# Information-oriented identity processing, identity consolidation, and well-being: The moderating role of autonomy, self-reflection, and self-rumination

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## Abstract

Adopting an information-oriented identity style is thought to be beneficial vis-à-vis adolescent well-being and identity consolidation. However, these associations have not been consistently replicated. Consequently, the present study aims to examine the possible moderating role of motivational (i.e., causality orientations) and cognitive resources (i.e., self-reflection–self-rumination) in this link. In line with hypotheses, moderated regression analyses in a sample of college students ($N = 263$) indicated that, with respect to outcomes such as identity commitment, identity integration, depressive symptoms, and self-esteem, an information-oriented style was less optimal under conditions of low autonomy and high self-rumination and more optimal under conditions of high autonomy and high self-reflection. Limitations are discussed and suggestions for future research are provided.
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## 1. Introduction

Over the years, the process of identity exploration has been viewed as a crucial component of identity formation (Grotevant, 1987). Marcia (1966) conceptualized exploration as one of the two basic dimensions of identity formation, the other one being identity commitment. He defined exploration as the degree to which individuals engage in a personal search for different values, beliefs, and goals; commitment was defined as the adherence to a set of convictions, goals, and beliefs. In an attempt to capture the social-cognitive processes underlying identity exploration, Berzonsky (1990) proposed three identity processing styles. He conceptualized the information-oriented identity style as the social-cognitive style underlying a pro-active, thorough, and broad-based identity exploration (Soenens, Duriez, & Goossens, 2005b).

Individuals scoring high on the information-oriented style actively construct an identity by engaging in a process of exploration through seeking out and evaluating self-relevant information. They are self-critical, open to new information, and willing to revise aspects of their identity (Berzonsky, 1990, 1992a). They display high levels of identity commitment, cognitive complexity, and self-reflection (Berzonsky & Ferrari, 1996). This style has to be contrasted to a normative style characterized by closure and a tendency to rely on social norms and expectations when facing identity-related decisions, and a diffuse-avoidant style characterized by a tendency to procrastinate and to avoid exploring identity-related issues in a systematic manner.

Berzonsky's (1990) theory generally assumes that being information-oriented is beneficial for one's identity formation and for one's psychosocial functioning in general. In line with this idea, the use of an information-oriented style was found to relate to identity consolidation (Berman, Schwartz, Kurtines, & Berman, 2001), agency (Berzonsky & Kuk, 2000), adaptive coping (Berzonsky, 1992a), and self-esteem (Nurmi, Berzonsky, Tammi, & Kinney, 1997). As such, the use of an information-oriented style can indeed be seen as a preferable course for identity consolidation and well-being (Schwartz, Mullis, Waterman, & Dunham, 2000). It should be noted, however, that the size of these association is typically modest. Moreover, some studies have failed to replicate some of these associations and evidenced non-significant relationships between an information-oriented style and indices of well-being, such as depressive symptoms and self-esteem (e.g., Nurmi et al., 1997; Passmore, Fogarty, Bourke, & Baker-Evans, 2005).

On the basis of this pattern of findings, we examined the possibility that the use of an information-oriented style may be optimal for identity consolidation and well-being under certain conditions but may be less optimal under other conditions. Specifically, we examined the moderating role of late adolescents' motivational orientations (i.e., their causality orientations) and cognitive orientations (i.e., self-reflection vs. self-rumination).

### 1.1. The moderating role of causality orientations

Causality orientations capture individuals' general motivational styles of regulating their behavior. Specifically, Self-Determination Theory (SDT; Ryan & Deci, 2000) distinguishes between three such orientations. The autonomous orientation is characteristic of individuals whose actions are based on a sense of volition. These individuals actively seek out opportunities that correspond to their personal values and interests. This orientation is related to high levels of well-

being, ego-development, personality integration, and goal attainment (Deci & Ryan, 1985; Sheldon & Kasser, 1995).

The controlled orientation is characteristic of individuals who perceive their behavior as being initiated by external demands or by partially internalized imperatives. This orientation has been associated with concern about external agents of control, negative affect, and public self-consciousness (Deci & Ryan, 1985). Finally, the impersonal orientation is characteristic of individuals who believe that they lack the resources to personally regulate their actions to obtain desired outcomes. These individuals develop a sense of incompetence that makes them vulnerable to failure experiences, depressive symptoms, and social anxiety (Deci & Ryan, 1985).

