Abstract:
Many self-theories presume that discrepancies between the self and goals for the self influence emotional experience. The present research compared how discrepancies from ideal selves, ought selves, and undesired selves predict negative emotions. In particular, the research tested Ogilvie's (1987) claim that the undesired self has stronger effects on well-being relative to ideal and ought selves. A total of 231 participants completed several measures of self-discrepancies and negative emotions. Consistent with Ogilvie's hypothesis, discrepancies from the undesired self significantly predicted negative emotions, whereas discrepancies from the ideal and ought selves did not. No type of discrepancy, however, predicted negative affect when global self-esteem was entered as a predictor, indicating a lack of incremental validity for self-discrepancies.

Article:
Many self-theories presume that discrepancies between the self and goals for the self influence emotional experience. The present research compared how discrepancies from ideal selves, ought selves, and undesired selves predict negative emotions. In particular, the research tested Ogilvie's (1987) claim that the undesired self has stronger effects on well-being relative to ideal and ought selves. A total of 231 participants completed several measures of self-discrepancies and negative emotions. Consistent with Ogilvie's hypothesis, discrepancies from the undesired self significantly predicted negative emotions, whereas discrepancies from the ideal and ought selves did not. No type of discrepancy, however, predicted negative affect when global self-esteem was entered as a predictor, indicating a lack of incremental validity for self-discrepancies.

People distinguish between the self as it is and the self as it could be (Markus & Nurius, 1986). Representations of possible states of the self function as goals and standards (Carver & Scheier, 1998; Duval & Wicklund, 1972), so it is important to understand how these self-states influence self-regulation. Several theories have examined how representations of possible selves differ (Carver, 1996; Higgins, 1987; Ogilvie, 1987) and whether these differences influence emotion and action (Leary, 2003; Ogilvie, 1987; Phillips & Silvia, 2005). Self-discrepancy theory (Higgins, 1987) proposes that discrepancies from ideal and ought selves create negative affect. Ogilvie (1987), in contrast, suggests that the undesired self—an avoidance-based self-goal—has a more powerful influence on emotions relative to ideal and ought selves. The present research examines how these three kinds of possible selves—ideal selves, ought selves, and undesired selves—predict emotional experience.

SELF-DISCREPANCY THEORY
Self-discrepancy theory (Higgins, 1987) posits three domains of the self: actual, ideal, and ought. The actual self is the person's representation of who he or she is currently. The ideal self is the representation of who he or she would like to become, such as wishes and aspirations for the self. The ought self is the representation of who a person feels he or she should become, such as duties and obligations for the self. Self-discrepancy theory predicts that discrepancies between the actual and ideal selves cause dejected emotions such as depression and sadness, and that discrepancies between the actual and ought selves cause agitated emotions such as anxiety and tension (Higgins, Klein, & Strauman, 1985).
Although research has shown that ideal and ought discrepancies predict emotions, it is clear that these effects depend on specific moderating variables (Boldero & Francis, 2000; Boldero, Moretti, Bell, & Francis, 2005; Higgins, 1999). Two patterns of findings have complicated tests of self-discrepancy theory. First, many studies have found that ideal and ought discrepancies are highly correlated. Phillips and Silvia (2005) found a correlation of .77 between latent ideal and ought factors. In their latent variable analysis, Gonnerman, Parker, Lavine, and Huff (2000) found that the discrepancy types were too highly correlated to estimate separate ideal and ought factors. Other studies have found correlations around .70 between ideals and oughts (Ozgul, Heubeck, Ward, & Wilkinson, 2003; Tangney, Niedenthal, Covert, & Barlow, 1998). Based on their multimethod study, Tangney and her colleagues concluded that there was "very little unique variance in the quantitative estimates of these concepts" (p. 265).

Second, many studies have failed to find that ideals and oughts uniquely predict depression and anxiety. In some studies, ideal discrepancies predicted many emotions and ought discrepancies did not. In a structural model of self-processes and emotions (Gramzow, Sedikides, Panter, & Insko, 2000), ideal discrepancies predicted both depression and anxiety, but ought discrepancies predicted neither emotion. In a study by Heppen and Ogilvie (2003), ideal discrepancies predicted many positive and negative emotions, but ought discrepancies did not uniquely predict any emotion. Thus, recent research shows that self-discrepancy theory's predictions are most likely to hold in specific situations, such as when self-discrepancies are salient and relevant to the context (see Boldero et al., 2005; Phillips & Silvia, 2005).

