Relationship of sociocultural factors and academic self-esteem to school grades and school disengagement in North African French adolescents

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The present study was designed to provide an integrated understanding of school grades and psychological disengagement among ethnic minority students. For that purpose, perceived parental involvement, acculturation orientations, and ethnic identity were simultaneously investigated in order to discover their respective contribution to grades among these students. Additionally, it was tested whether academic self-esteem mediated the relationship between grades and psychological disengagement. North African French junior high-school students completed a questionnaire assessing their ethnic identity, acculturation orientations, perceptions of parental involvement, academic self-esteem and trend toward the devaluing and discounting facets of psychological disengagement. Their grades in the main courses were obtained from the school records. Although perceived parental involvement displayed the strongest contribution to grades, acculturation orientations and ethnic identity still predicted grades, after controlling for parental involvement. Academic self-esteem mediated the influence of grades on both facets of disengagement, while this pattern was less clear for the devaluing process.

The school adaptation of students from ethnic minorities is a complex and multifaceted phenomenon, partly characterized by poor academic grades (e.g. Demo & Parker, 1987; Ogbu, 1988; Steele, 1997). At least two types of studies have addressed this issue: those focusing on the predictors of these students' grades, and those focusing on the consequences of their underachievement.

The first type of studies examined what factors may predict grades in order to find how to promote academic success among these students. Research has clearly demonstrated that perceptions of academic parental involvement (Jeynes, 2003), acculturation orientations (Farver, Narang, & Bhadha, 2002) and ethnic identity (Chapell & Overton, 2002) influence grades of ethnic minority students. However, these factors...
have been examined quite independently of each other. According to Wong and Rowley (2001), this lack of a holistic approach may be due to the existence of two lines of research that rely on different factors to explain these students' academic outcomes. Whereas some studies focused only on general factors that are common to all students (e.g. academic parental involvement), others focused exclusively on constructs related to ethnic minority culture (e.g. ethnic identity, acculturation orientations). As a result, it is unclear whether grades among ethnic minority students can be equally well predicted by general factors common to all students and by factors unique to ethnic minority cultures. Wong and Rowley suggested that a better understanding of ethnic minorities' school adjustment requires jointly examining both kinds of factors in a single study. The first aim of the present study was thus to simultaneously investigate perceived parental involvement, ethnic identity and acculturation orientations, in order to discover their respective contribution to grades among ethnic minority students.

The second type of studies focusing on ethnic minority students examined how minority students deal with poor grades' negative consequences for the self (Crocker, Major, & Steele, 1998). Findings indicated that minority students are especially likely to self-protect from the poor grades received by psychologically disengaging from school. Disengagement consists of detaching the global self-esteem from the academic domain so that it is no longer affected by the poor outcomes received (Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Steele, 1992, 1997). Although psychological disengagement is now a well-documented phenomenon (e.g. Osborne, 1995, 1997; Verkuyten & Brug, 2003), attempts to identify the predictors of disengagement are lacking (Schmader, Major, & Gramzow, 2001). Though not yet investigated, the definition of this process posits that poor grades will lead to disengagement only if students' global self-esteem is threatened by a lowered self-evaluation in the academic domain (i.e. a lowered academic self-esteem; Osborne, 1997; Steele, 1992, 1997; Verkuyten & Thijs, 2004). This suggests that academic self-esteem should mediate the effects of grades on psychological disengagement. The second aim of the present study was therefore to address this untested core postulate in the disengagement hypothesis.

We first review the literature showing that perceptions of parental involvement in schooling, acculturation orientations and ethnic identity are predictors of academic grades of ethnic minority students. This review will emphasize that these three factors have been examined independently of each other, hence raising the question of their respective influences on grades. Then, we address the literature on psychological disengagement in order to demonstrate that academic self-esteem may play a key role in minority students' disengagement from school.

**Predictors of academic grades**

**Perceptions of parental involvement in schooling**

Academic parental involvement relates to parents' interest and participation in their children's schooling. This can be reflected in a range of home-based behaviours (e.g. checking homework, supporting children's academic choices) and school-based behaviours (e.g. participation in school activities, attendance at parent-teacher conferences; Fantuzzo, McWayne, Perry, & Childs, 2004; Seginer & Vermulst, 2002; Zellman & Waterman, 1998).

Although both home-based and school-based parental involvement have been consistently related to better academic achievement (Epstein, 1987; Grolnick & Slowiaczek, 1994; Hill, 2001), two findings are noteworthy. First, parental involvement
at home has proved to be a stronger predictor of academic achievement than school-site involvement (Fantuzzo et al., 2004; Hickman, Greenwood, & Miller, 1995; Wang, Haertel, & Wallberg, 1993; Zellman & Waterman, 1998). As Zellman and Waterman pointed out, at a time when most school professionals still focus heavily on school-site involvement, this result should instead encourage them to pay more attention to parent-child interactions. Several studies have shown that the beneficial effect of parent-child interactions at home is so robust that it also occurs when measured at a general level (i.e. parenting; Darling & Steinberg, 1993). For example, adolescents who perceive their parents to monitor their activities and to be supportive perform better in school irrespective of their ethnic and socio-economic backgrounds (Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Second, students' perception of parental involvement in schooling was found to be a stronger predictor of their academic achievement than their parents' actual or reported involvement (Desimone, 1999; Gecas & Schwalbe, 1986; Grolnick, Ryan, & Deci, 1991). Therefore, students' self-reports have become the common measure of academic parental involvement (e.g. Abarca, Plunkett, & Sands, 2005; Bean, Bush, McKenry, & Wilson, 2003; Seginer & Vermulst, 2002; Steinberg et al., 1992). Research examining relations between students' self-reports and outcomes indicates that the more students perceive academic parental involvement at home, the higher their academic motivation (e.g. Abarca et al., 2005; Plunkett & Bamaça-Gomez, 2003) and grades (e.g. Brown, Mounts, Lamborn, & Steinberg, 1993; Grolnick et al., 1991; Jacobson & Crockett, 2000).

