths aged 15 and older were in grades 10 or 11 (79.6%). The proportion of boys aged 12 to 14 was 49.8% (53.2% for the second group of adolescents), compared to 51.8% for girls (48.2% for girls 15 and older).

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¹ Five youths among the entire group of respondents were 18 years of age

². The individualised path program is intended for youths experiencing academic difficulties, whereas the international studies programme is an enriched programme

Breakdown of the Sample and Average Age of Respondents Based on Grade and Gender

Grade	G	Girls		Boys		Total		
Graae	n Aver. Age N		N	Aver. Age	N	Aver. Age (S.D.)		
Grade 7	82	13.1	91	13.1	173	13.1 (0.7)		
Grade 8	67	14.1	88	14.0	155	14.0 (0.7)		
Grade 9	108	15.2	99	14.9	207	15.0 (0.7)		
Grade 10	86	15.9	105	15.9	191	15.9 (0.6)		
Grade 11	89	16.8	86	16.7	175	16.7 (0.4)		
Total	432	15.1	469	14.9	901	14.9 (1.4)		

The sample was drawn from a larger study (N =1113 youths) and all respondents selected reported involvement in a least one romantic relationship. The 901 youths participating in the study were significantly older (F = 15,23, p < 0.001) than the 212 youths excluded from the study. They were less often enrolled in grades 7 or 8 (36.4% vs. 42.5%) and were more often in grades 10 or 11 (40.6% vs. 34%). Likewise, they did not belong to the same study programmes, proportionally speaking: compared to youths excluded from the study, participants were less often enrolled in the international studies programme (15.4% vs. 31.6%) and more often enrolled in the regular program (77.8% vs. 64.6%) or individualised path program (6.8% vs. 3.8%). Participants in the study did not differ significantly from the 212 youths excluded from the study in terms of gender, parents' level of education and family environment.

Measures

Instrument 1: Socio-Demographic Questionnaire. In the first section, the Socio-Demographic Questionnaire provided general information such as: age, grade at school, studies programme, gender, parents' level of education and family context (single parent or two parents present at home). The questionnaire also assessed academic performance through the question: What is your grade average? The questions of Instrument 1 were drawn from a questionnaire entitled "Ados, families et milieu de vie" (Cloutier, Champoux, Lancop and Jacques, 1994).

Instrument 2: Questionnaire on Heterosexual Involvement. The Questionnaire on Heterosexual Involvement consisted of two comparable versions, one for boys and the other for girls. This questionnaire evaluated three aspects of heterosexual involvement (cross-sex friendships, love and sexuality)⁴. Only the sections on love and sexuality were used within the framework of this study. A total of ten parameters was used to evaluate precocity and the extent of romantic involvement:

- 1) Age at the time of the first romantic relationship (How old were you when you had your first boyfriend or girlfriend?).
- 2) Average age of partners in relation to one's age (As a rule, how old is your boyfriend or girlfriend when you do have one? 1 = younger by at least one year; 2 =

same age (more or less one year's difference); 3 = older by two years; 4 = older by more than three years).

- 3) Interest, which is associated with the value allocated to involvement in a romantic relationship. This index includes four statements measured on the basis of a 4-point Likert-type scale (from 1 = not at all to 4 = completely true). A factorial analysis of these four items (N = 1113) revealed one unique factor accounting for 52.6% of response variance. Internal consistency might be qualified from moderate to high, based on an Alpha coefficient of 0.69.
- 4) The number of relationships reported, inclusive of the current romantic relationship, if applicable (Not counting your current romantic relationship if you are involved in one, indicate the number of romantic relationships you have been involved in (based on duration); Do you have a boyfriend/girlfriend right now?).
- 5) The number of heartbreaks (How many times have you experienced a heartbreak?).
- 6) Average duration of romantic relationships in terms of years (indicate the number of romantic relationships that you have been involved in that lasted: less than one month; between 1 and 3; between 3 and 6 months; between 6 and 12 months; more than a year (specify).
- 7) The duration of a most meaningful recent (in the past six months) romantic relationship (How long has he/she been your boyfriend/girlfriend? 1 = less than one month; 2 = from 1 to 3 months; 3 = from 3 to 6 months; 4 = from 6 to 12 months; 5 = more than a year (specify)).
- 8) The amount of time spent each week with this same most significant romantic partner out of school (How many hours per week do you spend with your boy-friend/girlfriend? 1 = from 0 to 5 hours; 2 = from 5 to 10 hours; 3 = from 11 to 20 hours; 4 = more than 20 hours).
- 9) Romantic status is determined based on the existence or not of a current romantic relationship (Do you have a boyfriend/girlfriend right now?).
- 10) Sexual status refers to having, or not sexual intercourse for the first time (Have you ever had a complete sexual relationship?).

Instrument 3: Offer's Self-Image Questionnaire. A French version of the "Offer's Self-Image Questionnaire" (OSIQ; Offer, Ostrov and Howard, 1977, 1981) allowed us to assess the body image. This self-report inventory is often used to evaluate adolescents' satisfaction with their physical appearance and body changes. Seven items on a 6-point Likert-type scale (from 1 = "describes me very

³ "Adolescents, families and living environment"

⁴ The questionnaire was first submitted to 235 youths between 14 and 17 years of age in the course of a pilot study (Bergeron, Descoteaux and Ouellet. 2001).

well" to 6 = "does not apply to me at all") evaluate satisfaction with physical appearance, body changes and health. An abridged form of the instrument consisting of 4 items was associated with an internal consistency of 0.74 (Allgood-Merten, Lewinsohn and Hops, 1990). Papillon (2000) and Marcotte and coil. (2002) documented internal consistency coefficients of 0.70 when the entire scale is being used. Cronbach's alpha coefficient for the present study was also 0.70, representing a moderate internal consistency coefficient.

Instrument 4: Rosenberg's Self-Esteem Questionnaire. The French version of the "Self-Esteem Questionnaire" (Rosenberg, 1965) measured youths' self-esteem. This questionnaire consists of 10 graduated statements on a 4-point Likert-type scale (from 1 = "totally agree" to 4 = "totally disagree"). This questionnaire has frequently been used with adult or adolescent populations and presents an internal consistency coefficient of 0.88 (Papillon, 2000). The internal consistency observed in this study was 0.84.

Instrument 5: Achenbach's Youth Self-Report Questionnaire. The French version of "Youth Self-Report" (YSR; Achenbach, 1991) was used to evaluate behavioural problems (exteriorised problems). This widely used self-report measure evaluates the adjustment of youths aged 11 to 18 based on their answers to 112 brief statements (0 = False, does not resemble me at all; 1 = Sometimes true; 2 = Always true or often true). The questionnaire includes a total of 11 sub 1 s resulting in a distinct T score for exteriorised problems. Measurement of exteriorised problems involves 64 statements combining scores obtained on two scales (delinquency, aggressiveness). The construct validity and factor pattern of Achenbach's questionnaire are backed by numerous studies (e.g., Dedrick and coli., 1997). Test-retest reliability coefficients average above 0.80 and internal consistency coefficients obtained are generally 0.80 and higher (Achenbach, 1991). Research data on the French version revealed validity coefficients similar to those obtained for the English version (Wyss and coli., 2003).

Procedure

The research project was initiated in 2001 a high school near Quebec city in partnership with the school board and with the cooperation of the team of teachers responsible for morality and religious studies. Standardized administration of the questionnaire took place during a 1 hour 15 minute period^{5, 6}. Five researchers who had previously attended a training session participated in the

data collection. The participation rate in the study was about 85%.