Within SDT, an autonomous orientation is considered a more adaptive way of regulating one's behaviors compared to both a controlled and an impersonal regulation (Deci & Ryan, 1985). Although it has been found that an autonomous orientation is positively correlated with an information-oriented identity style, the size of this correlation was relatively modest, indicating that an information-oriented style may go hand in hand with either high or low levels of autonomy (Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005a).

On the basis of SDT, one may expect that the degree to which adolescents regulate their behaviors in an autonomous manner moderates the association between an information-oriented style and adolescent psychosocial outcomes. Specifically, adolescents who actively explore identity-relevant options under conditions of high autonomy would experience their search for a personal identity as self-endorsed and vitalizing. Conversely, an exploring identity alternatives under conditions of controlled or impersonal regulation is more likely to be experienced as stressful, mentally draining, bothersome, or even useless (Deci & Ryan, 1985). Moreover, information-oriented adolescents with an autonomous orientation may be more aware of their personal preferences so that they ultimately choose those options that truly reflect their own preferences (Brown & Ryan, 2003). The resulting sense of personality congruence may ultimately also contribute to well-being and identity consolidation (Sheldon & Kasser, 1995). In sum, it was hypothesized that an information-oriented style would be related to more adaptive outcomes when coupled with high levels of autonomy and low levels of controlled and impersonal regulation.

## 1.2. The moderating role of self-rumination versus self-reflection

Trapnell and Campbell (1999) distinguished between ruminative and reflective types of self-attentiveness. Self-rumination is motivated by fear and perceived threats, losses, or injustices to the self, whereas self-reflection is motivated by curiosity or epistemic interest in the self. Previous research has demonstrated that self-reflection is related to higher levels of personal identity, perspective-taking, and openness to experience; whereas self-rumination was related to lower levels of perspective-taking and higher levels of neuroticism (Joireman, Parrott, & Hammersla, 2002; Trapnell & Campbell, 1999).

Consequently, depending on one's cognitive orientation, an information-oriented style may be more or less adaptive. Information-oriented individuals with a constructive sense of self-reflection can be expected to engage in a goal-directed yet open identity exploration process which results in deliberately chosen and satisfying identity commitments. In contrast, to the extent that an information-oriented style goes hand in hand with self-rumination, adolescents may run the risk

of getting caught in a rigid, constricted, and shallow identity search which never brings the satisfaction and commitments that individuals were hoping for. These individuals probably are ''stuck'' in the exploration process and continue to dwell over the different alternatives at hand, which would be accompanied by distress and by aggravated identity confusion and dissolution (Stephen, Fraser, & Marcia, 1992). In sum, it was hypothesized that an information-oriented identity style would be related to more adaptive outcomes when coupled with high levels of self-reflection and low levels of self-rumination.

### 1.3. The present study

This study examined the moderating role of causality orientations and self-reflection versus self-rumination in the association between an information-oriented style and indicators of both identity consolidation and general well-being in a sample of college students. To capture the variance uniquely associated with the information-oriented style, the other two identity styles were being controlled for (cf. Nurmi et al., 1997).

Consistent with previous research in the identity domain (Dunkel, 2005; Luyckx, Goossens, Soenens, & Beyers, 2006b), we examined identity commitment, identification with commitment, and identity integration as indicators of identity consolidation. Identification with commitment has been defined as the degree to which adolescents can identify with and internalize their identity commitments (Grotevant, 1987; Luyckx, Goossens, & Soenens, 2006a). Identity integration is viewed as the individual's perception of the efficiency of his or her self-concept in integrating new information and in organizing and directing life experience (O'Brien & Epstein, 1988). In line with recommendations by Wilkinson and Walford (1998), we also examined both positive (i.e., self-esteem) and negative (i.e., depression) indicators of adolescents' well-being.

## 2. Method

### 2.1. Participants

Our sample consisted of 263 freshman students (72.6% women) from the department of Psychology at a large university in Flanders, the Dutch-speaking part of Belgium. This department mainly attracts Caucasian students from middle-class backgrounds. Mean age of this sample was 19.14 years (SD = 0.95).

