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MOTIVE-GOAL CONGRUENCE: NORMATIVE CONGRUENCE, IPSATIVE CONGRUENCE AND MINDFULNESS

A Thesis

Presented to

The Faculty of the Department of Psychology
The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

by

Anne Lytton Hurst

2006

APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

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Approved by the Committee, July 2006

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TABLE OF CONTENTS

	Page
Acknowledgments	iv
List of Tables	v
List of Figures	vi
Abstract	vii
Introduction	2
Method	16
Results	22
Discussion	25
Tables	31
Figures	42
Appendices	45
References	75
Vita	78

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LIST OF TABLES

Tal	ble	Page
1.	Descriptive Statistics and Reliabilities	31
2.	Regression predicting Time 5 Life-Satisfaction from Achievement-Approach Variables	35
3.	Regression predicting Time 5 Life-Satisfaction from Achievement-Avoidance Variables	36
4.	Regression predicting Time 5 Life-Satisfaction from Difference Scores between HS Motive and Achievement-Approach Goal	37
5.	Regression predicting Time 5 Life-Satisfaction from Power-Avoidance Variables	38
6.	Regression predicting Time 5 Life-Satisfaction from Difference Scores between FP Motive and Power-Avoidance Goal	39
7.	Regression predicting Time 5 Achievement-Approach Goal from HS Motive and Mindfulness	40
8.	Regression predicting Time 5 Power-Approach Goal from HP Motive and Mindfulness	41

LIST OF FIGURES

Figu	re	Page
1A.	Graphical example of High Normative and Low Ipsative Congruence	42
1B.	Graphical example of High Normative and High Ipsative Congruence	42
1C.	Graphical example of Low Normative and Low Ipsative Congruence	42
1D.	Graphical example of Low Normative and High Ipsative Congruence	42
2A.	Hope for Success Motive by Achievement-Approach Interaction	43
2B.	Fear of Failure Motive by Achievement-Avoidance Interaction	43
3A.	Mindfulness by Hope for Success Motive Interaction	44
3B.	Mindfulness by Hope for Power Motive Interaction	44

ABSTRACT

The purpose of this research was to further the study of motive-goal congruence. Research on motive-goal congruence has only assessed congruence as a normative variable. The present research was conducted to replicate previous findings relating normative congruence to well-being, to assess the predictive strength of ipsative congruence, and to assess for whom congruence increases over time. In this study three hypotheses were tested: (1) that normative congruence would predict change in well-being, (2) that ipsative congruence would account for change in well-being above and beyond normative congruence, and (3) that the interaction of motives and mindfulness would predict change in goals. Motives, goals, and life-satisfaction were assessed every week for five weeks. Trait mindfulness was also assessed. The repeated measures design allowed for the treatment of congruence as both a normative variable and an ipsative variable.

The first and third hypotheses received support. Normative motive-goal congruence predicted change in life-satisfaction for achievement-approach motives and goals and achievement-avoidance motives and goals. Ipsative motive-goal congruence negatively predicted change in life-satisfaction for power-avoidance motives and goals. This relationship between ipsative congruence and well-being was in the opposite direction of what had been predicted and therefore failed to support the hypothesis. Finally, the interaction between the achievement-approach motive and mindfulness predicted change in achievement-approach goals. Also, the interaction between the power-approach motive and mindfulness predicted change in power-approach goals. The first set of results is consistent with previous findings that motive-goal congruence predicts well-being. Secondly, the negative relationship documented between ipsative congruence and well-being in the power-avoidance domain contributes a new avenue of study to motive-goal research. Ipsative congruence should be further explored, and additional research should address how and why congruence may differ across motive domains and valences. Finally, the documented relationship between mindfulness, motives, show that congruence increases for people who are more mindful.