Yet, as students reach secondary school, many parents may think that they cannot assist with more complex schoolwork (Hill & Taylor, 2004; Seginer & Vermulst, 2002). This appears especially true for immigrant parents (Kao & Tienda, 1995) due to a lack of proficiency in the dominant language (Henderson, 1997), or general feelings of inability to help (Romo & Falbo, 1996). If, however, these parents cannot provide direct help on homework, they can still check whether it is done and encourage their children to do it well (Fuligni, 1997; Seginer & Vermulst, 2002). In a meta-analysis, Jeynes (2003) found that the positive impact of perceived parental involvement (already demonstrated among students from the mainstream culture) also held for ethnic minority students, even when the help received was inadequate (Arellano & Padilla, 1996). Thus, the mere fact of perceiving parental interest is sufficient for students to infer that their parents place a high value on education (Abarca et al., 2005; Epstein, 1988) and, in turn, to motivate them to succeed academically (Hoover-Dempsey et al., 2001).

**Acculturation orientations**

Contrary to perceived parental involvement, which has implications for all students whatever their ethnic background, acculturation orientations are only relevant for ethnic minority students. These orientations refer to the attitudes individuals hold towards both their culture of origin and the dominant culture of their host society (Berry, 1980; Bourhis, Moïse, Perreault, & Senécal, 1997; Ryder, Alden, & Paulhus, 2000). Acculturation was first conceptualized as a linear process where increased identification to the mainstream culture necessarily entails corresponding decreased identification to the culture of origin (Gordon, 1964). However, this unidimensional approach has been questioned mainly because it fails to identify alternatives to assimilation to the host culture.
Currently, authors agree that acculturation orientations are best approached through a bidimensional view (Flannery, Reise, & Yu, 2001; Ryder et al., 2000). According to this view, attitudes towards both cultures are not mutually exclusive but instead can vary independently (Berry, 1980; LaFromboise, Coleman, & Gerton, 1993). More precisely, ethnic minority individuals can have either positive or negative attitudes towards both their culture of origin and the dominant culture. This bidimensional perspective is well illustrated by John Berry’s work (Berry, 1980, 1997; Berry, Trimble, & Olmedo, 1986), which differentiates four acculturation orientations: (1) integration (positive attitudes towards both cultures), (2) assimilation (positive attitudes towards the dominant culture and negative attitudes towards the culture of origin), (3) separation (positive attitudes towards the culture of origin and negative attitudes towards the dominant culture) and (4) marginalization (negative attitudes towards both cultures). A fifth orientation, called individualism, has recently been added and refers to the preference to identify oneself as an individual rather than as a group member (Bourhis et al., 1997).

Ethnic minority individuals who report being highly integrated tend to experience less acculturative stress, less anxiety and fewer psychological problems compared with those who feel marginalized or separated (Berry, Kim, Minde, & Mok 1987; Berry & Sam, 1997; Farver, Bhadha, & Narang, 2002). Intermediate levels of stress are generally associated with assimilation, while marginalization is viewed as the greatest source of distress (Berry, 1970; Berry, Kim, Power, Young, & Bujaki, 1989). Considered as the most psychologically adaptive orientations, integration and assimilation have been expected to contribute to better school adjustment compared with the other orientations (Farver et al., 2002; LaFromboise et al., 1993). Likewise, adopting certain values and beliefs of the dominant culture prevailing at school is viewed as a necessary condition for academic success (e.g. Buenning & Tollefson, 1987; Gonzales & Roll, 1985; Trueba, 1988). Indeed, students are more likely to be academically rewarded inasmuch as they display attitudes and behaviours that are valued and expected within the mainstream culture. Since integration and assimilation both imply some absorption of the dominant culture, they have been expected to lead to better grades. Consistent with this hypothesis, grades were found to be positively related to integration (Berry, Wintrob, Sindell, & Mawhinney, 1982; Farver et al., 2002; López, Ehly, & García-Vásquez, 2002) and assimilation (Baldauf & Ayabe, 1977; Birman, Trickett, & Vinokurov, 2002). Apart from Berry et al., who also reported a negative association between marginalization and cognitive ability performance, no relationship was found for the other orientations.

Ethnic identity
Ethnic identity is a specific aspect of acculturation that focuses on the subjective sense of belonging to one’s ethnic group, associated with feelings of pride and learning about the traditions and values of the culture of origin (Phinney, 1990, 1992; Phinney, Romero, Nava, & Huang, 2001). As part of the acculturation process, ethnic identity is changing over time depending on the attitudes towards the dominant group (Phinney, 1990). For example, integration was found to elicit higher scores of ethnic identity than marginalization or separation (Farver et al., 2002). According to Phinney (1993), a high level of ethnic identity indicates a secure sense of self as an ethnic group member, which is crucial to the development of a healthy self-concept in adolescents. Having a secure sense of self as an ethnic group member is particularly challenging for ethnic minority adolescents who have to develop an identity as a member of a minority group, while dealing with the dominant culture (Phinney et al., 2001). For that reason, many
researchers have examined the relationships between ethnic identity and psychological well-being in these adolescents (Phinney, 1990). Results demonstrated that ethnic identity was a critical factor during adolescence, since higher scores of ethnic identity were associated with higher self-esteem (Phinney, 1992; Roberts et al., 1999; Sam, 2000), better mental health (Crocker, Luhtanen, Blaine, & Broadnax, 1994) and higher well-being (Martinez & Dukes, 1997).

