EMPIRICAL RESEARCH

Adolescent Psychological and Academic Adjustment as a Function of Discrepancies Between Actual and Ideal Self-Perceptions

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Abstract Actual-ideal discrepancies are associated with adolescent emotional distress and there is evidence that the size of discrepancies matters. However, the direction of discrepancies has not been examined, perhaps due to limitations of widely used self-discrepancy measures. Two hundred and twelve 7th, 9th and 11th grade students (59% female) in a public school in Jamaica described their actual and ideal selves in several different domains-friendship, dating, schoolwork, family, sports, and religion/spirituality-using a Pie measure. Students also completed measures of depressive symptoms, self-esteem, and academic achievement. Discrepancies favoring the ideal self and those favoring the actual self were linked to depressive symptoms, low self-esteem, and poor school grades in the domains of friendship, dating, and schoolwork. Effects were stronger among older adolescents than among vounger adolescents. Theories of actual/ideal self-discrepancies have focused on problems arising when the ideal self overshadows the actual self; however, the present study finds that self-discrepancies, regardless of their direction, are a liability. Implications for self-discrepancy measurement, adolescent development, and clinical practice are discussed.

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Introduction

Imagine you are a teenager with an annoyingly perfect twin-a smarter, funnier, and better-looking version of yourself whom you grudgingly consider to be the *ideal you* and against whom you are often compared. This scenario illustrates how discrepancies between ideal and actual selves can adversely impact self-worth. Scholarly interest in the emotional consequences of self-discrepancies has taken many forms since William James' (1890) classic discussion of the ratio of actualities (success in important domains) to potentialities (pretensions or aspirations in those domains). Decades would pass before research would catch up with James' proposition that humans thrive in states of selfconcordance rather than self-discrepancy (e.g., Festinger and Carlsmith 1959; Higgins et al. 1986). Previous studies have not considered the direction of these discrepancies, giving rise to the possibility that poor adjustment can be associated with relatively elevated levels of ideal or actual self perceptions. The present investigation examines concurrent psychological and academic adjustment as a function of discrepancies between the actual self and the ideal self in a sample of Jamaican adolescents.

Adolescent Self-Representations

Identity formation is a major task in adolescence as young people seek to answer the question "Who am I?" (Erikson 1968). Adolescents develop multiple views of the self, which include perceptions of self-states (e.g., the actual self or alternative/possible selves; Markus and Nurius 1986)

and of the self in different roles (e.g., self with parents or friends; Harter 1999; Harter et al. 1997). Other selfrepresentations, often referred to as self-guides, represent the wishes of important others and are believed to help children and adolescents regulate their behaviors (Higgins et al.1995). Eventually, external self-guides become internalized and continue their self-regulatory function as part of adolescents' own ideals. Higgins (1987) specified three domains of the self-actual, ideal, and ought-and proposed that discrepancies between self-states induce specific negative emotional states, with larger discrepancies producing greater distress (Higgins et al. 1995; Moretti and Higgins 1990). The actual self refers to the self the individual believes he/she currently is, the ideal self refers to the self that is wished or hoped for, and the ought self is the person that one is obligated or duty-bound to be. Conflict between self-guides (e.g., ideal, ought) and other selves (e.g., actual) is inevitable, and possibly beneficial (e.g., condom purchasing increases after reflecting on past failures-Stone et al. 1994). The current paper will focus on discrepancies between adolescents' actual and ideal selves as perceived from their own standpoint because these two self-states are theorized to be most strongly linked to depressive symptoms and self-esteem (Higgins 1987).

Adolescent Self-Discrepancies

The increasing cognitive sophistication characteristic of the adolescent years facilitates the creation of multiple versions of the self, and the ability to detect discrepancies between these views (Moretti and Higgins 1990; Moretti and Wiebe 1999). Addressing the topic of rivalries and conflicts between "different me's," James wrote:

I am often confronted by the necessity of standing by one of my empirical selves and relinquishing the rest. Not that I would not, if I could, be both handsome and fat and well-dressed, and a great athlete, and make millions a year, be a wit, a *bon-vivant*, and a lady-killer, as well as a philosopher; a philanthropist, statesman, warrior, and African explorer, as well as a "tone-poet" and saint. But the thing is simply impossible (James 1890/1950, p. 309).

Self-discrepancy theory (Higgins 1987), a descendant of earlier actual/ideal theories (e.g., Jacobson 1946; Rogers 1951; Sandler and Joffe 1965), holds that actual versus ideal discrepancies induce dejection-related emotions such as self-dissatisfaction and disappointment due to falling short of one's ideals. Actual/ideal discrepancies are associated with lower self-esteem and both momentary and chronic internalizing problems such as dejected feelings and depressive symptoms in college students (e.g., Carver et al. 1999; Higgins et al. 1985; Scott and O'Hara 1993; Strauman and Higgins 1987), and depressed adults have significantly larger actual/ideal self-discrepancies compared to nondepressed adults (Bentall et al. 2005; Kinderman and Bentall 1996; Strauman 1989). Selfdiscrepancies remain significant predictors of negative emotions even after controlling for ratings of the actual self (e.g., McDaniel and Grice 2008; Moretti and Higgins 1990; Moretti and Wiebe 1999). In addition, body image discrepancies are associated with body dissatisfaction/shame and bulimic eating (Bessenoff and Snow 2006; Sawdon et al. 2007; Sanderson et al. 2008; Strauman et al. 1991).