Results

Results are presented in three sections: a) exploration of metric properties of variables measuring romantic involvement and psychosocial adjustment based on age and gender; b) examination of correlations existing between adjustment indices, parameters of romantic involvement, age and gender; and c) presentation of sequential multiple regression analyses serving to predict four indices of psychosocial adjustment based on the ten parameters of romantic involvement under consideration, and taking into account age and gender^{7, 8}.

Description of Romantic Involvement and Psychosocial Adjustment

Table 3 presents means and standard deviations or percentages relating to parameters of romantic involvement and adjustment indices according to gender and to age groups (ages 12 to 14 and 15 to 17)⁹. A first 2 (gender) x 2 (age) multivariate variance analysis was conducted on the eight dependent variables used to measure romantic relationships 10, 11. According to the Wilk criterion (Tabachnich and Fidell, 1996), dependent variables taken together are significantly affected by both genders (F = 29.83; p < 0.001) and age group (F = 34.75; p < 0.001). A significant interaction effect exists between gender and age group (F = 2.77; p = 0.005). The results revealed a moderate association between all dependent variables combined and gender ($eta^2 = 0.23$) as well as with age group ($eta^2 = 0.26$). The power observed in both cases was 1.00. The interaction effect was associated with an eta² statistic of 0.03, with the observed power of 0.94. To examine main effects according to each dependent variable, eight univariate 2 (gender) X 2 (age group) analyses were conducted 12. Chi-squared tests were used in the case of nominal variables (e.g. sexual status).

⁷ Missing data were replaced by the mean, a procedure used in less than 3% of variables.

⁸ Statistical analyses were performed using SPSS software.

⁹ The cut-off of age 15 was based on the average of the youths. Youths in the first group (age 12-14) were less than 15 years of age, while youths in the second group (age 15-17) ranged from 15 to 18 years of age, with five respondents aged 18.

¹⁰ The number of youths and which youths are concerned varies according to the dependent variables measured. The MANOVA concerns only those respondents for whom information was available for all variables (N= 803) 2X5 univariate analyses conducted thereafter included all the youths for whom information was available for a given dependent variable (see "n" per variable in the Table 3).

¹¹ Logarithmic and inverse transformations were applied to certain variables to improve the normality of their distributions and limit extreme data: 1) log 10 of the number of relations; 2) log 10 of the number of heart breaks (+1); the inverse of the average duration (+1); and 4) the inverse of the duration of a significant relationship (+1). Results obtained for the hypotheses of normality, variance and covariance homogeneity, and linearity were satisfactory.

 $^{^{12}}$ Transformations used in the univariate analyses correspond to Note 13.

⁵ The questionnaires were administered in a set order: 1) Sociodemographic Questionnaire; 2) Questionnaire on Heterosexual Involvement (a- romantic relationships; b- sexuality); 3) Offer's Self-image Questionnaire; 4) Rosenberg's Self-esteem Questionnaire; and, 5) Achenbach's Youth Self-report Questionnaire.

⁶ The study protocol was reviewed and approved according to school standards and ethical rules in effect at Laval University. Free and enlightened consent was obtained from each youth participating in the study. Youths enrolled in Grades 7 and 8 had to obtain parental consent in writing in order to participate.

Table 3.

Means, Standard Deviations or Percentages Relative to Parameters of

Romantic Involvement and Adjustment Indices According to Age and Gender

			Ages 12-14	Ages 15-17	TOTAL
Variables		$\Pi_{[1]}$	M (AND) or %	M (AND) or %	M (AND) or%
ROMANTIC INVOLVEMENT					
Interest (on 4)	Girls	469	3.4 (0.5)	3.3 (0.5)	3.4 (0.5)
Interest (on 4)	Boys	432	3.4 (0.5)	3.5 (0.5)	3.4 (0.5)
Age 1st romantic relationship	Girls	469	10.5 (2.3)	12.8 (1.9)	11.6 (2.4)
	Boys	432	10.0 (2.3)	11.7 (2.7)	10.9 (2.6)
Age of partners	Girls	469	2.4 (0.6)	2.6 (0.7)	2.5 (0.7)
(from 1 to 4)	Boys	432	2.0 (0.3)	1.9 (0.4)	2.0 (0.4)
Nb. of romantic relationships	Girls	469	3.9 (3.8)	4.6 (3.9)	4.2 (3.8)
No. of fornance relationships	Boys	432	2.0 (0.3)	1.9 (0.4)	2.0 (0.4)
Nb. of heartbreaks	Girls	469	1.9(1.9)	1.7 (1.4)	1.8 (1.7)
No. of fleartbreaks	Boys	432	1.5(1.8)	1.5(1.5)	1.5 (1.7)
A	Girls	469	0.3 (0.4)	0.3 (0.4)	0.3 (0.4)
Average duration (years)	Boys	432	0.4 (0.5)	0.3 (0.3)	0.4 (0.4)
Duration of most significant relation-	Girls	431	0.4 (0.5)	0.6 (0.7)	0.45 (0.6)
ship (years) [2]	Boys	372	0.4 (0.5)	0.5 (0.6)	0.4 (0.5)
Times invested (significant relation.)	Girls	431	11.0 (7.0)	14.7 (7.6)	12.8 (7.7)
(hours I week)	Boys	372	10.2 (7.0)	13.6 (7.6)	12.0 (7.5)
Current romantic status	Girls	469	28.4%	38.5%	33.3%
(% in a relationship)	Boys	432	24.3%	34.8%	29.9%
Sexual status (% Sexually active)	Girls	469	20.6%	55.7%	36.5%
	Boys	432	33.2%	53.5%	45.1%
ADJUSTMENT INDICES					
A 1 ' C (0/)	Girls	469	77.2 (8.9)	76.0 (7.6)	76.6 (8.3)
Academic performance (%)	Boys	432	75.8 (8.3)	74.2 (7.8)	75.0 (8.0)
Body image (I 50)	Girls	469	36.9 (6.7)	36.0 (6.5)	36.9 (6.7)
	Boys	432	39.6 (6.5)	39.3 (6.0)	36.0 (6.5)
Self-esteem (I 50)	Girls	469	38.3 (6.4)	39.8 (6.4)	38.8 (6.4)
	Boys	432	41.5 (6.0)	41.3 (6.1)	41.4 (6.0)
Behavioural problems (I 50)	Girls	469	12.2 (5.9)	13.5 (5.7)	12.8 (5.8)
- -	Boys	432	12.9 (7.0)	13.7 (6.4)	13.4 (6.7)

^[1] Breakdown of the "n": a) ages 12 to 14: 243 girls – 202 boys and, b) ages 15 to 17: 226 girls – 230 boys.