### 2.2. Procedure

A total of 15 collective testing sessions, lasting 1 h apiece, are organized for psychology freshmen and sophomores each year. Students receive course credit for attending these sessions and participation in the actual data-collections is voluntary. Following a detailed briefing, students in the present study participated in such a collective testing session in February 2006. None of the students who attended the collective testing session refused to participate. Participants were informed that their anonymity was guaranteed.

## 2.3. Questionnaires

*Identity styles and commitment.* Participants were administered the Revised Identity Style Inventory (ISI-3; Berzonsky, 1992b). Sample items read: "I've spent a great deal of time thinking seriously about what I should do with my life' (information-oriented style; 11 items), "I prefer to deal with situations where I can rely on social norms and standards" (normative style; 9 items), "I'm not really thinking about my future now; it's still a long way off" (diffuse-avoidant style; 10 items), and "I'm not sure what I want to do in the future (reverse coded)" (commitment, 10 items). Cronbach's alphas were .65, .56, .72, and .70, respectively.

*Causality orientations.* The General Causality Orientations Scale (GCOS; Deci & Ryan, 1985) consists of 12 vignettes that describe specific situations (e.g., what questions one might ask oneself after being offered a new position in a company). Each vignette is accompanied by three responses, each of which reflects a causality orientation: the autonomous orientation (e.g., How interesting will the work be?; 12 items), the controlled orientation (e.g., How much money will I make?; 12 items), and the impersonal orientation (e.g., What if I do poorly?; 12 items). Participants were asked to indicate the extent to which each response reflected how well they act, feel, or think in this situation. Cronbach's alphas were .74, .78, and .76, respectively.

*Self-reflection and self-rumination.* The Self-rumination–Self-reflection Questionnaire (RRQ; Trapnell & Campbell, 1999) was used. Sample items read: "I love exploring my 'inner' self" (self-reflection; 12 items), and "I often find myself re-evaluating something I have done"(self-rumination; 12 items). Cronbach's alphas were .88 and .90, respectively.

*Identity integration.* The Identity Integration subscale (10 items) of the Multidimensional Self-Esteem Inventory (MSEI; O'Brien & Epstein, 1988) was administered. A sample item reads "I seldom experience much conflict between the different sides of my personality". Cronbach's alpha was .81.

*Identification with commitment.* This dimension was assessed with 5 items derived from the Utrecht-Groningen Identity Development Scale (U-GIDS; Meeus, 1996) and the Personally Expressive Activities Questionnaire (PEAQ; Waterman, 1993). A sample item reads "I sense that the direction I want to take in my life will really suit me". Cronbach's alpha was .86.

*Self-esteem.* The 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) was used. A sample item reads "I feel that I have a number of good qualities". Cronbach's alpha was .91.

*Depressive symptoms.* Participants were asked – using the 12-item version of the Center for Epidemiologic Studies Depression Scale (CESD; Radloff, 1977) – to indicate how often they experienced cognitive, somatic, and psychological symptoms of depression during the past week. A sample item reads "During the last week, I felt depressed". Cronbach's alpha was .86.

## 3. Results

### 3.1. Preliminary and correlational analyses

To examine possible gender differences, a multivariate analysis of variance (MANOVA) was conducted with gender as between-subjects variable and all variables as dependent variables. An overall multivariate effect was found (Wilks' $\lambda = .75$; $F(13, 247) = 6.13$; $p < .001$), and, as

Table 1
Descriptive statistics and mean differences by gender ($N = 263$)