Adolescents may be even more vulnerable to the distressing effects of self-discrepancies than adults or college students due to the centrality of identity formation processes during this developmental period (e.g., adolescents in moratorium and diffusion have significantly larger actual/ ideal discrepancies; Makros and McCabe 2001). Self-discrepancies are also particularly distressing during adolescence because of increases in self-awareness combined with limitations in the ability to integrate competing self-attributes into a coherent self-theory (Harter 1999, 2006). With age, adolescents gradually become aware of the discrepancies that cause distress, but only in late adolescence do they develop strategies for coping with actual/ideal conflict and reducing discrepancy-related distress (Harter et al. 1997; Harter 1999). The importance of heightened selfawareness in determining the emotional consequences of self-discrepancies is underscored by a recent study with U.S. college students in which self-discrepancies were significantly associated with negative emotions only for students exposed to a large mirror, which served to increase self-focused attention (Phillips and Silvia 2005).

The adverse consequences associated with self-discrepancies are assumed to arise when the ideal self overshadows the actual self (James 1890; Harter 1999). No studies have examined the possibility that the reverse might also be detrimental for adolescents—that adverse consequences are associated with the overshadowing of the ideal self by the actual self. If ideals serve to help adolescents regulate their behaviors according to certain standards and also to motivate them towards certain attitudinal or behavioral goals (Harter 1999; Higgins et al. 1995), then it is plausible that having achieved and exceeded one's ideals in key domains may produce demotivation or confusion. This counter-intuitive type of discrepancy is not yet represented in the adolescent literature, perhaps because most instruments are ill-suited to the task of measuring discrepancies in both directions.

The Selves Questionnaire developed by Higgins et al. (original 1985, modified 1986) is probably the most widely used self-discrepancy measure. The core elements of the instrument are (1) the idiographic format in which individuals are asked to list a number of attributes to describe the actual, ideal and ought selves separately, (2) a rating of

the degree to which each attribute describes each respective self, and (3) a scoring system that subtracts the number of matched attributes from the weighted number of attributes mismatched in meaning or degree rating. Although the idiographic format is often considered a strength of this measure, asking individuals to list attributes of their ideal self versus their actual self is likely to produce a bias towards more positive ideals and less positive actualities, and to capture discrepancies in one direction only. This is particularly problematic in a recent version in which respondents list attributes of the ideal and ought selves only, then rate the actual self on those attributes (Phillips and Silvia 2005). A second and more important limitation is that the scoring system is not designed to record the direction of discrepancies. An antonymous attribute pair in which the ideal is more positive than the actual is represented in the same way in the discrepancy score formula as an antonymous attribute pair in which the actual is more positive than the ideal (i.e., both pairs would receive a value of 2).

Other instruments have similar limitations. Harter's Self-Perception Profile for Adolescents (SPPA; 1988) approaches self-discrepancies nomothetically by measuring perceived self-competence and importance in specified life domains. In this case also, framing self-ratings in terms of competence primes individuals to report a discrepancy in which the actual self is less competent than ideally desired; thus, leaving no room for discrepancies in the opposite direction. The Self-Description Questionnaire (SDQ: Dubois 1993a; Byrne 1988) and the Self-Standards Questionnaire (SSQ: Dubois 1993b) improve on the SPPA by using descriptive rather than evaluative labels. It is technically possible for respondents to rate their self-description more highly than their self-standard, but researchers have not entertained the question of discrepancy direction in their statistical analyses (Dubois et al. 2000).

To overcome these limitations, we adopted a strategy previously used to measure discrepancies between actual and ideal parental roles (Cowan and Cowan 2001). In this approach, the individual divides a pie into slices of various sizes representing the relative *salience* of each role. Thus, for any given domain, the individual may choose to assign more slices to the ideal self than the actual self signifying that the domain is not as salient to their current self-view as they would like, or vice versa, indicating that the domain is more salient to the current self-view than they would ideally prefer. This strategy improves upon prior measurement approaches by having participants respond to domain labels (e.g., friendships) rather than positive attribute labels (e.g., popular), measuring salience (self-description) rather than competence (self-evaluation), and statistically capturing the direction and magnitude of the discrepancy by performing follow-up analyses to any significant interactions between actual self and ideal self ratings.

The Current Study

The present study describes cross-sectional differences in patterns of associations between discrepancy scores and adjustment in a sample of Jamaican adolescents. Three research questions will be addressed. Are discrepancies between the actual self and the ideal self linked to adolescent depressive symptoms, self-esteem, and school achievement? Does adjustment differ when discrepancies favor the actual self and when discrepancies favor the ideal self? Does age group, gender, or the domain of the discrepancy moderate these associations?

Most studies of ideal/actual self-discrepancies have focused on North American youth and young adults (e.g., McDaniel and Grice 2008; Moretti and Higgins 1990; Moretti and Wiebe 1999). Little is known about self-discrepancies among youth from other cultures. Consistent with the results of previous studies, we expected to find a significant actual self by ideal self interaction, accounting for unique variance in depressive symptoms and selfesteem scores above and beyond the main effects of the actual self and the ideal self. Similar findings were expected for school achievement. This is the first study to examine whether adjustment differs for discrepancies in which the actual self dwarfs the ideal self, but another study employing a similar methodology indicated that new fathers with actual/ideal discrepancies in either direction report higher depressive symptoms than those without discrepancies (Strauss and Goldberg 1999). As a result, we did not expect adolescent adjustment to differ based on whether discrepancies favored the actual self or ideal self. Previous work also indicates that mid-adolescents perceive more opposing attributes in their self-portraits and experience more intrapsychic conflict compared to younger adolescents because although their self-views progressively multiply, they still lack mastery at integrating these discrepant self-views into a unified self-understanding (Harter et al. 1997). As a consequence, we predicted that young adolescents would exhibit the fewest discrepancy-related adjustment problems. Prior research with Jamaican adolescents indicates that they place varying degrees of importance on different life domains (Ferguson and Dubow 2007). Thus, we expected domain to moderate the relations between self-discrepancies and adolescent adjustment. Finally, despite gender differences in self-esteem (Kling et al. 1999), depressive symptoms (Twenge and Nolen-Hoeksema 2002), and the extent to which boys and girls value various life domains (Ferguson 2006; Wigfield et al. 1996), evidence suggests that gender orientation, rather than gender per se, is a potential risk factor for negative consequences of self-discrepancies (Harter 1999; Klingenspor 2002). In the absence of data on gender orientation or body image self-views, we refrained from predictions on

whether gender would moderate relations between discrepancies and adjustment.