MOTIVE-GOAL CONGRUENCE: NORMATIVE CONGRUENCE, IPSATIVE	
CONGRUENCE AND MINDFULNESS	

INTRODUCTION

This research was conducted with three major aims. The first aim was to replicate the previous finding that motive-goal congruence predicts well-being. Motive-goal congruence is the degree to which an individual's motives and goals correspond in content. The second aim was to extend previous research on motive-goal congruence by assessing congruence not only as a normative variable, but also as an ipsative variable, and to assess whether ipsative congruence has predictive power above and beyond normative congruence. Previous research has relied solely on a normative approach, in which an individual's congruence is based on where one's motives and goals are located relative to group norms. It is important to assess an individual's congruence as it is grounded relative to how that individual's motives and goals vary over time. The third aim of this research was to demonstrate that mindfulness predicts change in congruence. If motive-goal congruence positively predicts well-being, it is beneficial to assess for whom increases in motive-goal congruence occur. It is proposed in this research that people who are mindful should display increases in their motive-goal congruence. Motives

Murray began the motive tradition in psychological research by identifying the underlying needs that guide people to engage in general need-satisfying behaviors.

Murray's theory of motives stemmed from Freud's theoretical grounding in the unconscious. Murray thought of motives and needs as underlying or latent inclinations that differ across individuals (Thrash & Elliot, 2001). A motive is a lasting predisposition

oriented toward certain incentives (Brunstein, Schultheiss, & Grassmann, 1998).

McClelland sought to rigorously operationalize these underlying motivation systems.

McClelland, Koestner, and Weinberger (1989) identified three underlying motivations that differ in strength across individuals: need for achievement, need for affiliation, and need for power. McClelland and Koestner (1992, p. 144) defined need for achievement as the "need to do something better than before and surpassing standards of excellence."

Need for affiliation is defined as the need to establish, maintain or restore relationships (Boyatzis, 1973). Need for power is defined as the need to have influence over others (McClelland, 1973).

In addition to these three types of motives, motivation can also be categorized as approach motivation or avoidance motivation. Elliot and Thrash (2002) noted that approach motivation is marked by appetitive behavior prompted and propelled by the possibility of desirable events, and avoidance motivation is marked by avoidant behavior prompted and propelled by the possibility of undesirable events. Each of the motive domains (achievement, affiliation, and power) can have either an approach or avoidance valence – for instance, one can have an achievement-approach motive, a power-avoidance motive, as well as any other combination. Individuals can have many motives that vary in domain and valence.

What Murray and McClelland originally defined as a motive in recent research has been reconeptualized as an implicit motive. Implicit motives are contrasted with explicit motives. Furthermore, explicit motives are to a certain extent similar to the concept of goals. The present study concerns motives and goals, which are concepts that are similar to implicit and explicit motives. Research on implicit-explicit motive

congruence is abundant and provides a conceptual basis for the recently emerging motive-goal congruence research.

McClelland, Koestner and Weinberger (1989) defined implicit motives as affective associative networks. Specifically, implicit motives are emotion-based, spontaneous predispositions to react to incentives that yield positive or negative affect for a person (Brunstein, Schultheiss, & Grassmann, 1998). Implicit motives result from emotional learning of incentives, rewards, and punishments. Theorists report that all motives are partly learned; specifically, implicit motives are learned experientially at an early, pre-language age when there are salient emotional cues for incentives and rewards (Brunstein, Schultheiss, & Grassmann, 1998; Hofer & Chasiotis, 2003; Schultheiss & Brunstein, 1999; Thrash & Elliot, 2001). These early-learned affective associations become incorporated into one's personality and are considered to be largely unconscious and to function automatically (Hofmann, Gschewendner & Schmitt, 2005). In accordance with the unconscious and automatic nature of implicit motives, implicit motives predict behaviors that are spontaneous (McClelland, Koestner & Weinberger, 1989). Thus, when presented with incentives or opportunities, the automaticity of implicit motives produces immediate and spontaneous behaviors.