Given the beneficial effects of ethnic identification on psychological well-being, ethnic identity has been thought to represent an area of psychosocial adjustment for ethnic minority adolescents that may be positively associated with other areas, including academic achievement (Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994; Wong, Eccles, & Sameroff, 2003). While some studies support this positive association between ethnic identity and grades (Chapell & Overton, 2002; Taylor et al., 1994; Wong et al., 2003), others reveal a negative relationship (Arroyo & Zigler, 1995; Fordham & Ogbu, 1986). These results were interpreted as reflecting different ways for adolescents to cope with the discrimination towards their ethnic group. Some of minority students may strive for academic success because they consider school as a means to improve their status in life (Fuligni, 1997; Wong et al., 2003). This strategy may be less likely, however, among those from low socio-economic background. Perceptions of limited opportunities of social mobility for members of their ethnic group may lead minority adolescents to see little or no link between academic success and access to good jobs (Fordham & Ogbu, 1986; Mickelson, 1990). As a result, minority students may develop oppositional identities, thereby showing their resentment over discrimination towards their ethnic group (Phinney, Horenczyk, Liebkind, & Vedder, 2001) and their indifference or even disdain towards academic success, which is highly valued by the dominant society (Ogbu, 1997).

In sum, the studies reviewed above clearly demonstrate that perceptions of academic parental involvement, acculturation orientations and ethnic identity influence grades of ethnic minority students. As previously noted, however, the fact that these factors were examined independently of each other does not inform their respective influences on these grades. Obviously, the impact of perceived parental involvement on academic achievement seems especially robust (Jeynes, 2003). This fact raises the question of whether factors unique to ethnic minority cultures (i.e. acculturation orientations, ethnic identity) will still matter for the prediction of grades among ethnic minority students, even after controlling for the effect of this general factor common to all students (i.e. perceived parental involvement). The first aim of the present study was therefore to examine these factors simultaneously in order to shed light on this issue. Given that prior research indicated that acculturation orientations and ethnic identity were crucial determinants of well-being and academic achievement, we expected both factors to predict grades, even after controlling for perceived parental involvement.

In addition, the present study was conducted on an understudied population, namely, North African French students (who are one of the largest ethnic minorities in France). These students are highly represented in special schools, which are devoted to students with academic difficulties due to cultural and low socio-economic backgrounds (Caille, 2001; Stefanou, 2001), and where the rate of academic failure is remarkably high (i.e. ‘priority education schools’; Andrieux, Levasseur, Penninckx, & Robin, 2001). In line with the results reviewed above, we expected that North African French students attending priority education schools would have better grades when they perceived their parents to be involved in their schooling. In addition, both integration and assimilation were expected to lead to better grades, whereas no relationship was
expected between grades and the other acculturation orientations. Finally, the fact that North African French students attending a priority education school are from low socio-economic background, together with the salience of discrimination towards their ethnic group in France (Blier & de Royer, 2001; CNCD, 2000), might lead them to reject the dominant culture prevailing at school and develop oppositional identities (Ogbu, 1997). We thus expected a negative relationship between ethnic identity and grades.

After having examined some important predictors of ethnic minority students' academic grades, we now turn to the question of how minority students may deal with the consequences of getting poor grades. More specifically, the following section focuses on psychological disengagement as a way to self-protect from the negative consequences for the self of academic underachievement and examines why academic self-esteem may play a key role in minority students' disengagement from school.

**Psychological disengagement**

Psychological disengagement is an instance of self-defensive strategies (Crocker et al., 1998) that turned out to be highly prevalent in school (Major et al., 1998; Schmader et al., 2001; Steele, 1997), and among students from diverse ethnic groups (Osborne, 1995, 1997; Verkuyten & Brug, 2003). Schmader et al. distinguished two different pathways through which academic disengagement may occur. Students may engage in a devaluing process whereby they decrease the importance of academic achievement to the point where they no longer view it as a self-relevant domain. Alternatively, students may engage in a discounting process whereby they decrease the importance of grades received by considering them as biased indicators of their ability.

As Schmader et al. (2001) pointed out, it is crucial to determine what the predictors of devaluing and discounting processes are, so as to better understand academic disengagement. The few studies conducted on this topic provided some evidence that grades and perceived discrimination may be predictors of disengagement (Schmader et al., 2001; Verkuyten & Thijs, 2004). In addition, another possible predictor of academic disengagement is suggested by its own definition. This definition states that students will detach their global self-esteem from the academic domain so that poor grades no longer affect their self-evaluation (Major et al., 1998; Steele, 1992, 1997). Accordingly, this presupposes that poor grades will decrease students' academic self-esteem. Such a lowered academic self-esteem may in turn impair their global self-esteem, hence creating a need to self-protect (Osborne, 1997; Steele, 1992, 1997; Verkuyten & Thijs, 2004). This would suggest that academic self-esteem would be a mediator of the relationship between grades and both devaluing and discounting processes. To date, however, this core postulate in the disengagement hypothesis has not yet been tested. This was the second aim of the present study.