| Variable | Total sample | Gender differences | | | |
|---|---|---|---|---|---|
| | | Males | Females | $F$ ratio | $\eta^2$ |
| | $M$ (SD) | $M$ (SD) | $M$ (SD) | | |
| Multivariate test[a] | | | | 6.13*** | .24 |
| Informational style | 3.11 (0.47) | 3.30 (0.43) | 3.03 (0.47) | 18.01*** | .06 |
| Normative style | 3.13 (0.48) | 3.12 (0.47) | 3.13 (0.47) | 0.01 | .00 |
| Diffuse-avoidant style | 2.50 (0.55) | 2.55 (0.66) | 2.49 (0.50) | 0.66 | .01 |
| Self-reflection | 3.59 (0.63) | 3.78 (0.61) | 3.51 (0.63) | 9.44** | .03 |
| Self-rumination | 3.44 (0.68) | 3.21 (0.73) | 3.54 (0.63) | 12.29*** | .04 |
| Autonomous orientation | 4.12 (0.40) | 4.04 (0.41) | 4.14 (0.40) | 3.22 | .01 |
| Controlled orientation | 2.74 (0.48) | 2.86 (0.52) | 2.69 (0.46) | 6.42* | .02 |
| Impersonal orientation | 2.61 (0.57) | 2.36 (0.59) | 2.71 (0.54) | 20.86*** | .07 |
| Identity commitment | 3.39 (0.56) | 3.50 (0.64) | 3.36 (0.53) | 3.14 | .01 |
| Identification with commitment | 3.30 (0.71) | 3.29 (0.79) | 3.30 (0.66) | 0.01 | .00 |
| Identity integration | 3.22 (0.60) | 3.23 (0.64) | 3.22 (0.58) | 0.01 | .00 |
| Self-esteem | 3.03 (0.61) | 3.21 (0.55) | 2.95 (0.61) | 9.11** | .03 |
| Depressive symptoms | 1.92 (0.53) | 1.86 (0.56) | 1.95 (0.52) | 1.36 | .01 |

*Note.* $M$ = mean; SD = standard deviation; $\eta^2$ = eta squared. All variables have a possible range of 1–5, except for self-esteem and depressive symptoms which have a possible range of 1–4.

[a] Using Wilks's Lambda.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

shown in Table 1, follow-up ANOVAs indicated that women, on average, scored higher on self-rumination and the impersonal orientation. Men scored higher on the information-oriented style, the controlled orientation, self-reflection, and self-esteem.

Table 2 presents correlations among all variables. The information-oriented style was positively related to the normative identity style, identity commitment, identification with commitment, the autonomous orientation, and self-reflection, and unrelated to the diffuse-avoidant style, self-esteem, and depressive symptoms. The three causality orientations were relatively independent. The autonomous orientation was positively related to identity commitment, identity integration, identification with commitment, and self-esteem and negatively with depressive symptoms. The impersonal orientation was negatively related to each of these variables, and the controlled orientation was only positively correlated with self-esteem. Finally, self-reflection and self-rumination were slightly positive interrelated. Whereas self-reflection was largely unrelated to the indices of identity consolidation and well-being, self-rumination was significantly negatively related to each of the adaptive outcomes and positively to depressive feelings.

### 3.2. Moderation analyses

Hierarchical regression analyses with two-way interaction terms were conducted, separately for the five dependent variables. In the first step, age, gender, and the normative and diffuse-avoidant identity styles were controlled for. In the second step, main effects of the information-oriented

Table 2
Correlations among all study variables ($N = 263$)

| Variable | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Information-oriented style | .18** | −.10 | .17** | .06 | −.12 | .64*** | .12 | .29*** | −.01 | .21** | .08 | .07 |
| 2. Normative style | | −.09 | .18** | .11 | −.08 | .04 | −.13* | .47*** | .26*** | .37*** | .20** | −.26*** |
| 3. Diffuse-avoidant style | | | −.19** | .30*** | .30*** | −.18** | .05 | −.37*** | −.46*** | −.32*** | −.10 | .09 |
| 4. Autonomous orientation | | | | .11 | −.16* | .14* | −.18* | .31*** | .28*** | .30*** | .31*** | −.19** |
| 5. Controlled orientation | | | | | .05 | −.03 | −.11 | .10 | −.04 | .05 | .17** | −.04 |
| 6. Impersonal orientation | | | | | | −.15* | .37*** | −.32*** | −.35*** | −.34*** | −.47*** | .29*** |
| 7. Self-reflection | | | | | | | .13* | .24*** | −.01 | .09 | .01 | .11 |
| 8. Self-rumination | | | | | | | | −.22*** | −.48*** | −.27*** | −.62*** | .55*** |
| 9. Identity commitment | | | | | | | | | .52*** | .58*** | .34*** | −.26*** |
| 10. Identity integration | | | | | | | | | | .66*** | .53*** | −.48*** |
| 11. Identification with commitment | | | | | | | | | | | .46*** | −.35*** |
| 12. Self-esteem | | | | | | | | | | | | −.56*** |
| 13. Depressive symptoms | | | | | | | | | | | | − |