Youths of all ages showed marked interest towards romantic involvement, although boys significantly more than girls (F = 3.95, p = 0.047). An interaction effect was observed between gender and age (F = 4.95, p = 0.026)¹³, with a greater difference between boys and girls aged 15 to 17, compared to youths at the onset of adolescence (ages 12 to14). First romantic relationships were initiated on average at 11.2 years of age. Examination of this variable revealed the existence of a main effect of gender (F = 26.41, p < 0.001), a main effect of age (F = 165.00, p < 0.001), and a significant interaction between age and gender (F = 4.43, p = 0.005)¹⁴. More precisely, if girls aged 12 to14 indicated having had their first romantic relationship later than boys, the opposite was observed

between those aged 15 and 17. Romantic partners were generally the same age in the case of boys, but significantly older in the case of girls (F = 199.54, p < 0.001), with a significant interaction effect between age and gender (F = 11.44, p = 0.001)¹⁵. Indeed, gender differences observed in the age of romantic partners was greater between the ages of 15 and 17 compared to younger adolescents. Moreover, the youths indicated having had in average 4.1 relationships, with a significantly greater number of relationships between ages 15 and 17 (F = 5.75, p = 0.017); the girls indicated having had a greater number of relationships than the boys (F = 26.34, p < 0.001)¹⁶. The average number of broken hearts per youth was 1.7, and girls reported significantly more episodes of broken hearts

 $_{[2]}$ The duration and time invested weekly in a recent more significant relationship was evaluated only in the case of youths to whom these variables applied (N = 803).

 $^{^{13}}$ Respectively, these effects were associated with eta2 statistics of 0.0004 and 0.0005, and an observed power of 0.51 and 0.60.

¹⁴ Respectively and for each effect associated with the age and the first romantic relationship, eta2 statistics were 0.029, 0.155 and 0.005 with an observed power of 1.00, 1.00 and 0.56.

 $^{^{15}}$ The main effect of gender and interaction effect was associated with an eta2 statistic of 0.182, and 0.013 with an observed power of 1.00 and 0.92.

¹⁶ Respectively and for each effect observed, eta2 statistics were 0.006 and 0.029, with an observed power of 0.67 and 1.00.

than boys $(F = 18.38, p < 0.001)^{17}$. In terms of duration of relationships, the youths indicated that relationships lasted on average 0.35 years (4.2 months). There was no significant difference based on age or gender for this variable. From another standpoint, it was observed that the most recent significant relationship (during the past six months) lasted in average 0.4 years (4.8 months), and was longer in duration for youths aged 15 to 17 than for youths aged 12 to 14 (F = 10.95, p < 0.001)¹⁸. The youths spent in average 12 hours per week outside of classroom hours in this same relationship, and time invested was significantly greater among the group of older adolescents, compared to youths aged 12 to 14 $(F = 44.9, p < 0.001)^{19}$. There was no gender difference on this variable. Finally, at the time of data collection, 29.4% of the youths reported being currently involved in a romantic relationship, with no significant difference between boys and girls, but more so for youths aged 15 to 17 than youths aged 12 to 14 (χ 2 (1, N = 901) = 10.64, p = 0.001)²⁰. On the other hand, 40.6% of the youths in the sample indicated being sexually active, more so among the boys (45.1%) than the girls (36.5%) $(\chi 2 (1, N = 901) = 7.02, p = 0.008)$, and more often among youths aged 15 to 17 than youths between 12 and 14 (χ 2 (1, N = 901) = 74.85, p < 0.001)²¹.

With respect to psychosocial adjustment indices, a multivariate 2 (gender) X 2 (age) analysis of variance was run on the four dependent variables measuring psychosocial adjustment²². According to the Wilk criterion (Tabachnich and Fidell, 1996), the dependent variables combined were significantly affected by both gender (F = 21.29; p < 0.001) and age group (F = 3.62; p = 0.006), but not by their interaction. The results revealed a weak association between these dependent variables and gender (eta2 = 0.09) as well as with age group $(eta^2 = 0.02)$. Respectively, observed powers were 1.00 and 0.88. A total of four 2 (gender) X 2 (age group) univariate analyses of variance were conducted to examine the effects of age and gender on each dependent variable. The results revealed that the academic performance of girls was significantly higher than that of boys (F = 8.33, p = 0.004) and average school grades of youths aged 15 to 17 were significantly lower than that of youths aged 12 to 14 (F = 6.21, p = 0.013)²³. Compared to the boys, girls scored lower for body image (F = 66.94, p < 0.001) and lower for self-esteem (F = 37.49, p < 0.001)²⁴. Behavioural problems were more frequent among youths aged 15 to 17 than youths aged 12 to 14 (F = 5.85, p = 0.016)²⁵, but were just as prevalent among girls and boys. There was no interaction effect of age and gender on any of the psychosocial adjustment indices.

Correlations between Romantic Involvement and Psychosocial Adjustment

Table 4 presents the correlations between parameters of romantic involvement, gender, age and adjustment indices for the entire sample $(N = 901)^{26}$. Significant correlations varied between 0.08 and 0.28, implying degrees of low to moderate relations between the variables. Academic performance presented a pattern of relations, for the most part negative, with the parameters of romantic involvement. More precisely, poorer performance at school was associated with greater romantic interest (r = -0.08); romantic relationships initiated earlier in adolescent development (r= 0.08); partners on average older than oneself (r = -0.12); more episodes of heartbreak (r = 0.10); more time invested in a significant relationship (r = -0.13); current involvement in a romantic relationship (r = -0.08)and having had at least one complete sexual intercourse (r = -0.16). On the other hand, body image was significantly associated with romantic interest (r = 0.14); romantic relationships initiated at an earlier age (r = -0.07); more romantic relationships (r = 0.11); romantic relationships lasting on average longer (r = 0.09 and r = 0.08); and with the current romantic status (r = 0.16). On the other hand, only romantic interest (r = 0.08), number of broken hearts (r = -0.08); average duration (r = 0.09) and duration of a recent significant relationships (r = 0.11); as well as romantic status (r = 0.08) were significantly related to selfesteem. Finally, behavioural problems were, for the most part, associated with further and more precocious romantic involvement. More specifically, behavioural problems were related to greater romantic interest (r = 0.17), a more precocious onset of romantic involvement (r -= -0.07); dating partners older than oneself (r = 0.13); more romantic relationships (r = 0.19); more episodes of heartbreak (r = 0.19)= 0.12); more time invested in a significant relationship (r = 0.14); and finally, to a more often active sexual life (r = 0.13). From another standpoint, gender, with boys as the reference group, was positively associated with academic performance (r = 0.10), but negatively associated with body image (r = -0.28) and self-esteem (r = 0.21). Age, on the other hand, was negatively associated with academic performance (r = -0.14) and with more behavioural problems (r = 0.11).

 $^{^{17}}$ The main effect of gender was associated with an eta2 statistic of 0,020, with an observed power of 0.99.

¹⁸ The main effect of age was associated with eta2 statistics of 0.029, with an observed power of 0.97.

 $^{^{19}}$ The main effect of age was associated with an eta2 statistic of 0.053, with an observed power of 1.00.

²⁰ The strength of the association between the variables, as represented by the eta statistic, was 0.109.

²¹ Respectively, and as represented by the eta statistic, the strength of the association between the variables was 0.09 and 0.29.

²² Results proper to hypotheses of normality, homogeneity of variance and covariance and linearity were satisfactory.

²³ Respectively, the main effects were associated with eta2 statistics of 0.009 et 0.007, with an observed power of 0.82 and 0.70.

²⁴ Respectively, the main effects were associated with eta2 statistics of 0.054 and 0.040, with an observed power of 1.00 in both cases.

²⁵ This main effect of age was associated with an eta2 statistic of 0.006 and 0,040, with an observed power of 0.68.

 $^{^{26}}$ The entire sample (N = 901) was considered in examining relationships between variables. Missing data (meaning not applying to certain youths) were replaced by 0.