THE UNDESIRED SELF
Ogilvie (1987) proposed an additional self-domain—the undesired self, which appears to play an important role in emotion. The undesired self is a representation of the self at its worst; it thus acts as a central avoidance goal. Ogilvie (1987) predicted that the undesired self should more strongly predict well-being relative to idealized selves. He reasoned that undesired selves are likely to be concrete self-images based on past experiences of failure, humiliation, and guilt. Idealized selves, in contrast, are often abstract, perfectionistic and unattainable, so people may have little direct experience with actualizing their ideal selves. As a result, undesired selves should have an emotional potency that ideal selves lack.

In the first study of the undesired self, Ogilvie (1987) assessed aspects of the real self ("how I am most of the time"), the ideal self ("how I would like to be"), and the undesired self ("how I hope to never be"). The actual-ideal discrepancies and actual-undesired discrepancies were used to predict life satisfaction. Both discrepancies predicted well-being. Consistent with Ogilvie’s model, actual-undesired discrepancies had stronger relations with well-being (r = -.72) relative to actual-ideal discrepancies (r = .37). Regression analyses found that only the undesired self uniquely predicted life satisfaction.

Carver, Lawrence, and Scheier (1999) assessed discrepancies involving ideal, ought, and undesired selves (called feared selves in their research). Ought discrepancies modestly predicted agitation at the zero-order level, but they failed to predict agitation when undesired-self discrepancies were considered simultaneously. Unlike ought and ideal discrepancies, undesired-self discrepancies uniquely predicted a wide range of emotions. As in Ogilvie's (1987) study, the unique effects of the undesired self were generally stronger than the unique effects of ought and ideal selves. In a recent study, Heppen and Ogilvie (2003) measured self-discrepancies and emotions five times over a 4-week period. The ideal self uniquely predicted several positive and negative affects, but the ought self failed to uniquely predict any emotion. As expected, the undesired self strongly predicted positive and negative affect, even after controlling for ideal and ought discrepancies.

INCREMENTAL VALIDITY OF SELF-DISCREPANCIES
Do self-discrepancies have unique effects on emotions above and beyond other self-variables? Self-discrepancy research has thus far paid little attention to the incremental validity (Hunsley & Meyer, 2003) of self-discrepancies. The field's interest in differentiating self-discrepancies from each other has perhaps detracted from differentiating self-discrepancies from other self-processes, such as self-esteem or self-concept valence. Specific self-beliefs—such as perceived discrepancies between the self and standards for the self—might not
uniquely predict emotional experience. Instead, global self-variables may act as "third variables" that cause both the discrepancies and the emotions. For example, global self-esteem should entail (1) believing that the self is close to its standards and (2) positive emotional feelings. Indeed, it is not obvious that specific self-discrepancies should have any predictive power beyond global variables such as self-esteem.

To date, only one experiment has examined the incremental validity of self-discrepancies. Ozgul et al. (2003) compared the effects of self-discrepancies with the effects of negative self-concepts. In most cases, self-concept negativity strongly predicted emotions, whereas ideal and ought discrepancies did not. A problem, however, is that the measure of self-concept valence was a global score derived from the Selves Questionnaire (Higgins, 1987). The assessment of self-discrepancies and self-concept valence thus stemmed from the same measurement instrument. Ideally, one would have distinct measures of discrepancies and self-concept valence. This overlap inflates the measures' shared method variance and probably underestimates the unique effects of self-discrepancies. Nevertheless, this study indicates the need to consider whether self-discrepancies can explain incremental variance in emotional experience.

THE PRESENT RESEARCH
The present research examined whether the undesired self is a better predictor of negative emotions than either the ideal or ought selves. Several limitations in past research motivated the present study. First, past research has used only one measure of self-discrepancies. Using multiple measures enables the analysis of latent discrepancy factors, which would provide more reliable estimates of discrepancy-emotion relationships. The present research thus used several measures of self-discrepancies. Second, major studies of the undesired self have used fairly small samples (n = 39, Ogilvie, 1987; n = 85, Carver et al., 1999; n = 66, Heppen & Ogilvie, 2003), even for conventional correlation and regression analyses. The present study's sample size (n = 231) is larger than the combined sample of these past studies, so the study should have higher power and a more trustworthy pattern of relationships. Finally, the present study examined the incremental validity of self-discrepancies relative to global self-esteem. Self-discrepancies might not explain unique variance in negative emotions. If not, self-theories may need to reconsider whether self-discrepancies are primary causes of emotional experience.

