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BRIEF REPORTS

Self-Discrepancy and Distress: The Role of Personal Growth Initiative

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Higher levels of personal growth initiative (PGI; C. Robitschek, 1998) are associated with lower negative and higher positive affect (e.g., C. Robitschek & S. Kashubeck, 1999; C. Robitschek & C. L. M. Keyes, 2004). Two hypotheses that have been suggested for such findings are that (a) PGI moderates the relation between problems and affect and (b) successful resolution of potential problems mediates the relation between PGI and affect (C. Robitschek & S. Kashubeck, 1999). The current research tested these two hypotheses, using self-discrepancies (E. T. Higgins, 1987) as problems or sources of distress. Using a sequential design and a sample of predominantly European American college students ($N = 134$), the authors found that PGI was associated with lower social anxiety and negative affect, higher positive affect, and lower self-discrepancies. No support for the first (moderation) hypothesis was found. However, there was partial support for the second (mediational) hypothesis. The results suggest that those higher in PGI experience less social anxiety in part by maintaining lower self-discrepancies.

Keywords: personal growth initiative, self-discrepancies, PGI, social anxiety, affect

Understanding factors that contribute to and protect against emotional distress, as well as factors that contribute to and enhance well-being, is an important element in providing effective psychological services. Recently, personal growth initiative (PGI; Robitschek, 1998) has emerged as a promising construct in furthering such understanding. PGI is defined as active, intentional involvement in changing and developing as a person (Robitschek, 1998, 1999). It includes cognitive components, such as knowing how to change and being committed to the growth process (e.g., "I know how to change specific things that I want to change in my life.") and behavioral components, specifically, enacting the growth process (e.g., "If I want to change something in my life, I initiate the transition process.").

Previous research has found PGI is positively related to positive functioning and negatively related to distress or poor functioning. For example, college students with high PGI report engaging in more environmental exploration and have more crystallized vocational identities than do students with lower PGI (Bartley & Robitschek, 2000; Robitschek & Cook, 1999). Conversely, Robitschek and Cook (1999) found that, compared with people high in PGI, those lower in PGI report more suppressive coping, or "a tendency to deny problems and avoid coping activities" (Heppner, Cook, Wright, & Johnson, 1995, p. 282), and less reflective coping, "the tendency to examine causal relationships, plan, and be systematic in coping" (Heppner et al., 1995, p. 282). People high in PGI report being more assertive and having a more internal locus of control, higher levels of instrumentality, and lower levels of chance locus of control than do people low in PGI (Robitschek, 1998). Although PGI is related to these constructs, it is distinct from them in that these other constructs do not directly address issues of personal growth (e.g., using one's assertiveness to return a steak that was not cooked correctly has little to do with personal growth).

It is of particular relevance to the current study that prior research has found that higher levels of PGI are associated with higher levels of psychological well-being, such as positive affect (PA), happiness, life satisfaction, and self-acceptance (Robitschek & Keyes, 2004), and lower levels of distress, including depression and anxiety (Robitschek & Kashubeck, 1999). Robitschek and Kashubeck (1999) suggested several explanations for these relations: PGI might prevent the formation of distress symptoms, PGI might minimize the level of distress experienced, or PGI might facilitate recovery from distress. For example, when faced with a distressing problem, an individual high in PGI might be better able to identify specific ways to respond to the problem, feel more confident in her or his ability to resolve the problem, and thus experience less distress and less decrease in PA from the same problem than might someone lower in PGI. This explanation suggests that PGI moderates the relation between problems and distress (i.e., that the relation between problems and distress is different at varying levels of PGI). Alternatively, individuals high

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in PGI might be better able to anticipate problems and actively work to prevent the problems than those low in PGI. This explanation suggests that prevention of potential problems may mediate the relation between PGI and distress (i.e., that the relation between PGI and affect is explained by prevention of potential problems). In other words, higher levels of PGI may predict fewer active problems or sources of distress, which in turn predict less distress and higher PA.