Examining whether academic self-esteem mediates the relationship between grades and both devaluing and discounting processes requires addressing three points. Firstly, the correlation between grades and both devaluing and discounting processes should be examined. Many studies have demonstrated that the negative consequences of receiving poor outcomes in a given domain are reduced by decreasing the perceived importance of that domain (e.g. Crocker & Major, 1989; Harter, 1986; Tesser & Paulhus, 1983). Since both devaluing and discounting serve to reduce the importance of the academic domain (Schmader et al., 2001), we expect that there will be a negative correlation between grades and both these processes. Moreover, past research has suggested that ethnic
minority students were more likely to discount their academic outcomes than they were to devalue academic success (Major & Schmader, 1998; Schmader et al., 2001; Voelkl, 1993, 1997). This difference could be due to the difficulty to distrust the importance of academic achievement in societies where it is highly valued (Crocker & Major, 1989). In contrast, students can easily discount the validity of grades by perceiving them as unfair evaluations (Mickelson, 1990). Thus, even if poor grades can lead to both higher devaluing and discounting, we expect students to report greater discounting than devaluing.

Second, the association between grades and academic self-esteem should be addressed. Since academic self-esteem refers to the evaluation of one’s performance in the academic domain (Marsh, 1986; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995), it is reasonable to expect that it will depend on the nature (positive or negative) of the academic outcomes received. In fact, several studies showed that prior academic achievement is a crucial determinant of academic self-esteem (e.g. Blanton, Crocker, & Miller, 2000; Heatherton & Polivy, 1991; Marsh, Byrne, & Yeung, 1999). Therefore, we expect that grades will be positively correlated with academic self-esteem.

Third, and finally, the relationship between academic self-esteem and either devaluing or discounting processes should be examined. Since academic self-esteem is considered to be a part of global self-esteem (Byrne, 1984; James, 1890/1963; Marsh, 1986), a decrease in academic self-esteem (due to poor grades) is likely to weaken global self-esteem (Osborne, 1997; Pelham & Swann, 1989; Rosenberg et al., 1995; Steele, 1997). In other words, the threat to global self-esteem would not come from the poor grades received, but from the low academic self-esteem they entail. It is exactly in this situation – when students’ global self-esteem is threatened – that students may psychologically disengage from the academic domain in order to self-protect (Crocker & Major, 1989; Crocker et al., 1998; Steele, 1997). This implies that the lower the academic self-esteem, the higher the disengagement from school. Since past research suggests that disengagement can be achieved by either devaluating the academic domain or by discounting academic outcomes received (Schmader et al., 2001), we thus expect that a lowered academic self-esteem would lead to greater devaluing and discounting.

Taken together, these three points lead us to expect academic self-esteem to mediate the relationship between grades and psychological disengagement. In addition, since previous research has also demonstrated that it is easier for students to discount the validity of grades due to perceived discrimination rather than to devalue the importance of academic achievement, we also expect students to disengage through greater discounting than devaluing.

Method

Participants and procedure
Participants were 183 (114 girls and 69 boys) North African French seventh and eighth graders (mean age $= 14.6$, $SD = 1.12$), attending a priority education school. All participants had at least 50% North African heritage via bloodline (117 Algerian-French, 46 Moroccan-French and 20 Tunisian-French) and most of them (83.1%) reported speaking Arabic at home. As for all priority education areas, the school was located in an economically depressed neighbourhood and was the recipient of compensatory education funds. All participants were thus from low or very low socio-economic backgrounds.
This population is usually very reluctant to participate in studies due to fear of being scrutinized because of cultural differences. Motivating parents to let their children take part in the study, and encouraging students to complete the questionnaire, represented a real challenge. For that reason, we told students that the study was aimed at giving them a unique opportunity to express their opinion about what they thought about school. We also designed the shortest possible questionnaire (through the use of sometimes very brief measures), so that it would be less threatening to this population. Finally, all participants were assured that their responses would be anonymous and confidential. On this basis, students completed a questionnaire containing different scales designed to measure their perceptions of parental involvement, acculturation orientations, ethnic identity, academic self-esteem and trend towards the devaluing and discounting facets of disengagement. It was administered in the classrooms in the middle of the school year so that all students had a clear sense of their achievement level. Because all these students were born in France and were in their third or last year of the secondary school, they did not have any specific problem with the French language.

**Measures**

**Academic grades.** Grades were taken from the school records for each of the six most important courses (i.e. mathematics, physics, biology, French, history and foreign language). The overall mean grade was computed, ranging from 0 (fail) to 20 (excellent).

**Perceptions of parental involvement.** Consistent with research reviewed above, we focused on the academic parental involvement at home from the students' perspective only. To avoid a lengthy questionnaire that would be threatening for participants, we used only a 2-item measure: (1) 'do your parents approve of the choices you make at school for your future?' and (2) 'do your parents supervise your academic outcomes?' Ratings were made on a 5-point scale (1 = not at all, 5 = very often). A mean score was calculated from these 2 items.

**Acculturation orientations.** The Immigrant acculturation scale (IAS) developed by Bourhis and collaborators (Bourhis et al., 1997) and based on the model of Berry (Berry et al., 1989) was adapted to measure students’ acculturation orientations in the school domain. In this scale, each of the five orientations are usually assessed through one statement, but formulated in the context of different domains (e.g. employment, endogamy-exogamy). Because we focused on the academic domain only and in a continued effort to get the shortest possible questionnaire, we used a single-item measure to tap into each orientation.