Implicit motives are responsive to certain kinds of incentives. Incentives that elicit implicit motives tend to be naturally occurring in the environment. Implicit motives are responsive to the nature of experiencing an activity itself, not an external value placed upon the activity (McClelland, Koestner & Weinberger, 1989). Therefore, just as implicit motives develop from early affective experiences, implicit motives are responsive to the intrinsic affective components of specific activities, which then produce spontaneous

behavior driven towards those incentives. For example, the implicit need for affiliation predicts the likelihood of being in a conversation with another person when assessed at random times during a given day (McClelland, Koestner & Weinberger, 1989).

Implicit motives, however automatic and stable, may not necessarily be well aligned with what one consciously desires. One may have desires to engage in behaviors that are important but not necessarily spontaneously initiated. These desires correspond to explicit motives.

In contrast to implicit motives, explicit motives (also called self-attributed motives) are conscious representations of the values that drive behavior (Thrash & Elliot, 2002; Hofmann, Gschwendner & Schmitt, 2005; McClelland, Koestner & Weinberger, 1989). Explicit motives are what one consciously acknowledges one is motivated to do, and as such are influenced by social norms and values. Thus, as opposed to implicit motives, explicit motives are developed based on social demands and normative pressures (Kehr, 2004). Thus, explicit motives are expressions of values that are influenced by social norms and demands, and because of this, explicit motives are often manifested as goals or duties (Kehr, 2004).

Because explicit motives are grounded in values, they are sensitive to social incentives that correspond with one's values (Thrash & Elliot, 2002). Specifically, explicit motives are responsive to social incentives that involve rewards, prompts, expectations, or demands (McClelland, Koestner & Weinberger, 1989). Whereas the anticipation of pleasure or displeasure in an activity elicits implicit motives, the anticipation of a valued outcome of an activity elicits explicit motives. Explicit motive predict deliberate, respondent behaviors (Thrash & Elliot, 2002). In as much as an

incentive is eliciting of one's explicit motivation, one's behavior will be in deliberate, conscious pursuit of that possible outcome. For example, those who report high self-attributed need for affiliation are more likely to want a roommate than to live alone, and less likely to go to the movies alone (McClelland, Koestner & Weinberger, 1989). Thus, in line with one's explicit expression of a need, one will engage in planned, deliberate behavior to satisfy that self-attributed need.

In sum, many implicit and explicit motives differ in some important ways.

Implicit motives are unconscious, develop from early affective experiences, and responsive to naturally occurring incentives of the pleasure or displeasure of an activity, and predictive of spontaneous behavior. Explicit motives are, on the other hand, conscious, develop from social norms, and responsive to incentives of valued outcomes, and predictive of deliberate behavior.

The differences between the two types of motives are also apparent in the way that they are measured. Measuring implicit constructs involves using projective measures to assess automatic responses to visual stimuli (Hofmann, Gschwendner & Schmitt, 2005). Implicit motives are typically measured using picture-story exercises (McClelland, Koestner & Weinberger, 1989). The participant is shown a series of pictures and given the freedom to create a set of stories based on the pictures. These stories are later coded for thematic content. It is postulated that given the unrestricted nature of a projective test, any thematic content found in an individual's story is an indication of his or her natural inclinations and implicit motives. Explicit motives, on the other hand, are typically measured using self-report questionnaires (McClelland, Koestner & Weinberger, 1989). Self-report questionnaires indicate that the participant is aware of the implications of his

or her answers, and thematic content is not coded as it is with projective measures, but readily apparent. McClelland, Koestner, and Weinberger (1989) reported that measures of implicit and explicit motives rarely correlate with each other.

Goals

Explicit motives share many of the same qualities with goals. Although goals are related to motives, goals constitute a distinct type of construct. Similar to motives, goals are representations of what an individual wants, desires, or is striving for in his or her current circumstances (Brunstein, Schultheiss, & Grassmann, 1998). A key difference between goals and motives is the temporal specificity of goals. Goals are what one desires or is striving for currently. This distinction highlights the consistent and stable nature of motives, and the more flexible nature of goals. This flexibility corresponds with the notion that goals are subject to one's values as influenced by the social environment. Values themselves are flexible in that they may change due to changing social environments. Thus, goals spring in part from values, self-concept, and beliefs and are more consciously available than motives (insomuch as in the present research motives are conceptualized similar to implicit motives in previous research; Brunstein, Schultheiss, & Grassmann, 1998). Therefore, goals serve the function of setting personally relevant and important cognition-based objectives (Brunstein, Schultheiss, & Grassmann, 1998). Goals guide an individual's behaviors toward achieving personal objectives. This guidance aids in achieving the higher order objective of attaining meaning and purpose (Schultheiss & Brunstein, 1999).