The purpose of the present study was to investigate these two possibilities to better understand the mechanisms by which PGI may prevent distress. However, in light of the fact that PA and negative affect (NA) have been shown to be separable (e.g., Larsen, McGraw, & Cacioppo, 2001), it is important not to assume that the relation between PGI and NA is simply the opposite as for PA. Thus, a second purpose of the present study was to investigate explicitly whether similar mechanisms explain the relations between PGI and distress and between PGI and PA. In addition to looking at general PA and NA, we chose to look at a specific type of distress, social anxiety, for several reasons. First, although higher PGI has been associated with lower general anxiety (Robitschek & Kashubeck, 1999), no study has yet examined the relation of PGI to social anxiety. Although general and social anxiety are certainly correlated, they are distinct constructs (Hardin, Varghese, Tran, & Carlson, 2006; Watson & Friend, 1969), so including social anxiety in this study expands understanding of the types of affect associated with PGI. Second, because the physical symptoms most associated with general anxiety are less likely to be experienced by those with subclinical levels of anxiety (e.g., Clark & Watson, 1991), social anxiety may be more appropriate than general anxiety to examine in our nonclinical sample. No specific predictions were made regarding the relative strength of the relations between PGI and these various types of affect.

One potential source of distress is self-discrepancies, which occur when the type of person someone wants or feels obligated to be is different from whom that person believes she or he actually is (Higgins, 1987), or when one's actual self is similar to one's undesired self (Ogilvie, 1987). For example, if one aspires to be successful, feels a responsibility to be compassionate, and does not want to be selfish but perceives oneself to be unsuccessful, unkind, and selfish, that person is experiencing self-discrepancies. Self-discrepancies seem particularly useful in studying PGI because the specific attributes that comprise the ideal, ought, and undesired selves (discussed in more detail in the *Self-discrepancy* section) are unique to and specified by each individual. Given that PGI refers to the process, not content, of personal growth, it is essential to allow individuals to identify their own individually relevant domains of personal growth, rather than to specify a domain (e.g., interpersonal skills) that may not be equally relevant to all individuals. In addition, just as PGI has been found to be related to increased PA and decreased NA, research and theory indicate that self-discrepancies lead to increased dejection- and agitation-related affect (e.g., Allen, Woolfolk, Gara, & Apter, 1996; Higgins, 1987), including social anxiety (Hardin & Leong, 2005), as well as decreased PA (Phillips & Silvia, 2005).

Although these consequences of self-discrepancies are well-established (see Higgins, 1987) and the counseling implications of self-discrepancies are discussed in the literature (e.g., Hardin & Leong, 2005; Hoskins & Leseho, 1996), little previous research has examined factors that may minimize self-discrepancies nor factors that may moderate the effects of self-discrepancies. Thus, by investigating the relation between PGI and self-discrepancies in the current study, we hope to facilitate a more complete understanding of self-discrepancies, in addition to furthering understanding of the mechanisms by which PGI affects PA and NA.

As noted above, two such mechanisms were investigated in the current study. First, we tested the hypothesis that PGI moderates the relations between self-discrepancies, PA and NA, and social anxiety, with self-discrepancies being less predictive of affect for individuals higher in PGI. In other words, when facing the same problem (in this case, high self-discrepancies), high-PGI people will experience less social anxiety and general NA and more PA than will low-PGI people because their active involvement in personal growth and change presumably leads to a greater sense of efficacy in eventually resolving the self-discrepancy. Second, we tested the hypothesis that self-discrepancies mediate the relation between PGI and affect. Given that individuals who are high in PGI are more involved in self-improvement, they may actually experience lower self-discrepancies than do individuals low in PGI. Thus, PGI may predict levels of self-discrepancies, which in turn predict affect.