Except for the individualism item, students rated their attitudes towards their native language and French (for examples of using language preference to examine acculturation, see Ben-Shalom & Horenczyk, 2003; Farver et al., 2002): (1) ‘I think that cultural membership is not important because only my academic individual abilities matter’ (individualism); (2) ‘It is important for me to master both French and my cultural language’ (integration); (3) ‘I think it is important for me to speak French better than my cultural language’ (assimilation); (4) ‘I don’t like to speak either French or my cultural language’ (marginalization); (5) ‘I think that my cultural language is more important than French’ (separation). All ratings were made on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

**Ethnic identity.** Students’ ethnic identity was assessed by using the revised version of the Multigroup Ethnic Identity Measure (MEIM; Roberts et al., 1999). The scale consisted of 12 items (e.g. ‘I am happy that I am a member of the ethnic group I belong
to’) and all ratings were made on a 5-point scale (1 = strongly disagree, 5 = strongly agree). A mean was calculated from the 12 items ($\alpha = .74$). As in previous studies using the MEIM (e.g. Branch, 2001; Roberts et al., 1999), we also included an open-ended question to elicit ethnic self-identification. However, this item was not included as part of the ethnic identity scale per se since it reveals nothing about the strength or valence of ethnic identity (see Roberts et al., 1999).

Academic self-esteem. The Performance State Self-Esteem Scale (Heatherton & Polivy, 1991) was used to assess students’ academic self-esteem. It consisted of 7 items (e.g. ‘I feel confident about my abilities’; $\alpha = .78$) and ratings were made on a 5-point scale (1 = low academic self-esteem, 5 = high academic self-esteem).

Academic psychological disengagement. Students rated 6 items modelled after those used by Schmader et al. (2001). All ratings were made on a 5-point scale (1 = strongly disagree, 5 = strongly agree). Devaluing was assessed with three items (reverse coded, $\alpha = .71$): ‘Being good at school is important for my future life’, ‘Being good at school is an important part of who I am’ and ‘Understanding things well at school is very important for me’. Discounting was assessed with three items (reverse coded, $\alpha = .73$): ‘The grades I obtain at school provide me a valid evaluation of my achievement level’, ‘The grades I obtain correctly reflect my academic abilities’ and ‘my grades influence my opinion about my academic abilities’. The mean scores for each disengagement facet were computed, with higher means indicating greater disengagement.

Results

Predictors of academic grades

A hierarchical regression analysis was conducted to establish the respective contributions of perceptions of parental involvement, acculturation orientations and ethnic identity to grades. Table 1 displays the means, standard deviations and correlations among all the variables, and Table 2 reports the results of the hierarchical regression analysis. Since girls in our sample appeared to perform better than boys ($r = -.20$, $p < .01$), students’ gender was entered in the equation first, to control for gender differences in grades (Cohen & Cohen, 1983). We expected acculturation orientations and ethnic identity to still predict grades after controlling for perceived parental involvement. To test this hypothesis (Petrocelli, 2003), perceived parental involvement was entered in the next block (Block 2), followed by acculturation orientations (Block 3) and ethnic identity (Block 4). Ethnic identity was entered after acculturation orientations because the literature suggests a causal ordering such that acculturation can lead to changes in adolescents’ ethnic identity (Farver et al., 2002; Phinney, 1990).

It was found that 27% of the variance in grades was accounted for by all predictors, $F(8, 172) = 7.85$, $p < .0001$. When entered, perceived parental involvement (Block 2) accounted for 14% of the variance in grades beyond that accounted for by students’ gender ($\Delta R^2 = .14$), $\Delta F(1, 178) = 29.23$, $p < .0001$. The third block added acculturation orientations, which accounted for 7% of the variance in grades ($\Delta R^2 = .07$), $\Delta F(1, 173) = 3.02$, $p < .02$, with integration contributing the only statistically significant beta. After controlling for the effects of gender, perceived parental involvement and acculturation orientations, ethnic identity contributed an additional 3% to the variance in grades ($\Delta R^2 = .03$), $\Delta F(1, 172) = 6.30$, $p < .02$ (Block 4). Therefore, acculturation orientations and ethnic identity significantly improved the
Table 1. Means, standard deviations and correlations of the entire set of variables

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<td>0.06</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Academic self-esteem</td>
<td>3.23</td>
<td>0.70</td>
<td>0.09</td>
<td>–</td>
<td>0.44</td>
<td>–</td>
<td>0.01</td>
<td>0.02</td>
<td>0.09</td>
<td>0.08</td>
<td>0.20</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic grades</td>
<td>9.90</td>
<td>2.79</td>
<td>–</td>
<td>0.35</td>
<td>–</td>
<td>0.15</td>
<td>0.04</td>
<td>–</td>
<td>0.10</td>
<td>0.06</td>
<td>0.11</td>
<td>0.60</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Devaluing</td>
<td>1.31</td>
<td>0.55</td>
<td>–</td>
<td>0.31</td>
<td>–</td>
<td>0.14</td>
<td>–</td>
<td>0.15</td>
<td>0.03</td>
<td>0.09</td>
<td>0.12</td>
<td>0.02</td>
<td>0.32</td>
<td>0.27</td>
</tr>
<tr>
<td>Discounting</td>
<td>2.80</td>
<td>1.01</td>
<td>–</td>
<td>0.01</td>
<td>–</td>
<td>0.39</td>
<td>–</td>
<td>0.04</td>
<td>0.10</td>
<td>0.03</td>
<td>0.14</td>
<td>0.14</td>
<td>0.07</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Note. Gender was scored –1 for girls and +1 for boys. *p < .05, **p < .01.
model’s ability to predict grades over and above that which can be predicted by perceived parental involvement. Considering now the overall model, results showed that perceived parental involvement was positively associated with grades ($B = 1.38$, $SE = 0.24$, $R^2 = 0.39^*$), controlling for ethnic identity and acculturation orientations. Integration was positively related to grades ($B = 0.22$, $SE = 0.13$, $t = 5.97$, $p < 0.0001$), controlling for perceived parental involvement and ethnic identity. Finally, ethnic identity appeared to be negatively related to grades ($B = -0.77$, $SE = 0.31$, $t = -2.51$, $p < 0.02$), controlling for perceived parental involvement and acculturation orientations.