METHOD
PARTICIPANTS AND PROCEDURE
A total of 231 people - 168 women, 63 men - from general psychology classes at the University of North Carolina at Greensboro participated and received credit toward a research participation option. They completed several questionnaires in groups of 8-40 people.

MATERIALS
People completed two measures of self-discrepancies, four measures of negative emotions, and one measure of global self-esteem.

The Selves Questionnaire. One measure of ideal, ought, and undesired selves was a modified version of the Selves Questionnaire (Higgins et al., 1985) developed by Carver et al. (1999). After reading definitions, people wrote five ideal, five ought, and five undesired self attributes. After listing each attribute, they rated how similar they were to the trait using a 7-point scale. The 5 ideal ratings were averaged for an ideal-discrepancy score, the five ought ratings were averaged for an ought-discrepancy score, and the five undesired ratings were averaged for an undesired-discrepancy score.

Heppen and Ogilvie measure of self-discrepancies. The second measure of ideal, ought, and undesired selves was created by Heppen and Ogilvie (2003). Unlike Carver et al.'s (1999) measure, this measure asks people for a holistic judgment of how close or far they are to each type of self. A large circle labeled with one of the selves is placed on one side of a sheet of paper, and a row of nine small circles extends across the page. People indicate how close or far they are from the ideal, ought, or undesired self by filling in one of the nine circles, which is assigned a number from 1-9 for analysis.
Negative emotions. People completed four measures of negative affect: the Beck Depression Inventory (BDI; Beck & Steer, 1987), the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), the Center for Epidemiologic Studies-Depression Scale (Radloff, 1977), and the State-Trait Anxiety Inventory (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Each of the scales has been widely used in research (Beuke, Fischer, & McDowall, 2003).

Self-esteem. Global self-esteem was measured with the 10-item Rosenberg (1965) self-esteem scale, which is probably the most widely-used measure of global self-esteem (see Blascovich & Tomaka, 1991).

RESULTS
DATA REDUCTION AND DESCRIPTIVE STATISTICS
Table 1 displays the descriptive statistics for each scale along with the correlation matrix. Each variable was centered prior to analysis; the uncentered means are displayed in the table. Model fit was assessed using several standard measures (Hu & Bentler, 1999; Kline, 2005). The chi-square test examines the model's "badness of fit": A significant chi-square indicates significant deviation between the observed and reproduced covariance matrices. It is widely known that the chi-square test is biased by large samples. The comparative fit index (CFI) indicates how well the fit of the predicted model improves upon the fit of a null model. CFI values greater than .90 are seen as good (Hu & Bentler, 1999). The standardized root mean-square residual (SRMR) is a measure of the average residual between the sample and predicted correlation matrices. SRMR values less than .10 are seen as good (Kline, 2005). Finally, the root mean-square error of approximation (RMSEA) is an index that accounts for the complexity of the model. RMSEA values less than .08 indicate good fit, and values less than .05 indicate close fit (Browne & Cudeck, 1993).

SELF-DISCREPANCIES AND NEGATIVE AFFECT
The first model, shown in Figure 1, examined the relationship of ideal and ought discrepancies to negative affect. This model fit well according to some fit indexes. The CFI was greater than .90 (.915), and the SRMR was less than .10 (.0556). The chi-square test was significant, $\chi^2(17) = 94, p < .001$, however, and the RMSEA was greater than .08 (.14). On balance, the fit appears to be acceptable. Ideal-self discrepancies strongly predicted negative affect ($\beta = .458, p = .035$), whereas ought-self discrepancies did not predict negative affect ($\beta = -.04, p = .86$). The high correlation between ideal and ought discrepancies ($\beta = .80$) is consistent with past research, which has found similarly strong relations between observed (Ozgul et al., 2003; Tangney et al., 1998) and latent (Phillips & Silvia, 2005) ideals and oughts.

A second model, shown in Figure 2, included the undesired self as an additional predictor. This model fit acceptably: The CFI was greater than .90 (.917) and the SRMR was less than .10 (.052), but the chi-square test was significant ($\chi^2(29) = 119, p < .001$) and the RMSEA was greater than .08 (.116). How did the discrepancies predict negative affect? Ideal-self discrepancies had a modest but nonsignificant relation to negative affect ($\beta = .122, p = .68$), and ought-self discrepancies had a near-zero relation to negative affect ($\beta = .040, p = .84$). Undesired-self discrepancies, in contrast, significantly predicted negative affect ($\beta = -.366, p = .041$): Negative affect declined as people moved farther from the undesired self. Thus, when the undesired self was considered, the ideal self no longer significantly predicted negative affect. This pattern is consistent with Ogilvie's (1987) contention that the undesired self has a stronger influence on well-being than the ideal and ought selves.