In light of the fact that measuring self-discrepancies increases their accessibility (by forcing participants to think about their self-discrepancies), measuring self-discrepancies and affect simultaneously may lead to inflated correlations between these constructs. Therefore, most past researchers of self-discrepancies have measured self-discrepancies at least 1 week before other variables (e.g., Higgins, Klein, & Strauman, 1985). We employed a similar design, measuring PGI, self-discrepancies, and affect at three points in time, each separated by 1 week. In addition to avoiding the problem of the measurement of self-discrepancies affecting reports of affect, this sequential design is also more consistent with our mediational hypothesis (Frazier, Tix, & Barron, 2004; Hoyle & Robinson, 2004), which implies that levels of PGI at Time 1 predict future levels of self-discrepancies, which in turn predict future affect. Finally, by examining these hypotheses separately for PA and NA, we were able to test whether the same mechanisms underlie the relations between PGI and PA and NA.

Method

Participants

Participants were recruited from undergraduate psychology classes at a large, public, Southwestern university. Participants older than 25 years of age ($n = 17$) were excluded because their experiences are likely different than those of more traditionally aged undergraduate students. In addition, participants who did not complete all three data collection sessions ($n = 52$) or who had outlying data (three or more standard deviations from the mean on any variable; $n = 6$) were also excluded, leaving a final sample of 134 participants. Over two thirds of the sample (76.1%) were women ($n = 102$). The majority of the sample (71%) self-identified as European American ($n = 95$), with the remaining sample identifying as Hispanic ($n = 8$), Asian American ($n = 20$), African American ($n = 3$), biracial or multiracial ($n = 3$), Native American ($n = 4$), and other ($n = 1$). Due to the low numbers of participants in each of these other racial and ethnic groups, we were not able to analyze the data separately for ethnicity. Ages ranged from 17 to 25 years, with a mean of 19.52 years ($SD = 1.66$). The sample was predominantly first-year students (43.3%), with 22.4% sophomores, 20.9% juniors, and 13.4% seniors.

Measures

PGI. PGI was measured using the Personal Growth Initiative Scale (PGIS; Robitschek, 1998). The PGIS is a 9-item measure employing a 6-point Likert-type scale, ranging from 0 (*definitely disagree*) to 5 (*definitely agree*). Scores can range from 0 to 45, with higher scores indicating higher levels of PGI. Previous research found internal consistency estimates from .78 to .90 and test–retest reliability estimates of .74 after 8 weeks (Robitschek, 1998, 1999). Supporting the convergent validity of the measure, PGIS scores correlated positively with assertiveness, internal locus of control, and instrumentality among both European American (Robitschek, 1998) and Mexican American college students (Robitschek, 2003). Discriminant validity of the PGIS is supported by evidence (a) that PGIS scores do not correlate with age, social desirability, or SAT scores in a predominantly European American sample (Robitschek, 1998) and do not correlate with age, acculturation, ethnic identity, or interdependence in a Mexican American sample (Robitschek, 2003), as well as (b) that PGIS scores do not differ between men and women nor between racial and ethnic minorities and European Americans (Robitschek, 1998). Construct validity is supported by positive correlations between PGIS scores and intentional growth processes (Robitschek, 1999).

Self-discrepancy. There are several methods of measuring self-discrepancies presented in the literature. The most recent addresses the criticisms of earlier methods by combining idiographic and nomothetic methods (Hardin, 2002; Hardin & Leong, 2005). Discrepancies from three domains of the self were measured: ideal (attributes a person is striving toward), ought (attributes a person feels obligated to possess), and undesired (attributes a person does not want to possess). These domains were measured from the standpoint of the participant and a participant-selected significant other. Consistent with Higgins et al.'s (1985) original methodology, participants were asked to generate a list of five attributes for each of six self states: ideal–own, ideal–other, ought–own, ought–other, undesired–own, and undesired–other. For example, for the ideal–own self-state, participants are instructed to "Please list the attributes of the type of person you would IDEALLY like to be; the type of person you wish, desire, or hope to be." For the undesired–other self-state, participants are instructed to, "Please list the attributes of the type of person [Mom] does NOT want you to be; the traits that are UNDESIRED." Approximately one half of participants were presented with the three *other* self-states first. Order of presentation of the ideal, ought, and undesired domains of the self within the *own* and *other* self-guides was counterbalanced.