* $p < .05$.
** $p < .01$.
*** $p < .001$.

style, the three causality orientations, and self-rumination and self-reflection were investigated. In a third and last step, the five interaction terms of interest – that is, the influence of the information-oriented style moderated by the three causality orientations, self-reflection, and self-rumination – were tested simultaneously as a "chunk" (Jaccard & Turrisi, 2003). If application of the "chunk" test revealed a significant increase in $R^2$, then this suggested that at least one interaction term was important to retain. If the difference in $R^2$ between the model including the interaction terms and the model including only the main-effects was trivial, then this suggested that none of the interaction terms were necessary and they could be dropped from the model. To calculate the interaction terms, all the independent terms were first centered.

Table 3 gives the standardized betas and the $R^2$-values for the subsequent steps in the regression analyses. In Step 1, the control variables added significantly to the prediction of the outcomes. With a few exceptions, this was primarily due to the effects of the normative and diffuse-avoidant identity styles on the outcome variables. In Step 2, the main effects explained an additional significant portion of the variance in the outcomes. The information-oriented style was positively related to identification with commitment but unrelated to each of the other outcomes.

In Step 3, the "chunk" of interaction effects significantly added to the prediction of each of the five outcome variables. In the case of identity commitment, the interaction term of information-oriented style and self-reflection was significantly positive. Subsequent simple slope analyses indicated that the simple slope at low levels of self-reflection (i.e., 1SD below the mean) was $-0.02$ ($t = -0.22$; $p = .82$); the simple slope at high levels of self-reflection (i.e., 1SD above the mean) was 0.27 ($t = -2.95$; $p < .01$).

In the case of identity integration, identification with commitment, and self-esteem, the interaction term of information-oriented style and autonomous orientation was significantly positive. The simple slopes at low levels of autonomous orientation were $-0.20$ ($t = -2.14$; $p < .05$) for identity integration, 0.01 ($t = 0.09$; $p = .93$) for identification with commitment, and $-0.04$ ($t = -0.32$; $p = .74$) for self-esteem; the simple slopes at high levels of autonomous orientation were 0.12 ($t = 1.60$; $p = .11$), 0.47 ($t = 3.72$; $p < .001$), and 0.24 ($t = 2.62$; $p < .01$), respectively.

Finally, in the case of depressive symptoms, the interaction term of information-oriented style and self-rumination was significantly positive. The simple slopes at low and high levels of self-rumination were $-0.14$ ($t = -1.36$; $p = .18$) and 0.19 ($t = 1.97$; $p < .05$), respectively. Fig. 1 gives a graphical presentation of these significant interaction effects using these simple slopes. A set of ancillary analyses indicated that all interactions aforementioned were of a bilinear rather than a quadratic nature.

## 4. Discussion

Although adopting an information-oriented identity processing style is thought to be beneficial towards identity consolidation and well-being, some studies have shown that empirical associations between an information-oriented identity style and these outcomes (and especially well-being) are relatively modest. Given such findings, it is important to examine the conditions that determine the relative degree to which an information-oriented style contributes to psychosocial adjustment (Berzonsky, 2003). Guided by SDT (Ryan & Deci, 2000) and Trapnell and Campbell's

Table 3
Hierarchical regression analyses predicting identity functioning and well-being from the information-oriented identity style, causality orientations, and self-rumination and self-reflection