Method

Participants

Two hundred and twelve students were recruited from grades 7 (13 boys, 38 girls), 9 (48 boys, 58 girls) and 11 (26 boys, 29 girls) in one large traditional public high school in Kingston, Jamaica. Students ranged from 11.17 to 18.00 years, with mean ages of 12.47 (range = 11.17-14.83; SD = .69), 14.30 (range = 13.00-15.17; SD = .48) and 16.33 (range = 15.00-18.00; SD = .66) years at each grade level, respectively.

Most participants came from middle-class homes. Maternal and paternal occupations as reported by students were coded by independent raters for occupational prestige using Stevens and Hoisington's (1987) scale (inter-rater reliability: r = .94, p < .01). Mean parental occupational prestige was 46.32 (SD = 11.19) with a range of 19–81.09 on a scale ranging from a possible low of 14.69 (waiter's/waitress's assistant) to a possible high of 81.09 (physician).

Measures

Self-Discrepancies

Students completed the Identity Pie (Ferguson and Dubow 2007), an adaptation of "The Pie" (Cowan and Cowan 2001). The Identity Pie comes divided into 20 slices. Adolescents are instructed to allocate these slices into different life domains (i.e., friendships, dating, schoolwork, family, religion/spirituality, and sports) based on their salience. Students described their actual self first: "Make this Pie represent *who you are* as a person based on how important these...areas of life are to you...." Next, students described their ideal self, again allocating 20 slices across the domains: "Now, make a Pie to represent the person that *you would like to be*—your 'ideal' self...." For each Identity Pie, scores were the number of slices allocated to each domain, ranging from a possible low of 0 to a possible high of 20.

The Identity Pie was validated against the Subjective Task Values scale (Eccles et al. 1983; Eccles et al. 1993), adapted to the 6 domains measured by the Identity Pie. With four items per domain, each Subjective Task Values subscale measured the perceived usefulness, importance, interest and enjoyment of that domain on a 7-point scale ranging from least positive to most positive. Within each domain, Identity Pie scores correlated significantly and positively with mean Subjective Task Values scores $(r = .32 \text{ to } .58, ps \le .01)$. To assess discriminant validity, across domain correlations were computed between the Identity Pie and the Subjective Task Values (e.g., schoolwork domain ratings on the Identity Pie were correlated with dating domain ratings on the Subjective Task Values scale). As expected, most across-domain correlations were significant and negative, or non significant.

Self-Esteem

The Rosenberg Global Self-Esteem Scale was used to measure overall self-esteem (Rosenberg 1989); Cronbach's $\alpha = 0.84$. Students rated each statement on a 4-point scale ranging from 1 ("strongly agree") to 4 ("strongly disagree"). This measure included 10 items (e.g. "I take a positive attitude toward myself"). Positively worded items were reverse scored so that higher item mean scores reflected higher self-esteem.

Depressive Symptoms

The Center for Epidemiological Studies Depressive symptoms Scale (CES-D) was used as a measure of general depressive symptoms (Radloff 1977); Cronbach's $\alpha = 0.80$. Students indicated how often they had experienced depressive symptomatology or positive feelings during the past week on a 4-point scale ranging from 0 ("rarely or none of the time"; "less than 1 day") to 3 ("most or all of the time"; "5–7 days"). This scale included 20 items (e.g. "I felt depressed") from which an item mean was calculated.

School Achievement

Students reported their average exam percentage grades from the end of the previous school year (range in sample = 50-100%). Standardized achievement tests are not used in Jamaica; thus, cumulative exam grades are a commonly used measure of school achievement. Prior research on the bidirectional effects of self-concept on achievement indicates that there is a similar pattern of effects when achievement is measured using grades versus test scores (Helmke and Van Aken 1995).

Procedure

As is customary in Jamaica for this type of study, students participated based on principal consent and their own assent. In Jamaican culture, parents regard school officials and teachers as second parents, holding primary authority and decision-making responsibility for their children's education and general well-being when at school (Evans 2001). It is common practice for school principals to review and approve students' participation in school-based research involving anonymous surveys and minimal risks. The consent procedure chosen for this study received full authorization from the Institutional Review Board of the host U.S. institution and the participating school administration. Grade supervisors initially selected 3 classes in the 7th, 9th, and 11th grades for participation in the study. After the first week of data collection, interested students from other classes at each grade level were also invited to participate. Of the total invited, 51% of 7th graders, 62% of 9th graders and 55% of 11th graders participated in the study. For their participation, each student was offered the chance to win movie theatre vouchers.

Surveys were administered in a group format during a class period or after school. Instructions for each measure were read aloud by the experimenter, who remained in the room throughout testing to answer any questions.

Plan of Analysis

Consistent with prior research examining the unique contribution of discrepancies beyond self ratings (McDaniel and Grice 2008; Moretti and Wiebe 1999), a series of hierarchical regression analyses was performed using centered scores for continuous variables. The first step in each regression included actual scores, ideal scores, gender, and age group as predictors. The second step examined the effect of actual/ideal discrepancies, using the interaction of actual scores and ideal scores. The third step included all possible two and three way interactions between actual self scores, ideal self scores, gender, and age group. Separate analyses were conducted for each of six different self domains (friendships, dating, schoolwork, family, religion/spirituality, and sports) with self-esteem, depressive symptoms, and school grades as the dependent variables. For significant interactions, results were plotted based on the means for each group at conditional values (+1 SD and -1 SD) of the moderator variable (Aiken and West 1991). For all significant actual score by ideal score interactions, ANOVAs were run to test for differences in adjustment between discrepant and non-discrepant adolescents, followed by LSD contrasts to compare adolescents with discrepancies favoring the ideal self (high ideal/low actual group) to adolescents with discrepancies favoring the actual self (high actual/low ideal group).