After generating these lists of attributes, participants were provided a list of 100 attributes from which they could choose to complete (if fewer than 30 attributes were listed) or modify their lists. The adjectives in this list were randomly selected from Anderson's (1968) list of 555 trait words. Anderson reports average likeability ratings for each of these trait words, based on the average ratings of a large sample of participants. For example, *liar* and *phony* were rated as the least likable traits by Anderson's participants, whereas *sincere* and *admirable* were rated as most likeable. To provide participants with a list of words that represent the full range of these likeability ratings, Hardin and Leong (2005) divided Anderson's original list into quartiles according to mean likeability rating and randomly selected 25 words from each quartile. These 100 words were then presented, in alphabetical order, to participants after they had attempted to generate 30 attributes on their own. This allowed for idiosyncratic attributes to be generated (as recommended by Higgins, 1987, 1999) and provided help to those for whom the task of generating 30 trait words was more difficult (as suggested by Tangney, Niedenthal, Covert, & Barlow, 1998). In a previous study with a similar sample (Hardin, 2002), 100% of participants idiographically generated all 30 words before being presented with this list of 100 words and changed less than 10% of their idiographically generated words after consulting the list.

After having an opportunity to consult the list of 100 trait words, participants then were asked to rate the extent to which each of the 30 attributes describing their ideal, ought, and undesired selves actually applied to them at that time on a 5-point rating scale, from 1 (*completely applies to me*) to 5 (*doesn't apply to me at all*). Thus, participants directly rated the extent to which they perceived a discrepancy between their actual self and the three target selves, consistent with previous methodologies (e.g., Carver, Lawrence, & Scheier, 1999; Cheung, 1997).

Ratings of the undesired attributes were reverse scored so that, for all three types of self-discrepancy, higher scores indicate the more detrimental state (of dissimilarity to the ideal and ought selves and similarity to the undesired self). Consistent with previous research that was interested in global self-discrepancies rather than the specific relations among different types of self-discrepancies and specific types of affect (e.g., Gonnerman, Parker, Lavine, & Huff, 2000), ratings for the three types of self-discrepancy were averaged to yield an overall self-discrepancy score that could range from 1 to 5. Hardin and Leong (2005) reported Cronbach's alpha reliabilities for the separate self-discrepancy scores in the range of .73 to .88 for both European Americans and Asian Americans. Supporting the validity of the method, self-discrepancies correlated negatively with depression and social anxiety among both European Americans and Asian Americans (Hardin & Leong, 2005).

Social anxiety. Social anxiety was measured using the brief version of the Fear of Negative Evaluation Scale (FNE; Leary, 1983) and the Social Avoidance and Distress Scale (SAD; Watson & Friend, 1969). The brief FNE measures anxiety in evaluative situations and consists of 12 items taken from the original FNE (Watson & Friend, 1969). An example of an item from the FNE is, "I am afraid that others will not approve of me." Participants respond to each item using a 5-point Likert-type scale ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). Leary (1983) reported a Cronbach's alpha of .90 for the brief FNE in a college student sample. Scores may range from 5 to 60, with higher scores indicating greater fear of negative evaluation. Supporting the validity of the FNE, scores correlated in the expected direction with other measures of social anxiety (Leary, 1983) in a sample of undergraduates, and students high in FNE reported feeling more uneasy in an evaluative situation than did those low in FNE (Watson & Friend, 1969).

The 28-item SAD measures behavioral avoidance and affective reactions in social situations. An example of an item from the SAD is, "I am usually nervous with people unless I know them well." A modified version of the original measure was used in this study, which involved a 5-point Likert scale, ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). Reliability coefficients of nearly .90 have been reported using this modified response format (Leary, 1991). SAD scores may range from 28 to 140, with higher scores indicating greater levels of social anxiety. Supporting the validity of the SAD, undergraduates with high SAD scores reported less interest in and more worry about engaging in a group discussion task than did those with low SAD scores (Watson & Friend, 1969).