**Predictors of psychological disengagement**

The other aim of the present research was to test whether academic self-esteem mediated the relationship between grades and psychological disengagement. We also expected to replicate past findings showing that students tend to report greater discounting than devaluing. A paired $t$ test revealed that students were indeed more likely to discount academic grades ($M = 2.80$, $SD = 1.10$) than to devalue academic achievement ($M = 1.31$, $SD = 0.55$), $t(182) = 21.17$, $p < 0.001$, $d = 1.83$. To test the mediational hypothesis, we followed the four steps outlined by Baron and Kenny (1986).

### Table 2. Summary of hierarchical regression analysis for variables predicting students’ grades

<table>
<thead>
<tr>
<th>Variable</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>$-0.57$</td>
<td>$-0.63$</td>
<td>$-0.53$</td>
<td>$-0.56$</td>
</tr>
<tr>
<td>Perceived parental involvement</td>
<td>$1.3$</td>
<td>$1.38$</td>
<td>$1.38$</td>
<td>$1.4$</td>
</tr>
<tr>
<td>Gender</td>
<td>$-0.20$</td>
<td>$-0.22$</td>
<td>$-0.19$</td>
<td>$-0.19$</td>
</tr>
<tr>
<td>Individualism</td>
<td>$-0.08$</td>
<td>$-0.08$</td>
<td>$-0.04$</td>
<td>$-0.04$</td>
</tr>
<tr>
<td>Integration</td>
<td>$0.35$</td>
<td>$-0.21$</td>
<td>$-0.19$</td>
<td>$-0.24$</td>
</tr>
<tr>
<td>Assimilation</td>
<td>$-0.21$</td>
<td>$-0.31$</td>
<td>$-0.21$</td>
<td>$-0.20$</td>
</tr>
<tr>
<td>Separation</td>
<td>$-0.13$</td>
<td>$-0.14$</td>
<td>$-0.14$</td>
<td>$-0.14$</td>
</tr>
<tr>
<td>Marginalization</td>
<td>$-0.12$</td>
<td>$-0.24$</td>
<td>$-0.20$</td>
<td>$-0.20$</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>$-0.77$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>$0.04^*$</td>
<td>$0.17^*$</td>
<td>$0.24^*$</td>
<td>$0.27^*$</td>
</tr>
</tbody>
</table>

Note. Gender was scored $-1$ for girls and $1$ for boys.

*p < 0.05, **p < 0.01. $\Delta R^2 = 0.14$ for Block 2 ($p < 0.001$); $\Delta R^2 = 0.07$ for Block 3 ($p < 0.02$); $\Delta R^2 = 0.03$ for Block 4 ($p < 0.01$).
integration and ethnic identity were significant predictors of grades, the mediational analysis was conducted using these variables as covariates. Following this procedure, two separate analyses were conducted on discounting and devaluing. (Figure 1)

The analyses conducted on discounting revealed that grades negatively predicted discounting \( (B = -0.13, SE_B = 0.03, \beta = -0.35, t = -4.66, p < .001; \text{Step 1}) \). Then, grades positively predicted academic self-esteem \( (B = 0.14, SE_B = 0.02, \beta = 0.58, t = 9.41, p < .001; \text{Step 2}) \). For Steps 3 and 4, discounting was regressed on both grades and academic self-esteem. As expected, discounting was negatively predicted by academic self-esteem while controlling for grades \( (B = -0.61, SE_B = 0.12, \beta = -0.42, t = -4.94, p < .001; \text{Step 3}) \), and grades did not significantly predict discounting when controlling for academic self-esteem \( (B = -0.04, SE_B = 0.03, \beta = -0.10, t = -1.19, p < .24; \text{Step 4}) \). Moreover, the reduction of the direct effect of grades on discounting was significant (Sobel’s test, \( z = -4.35, p < .0001 \)). Interestingly, these analyses also revealed that perceived parental involvement (which was entered as a covariate) directly predicted discounting \( (B = -0.22, SE_B = 0.09, \beta = -0.17, t = -2.42, p < .02) \).

\[
\begin{array}{c}
\text{Academic Grades} \\
\downarrow
\end{array}
\begin{array}{c}
\text{Academic Self-Esteem} \\
\downarrow
\end{array}
\begin{array}{c}
\text{Academic Discounting} \\
\text{Sobel's test: } z = -4.35, p < .0001
\end{array}
\begin{array}{c}
\text{Academic Grades} \\
\downarrow
\end{array}
\begin{array}{c}
\text{Academic Self-Esteem} \\
\downarrow
\end{array}
\begin{array}{c}
\text{Academic Devaluing} \\
\text{Sobel's test: } z = -1.84, p < .07
\end{array}