Table 4. Correlations between Gender, Age Parameters of Romantic Involvement and Adjustment Indices

		Psychosocial Adjustment			
	Academic Performance	Body Image	Self-esteem	Behavioural Problems	
- Gender (ref. = boys)	0.10**	-0.28**	-0.21**	-0.03	
Age	-0.14**	0.01	0.06	0.11**	
Interest	-0.08*	0.12**	0.08*	0.17**	
Age 1sr relationship	0.08*	-0.09**	-0.01	-0.07*	
- Age of partners	-0.12**	-0.05	-0.05	0.13**	
- No. of relationships	-0.04	0.08*	0.07	0.19**	
- No. of heartbreaks	-0.10**	0.02	-0.08*	0.12**	
Average duration	-0.01	0.11**	0.09**	-0.06	
- Duration of a significant relationship	0.04	0.08*	0.11**	0.01	
- Time invested	-0.13**	0.002	0.04	0.14**	
- Romantic status	-0.08*	0.11**	0.08*	0.06	
- Sexual status	-0.16**	0.07	-0.04	0.13**	

Note: The Pearson correlation coefficient (r) was used for all variables, except for categorical variables (gender, current romantic status – involved or not in a relationship, and sexual status – sexually active or not) where Spearman's rho (R) was preferred.

* p<.0S; ** p<.0I

Prediction of Psychosocial Adjustment on the Basis of Romantic Involvement

Four sequential linear regression analyses were performed to determine if the consideration of parameters of romantic involvement improved the prediction of the adjustment indices (a- academic performance, b- body image, c- self-esteem, d- behavioural problems)²⁷ on the basis of parameters of romantic involvement²⁸. Age and gender were computed in the first step of each of the equation, while the ten parameters of romantic involvement (interest, age at the time of the first romantic relationship, age of partners compared to oneself, number of romantic relationships, number of broken hearts, duration of relationships (on average, based on a recent most significant relationship), time invested each week in this significant relationship, romantic status, sexual status) were considered in the second step of the regression analyses. The existence of interaction effects of either age or gender with any independent variables was evaluated by adding a third step to the equations²⁹. Final equations, that is to say after having omitted parameters of romantic involvement not contributing significantly to the prediction, are presented in Table 6. Precisely, the table displays for each of the predictive model, the regression coefficients (B) and their standardised errors (SEB), the standardised regression coefficients (β), the adjusted R2 and R2 statistics, the probabilities of occurrence of B coefficients and the degree and significance of change in the R2 tied to each step.

Results of evaluation of assumptions led to the transformation of certain independent variables to reduce skewness, the number of outliers and improve the normality and linearity of residuals³⁰. No transformation was necessary to normalise dependent variables. With the use of a p < 0.001 $(\chi 2 \text{ (dl, } 12) = 32.91)$ criterion of Mahalanobis distance, four outliers remained present in the equation after performing the transformations³¹. These data were maintained in the equations given their low remoteness (Maximum Mahalanobis Statistic χ 2 = 39.26). As for the final equations, meaning those resulting from the exclusion of independent variables not contributing significantly to the prediction, the Mahalanobis distance criterion (p < 0.001) suggested that between two and nine outliers remained (for body image and behavioural problems, respectively). These data were again preserved owing to their low remoteness (maximum distance of 8.2 from the χ2 statistic), and considering that the equations with or without the outliers did not differ significantly from each other.

Prediction of Academic Performance Based on Romantic Involvement. A first regression analysis was computed to predict academic performance based on romantic involvement. In addition to age and gender (step 1), eight parameters of romantic involvement were retained in the equation: 1) age at the time of the first romantic relationship; 2) age of partners in relation to oneself; 3) (log of number of relationships; 4) (log of number of broken hearts; 5) (inverse of average duration; 6) (inverse of

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²⁷ With the exception of school grades, which were measured in percentage (%), dependent variables were compiled on a 50-point scale.
²⁸ Same as Note 28.

²⁹ Variables were omitted from the equations in the absence of either a significant main effect or a significant interaction effect.

³⁰ Metric transformations used in the univariate analyses correspond to Note 13. Transformations used for the duration of relationships invert the direction of association between variables.

³¹ This result pertains to equations including the twelve predictor variables considered initially.

Table 5.

Sequential Regression Analyses Examining the Relationship between Romantic Involvement and Adjustment Indices

bet	between Romantic Involvement and Adjustment Indices					
N = 901 Variables enter in each step ed	Regression Results					
	B (SE B		Sign. p)	(R2(adj. R2)	Δ R2	
Academic Performance (DV)						
Step 1				0.029	0.029***	
- Age	-0.79 (0.19)	-0.14	0.000	(0.026)		
Gender (ref. = boys)	1.15(0.54)	0.09	0.006			
Step 2				0.126	0.097***	
- Age	-0.99 (0.22)	-0.17	0.000	(0.116)		
Gender (ref. = boys)	1.72 (0.60)	0.11	0.004			
- Age at time of 1st relation.	0.62 (0.12)	0.19	0.000			
- Age of partner	-1.65 (0.48)	-0.12	0.001			
Nb. of relationships (log)	2.89 (0.84)	0.13	0.001			
Nb. of broken hearts (log)	-2.25 (1.09)	-0.07	0.038			
 Average duration (inv.) 	0.33 (2.19)	0.01	0.879			
Duration signif. relation. (inv.)	-6.09 (1.84)	-0.14	0.001			
- Time invested (signif. relat.)	-0.10 (0.04)	-0.10	0.005			
1st sexual relation. (ref= no)	-2.93 (0.64)	-0.18	0.000			
Body Image (DV)						
Step 1				0.069	0.069***	
- Age	-0.00 (0.15)	-0.01	0.476	(0.067)		
Gender (ref. = boys)	-3.52 (0.43)	-0.27	0.000		0.031***	
Step2				0.100		
- Age	-0.16 (0.15)	-0.03	0.304			
Gender (ref. = boys)	-3.56 (0.43)	-0.27	0.000			
Interest	1.29 (0.40)	0.10	0.001			
Nb. of relationships (log)	1.29 (0.63)	0.07	0.041			
Current relationship (ref= no)	1.49 (0.48)	0.10	0.002			
Self-esteem (DV)						
Step 1				0.042	0.042***	
- Age	0.19 (0.15)	-0.04	0.190	(0.040)		
Gender (ref.= boys)	-2.53(0.42)	-0.20	0.000		0.028***	
Step 2	, ,			0.070		
- Age	0.07 (0.15)	0.02	0.660	(0.063)		
Gender (ref. =boys)	-2.60 (0.46)	-0.20	0.000	(3.3.3.2)		
Interest	0.95 (0.40)	0.08	0.017			
- Age of partner	0.30 (0.37)	0.03	0.417			
Nb. of relationships (log)	1.33 (0.61)	0.08	0.028			
Nb. of broken hearts (log)	-2.25 (0.87)	-0.09	0.010			
Duration signif. relation. (inv.)	-3.67 (1.11)	-0.11	0.001			
Behavioural Problems (DV)	,	1	1			
Step 1				0.013	0.013**	
- Age	0.48 (0.15)	0.11	0.001	(0.011)		
- Gender (ref. = boys)	-0.88 (0.46)	-0.07	0.055	,		
Step 2	(2.1.4)	1		0.126	0.113***	
- Age	0.28 (0.17)	0.06	0.09	(0.117)	1	
Gender (ref. = boys)	-0.88 (0.46)	-0.07	0.055	(****/		
Interest	1.41 (0.38)	0.12	0.000			
Age at time of 1st relation.	-0.21 (0.09)	-0.09	0.024			
Age of partner	1.19 (0.37)	0.12	0.001			
Nb. of relationships (log)	1.23 (0.63)	0.12	0.050			
Nb. of broken hearts (log)	1.67 (0.83)	0.07	0.045			
Average duration (inv.)	4.82 (1.36)	0.07	0.000			
1st sexual intercourse (ref=	2.38 (0.46)	0.12	0.000			