PA and NA. PA and NA were measured using the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS is based on Watson and Tellegen's (1985) conceptualization of emotion as a two-factor model, composed of orthogonal PA and NA dimensions. The PANAS contains 10 PA words (e.g., *interested*, *proud*, *excited*) and 10 NA words (e.g., *distressed*, *irritable*, *afraid*) that were chosen as "relatively pure markers of either PA or NA" (Watson et al., 1988, p. 1064). The general time instructions were used in this study, so that participants were asked to rate each word on the extent that they "generally feel this way, that is, how you feel on the average," using a 5-point rating scale from 1 (*very slightly or not at all*) to 5 (*extremely*). Scores on each scale may range from 10 to 50, with higher scores indicating higher levels of general PA or NA. In a large undergraduate validation sample, Watson et al. (1988) reported internal consistency reliabilities of .88 and .87 on the PA and NA, respectively, using the general time instructions, and test–retest reliabilities of .68 and .71. Supporting the validity of the measure, PA scores correlated negatively and

NA scores correlated positively with measures of depression, anxiety, and general distress.

Demographics. Participants also completed a brief demographic questionnaire that included questions about age, gender, year in school, and racial and ethnic identification.

Procedure

Data were collected at three points in time, each 1 week apart. The PGIS and the demographics questionnaire were administered at Time 1, the self-discrepancy measure was administered at Time 2, and the affect measures were administered at Time 3.

Results

Preliminary Analyses

The two predictors (self-discrepancies and PGI) and the four outcome variables (fear of negative evaluation, social avoidance anxiety, PA, and NA) were tested for skewness and kurtosis by dividing the skewness (S) or kurtosis (K) statistics by their standard errors (as provided by SPSS, Version 13.0) to obtain a z statistic testing the null hypothesis that the skewness or kurtosis statistics were zero (Tabachnick & Fidell, 2001). SAD scores and PA and NA scores were positively skewed (S = .54, .68, and .47, respectively; z = 2.57, 3.24, and 2.38, respectively, ps $< .05$). These problems were corrected by taking the square root of the SAD and PA scores and applying a $\log_{10}$ transformation to the NA scores. Unless otherwise noted, these transformed variables were used in all of the following analyses. There were no gender differences, as revealed by t tests and a series of Fisher's z tests; therefore, women and men were combined for all analyses. Means, standard deviations, correlations, and scale reliabilities for all six measures are shown in Table 1. With the exception of the relation between fear of negative evaluation and PA, all intercorrelations were significant. PGI was particularly highly correlated with PA ($r = .49$, $p < .05$).

Tests of Hypotheses

To test the first hypothesis that PGI moderates the relation between self-discrepancies and affect, we conducted a series of hierarchical regression analyses, with centered self-discrepancy scores entered in Step 1, centered PGIS scores entered in Step 2, and the interaction between these centered scores entered in Step 3. As shown by the nonsignificant R^2 change from Steps 2 to 3 for all four dependent variables (see Table 2), we found no evidence for moderation. In light of the very small effect size for the interaction effect (i.e., $\Delta R^2 < .01$), the lack of significance appears to be due to the triviality of the effect rather than a lack of power.

The second hypothesis was that self-discrepancies mediate the relation between PGI and affect. As demonstrated by the significant correlations between PGI and self-discrepancies, between PGI and all four affect variables, and between self-discrepancies and all four affect variables (see Table 1), Baron and Kenny's (1986) assumptions for testing mediation are met for all of the affect variables. To establish mediation, the direct effect of the independent variable (i.e., PGI) on the dependent variables (affect) when in the presence of the mediator (self-discrepancy) should be reduced (indicating partial mediation) or eliminated (indicating full mediation). This is initially tested using hierarchical regression, in which the mediator (self-discrepancies) is entered in Step 1 and the independent variable (PGI) is entered in Step 2. A nonsignificant R^2 change from Step 1 to Step 2 is consistent with full mediation. As seen in Table 2, evidence for full mediation was obtained for fear of negative evaluation ($\Delta R^2 < .01$, $p > .33$) but not for any of the other three variables tested. However, although the unique variance in social avoidance anxiety accounted for by PGI is significant after accounting for self-discrepancies, it does appear to be reduced, from 16% (based on squaring the simple correlation) to 9.2%, suggesting partial mediation.