\text{Figure 1. (A) Mediation analysis for academic discounting. (B) Mediation analysis for academic devaluing. Note–Unstandardized coefficients are reported. The number in parentheses indicates the direct effect of academic grades on the disengagement process prior to the inclusion of academic self-esteem in the regression equation. *p < .05, **p < .001.}
Similar analyses were conducted on devaluing and revealed that grades negatively predicted devaluing ($B = -0.04, SE_B = 0.02, \beta = -0.23, t = -2.91, p < .005$; Step 1). Since Step 2 was already checked (the corresponding equation regression is the same whatever the disengagement process considered), we then examined Steps 3 and 4 by regressing devaluing on both grades and academic self-esteem. As expected, devaluing was negatively predicted by academic self-esteem while controlling for grades ($B = -0.15, SE_B = 0.08, \beta = -0.19, t = -2.01, p < .05$; Step 3), and grades did not significantly predict devaluing when controlling for academic self-esteem ($B = -0.02, SE_B = 0.02, \beta = -0.12, t = -1.23, p < .23$; Step 4). The Sobel’s test, however, indicated that the reduction of the direct effect of grades on devaluing was only marginal ($z = -1.84; p < .07$). As for discounting, it is noteworthy that these analyses also revealed that perceived parental involvement directly predicted devaluing ($B = -0.13, SE_B = 0.05, \beta = -0.18, t = -2.33, p < .02$). Taken together, the present findings indicated that academic self-esteem mediated the influence of grades on both facets of disengagement, although this pattern was less clear for the devaluing process.

**Discussion**

The first aim of the present study was to establish the respective contributions of minority students’ perceptions of parental involvement, acculturation orientations and ethnic identity to their academic grades. At the same time, we also expected to extend previous findings about the predictors of grades amongst North African French students.

Relative to acculturation orientations and ethnic identity, perceptions of parental involvement clearly displayed the strongest contribution to students’ grades, as indicated by all the statistical coefficients. Indeed, this factor has the largest correlation with grades ($r = .35$), the largest standardized partial regression coefficient ($\beta = 0.40$) and the largest increase in proportion of variance accounted for ($\Delta R^2 = .14$). Compared with perceived parental involvement, acculturation orientations and ethnic identity contributed, to a lesser extent, to grades (all statistical coefficients were at least half of those obtained for perceived parental involvement). Both factors, however, significantly improved the model’s ability to predict grades over and above that which can be predicted by perceived parental involvement. This means that a complete understanding of ethnic minority students’ academic achievement requires taking into account different kinds of factors: General factors common to all students as well as cultural factors more specific to ethnic minority students. To our knowledge, past research has not allowed this conclusion since these factors have never been investigated simultaneously.

With regards to the direction of the effects, the present results indicated that past findings were replicated among North African French students. As expected, better grades were associated with higher perceptions of parental involvement. This supports the idea that the mere perception of parental interest in academic achievement is sufficient to convey a positive attitude towards school (Grolnick & Slowiàczyk, 1994) and then, to help students perform better (Grolnick et al., 1991; Plunkett & Bamaca-Gomez, 2003). Likewise, integration was positively related to grades (see also Farver et al., 2002; López et al., 2002). The fact that only integration (and not assimilation) reached significance suggests that better grades are more likely when the acculturation orientation does not imply a choice between both cultures. By allowing ethnic minorities to feel accepted while preserving their original culture, integration facilitates psychological and academic adjustment (Kosic, 2002; LaFromboise et al., 1993; van de
Vijver, Helms-Lorenz, & Feltzer, 1999). Finally, results obtained for ethnic identity also supported previous findings showing a negative relationship with grades (Arroyo & Zigler, 1995; Fordham & Ogbu, 1986). It may be that North African French students have developed an oppositional ethnic identity in response to their feelings that they are neglected or rejected by the French school system. One can easily understand that being from low socio-economic backgrounds, living in a segregated environment, and attending special schools with lower probabilities of academic success compared with other schools, can elicit disinterest in academic achievement due to perceived discrimination (Fordham & Ogbu, 1986; Mickelson, 1990).

The second aim of the study was to examine an untested core assumption in the disengagement hypothesis, which posits academic self-esteem as a mediator of the relationship between grades and academic disengagement (Osborne, 1995, 1997; Steele, 1992, 1997). As expected, academic self-esteem mediated the influence of grades on discounting and devaluing, although this pattern was less obvious for the devaluing process. This finding supports the idea that the need to self-protect is not elicited by the poor grades themselves, but by the resulting low academic self-esteem. The present results also replicated previous findings indicating that students were more likely to discount academic grades than to devalue academic achievement (Schmader et al., 2001; Voelkl, 1993, 1997), suggesting that it is actually difficult to devalue academic success when it is highly valued and expected by the society (Crocker & Major, 1989).

To provide a fairer picture of paths towards psychological disengagement, we also examined the role of factors that appeared to predict grades (i.e. perceived parental involvement, integration, ethnic identity). Only perceived parental involvement was directly associated with lesser discounting and devaluing, hence attesting the importance of this factor in the disengagement process.

Our research has some limitations, however. Firstly, our sample size was only modest. This can be explained by the fact that North African French families were very reluctant to let their children participate in the study, due to their fear of being scrutinized because of their cultural origin. This difficulty in the collection of data may partly explain why North African French students are rarely studied though they are especially at risk for academic failure and academic disengagement. Secondly, in an attempt to build the shortest possible questionnaire so that it would be less threatening to this population, we used very brief measures of perceived parental involvement and acculturation orientations. The use of these minimal measures, however, perhaps undermines the strength of the present results. Future research is needed to test whether the effects of these variables can be replicated with stronger measures.