| Predictor | Identity commitment | | Identity integration | | Identification with commitment | | Self-esteem | | Depressive symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ |
| Step 1: *Controls* | | .36*** | | .27*** | | .23*** | | .09*** | | .10*** |
| Gender | −.12* | | −.03 | | −.01 | | −.19** | | .09 | |
| Age | .11* | | −.02 | | .02 | | −.04 | | .12* | |
| Normative style | .43*** | | .22*** | | .34*** | | .19** | | −.26*** | |
| Diffuse-avoidant style | −.35*** | | −.44*** | | −.30*** | | −.10 | | .09 | |
| Step 2: *Main effects* | | .09*** | | .20*** | | .12*** | | .44*** | | .27*** |
| Information-oriented style | .10 | | −.02 | | .18** | | .09 | | .01 | |
| Autonomous orientation | .13* | | .08 | | .15** | | .13** | | −.04 | |
| Impersonal orientation | −.14* | | −.07 | | −.16** | | −.33*** | | .12* | |
| Controlled orientation | .11* | | .02 | | .07 | | .11* | | .01 | |
| Self-rumination | −.09 | | −.39*** | | −.16** | | −.45*** | | .46*** | |
| Self-reflection | .06 | | −.04 | | −.09 | | −.05 | | .07 | |
| Step 3: *Interaction effects* | | .02* | | .02* | | .03* | | .02* | | .03* |
| Information-oriented style × autonomous orientation | −.02 | | .12* | | .15** | | .11* | | −.08 | |
| Information-oriented style × controlled orientation | −.03 | | −.05 | | −.04 | | −.06 | | .10 | |
| Information-oriented style × impersonal orientation | .01 | | .08 | | .07 | | .04 | | −.03 | |
| Information-oriented style × self-rumination | .02 | | −.09 | | −.01 | | .03 | | .15** | |
| Information-oriented style × self-reflection | .16** | | .05 | | .05 | | .08 | | .06 | |

* $p < .05$.
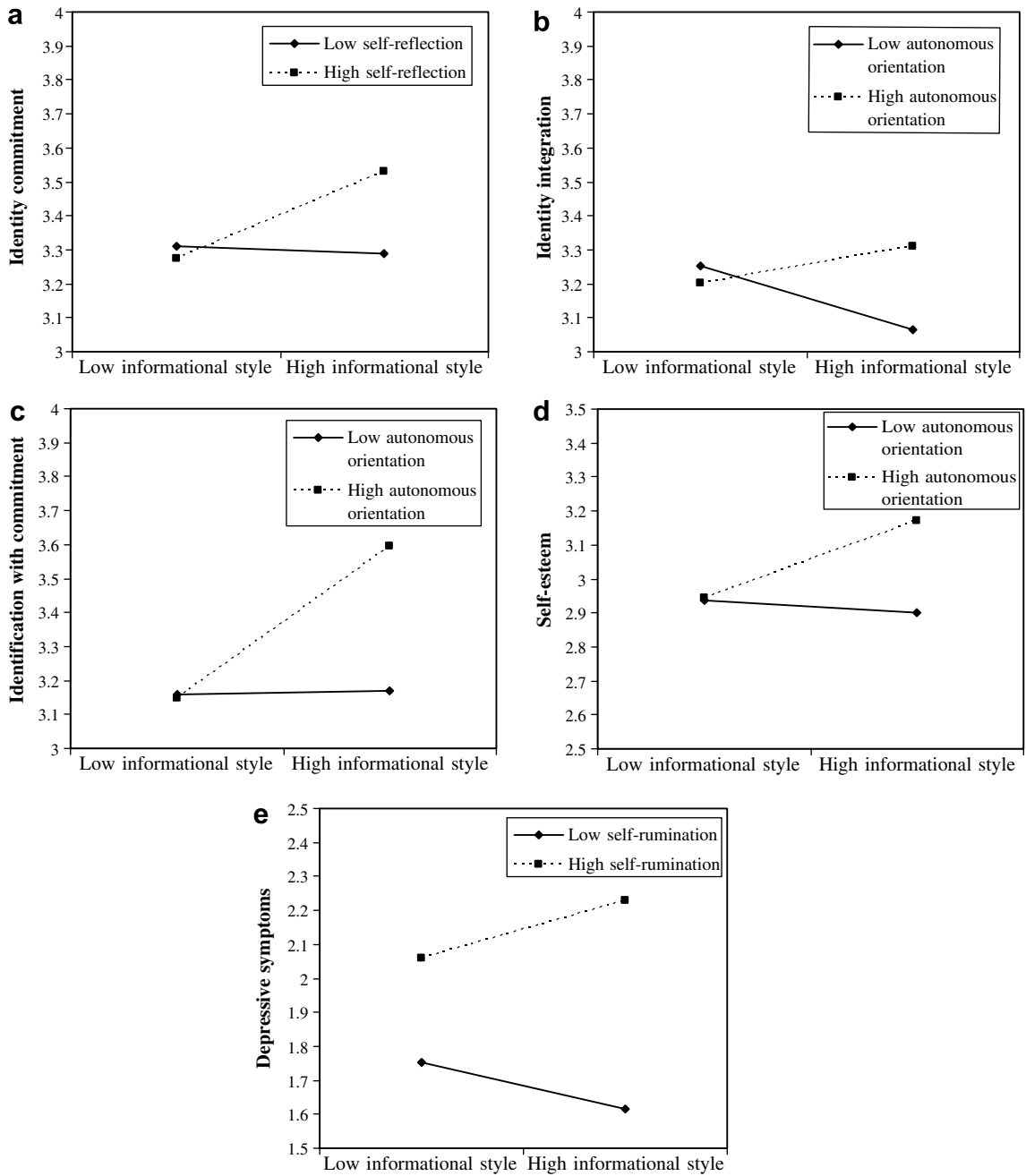** $p < .01$.
*** $p < .001$.