To explicitly test the significance of the indirect effect of PGI on the affect variables, we conducted Sobel tests (Sobel, 1982, as cited in Baron & Kenny, 1986) using bootstrap analyses, as recommended by Preacher and Hayes (2004). A significant Sobel statistic indicates that the indirect effect of the independent variable (PGI) on the dependent variable (affect), through the mediator (self-discrepancies), is significantly different from zero, indicating mediation. Bootstrap analysis has the advantage of increasing power with small samples and of providing a confidence interval (CI) for the test statistic, as well as correcting for violations of normality (see Preacher & Hayes, 2004). Results of these analyses, using 3,000 bootstrapped samples, indicate a significant indirect effect of PGI on fear of negative evaluation (Sobel = −.16, z = −2.43, $p < .05$; mean indirect effect = −.15, 95% CI = −.29,

Table 1
Descriptive Statistics, Internal Consistency Reliabilities, and Bivariate Correlations

Variable	*M*	*SD*	1	2	3	4	5	6
1. SDs	2.18	0.46	*.85*	—				
2. PGIS	32.72	6.47	−.39*	*.87*	—			
3. FNE	35.59	10.10	.29*	−.19*	*.91*	—		
4. SAD	64.99	18.87	.32*	−.40*	.43*	*.95*	—	
5. PA	2.35	0.67	−.26*	.49*	−.15	−.42*	*.83*	—
6. NA	1.02	0.51	.26*	−.26*	.47*	.38*	−.29*	*.78*

Note. Alpha reliabilities are presented in italics on the diagonal. SDs = self-discrepancies; PGIS = Personal Growth Initiative Scale (Robitschek, 1998); FNE = brief Fear of Negative Evaluation Scale (Leary, 1983); SAD = Social Avoidance and Distress Scale (Watson & Friend, 1969); PA = Positive Affect and NA = Negative Affect from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). Transformed scores, sqrt(SAD), sqrt(PA), and $\log_{10}$ (NA), are used for the correlations.
* $p < .05$.

Table 2
Summary of Hierarchical Regressions Predicting Affect From Self-Discrepancies, PGI, and Their Interaction

	FNE				SAD[a]				PA[a]				NA[a]			
Predictor	*B*	*SE B*	β	ΔR^2	*B*	*SE B*	β	ΔR^2	*B*	*SE B*	β	ΔR^2	*B*	*SE B*	β	ΔR^2
Step 1																
Constant	35.59	0.84			7.98	0.10			1.52	0.02			0.29	0.01		
SDs	6.49	1.84	.29*	.09*	0.81	0.21	.32*	.10*	−0.12	0.04	−.26*	.07*	0.06	0.02	.26*	.07*
Step 2																
Constant	35.59	0.84			7.98	0.10			1.52	0.02			0.29	0.01		
SDs	5.73	2.00	.26*		0.48	0.22	.19*		−0.04	0.04	−.07		0.05	0.02	.19*	
PGIS	−0.14	0.14	−.09	<.01	−0.06	0.02	−.33*	.09*	0.02	<0.01	.46*	.18*	<−0.01	<0.01	−.19*	.03*
Step 3																
Constant	35.12	0.89			7.95	0.10			1.52	0.02			0.29	0.01		
SDs	5.43	2.00	.25*		0.46	0.22	.18*		−0.03	0.04	−.07		0.04	0.02	.18*	
PGIS	−0.10	0.14	−.07		−0.06	0.02	−.32*		0.02	<0.01	.45*		<−0.01	<0.01	−.17	
SD × PGIS	−0.34	0.26	−.12	.01	−0.02	0.03	−.06	<.01	<0.01	0.01	.06	<.01	<−0.01	<0.01	−.08	<.01

Note. PGI = personal growth initiative; SDs = self-discrepancies; PGIS = Personal Growth Initiative Scale (Robitschek, 1998); FNE = brief Fear of Negative Evaluation Scale (Leary, 1983); SAD = Social Avoidance and Distress Scale (Watson & Friend, 1969); PA = Positive Affect and NA = Negative Affect from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988).
[a] Transformed variables were used.
* $p < .05$.