^{*}p<.05; ** p<.0l; *** p<.00l

duration of the most recent relationship; 7) time invested each week in a significant relationship; and, 8) sexual

 ${\rm status}^{32}.$ Significant changes in R2 were obtained for the

first two steps of the equation (Step 1: Δ : F (2.898) = 13.19, p < 0.001; Step 2: ΔF (8.890) = 12.41, p < 0.001), as well as when all 16 potential interaction effects with gender or age were considered simultaneously (Step 3: Δ F(16.874) = 1.85, p = 0.022). Consideration of the parameters of romantic involvement in a second step increased the variance accounted for (R2) by 9.7%. Adjusted R2 corresponded respectively to 2.6% for Step 1 and to 11.6% following Step 2, indicating that 11.6% of the variance in youths' academic performance is accounted for by the equation. In Step 2 of the model, nine variables were associated with regression coefficients (β) contributing significantly to the prediction: 1) age (β = -0.17); 2) gender (β = 0.11); 3) age at the time of the first relationship (β =0.19); 4) age of partners (β = -0.12); 5) (log of) number of relationships (= 0.13); 6) (log of) number of broken hearts (β = -0.07); 7) (inverse on duration of a more significant relationship (β = -0.14); 8) time invested in a significant relationship (β = -0.10); and, 9) sexual status (β = -0,18).

Sixteen additional multiple regression equations were designed to evaluate the existence of interaction effects of either age or gender with each of the romantic involvement parameters retained. Four interaction effects with age proved significant: a) average duration of romantic relationships (p = 0.001), duration of a significant relationship (p = 0.002), time spent in this same relationship (p = 0.004) and sexual activity (p = 0.019). These results were examined through repetition of the multiple regression equation according to two age groups (ages 12 to 14 and 15 to 16). Between 12 and 14, Steps 1 and 2 of the equation both contributed significantly to the prediction (Step 1: Δ F (2.442) = 6.86, p = 0.001; Step 2: Δ F (8.434) = 10.74, p < 0.001). Change in variance accounted (R2) after the second step corresponded to 16.0%, with a cumulative adjusted R2 of 17.2%, indicating that 17.2% of the variance in academic performance of youths aged 12 to 14 can be predicted by the equation. Between 15 and 17, the equation was also associated with a significant increase in variance accounted for (R2) in the first two steps of equation (Step1: Δ F (2.453) = 4.99, p = 0.007; Step 2: $\Delta F (8.445) = 4.02$, p = 0.001), although the cumulative predictive capacity of this second equation was in fact lower (R2 = 6.6%). A look at the standardised regression coefficients (β) for variables interacting significantly with age revealed: 1) an inverse, but nonsignificant relationship, between academic achievement and (the inverse of the average duration of romantic relationships for youths aged 12 to 14 ($\beta = 0.04$, p = 0.44), compared to youths aged 15 to 17 (β = -0.05, p = 0.44); 2) a significant association between academic performance and the duration of a recent most important romantic relationship solely during the second segment of adolescence (β = - 0.17, p = 0.01), compared to youths aged 12 to 14 (β = - 0.09, p = 0.09); 3) a comparable relationship between academic performance and investment in time for both 12 to 14-year-olds (β = - 0.11, p = 0.028) and 15 to 17-year-olds (β = - 0.11, p = 0.037); and 4) academic performance was more strongly affected by active sexuality at the onset of adolescence (β = - 0.23, p < 0.001), compared to youths aged 15 to 17 (β =- 0.12, p =0.034).

Prediction of Body Image Based on Romantic Involvement. A second regression analysis was computed to predict body image based on romantic involvement. In addition to age and gender (Step 1), only three parameters of romantic involvement were retained in the final equation: 1) romantic interest; 2) (log of) number of relationships; 4) current romantic status³³. Significant changes in variance accounted for (R2) were obtained in the first two steps of equation (Step 1: Δ F (2.898) = 33.49, p < 0.001; Step 2: Δ F (3.895) = 10.19, p < 0.001); however, the third step of the equation did not support the existence of significant interaction with age and gender (Step: Δ F (6.889) = 0.95, p = 0.462). Consideration of parameters of romantic involvement in the second step of the model enhanced by 3.1% the portion of variance accounted for (R2) Adjusted R2 corresponded respectively to 6.7% for Step 1 and 9.5% following Step 2, indicating that 9.5% of the variance of body image during adolescence is accounted for by the equation. In Step 2, four variables were associated to regression coefficients (β) contributing significantly to the prediction: 1) gender ($\beta = -0.27$); 2) romantic interest ($\beta = 0.10$); 3) (log of) number of relationships (β = 0.07); and 4) current romantic status (β = 0.10).

Prediction of Self-esteem through Romantic Involvement. A third model was built for the purpose of predicting self-esteem on the basis of romantic involvement. In total, in addition to age and gender (Stage 1 of the model), five parameters of romantic involvement were retained in the regression equation: 1) interest shown; 2) age of partners in relation to oneself; 3) (log on number of relationships; 4) (log on number of broken hearts; and, 5) (inverse on duration of a recent significant relationship³⁴. The equation was associated with an increase in explained variance (R2) significantly different from zero in the first two stages of model construction (Stage 1: Δ F (2.898) = 19.83, p < 0.001; Stage 2: Δ F (5.893) = 5.33, p < 0.001), as well as when the entire group of 10 possible cross-link effects with gender and age were considered

 $^{^{32}}$ A first regression analysis revealed the absence of a main effect for romantic interest, average duration of relationships and current romantic status. With the exception of the average duration for which a significant interaction effect was obtained with age (p = 0.001), these variables were omitted from the equation.

³³ A first regression analysis revealed the absence of a main effect or an interaction effect for seven of the ten independent variables: age at the time of the first; romantic relationship, age of the partners, (log of) number of broken hearts, (inverse of) average duration of the relationships, (inverse of) duration of a recent relationship, time invested and sexual status. These variables were omitted from the equation.

³⁴ The first regression analysis revealed the absence of a principal effect for: age at the time of the first romantic relationship, age of the romantic partner, (inverse of) average duration of the relationships, time spend in a more significant relationship, current romantic status and sexual status. With the exception of average age of the romantic partners, a variable showing significant interaction with gender and age (p = 0.01), these variables were omitted from the prediction model.

(Stage 3: Δ F (10.882) = 2.32, p = 0.011). Consideration of parameters of romantic involvement in the second stage of the model increased explained variance (R2 by 2.78%. Adjusted R2 corresponding respectively to 4.2% for Stage 1 and to 6.3% following Stage 2 indicated that 6.3% of the variance of academic performance during adolescence was predicted by the model. In Stage 2 of the model, five regression coefficients (β) made a unique contribution to the total prediction that was significantly different from zero: 1) gender (β = -0.20); 2) interest in romantic relationships (β = 0.08); 3) (log of) number of relationships (β = 0.08); 4) (log of) number of broken hearts (β = -0.09); et, 5) (inverse on duration of a more significant relationship (β = -0.11).