Results

Table 1 presents descriptive statistics and bivariate intercorrelations among the actual and ideal scores in each of the six domains. In each domain, actual and ideal scores were significantly and positivity correlated. All correlations within domains, but not between domains, were significant and positive; actual scores tended to correlate negatively with actual scores in other domains and ideal scores tended to correlate negatively with ideal scores in other domains.

Table 2 summarizes the results of the regression analyses. No statistically significant findings emerged for the family, religion or sports domains, with one exception: ideal scores for the Religion/Spirituality were associated with depressive symptoms ($\beta = -.17$). Age group predicted school grades; students in 7th grade (grades: M =89.28, SD = 5.82) had significantly higher grades than students in 9th grade (grades: M = 75.69, SD = 8.21), who had significantly higher grades and self-esteem than students in 11th grade (grades: M = 69.51, SD = 9.11). There were no statistically significant main effects or interactions involving gender.

Friendship Domain

Depressive Symptoms

Ideal self scores in the friendship domain predicted depressive symptoms. There was also a statistically significant two-way interaction, which was qualified by a three-way interaction between actual self scores, ideal self scores, and age group. Both 9th graders and 11th graders reported higher depressive symptoms as a function of discrepancies between actual and ideal scores than did 7th graders (Fig. 1). ANOVAs using 9th and 11th graders indicated that there was a significant difference, F (1, (159) = 5.34, p < .05, in depressive symptoms between adolescents with discrepancies (M = .85, SD = .49) and those without (M = .68, SD = .46), but there were no significant differences between those in the high actual/low ideal group and the high ideal/low actual group. Thus, outcomes did not differ as a function of the direction of the discrepancy.

Self-Esteem

Actual self scores predicted self-esteem in the friendship domain. There was also a statistically significant two-way interaction between actual self scores and ideal self scores. Discrepancies between actual and ideal scores were associated with lower self-esteem (Fig. 2). ANOVAs using the entire sample indicated that there was a significant difference, F(1, 210) = 9.22, p < .01, in self-esteem between adolescents with discrepancies (M = 2.09, SD = .50) and those without (M = 2.33, SD = .43), but there were no significant differences between those in the high actual/low ideal group and the high ideal/low actual group. Thus, outcomes did not differ as a function of the direction of the discrepancy.

Variable	Ι	7	<i>i</i> n	4	c	0	-	D		10	11	(MC) M
Friendship domain	uin											
1. Actual	I											3.10 (1.33)
2. Ideal	.39**	I										2.72 (1.39)
Dating domain												
3. Actual	.06	.07	I									1.75 (1.26)
4. Ideal	02	.02	.59**	I								1.60 (1.32)
Schoolwork domain	nin											
5. Actual	19^{**}	14^{*}	21**	15*	I							4.29 (1.58)
6. Ideal	60.	06	.06	07	.43**	I						4.41 (1.78)
Family domain												
7. Actual	15*	.05	31^{**}	19^{**}	20**	16^{*}	I					3.94 (1.52)
8. Ideal	.08	.05	15*	14*	13	10	.45**	I				3.61 (1.50)
Religion domain	_											
9. Actual	41**	19^{**}	16^{**}	00.	15*	26^{**}	01	04	I			3.47 (1.74)
10. Ideal	15*	09	14^{*}	12	08	16^{*}	08	.03	.62**	I		3.89(1.96)
Sports domain												
11. Actual	.04	04	.01	.02	17*	03	24**	10	25**	14*	I	2.30 (1.40)
12. Ideal	.08	23**	03	08	01	13*	14*	21**	21**	28**	.52**	2.31 (2.07)

 Table 2
 Actual and ideal self

 scores in the friendship, dating,
 and schoolwork domains and

 their associations with
 depressive symptoms, self

 esteem, and school grades
 school grades

	Depressive symptoms β	Self-esteem β	School grades β
Friendship domain			
Step 1	$(R^2 = .07^{**})$	$(R^2 = .08^{**})$	$(R^2 = .41^{**})$
Actual score	.10	23**	.02
Ideal Score	18*	.13	03
Age group	.06	11	64**
Step 2	$(\Delta R^2 = .01^*)$	$(\Delta R^2 = .02^{**})$	
Actual \times ideal	.15*	15*	06
Step 3	$(\Delta R^2 = .04^{**})$		
Actual \times ideal \times age	.49*	28	03
Dating domain			
Step 1	$(R^2 = .05^{**})$		$(R^2 = .44^{**})$
Actual score	.04	.00	09
Ideal score	.18*	12	15*
Age group	.00	12	60**
Step 2	$(\Delta R^2 = .04^{**})$		$(\Delta R^2 = .03^*)$
Actual \times ideal	.24**	16	16*
Step 3			
Actual \times ideal \times age	38	.11	44
Schoolwork domain			
Step 1	$(R^2 = .03^*)$	$(R^2 = .04^{**})$	$(R^2 = .42^{**})$
Actual score	02	.08	.11
Ideal score	.15*	14*	02
Age group	.04	14*	64**
Step 2	$(\Delta R^2 = .02^*)$	$(\Delta R^2 = .02^{**})$	
Actual \times ideal	16*	.17*	.02
Step 3		$(\Delta R^2 = .02^{**})$	
Actual \times ideal \times age	15	.39**	.06

effects across domains * p < .05, ** p < .01

All significant results are presented in Table 1 with the exception of a significant effect of ideal scores on depressive symptoms ($\beta = -.17$) in the religion/spirituality domain. There were no significant effects in the family, religion, and sports domains, nor were there any significant gender

School Grades

Age group predicted school grades in the friendship domain. There were no statistically significant interactions.