−.04, $p < .01$) and social avoidance (Sobel = −.01, $z = -1.96$, $p < .05$; mean indirect effect = −.01, 95% CI = −.03, −.001, $p < .05$). Thus, these results confirm that self-discrepancies partially mediate the relation between PGI and social avoidance and fully mediate the relation between PGI and fear of negative evaluation in this sample. The Sobel test was not significant for PA or NA.

Discussion

The purpose of this study was to test two hypotheses about the mechanisms by which PGI influences PA and NA. The first hypothesis was that PGI moderates the relation between self-discrepancies and affect, with higher self-discrepancies being less predictive of affect among those higher in PGI. However, we found no support for this hypothesis. Results suggest that regardless of levels of PGI, higher self-discrepancies are associated with higher social anxiety and general NA and lower PA in this sample of predominantly European American young adults. It is important to note, however, that there were very few participants in the current study who were high in both PGI and self-discrepancies. Indeed, PGI and self-discrepancies were negatively correlated, indicating that individuals with higher PGI have lower self-discrepancies.

The finding that higher levels of PGI are associated with lower self-discrepancies is consistent with our second hypothesis that successful prevention of potential problems, in this case self-discrepancies, mediates the relation between PGI and affect. This hypothesis was partially supported; results indicate that among predominantly European American young adults, self-discrepancies do at least partially mediate the relations between PGI and social anxiety but do not mediate the relation between PGI and PA or more general NA. Thus, it appears that one reason predominantly European American young adults who are high in PGI tend to have less social anxiety is because they are able to successfully avoid self-discrepancies. The intentional involvement in personal growth behaviors of high-PGI people appears to lead them to be more satisfied with themselves (i.e., to experience greater consistency between their current self and their ideal or moral standards), which in turn leads to greater confidence in social interactions and perceptions of acceptance from others and, thus, less avoidance of social interactions.

However, self-discrepancies only partially mediated the relation between PGI and social avoidance anxiety, indicating a direct effect of PGI beyond this indirect effect through lower self-discrepancies. Perhaps high-PGI people are more likely to perceive social interactions as growth opportunities and, thus, report less social avoidance, regardless of levels of self-discrepancies. Self-discrepancies fully mediated the relation between PGI and another aspect of social anxiety, fear of negative evaluation. Individuals who perceive their current selves to be consistent with their ideal selves or very far from their undesired selves are unlikely to anticipate being evaluated negatively by others; thus, the intentional involvement in personal growth behaviors of high-PGI people leads individuals to greater congruence with their personal standards, which in turn leads to less fear of negative evaluation.

In addition to this mediated effect of PGI on social anxiety, the lack of mediation for general PA and NA suggests that PGI influences mood through mechanisms other than self-discrepancies. PGI seems to have a particularly important relation with PA, accounting for 18% of unique variance in this variable. However, none of this is to say that people who are high in PGI never experience a self-discrepancy, nor that people high in PGI do not experience NA or declines in PA. Perhaps they are quicker to identify self-discrepancies when they occur and, therefore, quicker to take action to resolve the discrepancy than are those low in PGI. It is important to remember that PGI refers to the process by which individuals intentionally seek growth, not the outcome or content of this process. Just as we hope that, through therapy, our clients learn more effective ways to handle future problems, rather than develop unrealistic expectations that they will not encounter future

problems, it seems likely that PGI facilitates a more effective process of responding to current and imminent problems. This is an important question for future research. By examining the experience of individuals who are high in PGI and in the midst of distress, future research would provide a more sophisticated understanding of the process underlying the relation between PGI and affect.