Goals are situation-specific cognitions that direct particular behaviors, whereas motives are more general orientations that broadly direct less specific behaviors. Thrash

and Elliot (2001) described motives as providing energization toward behavior in a general direction, but cannot predict how a specific goal will be expressed. Motives can organize and guide behavior in a general way over time, but the goals that individuals endorse may not directly spring from these motives. Furthermore, motives may have little effect on how the goals are expressed and how desired outcomes are strategically approached (Brunstein, Schultheiss & Grassmann, 1998).

Congruence

Despite being distinct constructs, motives and goals conceptually overlap to a certain extent. Goals are conceptualized as the outward, tangible expression of motivation. This aspect of goals reveals the relatedness of the two concepts. Goals are therefore predicted by both underlying motives and by values. Underlying motives, however, do not predict goals as strongly as values do. Thus, goals can become disconnected from underlying motives for many individuals. Individuals can vary to the degree that their goals spring from their underlying motives. Some people may have goals that are in accordance with their motives, and some people may have goals that are disconnected from their motives. This lack of correspondence between motives and goals is termed incongruence. Alternatively, the correspondence between motives and goals is called congruence. Just as individuals differ in the types of motives and goals they endorse, individuals can also vary in the extent to which their motives and goals are congruent. Therefore, congruence itself is a variable that can be measured across individuals, and as such congruence can be used to predict outcomes. It is important to assess the predictive strength of motive-congruence.

Well-Being

One of the most commonly predicted outcomes in personality is well-being.

Subjective well-being is composed of three constructs – positive affect, negative affect, and life satisfaction (Diener, Emmons, Larson, & Griffin, 1985). These constructs constitute how a person feels and how a person evaluates his or her life as a whole.

Positive and negative affect are rooted in emotions, whereas life satisfaction is rooted in cognitive judgments concerning one's progress in satisfying personal needs and goals (Diener, Emmons, Larson, & Griffin, 1985). These two components of well-being, affect and life-satisfaction, are conceptually related to motives and goals. Affect (how good or bad one feels) is defined as a valenced feeling state in response to emotionally salient events that are motivational in nature (Ekman & Davidson, 1994). Also, in concordance with the above definition of life satisfaction, the extent to which one is satisfied with one's life is in part determined by how one interprets one's success at personal goal strivings. Therefore, well-being is not only an important construct to predict, but also conceptually relates to motive-goal congruence.

Research has shown specifically how well-being and congruence are related. Hofer and Chasiotis (2003) reported that for the achievement and affiliation motive domains, the congruence of implicit motives and self-attributed goals positively predicted life satisfaction. Furthermore, research has revealed that implicit motives moderate how strongly goal commitment and attainability predict well-being. High commitment to a motive-congruent goal is a positive predictor of well-being, and high commitment to a motive-incongruent goal is a negative predictor of well-being (Brunstein, Schultheiss, & Grassmann, 1998). Also, progress toward motive-congruent goals positively predicts

well-being (Brunstein, Schultheiss, & Grassmann, 1998). Therefore, motive-goal congruence has been shown to be a significant positive predictor of well-being.

Additionally, Sheldon and Elliot (1999) explored the discrepancies between motives and goals in their self-concordant model. It was shown that goals that are more concordant with one's "self" yield increased sustained goal effort, which in turn yields increased goal attainability and finally increased need satisfaction and well-being (Sheldon & Elliot, 1999). Similarly, one would expect that if goals are more congruent with motives, then goal effort, goal success, and well-being will increase. Predicting later well-being controlling for initial well-being begins to address whether this is any causal direction of prediction between motive-goal congruence and well-being. This connection between motive-goal congruence and well-being leads to the first hypothesis of this research. It is proposed that motive-goal congruence will predict change in well-being over time controlling for initial well-being.