INCREMENTAL VALIDITY OF SELF-DISCREPANCIES
Thus far, the data show that discrepancies from the undesired self predicted negative emotions, whereas discrepancies from the ideal and ought selves did not. Does the undesired self still predict negative affect when global self-esteem is considered? A third model, shown in Figure 3, was estimated to examine the incremental validity of self-discrepancies. In this hybrid model (Kline, 2005), ideal, ought, and undesired selves are modeled as latent variables and self-esteem is modeled as an observed variable. The CFI was greater than .90 (.915), and
the SRMR was less than .10 (.053). The chi-square test was significant, \(\chi^2(35) = 151, p < .001\), however, and the RMSEA was greater than .08 (.12).

No evidence for incremental validity was found. Self-esteem strongly predicted negative affect (\(\beta = -.814, p < .001\)), and all three self-discrepancies failed to significantly predict negative affect (all \(\beta s < -.12, all ps > .25\)). This pattern indicates that self-esteem operated as a third-variable that explained the relationships between specific self-beliefs and negative emotions.

GENERAL DISCUSSION
The present research examined how discrepancies from the ideal, ought, and undesired selves predict negative emotions. Theories of self-regulation agree that negative emotions result from failing to meet desired self-states (Carver, 1996; Duval & Silvia, 2001; Higgins, 1987), but they disagree about the kinds of self-states that are important and the kinds of emotions that ensue. According to Ogilvie's (1987) model of the undesired self, representations of "the self at its worst" are particularly powerful guides for motivated action. Images of an undesired self often stem from negative past experiences, so they should be more compelling than idealized representations that may not have been experienced directly (see Ogilvie, 1987).

In the present study, discrepancies from the ideal self predicted negative emotions, but discrepancies from the ought self did not. This pattern is consistent with past research (e.g., Gramzow et al., 2000; Heppen & Ogilvie, 2003), which typically has found more reliable effects for the ideal self than for the ought self. This may stem from the fact that the ideal self represents a more purely approach type of self-guide relative to the ought self (Carver, 1996; Carver et al., 1999). When discrepancies for the undesired self were considered, however, neither ideal nor ought discrepancies predicted negative emotions. This pattern supports Ogilvie's (1987) hypothesis that the undesired self has a stronger effect on well-being relative to ideal selves.

A second goal of the present research was to examine the incremental validity of self-discrepancies as predictors of emotions. A lot of debate and research has involved discriminating self-discrepancies from each other (Carver, 1996) and discriminating their effects on emotions (Boldero et al., 2005). Little attention, however, has been paid to whether self-discrepancies as a class predict emotions above and beyond better-known classes of variables. It is conceivable that "third-variables," particularly variables associated with global evaluations of the self, account for both specific self-discrepancies and variations in emotions. People with high self-esteem, for example, probably feel relatively happy and believe that they are close to their desired selves and far from their undesired selves. In the present study, including global self-esteem as a predictor eliminated the relations between self-discrepancies and emotions. This finding suggests that self-esteem acts as a third-variable that explained the relations between discrepancies and emotions. At the same time, the relation between self-esteem and negative affect (\(\beta = -.81\)) was perhaps too high, for it suggests that the measures of self-esteem and emotion may have had too much conceptual overlap. Clearly, future research on self-discrepancies should pay more attention to incremental validity.

Finally, the present study demonstrates the fruitfulness of large-sample latent tests of self-discrepancy theory's predictions. Self-discrepancy research began before latent-variable analysis was widely used. As a result, researchers tested self-discrepancy predictions with waves of partial and double-partial correlations (e.g., Higgins et al., 1985). Although such analyses sufficed at the time, modern research offers more powerful ways of estimating the models predicted by self-discrepancy theory.

1. Preliminary analyses explored the viability of separate depression and anxiety factors. The latent depression factor (indicated by the BDI and CESD) was too highly correlated with the latent anxiety factor (indicated by the BAI and STAI) to estimate distinct factors, \(\beta = .98\), so an overall negative affect factor was created.

REFERENCES