Future researchers should also attempt to replicate these findings with other samples. This study relied on a relatively homogenous sample of predominantly European American young adults enrolled in college. It is unknown whether these results would apply to individuals of other racial and ethnic identities, ages, or educational backgrounds. Although previous research has supported the validity of the PGIS with Mexican Americans (Robitschek, 2003), other cross-cultural differences have been found for some of these variables. For example, Asian Americans have been found to have higher levels of self-discrepancies than European Americans (Hardin & Leong, 2005), as well as higher levels of social anxiety (Hardin & Leong, 2005; Okazaki, 1997). PGI theory suggests no reason to believe that Asian Americans should have lower levels of PGI (although this should be confirmed empirically); thus, PGI may have a weaker relation with self-discrepancies and social anxiety in this group, with other culturally specific variables (e.g., self-construal, acculturation, experiences of discrimination) being more predictive of self-discrepancies and distress. These are certainly testable hypotheses. Exploring whether PGI may interact with such variables to predict self-discrepancies and distress would be another useful avenue of research. Just because PGI was not found to interact with self-discrepancies in predicting distress in the current study, does not mean PGI might not interact with other stressors (such as experiences of discrimination) in other samples (e.g., African American adolescents or less acculturated Asian American adults).

It is interesting to note that competing hypotheses might be made about such an interaction. On the one hand, we might hypothesize that individuals higher in PGI would experience less distress in response to such experiences, because their high PGI would lead to a greater sense of efficacy in knowing how to cope with or respond to these events. On the other hand, if Robitschek and Kashubek (1999) are correct in their hypothesis that, "people with high personal growth orientation . . . recognize their distress quickly and then take steps to change themselves or their situation rather than remaining stuck in the distress" (p. 169), it is conceivable that individuals might actually experience more initial distress in response to such experiences, which motivates action to resolve the problem. This highlights the need, noted above, for researchers to study individuals who are high in PGI and in the midst of experiencing a problem or crisis, to fully understand the relation between PGI and affect across various groups.

Finally, future researchers should attempt to provide even stronger tests of our mediational hypothesis. Our use of a sequential design did allow us to demonstrate that levels of PGI at Time 1 predict levels of self-discrepancies 1 week later, which in turn predict levels of distress 1 week after that; however, a stronger test of the hypothesis would involve controlling for baseline levels of these variables by measuring PGI, self-discrepancies, and affect at all three points in time (Frazier et al., 2004; Hoyle & Robinson, 2004). This lack of control in the current study, combined with the short time lag between data collection sessions, weakens the conclusion that, for example, PGI at Time 1 actually predicts a change in self-discrepancies from Time 1 to Time 2.

In addition, future researchers should attempt to directly test the hypothesis that higher PGI causes lower self-discrepancies, particularly if the negative correlation between PGI and self-discrepancies is replicated with other samples. Our use of mediational analyses implies a causal model of the relations among PGI, self-discrepancies, and affect; however, conclusions about causality are not possible due to the correlational design of this research. A stronger test of the hypotheses would involve actually manipulating levels of PGI and measuring subsequent effects on self-discrepancies and distress. Such research would also expand the literature on self-discrepancies by providing much-needed insight into the precursors of self-discrepancies. Although Higgins (1987) has theorized about factors that influence the development of self-discrepancies (e.g., interactions with parents), virtually no empirical research has examined these and other factors that lead to the formation of self-discrepancies. Future research could also explore whether problems such as self-discrepancies predict or cause PGI. However, this relationship seems less plausible, given that PGI is conceptualized as being a more stable individual-differences variable (similarly, the prediction that social interactions cause differences in extraversion is less plausible than the reverse prediction).

As a preliminary exploration of the processes underlying these relations among PGI, self-discrepancies, and affect, the current results highlight the important role of PGI and underscore the importance for clinicians of focusing clients on the process of change. As noted elsewhere (Robitschek, 1998), this goal of enhancing the process of growth for clients is salient across multiple theoretical orientations. Thus, as therapists, we need not only to work with our clients to resolve the problems with which they enter treatment but also to facilitate their engagement in the broader process of personal growth. To this end, research examining how PGI develops and which interventions are most effective in increasing PGI is much needed. This study also highlights the unique relation between PGI and PA. For counseling psychologists committed to enhancing clients' strengths, PGI seems to be an important construct to mobilize in fostering such positive growth.

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