Fig. 1. Simple slopes of the information-oriented style predicting identity commitment (Panel a), identity integration (Panel b), identification with commitment (Panel c), self-esteem (Panel d), and depressive symptoms (Panel e) at varying levels of the autonomous orientation (Panel b, c, and d), self-reflection (Panel a), and self-rumination (Panel e). High levels are 1 SD above the mean; low levels are 1 SD below the mean.

(1999) model, this study examined the possible moderating role of adolescents' causality orientations and their level of self-reflection and self-rumination.

First, when individuals scored high on the autonomous orientation, their use of an information-oriented style was positively associated with identification with commitment and self-esteem. When individuals scored low on the autonomous orientation, the information-oriented style was negatively associated with identity integration. As such, these results lend further credit to the central tenet of SDT stating that experiencing a sense of autonomy in one's actions is critical for people's optimal functioning. The present study extends previous research conducted within the SDT-framework by demonstrating the usefulness of self-determination as a motivational resource in the domain of identity formation, the latter being a central developmental task in adolescence (see also Soenens et al., 2005a). The present study indeed demonstrated that when individuals consider themselves to be the author of their actions and, hence, act in line with an internalized system of needs and values, their exploratory activities serve the process of obtaining a consolidated identity and of obtaining a sense of self-worth. However, when exploratory activities are less autonomously regulated, their effects can be counterproductive for the identity integration process.

Second, when individuals scored high on self-reflection, the use of an information-oriented identity style was beneficial towards the formation of identity commitments. However, when individuals scored high on self-rumination, their use of an information-oriented style was positively associated with depressive symptoms. Apparently, for the latter individuals, exploring identity-related issues might be a symptom of an underlying tendency of protracted self-questioning, indecision, and procrastination. Identity issues may not be explored in a systematic manner but rather in aimlessness and anomie. As such, identity exploration might have more in common with a diffused identity state for these individuals, blocking these persons from forming fully endorsed identity commitments which renders them vulnerable to depressive symptoms (Côté & Schwartz, 2002). Apparently, the vast array of potential identity choices available to the person, coupled with a dominant tendency to self-ruminate, might render the identity exploration task a difficult one to negotiate.

Our findings have to be interpreted in light of several limitations. First, although a pattern of interaction effects emerged in line with hypotheses, not all anticipated interaction effects emerged. Further, some of the obtained interaction effects were rather modest. This might not be surprising given the fact that moderated regression is a conservative statistical technique for assessing interactions (McClelland & Judd, 1993). Second, all of the data were self-reported. Accordingly, some of the covariation among the variables may reflect common method variance. One way to address this issue would be to measure some behavioral and cognitive aspects of motivational dispositions and adjustment more directly or to rely on multiple informants. Third, all relationships were investigated cross-sectionally. Longitudinal research is required to investigate if – and under which conditions – the information-oriented style actually influences well-being and identity consolidation in adolescents. Fourth, the present sample consisted of Caucasian participants. Given the increased ethnic heterogeneity characterizing many Western countries, it may be important to replicate the present findings with non-White individuals. Further, the inclusion of university students only likely excluded lower-income and less educated adolescents, a group that has received little attention in identity research (Schwartz, 2005). Finally, future research is also needed to identify additional conditions – such as the parental climate in which one is reared (cf. Adams,

Berzonsky, & Keating, 2006; Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, in press) – that increase the effectiveness of an information-oriented identity style in fostering positive well-being and identity consolidation.

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