Dating Domain

Depressive Symptoms

Ideal self scores predicted depressive symptoms in the dating domain. There was also a statistically significant two-way interaction between actual self scores and ideal self scores (Fig. 3). Discrepancies between actual and ideal scores were associated with higher depressive symptoms. ANOVAs indicated that there was a significant difference, F(1, 210) = 3.97, p < .05, in the depressive symptoms of adolescents with discrepancies (M = .88, SD = .51) and those without (M = .73, SD = .47), but there were no significant differences between those in the high actual/low ideal group and the high ideal/low actual group. Thus,

outcomes did not differ as a function of the direction of the discrepancy.

Self-Esteem

There were no significant associations involving selfesteem in the dating domain.

School Grades

Ideal self scores and age group predicted school grades in the dating domain. There was also a statistically significant two-way interaction between actual self scores and ideal self scores (Fig. 4). Discrepancies between actual and ideal scores were associated with lower school grades. ANOVAs indicated that there was a significant difference, F (1, 210) = 4.44, p < .05, in school grades between adolescents with discrepancies (M = 75.89, SD = 10.44) and those without (M = 78.98, SD = 10.67), but there were no significant differences between those in the high actual/low

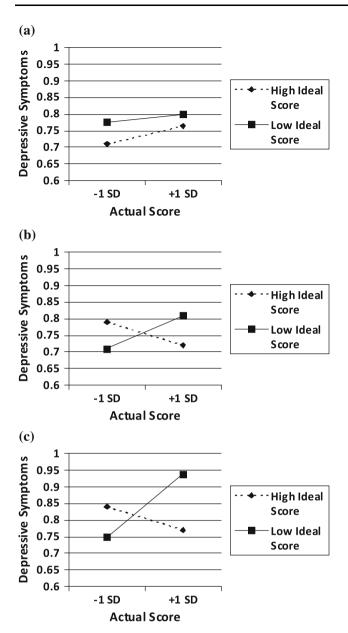


Fig. 1 Interaction between actual and ideal friendship scores in relation to depressive symptoms. a 7th grade, b 9th grade, c 11th grade

ideal group and the high ideal/low actual group. Thus, outcomes did not differ as a function of the direction of the discrepancy.

Schoolwork Domain

Depressive Symptoms

Ideal self scores predicted depressive symptoms in the schoolwork domain. There was also a statistically significant two-way interaction between actual self scores and ideal self scores (Fig. 5). Discrepancies between actual and

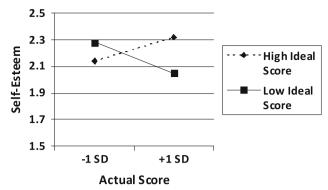


Fig. 2 Interaction between actual and ideal friendship scores in relation to self-esteem

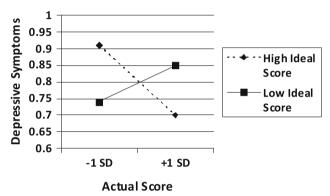


Fig. 3 Interaction between actual and ideal dating scores in relation to depressive symptoms

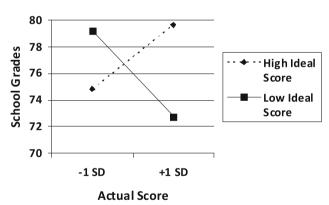


Fig. 4 Interaction between actual and ideal dating scores in relation to school grades

ideal scores were associated with more depressive symptoms. ANOVAs using the entire sample indicated that there was a significant difference, F(1, 210) = 4.09, p < .05, in depressive symptoms between adolescents with discrepancies (M = .84, SD = .50) and those without (M = .70, SD = .46), but there were no significant differences between those in the high actual/low ideal group and the high ideal/low actual group. Thus, outcomes did not differ as a function of the direction of the discrepancy.

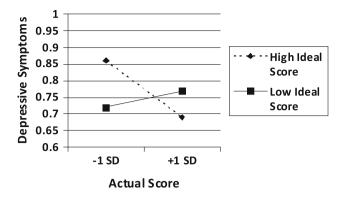


Fig. 5 Interaction between actual and ideal schoolwork scores in relation to depressive symptoms

Self-Esteem

Ideal self scores and age group predicted self-esteem in the schoolwork domain. There was also a statistically significant two-way interaction between actual self scores and ideal self scores, which was qualified by a three-way interaction between actual self scores, ideal self scores, and age group. Follow-up analyses indicated that 9th and 11th graders reported lower self-esteem associated with discrepancies between actual and ideal scores than did 7th graders (Fig. 6). Additionally, 7th graders with high actual/ low ideal discrepancies reported lower self-esteem. ANO-VAs using 9th and 11th graders indicated that there was a significant difference, F(1, 159) = 7.87, p < .01, in selfesteem between adolescents with discrepancies (M = 2.04, SD = .52) and those without (M = 2.30, SD = .46), but there were no significant differences between those in the high actual/low ideal group and the high ideal/low actual group. Thus, outcomes did not differ as a function of the direction of the discrepancy.

School Grades

Age group predicted school grades in the schoolwork domain. There were no statistically significant interactions.