Ten additional multiple regression equations were built for the purpose of separate evaluation of the existence of cross-link effects of age and gender with each of the parameters of romantic involvement retained. Two cross-link effects with gender and one cross-link effect with age proved significant. More precisely, the age of romantic partners in relation to oneself interacted significantly with age (p = 0.010) and gender (p = 0.011), while interest shown towards romantic relationships interacted with gender (p = 0.029). These results were examined in a first phase though the repetition of the multiple regression equation for the two age groups (12 to 14 and 15 to 17) and according to gender. Between ages 12 and 14, the equation was associated with an increase in explained variance (R2 significantly different from zero during the first two stages of model construction (Stage 1: ΔF (2.442) = 14.34, p < 0.001; Stage 2: ΔF (5.437) = 2.78, p = 0.02); as well as with a total increase in explained variance by the second stage of the model of 2.8% (R2 and an adjusted total R2 of 7.5%, indicating that 7.5% of the variance in the self-esteem of youths between 12 and 14 was predicted by the model. Between ages 15 and 17, the equation was also associated with an increase in explained variance (R2) significantly different from zero in the first two stages of model construction (Stage 1: Δ F (2.453) = 5.93, p = 0.003; Stage 2: ΔF (5.448) = 3.63, p = 0.003); with a increase in explained variance for the second stage slightly higher (R2 = 3.8%) and an adjusted total R2 of 4.9%. An examination of standardised regression coefficients (β) for the variable "age of romantic partners" revealed a non-significant, but inverse relation according to age group, more precisely β = -0.03 (p = 0.528) between 12 and 14 years of age and β = 0.08 (p = 0.137) between 15 and 17 years of age.

In terms of cross-link effects with gender, the equation was associated with an increase in explained variance (R2 significantly different from zero in the second stage of model construction for boys (Stage 1: Δ F (1.430) = 0.248, p = 0.619; Stage 2: Δ F (5.425) = 4.43, p = 0.001) and for girls (Stage 1: Δ F (1.467) = 1.74, p = 0.188; Stage 2: Δ F (5.462) = 3.75, p = 0.002). For the boys, the total increase in variance explained by the second stage of the model was 4.9% (R2, with an adjusted total R2 of 3.7%, which meant that only 3.7% of the variance of boys' self-

esteem was adequately predicted by the model. For girls, 3.9% of the variance was explained by the second stage of the model (R2, with a low proportion of variance in self-esteem correctly predicted by the model (adjusted R2 = 3.0%). A study of the standardised regression coefficients (β) for the "age of romantic partners" variable again revealed a non-significant, but inverse relation according to gender, or β = -0.08 (p = 0.079) for the boys and β = 0.09 (p = 0.062) for the girls. Finally, interest displayed in romantic relationships was significantly associated with self-esteem solely in the case of the boys (β = 0.17, p = 0.001), and not the girls (β = 0.006, p = 0.889).

Prediction of Behavioural Problems though Romantic Involvement. The last model was designed to predict behavioural problems based on romantic involvement. In addition to age and gender, seven variables of romantic involvement were used: 1) interest shown; 2) age at the time of the first romantic relationship; 3) age of the partners; 4) (log of) number of relationships; 5) (log of) number of broken hearts; 6) (inverse of) average duration of the relationships; and, 7) sexual status³⁵. The equation was associated with an increase in explained variance (R2 significantly different from zero in the first two stages of model construction (Stage 1: Δ . F (2.898) = 6.04, p = 0.002; Stage 2: Δ .F (7.891) = 16.45, < 0.001), but not when the entire 14 possible cross-link effects with age and gender were considered (Stage 3: Δ F (14.877) = 1.11, p = 0.345). Consideration of the parameters of romantic involvement in the second stage of the model increased explained variance (R2) by 11.3%. Adjusted R2 corresponded respectively to 1.1% for Stage 1, and 11.7% following Stage 2, indicating that 11.7% of the variance in behavioural problems during adolescence was adequately predicted by the model. In Stage 2 of the model, seven regression coefficients (β) made a unique contribution to the total prediction that was significantly different from zero: 1) interest shown ($\beta = 0.12$); 2) age at the time of the first relationship ($\beta = -0.09$); 3) age of the partners $(\beta = -0.12)$; 4) (log of) number of relationships ($\beta = 0.07$); 5) (log of) number of broken hearts (11 = 0.07); 6) (inverse of) duration of relationships ($\beta = 0.12$); and 7) sexual status ($\beta = 0.19$).

Model Summary and Validation of Hypotheses. Under the terms of Hypothesis 1, regression models explained a significant proportion of the variance demonstrated by each of the psychosocial adjustment indices. However, it was the models' predictions of academic performance (1a) and behavioural problems (1d) that provided explanations for a more interesting proportion of the total variance. Following the example of correlation statistics, certain parameters of romantic involvement were linked positively to adjustment indices, while others were linked negatively. For example, the fact of having

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³⁵ The first regression analysis conducted revealed the absence of a principal effect or a cross-link effect for three variables: (inverse of) duration of a recent significant relationship, time invested weekly in this relationship and current romantic status. These variables were omitted from the model.

been involved in several romantic relationships and having experienced several episodes of heartbreak was negatively associated with academic performance. Longerlasting romantic relationships were predictors of significantly superior academic performance. From another standpoint, a review of interaction possibilities only partially supported hypotheses 2 and 3 of this study. Indeed, even if the strength of relations between romantic involvement and academic performance is greater between ages 12 to 14 compared to the second group of adolescents, the review of variables associated with a significant cross-link effect with age was inconclusive. More precisely, the sole fact of being sexually active was predictive of a greater decline in academic performance for 12 to 14-year-olds, while the duration of a significant relationship was associated with better academic performance for youths aged 15 to 17. Under the terms of Hypothesis 3 of the study, it was observed that self-esteem was significantly affected by gender. Moreover, the results illustrated for the most part that interest in romantic relationships was positively associated with self- esteem solely in the case of boys; girls dating older partners generally indicated a higher level of self- esteem, with the contrary applying to boys.

Discussion

Several theoreticians maintain that initiation into romantic involvement is a central component of adolescent development (Havighurst, 1972; Erikson, 1959; Sullivan, 1953), stressing both the risks and opportunities for growth that might result. Yet, very little is known about the significance of romantic relationships in terms of well-being and psychosocial adjustment during adolescence (Feiring, 1999; Shulman and coli., 1997; Maccoby, 1990; Sippola, 1999). Rare are the studies with a multidimensional perspective adapted to the complexity of the phenomenon. The purpose of this study was to meet this need for empirical data in French-speaking Quebec. Following the example of two American studies (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbruner and Collins, 2001), multiple criteria were used to evaluate romantic involvement and psychosocial adjustment during adolescence. In keeping with initial expectations and available empirical data, the information obtained supports the assumption of the existence of significant relations between several parameters of romantic involvement and different indices of psychosocial adjustment. Relationship patterns, both positive and negative, corresponded for the most part with empirical data available in the field (for example, Zimmer-Gembeck, Siebenbruner and Collins, 2001). Along with the influence of age and gender on certain variables, they reflect the changing significance and potentially multiple roles of romantic relationships during adolescence (Neeman, Hubbard and Masten, 1995).