Thirdly, all variables except grades were self-reported; therefore, response bias such as social desirability could have inflated the relationships among the different variables. Nevertheless, self-reports can also constitute a strength in the present study. The personal feelings and perceptions ethnic minority students hold towards their ethnic group and school are real to them and, as a result, may have a greater influence than a researcher’s perspective or even parents and teachers’ perspectives (Grolnick et al., 1991; Honora, 2003). As described earlier, the advantage of students’ self-reports is especially well documented for parental involvement.

Finally, although part of our research was derived from theoretical considerations and several previous studies, causal interpretations must be made very cautiously. The main reasons for this caution concerns the correlational nature of the study and the fact that all variables were measured at only one point in time. All of these variables refer to dynamic processes that are likely to vary over time and that would be better captured by
longitudinal studies with several data points. The contribution of the present study, however, was more modestly to offer a snapshot of important factors likely to affect grades and psychological disengagement among some ethnic minority students.

The present work also raises questions that should be addressed in future research. For example, the lack of any comparison group raises the question of the generalization of our findings to other ethnic minorities but also to the dominant (non-immigrant) ethnic group. We believe that most of the present results can be expected in all ethnic groups inasmuch as they involve variables and processes that are common to all students. This is the case for perceived parental involvement and all the variables implicated in the disengagement process (i.e. academic self-esteem, discounting and devaluing). Indeed, Jeynes (2003) concluded that the beneficial impact of parental involvement holds no matter what the ethnic background. Likewise, Steele (1997) suggested that all students experiencing threat due to academic failure might psychologically disengage from school. Thus, regardless of ethnicity, parental involvement might predict better grades and those students who get lower grades might feel academically incompetent and then feel the need to self-protect through either the devaluing or discounting process. On the contrary, acculturation orientations and ethnic identity are unique to ethnic minority students and should be relevant for those students only. Considering these culture-specific variables, past research suggests that the negative association between ethnic identity and grades found in the present study may be not generalizable to all ethnic minorities (Wong et al., 2003). For example, a rather positive association could be found among ethnic minorities that are less discriminated and from a higher socio-economic background than were our participants.

Likewise, the fact that our sample was limited to students with a low socio-economic status invites further research. We chose to study low-income North African students because it is this specific immigrant population that is at risk for academic failure and disengagement in France. Because socio-economic status, ethnicity and academic failure are often confounded variables (Hill et al., 2004), future research is needed to determine the unique effects of ethnicity and socio-economic status (as well as their interactive effects) on grades and academic disengagement. When considering a comparison with mainstream students from a low socio-economic background and attempting to untangle ethnicity and socio-economic status, one must be aware that incomes from majority and minority groups are not entirely equivalent. As pointed out by Meece and Kurtz-Costes (2001), ethnic minorities from a low socio-economic background face lower-quality jobs, worse work conditions and less stable jobs than their mainstream counterparts with the same low socio-economic status.

Despite some limitations, the current research does make a contribution to the literature. It extends past findings about the predictors of grades to an under-examined population: North African French students. It also adds to the understanding of psychological disengagement. Our findings support a previously untested core postulate of the disengagement hypothesis that poor grades will trigger psychological disengagement only if they result in a decreased academic self-esteem. In addition, the present study goes further than prior research by providing a more inclusive understanding of ethnic minority students’ academic achievement and disengagement. If their academic achievement depends largely on a general factor (i.e. perceived parental involvement) that is common to all students, it also depends on more culture-specific factors, hence reflecting the complexity of their school adaptation. The findings obtained for acculturation orientations and ethnic identity invite educators and policy makers to strive for a better knowledge of these cultural factors. Instead of interpreting
them as deficits in ethnic minority students, greater attention should be paid to the mismatch between what the school expects and what the children bring to the school setting. For example, discovering that the French educational system is clearly assimilationist (Wieviorka, 1998) while it is integration that leads to better grades among North African French students can help understand that school expectations can be a barrier to their academic achievement. (See Bourhis et al., 1997, for the consequences of the discrepancy between acculturations orientations of the immigrants and those of the host society). Likewise, the negative relationship found between ethnic identity and grades suggests that adolescents are completely aware of the discrimination towards their ethnic group and feel rejected by school. Because, during adolescence, ethnic minority students feel the need to learn more about their culture of origin (Phinney et al., 2001), the school system could be helpful, for example, by giving them the opportunity to learn their first language. In line with this, the French senate has recently recognized that the Arabic language is not taught enough in primary and secondary schools and has stressed the necessity to change this situation (French Senate, 2005).

Finally, our findings display the impact of several factors whose relationships to psychological disengagement have never been studied before. They highlight the beneficial role of students’ perceptions of parental involvement on their identification with school. They thus reinforce the necessity for school professionals, already noticed by Zellman and Waterman (1998), to rethink their notion of academic parental involvement. Currently, teachers and educators hold a rather ‘school-centric’ definition of parental involvement, which can lead them to wrongly interpret a lack of parents’ participation at school as a lack of academic involvement in general. Although parental involvement in school activities, such as attendance at parent-teacher conferences, is of course crucial, one should also think about ways to increase parents’ involvement in their children’s schooling at home. It is important to note that parents from ethnic minority background can promote academic stimulating environments in ways that do not fit the usual expectations of the school system (Scribner, Young, & Pedroza, 1999). Parental involvement at home can also be improved. For example, one can heighten parents’ awareness of the importance of managing and monitoring their children’s use of time for homework (Finn, 1998). Zellman and Waterman even suggest that school professionals should focus on how to improve parent-child interactions in general to ensure stronger beneficial effects on children.

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References


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