Discussion

The current study investigated the actual self, ideal self and the interaction between these two self-representations in the prediction of concurrent depressive symptoms, selfesteem, and school achievement among Jamaican adolescents. It is, to our knowledge, the first published empirical investigation of this nature among Caribbean adolescents and has implications both for theory and practice. Actual and/or ideal self scores in the friendship, dating, and

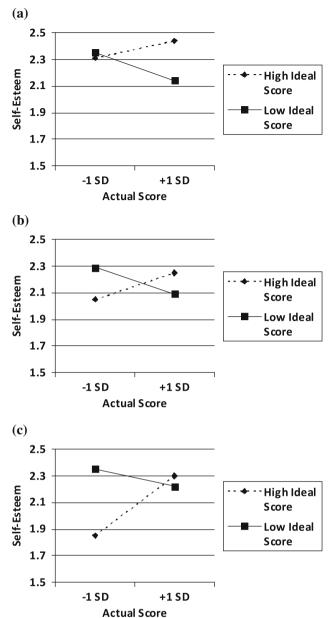


Fig. 6 Interaction between actual and ideal schoolwork scores in relation to self-esteem. **a** 7th grade, **b** 9th grade, **c** 11th grade

schoolwork domains had significant effects on adolescent adjustment. Moreover, actual/ideal discrepancies in all three domains accounted for unique variance beyond the effects of actual or ideal self scores. Discrepancies in the friendship and schoolwork domains accounted for unique variance in adolescent self-esteem and depressive symptoms, and discrepancies in the dating domain accounted for unique variance in depressive symptoms and academic achievement. Adjustment did not differ when discrepancies favored the actual self versus favoring the ideal self. The findings were significantly more pronounced for older adolescents than for young adolescents.

Self-Discrepancies and Adjustment

As predicted by Self-Discrepancy Theory (Higgins 1987), the current findings indicated that the association between adolescent adjustment and self-representations is explained not just by the actual self and the ideal self, but also by discrepancies between the two. This is consistent with prior research done with North American samples. Moretti and Wiebe (1999) found that adolescent self-discrepancy was a marginally significant predictor of self-reported internalizing problems beyond self ratings and McDaniel and Grice (2008) found that actual/ideal discrepancies among college undergraduates uniquely and significantly predicted variance in depressive symptoms and self-esteem scores after controlling for actual self ratings.

Unique to the present study is the finding that self-discrepancies, regardless of their direction, are a liability. Both discrepancies favoring the actual self *and* those favoring the ideal self predicted higher depressive symptoms, lower self-esteem, and lower school achievement. Larger discrepancies in each direction tended to be associated with greater distress. It appears that adolescents experience distress associated with any mismatch between who they perceive themselves to be and who they want to be; regardless of whether that discrepancy is due to falling short of their ideals or exceeding them. In other words, the size of the discrepancy, rather than its direction, appears to have the greatest impact on adolescent adjustment.

It is important to remember that these findings do not reveal the causal direction of effects. It is possible that discrepancies promote distress and poor adjustment among adolescents (e.g., awareness of falling short of one's ideals or exceeding one's ideal investment in a key domain may have caused disappointment and depressive symptoms). However, it is also possible that poor adjustment may heighten self-discrepancies (e.g., a depressed adolescent might perceive greater differences between the actual and ideal self than a non-depressed adolescent). Age group differences lend credence to the former explanation, but developmental pathways cannot be specified in our crosssectional data.

Age Group Differences

Consistent with expectations based on the cognitive developmental perspective, age moderated the association between self-discrepancies and concurrent adjustment. Young adolescents with self-discrepancies in the friendship and schoolwork domains reported fewer adjustment difficulties than their older counterparts. Nascent cognitive abstraction abilities of young adolescents limit the proliferation of their self-representations; consequently, they have fewer discrepancies among these self-views. Relative to older adolescents, young adolescents are also less aware of the self-discrepancies they do have. These developmental differences make young adolescents less vulnerable to experiencing discrepancy-related distress (Harter et al. 1997). Older adolescents with better abstraction capabilities, however, have more numerous self-views and selfcontradictions, and are more aware of these discrepancies. Ironically, despite these advances in self-knowledge, midadolescents do not yet have sufficient cognitive integration skills to manage their internal self-discrepancies (Harter 1999, 2006). Taken together, these developmental features likely explain why older adolescents experienced more difficulty coping with self-discrepancies than younger adolescents.

Limitations

As with any other study, this investigation had some limitations worth mentioning. The Identity Pie is a finite whole; this limits the variance of scores, which may have contributed to some nonsignificant findings. In addition, all measures of adolescent concurrent functioning were selfreported. Thus, shared reporter variance may have affected the significance of results. Given that discrepancies and adjustment are likely to be intertwined in an adolescent's perception of self, replication with peer and mother reports would be beneficial. Cross-sectional data are susceptible to cohort effects; a longitudinal investigation of the current research questions will clarify developmental pathways. The sample, although drawn from one large public school, was geographically diverse including students from at least 3 parishes, both urban and rural areas, and a variety of family income levels. Caution must be exercised when generalizing the findings to adolescents in other settings. Finally, given the number of main effects and interactions tested, the relatively small sample size means that some smaller effects may have been overlooked, particularly those in which gender was a moderator. Some of the aforementioned limitations (smaller sample size, limited variance of scores) underscore the robustness of the findings of this study while others (sample demographics, cross-sectional design) suggest avenues for future research in this area.

Research and Clinical Implications

This investigation highlights the limitations of a longstanding (mis)understanding of actual/ideal self-discrepancies to be ideals which overshadow one's actual view of self (James 1950; Harter 1999). This study and prior parenting research (e.g., Strauss and Goldberg 1999) strongly suggest that discrepancies in both directions occur and are of emotional significance. Self-discrepancy measures

which fail to assess the direction of discrepancies (e.g., SPPA, Harter 1988; Selves Questionnaire, Higgins et al. 1986) or statistical strategies which do not investigate the presence or effects of self-discrepancies in both directions (e.g., Dubois et al. 2000) may miss half of the story. Measures and administration procedures that avoid researcher bias towards one self-view over another-either by allowing both positive and negative attributes to describe either self-view or by allowing equally low or high ratings of self-views-may be more effective in capturing discrepancies in both directions (e.g., The Pie-Cowan and Cowan 2001; Identity Pie-Ferguson and Dubow 2007). Future scholars should look into revising extant measures to assess discrepancies in both directions. For example, a code for discrepancy direction could be added to the scoring system of the Selves Questionnaire for synonymous mismatches and antonymous mismatches. Alternatively, researchers using the SDQ (Dubois 1993a; Byrne 1988) along with the SSQ (Dubois 1993b) can follow a similar analytic strategy to the one used in this paper to assess the presence, direction, and effects of discrepancies.