Links between Romantic Involvement and Psychosocial Adjustment

All in all, the results obtained support the hypothesis of a negative link between strong romantic involvement during adolescence and academic performance. More precisely, it is possible to predict poor academic performance by youths involved in romantic relationships at an early age, dating partners on average older than themselves, experiencing episodes of heartbreak, investing more time in a recent, more significant romantic relationship and reporting being sexually active. This result may be explained notably by the often strong emotional investment required by romantic encounters and potentially long hours spent on the telephone or in activities outside of school (Neeman, Hubbard and Masten, 1995). The energy channelled towards initiating and maintaining romantic relationships may interfere with available energy, time and attention directed toward academic achievement (Leaper and Anderson, 1997). Likewise, youths more involved romantically are subject to greater exposure to experiences of breaking up, rejection, heartbreak and conflict, which can lead to depressing feelings that in turn may hamper academic performance (Larson, Clore and Wood, 1999; Monroe and coli., 1999; Lafleur, Drolet and Trottier, 1999). Precocity in romantic relationships and dating partners on average older than oneself may be associated with a general tendency to act older than one's age and neglect schoolwork in favour of social involvement with youths often at risk of showing behavioural problems (Neeman, Hubbard and Masten, 1995). Finally, some authors reported that the emergence of active sexuality, particularly precocious sexuality, was associated with a decrease in motivation for schoolwork and generally poorer academic performance (Irwin and Shafer, 1992; Ostrov and coli., 1985). On the other hand, it was observed that having experienced a number of romantic relationships and/or a recent, longer-lasting romantic relationship was associated with better academic performance by those between 12 and 17 years of age. These results concur with the observation that a heterosexual context may also prove energising for youths, compensate for feelings of boredom for some and help mitigate the stress of puberty (Darling and coli., 1999). Higher levels of commitment and enthusiasm were also observed (Aneshensel and Gore, 1991); Larson and Asmussen, 1991), as were increased energy levels and greater cognitive complexity (Darling and coli., 1999) when adolescents discussed their romantic activities. Finally, since the romantic partner is, for many youths, a source of additional support (Furman and Buhrmester, 1992; Connolly and Johnson, 1996), it is plausible that this might contribute, to a certain extent, to maintaining a positive outlook towards school. On the other hand, in cases where the pattern of engagement is precocious, when episodes of heartbreak occur successively and when relationships last on average longer and involve active sexuality, an inverse relation is obtained between romantic involvement and academic performance.

From another standpoint, although relations were modest, the results supported the existence of positive links between romantic involvement and body image and self-esteem. More specifically, a significant proportion of

variance in body image could be predicted by the interest shown in romantic relationships, the average number of romantic relationships and the existence of a current romantic relationship. It is possible that these links might be explained in part by the underlying importance of physical beauty during adolescence. Indeed, physical appearance has a major impact on heterosexual appeal during adolescence (Feiring, 1996), generally contributing greatly to determining feelings of personal value, social status and interpersonal attractiveness during adolescence (Cloutier, 1996). Therefore, it is plausible that physical beauty contributes to popularity with the opposite sex and indirectly reinforces youths' body image. On the other hand, better self-esteem can be predicted during adolescence on the basis of more marked interest in romantic involvement, more romantic relationships, fewer episodes of heartbreak and recent, more-lasting significant relationships. Overall, these results correspond to data suggesting that heterosexual relationships are generally pleasing and enriching areas of the social experience during adolescence (Richards and coli., 1998; Csikszentmihayli and Larson, 1984). It has been documented that adolescents reported feeling more attractive, competent and important in life in a mixed social context (Richard and call., 1998). Similarly, experiencing a stable romantic relationship has been associated positively with selfesteem (Long, 1989), greater social competence and a better opinion of personal heterosexual appeal (Zimmer-Gembeck, Siebenbruner and Collins, 2001).

Finally, the results indicated that the characteristics of romantic involvement during adolescence may serve to predict a significant portion of variations in behavioural difficulties experienced during adolescence. More precisely, it is possible to more successfully predict behavioural problems among youths showing greater interest in romantic relationships, having experienced a romantic relationship at an earlier age, having dated older partners, having had more romantic relationships and suffered more broken hearts and having been sexually active. Like the link with academic performance, experiencing romantic relationships on average longer in duration was also associated with fewer behavioural difficulties. This may be explained in part by the fact that more committed and serious romantic relationships develop progressively outside the group context during adolescence (Dunphy, 1963; Furman and Wehner, 1994), which might potentially decrease the risk of behavioural problems. On the whole, the results support the existence of links between behavioural difficulties during adolescence (for example, smoking, drinking and using drugs, run-ins with the law) and precocious romantic commitment and number of romantic experiences (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbruner and Collins, 2001). These results concur with the risks associated with sexual activity during adolescence (Irwin and Shafer, 1992). This may be attributable to a general propensity for adopting behaviour beyond one's age (Neeman, Hubbard and Masten, 1995), which has been associated with consorting within a social network where problems and behavioural difficulties are more prevalent (Jessor and coli., 1983). Equally, youths experiencing adjustment problems are more likely to have romantic partners experiencing similar difficulties, sharing the same values and engaging in similar social conduct (Capaldi and Crosby, 1997; Quinton and coli., 1993). These romantic relationships risk acerbating already existing difficulties (Zimmer-Gembeck Siebenbruner and Collins, 2001).

The Influence of Age and Gender

Some authors have suggested that the significance of romantic involvement in psychosocial adjustment during adolescence varies according to age and gender (for example, Zimmer-Gembeck, Siebenbrunner and Collins, 2001). In our second research hypothesis, results obtained suggested a stronger tie to academic performance and involvement in romantic relationships at the onset of adolescence (ages 12 to14) compared to adolescents of the second age group (ages 15 to 17). However, an examination of the variables for which significant interaction with age does exists did not offer a clear portrait. Only four significant interaction effects were obtained, and only two among them were associated with variables contributing significantly to the prediction of academic performance and the duration of a more significant romantic relationship only in the second age group of adolescents. Moreover, the impact of commitment to active sexuality on academic performance appeared to be detrimental for youths between 12 and 14, compared to youths between 15 and 17. Other authors have also documented that greater involvement at an early age during adolescence is associated with poorer academic performance and its decline in time (Neeman, Hubbard and Masten, 1995; Zimmer-Gembeck, Siebenbrunner and Collins, 2001). As proposed by Sullivan (1953), a lack of emotional maturity and intense romantic involvement might appear more harmful to youths' adjustment at the onset of adolescence.

Adjustment to a heterosexual reality may create different challenges for boys and girls, and according to Maccoby (1990), this adaptation is particularly difficult for girls. Contrary to hypothesis 3 of this study, information gathered during our research provided very little support for the existence of differences linked to gender. According to the results obtained, predictions of body image and self-esteem on the basis of romantic involvement were slightly, or not at all, affected by gender. This undermines the observation whereby girls more often experience lowered self-esteem linked to the emergence of cross-sex networks (Darling and coli., 1999; Maccoby, 1990), and they impart greater importance to heterosexual appeal in their definition of self (Archer, 1992). In this research, the results indicated primarily that girls dating older romantic partners tended to have better self-esteem, while the contrary was observed with boys: their selfesteem was greater when they dated partners who were younger and also when they evinced greater interest in romantic relationships. This corresponds to the normative

trend of girls dating older boys, while boys tend to date girls who are younger or of the same age (Cloutier and coli., 1994). With respect to body image, it is possible that the lack of difference linked to gender mirrors the importance of physical appearance in the eyes of both boys and girls in determining romantic appeal and popularity with the opposite sex (Feiring, 1996). However, it cannot be excluded that boys' self-esteem resides more possibly in exterior aspects such as interest shown and the number of girls in their entourage. On the other hand, girls' self-esteem resides more possibly in more intrinsic aspects such as the quality of romantic relationships and feelings of well-being with their partner (Darling and coli., 1999).