It is normative for youth to experience actual/ideal selfdiscrepancies in one or more major life domain at some point during the adolescent years. Their association with internal distress suggests that self-discrepancies may be an appropriate focus of clinical attention. Clinical approaches to reduce internal distress could involve changing patterns of self-construct availability and accessibility (Moretti 1991). Self-discrepancies that are more available (i.e., of greater magnitude) or accessible (i.e., more likely to be activated) may give rise to more intense internal distress (Higgins 1987; Higgins et al. 1986). To change the magnitude of a self-discrepancy, individuals first need to be aware of their discrepant self views. However, individuals are sometimes unaware of their self-beliefs, especially when they are depressed (Bargh et al. 1986). Thus, the first clinical intervention step would be to increase the adolescent's awareness of his/her actual and ideal selves and discrepancies between the two, as well as how these selfbeliefs are related to distressing feelings. One can then decrease the magnitude of self-discrepancies and related distress by changing actual self-beliefs to approach the ideal, vice versa, or simultaneously bringing each self-view closer to the other. The second therapeutic avenue involves changing the accessibility of self-beliefs so that negative self-beliefs are activated less frequently and positive selfbeliefs are activated more frequently. This may involve decreasing rumination about distressing self-discrepancies while increasing time spent thinking about areas of selfconcordance.

A final therapeutic implication is that self-discrepancies in the friendship, dating, and schoolwork domains warrant particular clinical attention. Discrepancies in these domains can act as markers of potential adjustment problems, which, if identified early can be addressed proactively through preventive and early intervention approaches. Because adjustment difficulties are more pronounced among midadolescents with self-discrepancies, they may require more targeted social, emotional, or academic support from caregivers at home and at school. This may be particularly relevant to clinicians and other concerned adults serving youth in the Caribbean or Caribbean immigrant youth in the U.S. and other countries.

Conclusions

Findings from this sample of Jamaican youth replicate and extend those reported for North American youth, supporting the cross-cultural generalizability of self-discrepancy theory. Actual/ideal self-discrepancies have a significant impact on Jamaican adolescents' psychological and academic adjustment beyond the effects of actual and ideal self-representations. This is the first study to demonstrate that negative correlates are similar when the actual self dwarfs the ideal self *and* when the ideal self dwarfs the actual self. These findings challenge actual/ideal self-discrepancy theories, which focus on the latter.

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References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Bargh, J. A., Bond, R. N., Lombard, W. J., & Tota, M. E. (1986). The additive nature of chronic and temporary sources of construct accessibility. *Journal of Personality and Social Psychology*, 50, 869–878.
- Bentall, R. R., Kinderman, P., & Manson, K. (2005). Self-discrepancies in bipolar disorder: Comparison of manic, depressed, remitted and normal participants. *British Journal of Clinical Psychology*, 44, 457–473.
- Bessenoff, G. R., & Snow, D. (2006). Absorbing society's influence: Body image self-discrepancy and internalized shame. *Sex Roles*, 54, 727–731.
- Byrne, B. M. (1988). The Self Description Questionnaire III: Testing for equivalent factorial validity across ability. *Educational and Psychological Measurement*, 48(2), 397–406.
- Carver, C. S., Lawrence, J. W., & Scheier, M. F. (1999). Selfdiscrepancies and affect: Incorporating the role of feared selves. *Personality and Social Psychology Bulletin*, 25, 783–792.
- Cowan, C. P., & Cowan, P. A. (2001). The pie. In J. Touliatos, B. F. Perlmutter, & M. A. Straus (Eds.), *Handbook of family measurement techniques* (p. 133). Thousand Oaks: Sage.

- DuBois, D. L. (1993a). Self-description questionnaire. Unpublished measure. Columbia, Missouri: Department of Psychology, University of Missouri-Columbia.
- DuBois, D. L. (1993b). Self-standards questionnaire. Unpublished measure. Columbia, Missouri: Department of Psychology, University of Missouri-Columbia.
- DuBois, D. L., Tevendale, H. D., Burk-Braxton, C., Swenson, L. P., & Hardesty, J. L. (2000). Self-system influences during early adolescence: Investigation of an integrative model. *Journal of Early Adolescence*, 20(1), 12–43.
- Eccles, J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., et al. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75–146). San Francisco, CA: W. H. Freeman.
- Eccles, J. S., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Age and gender differences in children's self- and task perceptions during elementary school. *Child Development*, 64(3), 830–847.
- Erikson, E. H. (1968). Identity: Youth and Crisis. NewYork: Norton.
- Evans, H. (2001). Inside Jamaican schools. Kingston 7: University of the West Indies Press.
- Ferguson, G. M. (2006). "A Me Dis": A study of Jamaican adolescent identity construction using a graphical measure. In R. Craven, J. Eccles, M. Trinh Ha (Eds.), *Proceedings of the 4th international biennial self research conference*. Sydney: SELF Research Center, University of Western Sydney.
- Ferguson, G. M., & Dubow, E. F. (2007). Self-representations of Jamaican adolescents: Perceived parental ideal, own ideal and actual self. *Caribbean Journal of Psychology*, 2(2), 27–43.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58, 203–211.
- Harter, S. (1988). *The self-perception profile for adolescents*. Unpublished manual. Denver, Colorado: University of Denver.
- Harter, S. (1999). *The construction of self*. New York: The Guilford Press.
- Harter, S. (2006). Self-processes and developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (2nd Ed., Vol. 1. Hoboken, pp. 370–418). NJ: Wiley.
- Harter, S., Bresnick, S., Bouchey, H. A., & Whitesell, N. R. (1997). The development of multiple role-related selves during adolescence. *Development and Psychopathology*, 9, 835–853.
- Helmke, A., & Van Aken, M. A. (1995). The causal ordering of academic achievement and self-concept ability during elementary school: A longitudinal study. *Journal of Educational Psychology*, 87(4), 624–637.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340.
- Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Selfdiscrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal* of Personality and Social Psychology, 5(1), 5–15.
- Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition*, 3, 51–76.
- Higgins, E. T., Loeb, I., & Moretti, M. M. (1995). Self-discrepancies and developmental shifts in vulnerability: Life transitions in the regulatory significance of others. In D. Cicchetti & S. Toth (Eds.), *Rochester symposium on developmental psychopathology* (Vol. 6, pp. 191–230). Rochester, NY: University of Rochester Press.
- Jacobson, E. (1946). The effect of disappointment on ego and superego formation in normal and depressive development. *Psychoanalytic Review*, 33, 129–147.
- James, W. (1890/1950). *The principles of psychology* (Vol. 1). New York: Henry Holt. Unaltered republication, New York: Dover.

- Kinderman, P., & Bentall, R. P. (1996). Self-discrepancies and persecutory delusions: Evidence for a model of paranoid ideation. *Journal of Abnormal Psychology*, 105(1), 106–113.
- Kling, K. C., Hyde, Janet S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125(4), 470–500.
- Klingenspor, B. (2002). Gender-related self-discrepancies and bulimic eating behavior. *Sex Roles*, 47(1/2), 51–64.
- Makros, J., & McCabe, M. P. (2001). Relationships between identity and self-representations during adolescence. *Journal of Youth* and Adolescence, 30(5), 623–639.
- Markus, H., & Nurius, P. (1986). Possible selves. American Psychologist, 41, 954–969.
- McDaniel, B. L., & Grice, J. W. (2008). Predicting psychological well-being from self-discrepancies: A comparison of idiographic and nomothetic measures. *Self and Identity*, 7(3), 243–261.
- Moretti, M. M. (1991). The law of cognitive structure activation: New directions in understanding depressive symptoms and psychotherapy. *Psychological Inquiry*, 2, 196–199.
- Moretti, M. M., & Higgins, E. T. (1990). Relating self-discrepancy to self-esteem: The contribution of discrepancy beyond actual-self ratings. *Journal of Experimental and Social Psychology*, 26(2), 108–123.
- Moretti, M. M., & Wiebe, V. J. (1999). Self-discrepancy in adolescence: Own and parental standpoints on the self. *Merrill-Palmer Quarterly*, 45(4), 624–649.
- Phillips, A. G., & Silvia, P. J. (2005). Self-awareness and the emotional consequences of self-discrepancies. *Personality and Social Psychology Bulletin*, 31(5), 703–713.
- Radloff, L. S. (1977). The CES-D scale: A self-report depressive symptoms scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401.
- Rogers, C. R. (1951). *Client-centered therapy*. Boston: Houghton-Mifflin.
- Rosenberg, M. (1989). Society and the adolescent self-image (Revised edition ed.). Middletown, CT: Wesleyan University Press.
- Sanderson, C. A., Wallier, J. M., Stockdale, J. E., & Yopyk, D. J. (2008). Who feels discrepancy and how does feeling discrepant matter? Examining the presence and consequences of feeling discrepant from personal and social norms related to thinness in American and British high school girls. *Journal of Social and Clinical Psychology*, 27(9), 995–1020.
- Sandler, J., & Joffe, W. G. (1965). Notes on childhood depressive symptoms. *International Journal of Psychoanalysis*, 46, 88–96.
- Sawdon, A., Cooper, M., & Seabrook, R. (2007). The relationship between self-discrepancies, eating disorder and depressive symptoms in women. *European Eating Disorders Review*, 15, 207–212.
- Scott, L., & O'Hara, M. W. (1993). Self-discrepancies in clinically anxious and depressed university students. *Journal of Abnormal Psychology*, 102, 282–287.
- Stevens, G., & Hoisington, E. (1987). Occupational prestige and the 1980 US labor force. *Social Science Research*, 16, 74–105.
- Stone, J., Aronson, E., Crain, A. L., Winslow, M. P., & Fried, C. B. (1994). Inducing hypocrisy as a means of encouraging young adults to use condoms. *Personality and Social Psychology Bulletin*, 20(1), 116–128.
- Strauman, T. J. (1989). Self-discrepancies in clinical depression and social phobia: Cognitive structures that underlie emotional disorders? *Journal of Abnormal Psychology*, 98(1), 14–22.
- Strauman, T. J., & Higgins, E. T. (1987). Automatic activation of self-discrepancies and emotional syndromes when cognitive structures influence affect. *Journal of Personality and Social Psychology*, 53, 1004–1014.

- Strauman, T. J., Vookles, J., Berenstein, V., Chaiken, S., & Higgins, E. T. (1991). Self-discrepancies and vulnerability to body dissatisfaction and disordered eating. *Journal of Personality* and Social Psychology, 61(6), 926–956.
- Strauss, R., & Goldberg, W. A. (1999). Self and possible selves during the transition to fatherhood. *Journal of Family Psychol*ogy, 13(2), 244–259.
- Twenge, J. M., & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: A meta-analysis. *Journal of Abnormal Psychology*, 111(4), 578–588.
- Wigfield, A., Eccles, J. S., & Pintrich, J. R. (1996). Development between the ages of 11 and 25. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 148–185). New York, NY: Prentice Hall International.

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