In conclusion, most youths following an adapted adjustment trajectory will initiate romantic relationships during the latter part of adolescence (ages 15 to 17) and will do so moderately and progressively (Neeman, Hubbard et Masten, 1995). Despite an inherent risk associated with precocious romantic involvement, the results support the existence of few differences linked to age. This may be explained in part by the range of ages covered (ages 12 to 17). Indeed, according to conclusions reached by Neeman, Hubbard and Masten (1995), it is only when adolescents reach young adulthood that the relation between youths' romantic involvement and psychosocial adjustment begins to fade. However, many difficulties present during early adolescence tend to continue during adulthood. From another standpoint, the small number of differences linked to gender contrast with results obtained by other authors (Sharabany, Gershoni and Hoffman, 1981; Lempers and Clark-Lempers, 1993; Connolly and Johnson, 1996; Richards and coli., 1998; Shulman and Scharf, 2000). For example, based on a more-at-risk sample and following a longitudinal perspective, Zimmer-Gembeck and his partners (2001) reported a strong increase in the psychosocial difficulties experienced by girls deeply involved in romantic relationships at age 16, compared to boys of the same age. In this study, most of the youths appeared to be following an adapted psychosocial path often indicative of less involved relationships. It is therefore plausible that some differences linked to gender were not sufficient to prove significance.

Limits and Contributions

This study compared certain methodological limits. First, it involved transversal data implying a cohort effect and not allowing any understanding of individual adjustment trajectories inherent in romantic relationships. Secondly, despite the use of varied measures and multiple

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criteria in the evaluation of romantic involvement, all of the information was gathered from the youths themselves. Therefore, the results are entirely dependent on their perception, and it is possible that they might have been influenced by notions of social desirability (for example, reporting a greater level of romantic or sexual experience than what really happened). Thirdly, adjustment indices were studied according to different parameters measuring the place occupied by romantic involvement in youths' lives; therefore, the study did not delve into the link between the intrinsic characteristics of romantic relationships and youths' adjustment. For example, over and above a given level of experience, the degree of intimacy, or then again the presence of violent behaviour, may affect the functioning and well-being of youths differently. Finally, many other factors can be linked to psychosocial adjustment during adolescence. For example, it is necessary that we acquire better understanding of the influence of family environment and the impact of change in networks of friends on adaptation towards the transition to romantic involvement during adolescence.

On the whole, however, this research allowed us to study the relation between romantic involvement and psychosocial adjustment within a sample of youths in Quebec, based on the criteria of multiple measures. Following the example of data existing in the field, romantic relationships during adolescence may have both positive and negative consequences. Notably, if romantic relationships can positively influence self-esteem, particularly if the relationships last a long time, it remains a fact that precocious introduction to sexual activity is associated with poorer academic performance and an increased risk of experiencing behavioural problems. This highlights the complexity of links existing between the characteristics of romantic involvement and psychosocial adjustment during adolescence. Further research might result in a better understanding of which characteristics of romantic involvement are associated with an adapted trajectory of psychosocial adjustment. Among other things, it would be interesting to study the significance of intrinsic characteristics within romantic relationships (for example, degree of intimacy, jealousy, conflicts, etc.) on emotional health and well-being during adolescence. Ultimately, this might help us better accompany youths during their transition to adulthood, since this developmental period has a major impact on aspects of social and personal maturity required to face the challenges of adulthood.

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ЗНАЧУЩІСТЬ ВЗАЄМОСТОСУНКІВ І ПСИХОСОЦІАЛЬНОЇ АДАПТАЦІЇ В ПІДЛІТКОВОМУ ВІЦІ

Дослідження розглядає зв'язок між різними аспектами залученості до романтичних стосунків і психосоціальної адаптації в підлітковому віці. Дев'ятсот один юнак (432 хлопчика, 469 дівчаток) віком від 12 до 17 років відзначили, що мали досвід принаймні одного із видів романтичних стосунків, відповідаючи на питання опитувальника, який досліджував десять параметрів романтичної участі (інтерес, вік на момент першого романтичного досвіду, середній вік партнерів, кількість романтичних стосунків, кількість «розбитих сердець», середня тривалість стосунків, тривалість недавніх стосунків, більш значущі взаємини, час, проведений щотижня поза школою в цих відносинах, нинішній романтичний статус, сексуальна активність або її відсутність) та чотири показники психосоціальної адаптації (успішність в школі, образ тіла, самооцінка, поведінкові проблеми). Отримані результати свідчать про те, що можна точно передбачити погіршення успішності в школі через сильну романтичну залученість, що є більш поширеним для підлітків (віком від 12 до 14), ніж для молодих людей (віком від 15 до 17 років). Тілесний образ і самооцінка позитивно та достовірно пов'язані з більш широкою участю в романтичних стосунках, і хлопчики відрізняються від дівчаток з точки зору факторів, які обумовлюють самооцінку. Зрештою, поведінкові проблеми значною мірою асоціюються з більшою залученістю до романтичних стосунків у підлітковому віці. Відмінності, які стосуються віку і статі, відносяться до взаємодії ефектів, які стосуються лише декількох параметрів. Отримані результати розглядаються в контексті психосоціального розвитку в підлітковому віці.

Ключові слова: підлітковий вік, прихильність у відносинах, психосоціальна адаптація.

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ЗНАЧИМОСТЬ ВЗАИМООТНОШЕНИЙ И ПСИХОСОЦИАЛЬНОЙ АДАПТАЦИИ В ПОДРОСТКОВОМ ВОЗРАСТЕ

Исследование рассматривает связь между различными аспектами романтической вовлеченности и психосоциальной адаптации в подростковом возрасте. Девятьсот один юноша (432 мальчика, 469 девочек) в возрасте от 12 до 17 лет указали, что имели опыт по крайней мере одного из видов романтических отношений, отвечая на вопрос опросника, который исследовал десять параметров романтического участия (интерес, возраст на момент первого романтического опыта, средний возраст партнеров, количество романтических отношений, количество «разбитых сердец», среднюю продолжительность отношений, продолжительность недавних отношений, более значимые отношения, время, проведенное в неделю вне школы в этих отношениях, нынешний романтический статус, сексуальная активность или ее отсутствие) и четыре показателя психосоциальной адаптации (успешность в школе, образ тела, самооценка, поведенческие проблемы). Полученные результаты свидетельствуют о том, что можно точно прогнозировать ухудшение успеваемости в школе среди подростков (в возрасте от 12 до 14), в отличие от молодых людей (в возрасте от 15 до 17 лет), вследствие сильной романтической привязанности. Телесный образ и самооценка положительно и значимо связаны с более широким участием в романтических отношениях; мальчики отличаются от девочек с точки зрения факторов, обуславливающих самооценку. Поведенческие проблемы в значительной степени ассоциируются с большим участием в романтических отношениях в подростковом возрасте. Различия, которые касаются возраста и пола, относятся ко взаимодействию эффектов, которые касаются лишь нескольких параметров. Полученные результаты рассматриваются в контексте психосоциального развития в подростковом возрасте.

Ключевые слова: подростковый возраст, привязанность в отношениях, психосоциальная адаптация.

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