Ipsative Congruence

The second hypothesis concerns a new type of congruence that has yet to be examined. Previous research has treated congruence as a normative variable. Block (1957) explained that a normative measurement is one in which each score for an individual is compared to the mean score of a group. Until now, all of the congruence literature has assessed congruence by evaluating an individual's motive and goal standings relative to others' motive and goal standings. From this perspective, one is normatively congruent if one's motive and goal are matched relative to the group (see Figures 1a and 1b). Specifically, one is normatively congruent if one has a high motive and high goal, low motive and low goal, or moderate motive and moderate goal. One is normatively

incongruent if one's motive and goal are not matched relative to the group (see Figures 1c and 1d). Specifically normative incongruence is present if one had a high motive and low goal, low motive and high goal, moderate motive and high goal, or any other permutation. This relative standing of motives and goals constitutes normative congruence.

Normative congruence in this study is assessed in the same manner as previous research with the exception that most congruence research uses one time point, not the mean derived from multiple time points as used in this research. Thus, instead of a single score for each motive and goal, a mean score of each motive and goal is taken across the five time points. Using mean motives and mean goals simply increases the reliability of these variables.

The use of multiple time points provides the opportunity to asses the degree to which motives and goals vary together for a given individual. Block (1957) defined ipsative measurement as one in which a set of scores is evaluated relative to an individual's personal mean. Therefore in this study, how motives and goals vary together across time constitutes ipsative congruence. From this perspective one is ipsatively congruent if one's motives and goals vary together across time (see Figures 1b and 1d). One is ipsatively incongruent if one's motives and goals do not covary or, worse, if they vary inversely across time (see Figures 1a and 1c).

Standardized congruence scores for an individual yield information on where a particular person falls in a distribution of congruence scores in relation to other individuals in the sample. This is true of both normative congruence and ipsative congruence variables. Thus, individuals can be compared to the group as to how

normatively congruent or how ipsatively congruent they are. The fact that motive-goal congruence can be assessed in two conceptually different ways raises questions about the predictive strength of the two types of congruence. Can ipsative congruence account for variance in well-being above and beyond normative congruence? Congruence is a personal experience. It springs from an individual's internal motives and what that individual has come to value from external cues. As such, a score representing the relative standing of an individual's motives and goals may be less informative of that person's well-being than a score representing how much an individual's motives and goals vary together across time. The second hypothesis is that ipsative congruence will account for change in well-being above and beyond normative congruence.

Mindfulness

If motive-goal congruence predicts well-being, then it is important to assess who is higher in motive-goal congruence. There could be personality factors such as self-awareness, reflection, or mindfulness that moderate the degree of correspondence between implicit and explicit constructs (Hofmann, Bawronski, Gschwendner, Le & Schmitt, 2005). Thrash and Elliot (2002) found that self-determination predicted higher congruence between implicit and explicit achievement-approach motives. Private body consciousness and preference for consistency have also been found to predict achievement-approach congruence (Thrash, Elliot, Schultheiss, & Murray, 2006). Therefore, individuals with these traits are more likely to be congruent, and by extension, individual differences in congruence can be predicted by certain trait variables. Individual differences in these personality factors help to explain the previous lack of significant correlations between motives and goals if there were personality factors that were not

considered. Therefore, the relationship between motives and goals could be moderated by personality variables that reflect the extent to which people are in tune with what is happening inside them.

In the present study it is proposed that one variable that also relates to motive-goal congruence is that of mindfulness. Mindfulness is defined as the process in which one is consciously attentive to and aware of one's moment-to-moment experience (Bishop et al., 2004; Brown & Ryan, 2003; Shapiro, Carlson, Astin, & Freedman, 2006). The mindfulness construct may relate to motive-goal congruence in that by definition mindfulness includes components of internal and external experience. Brown and Ryan (2003) described awareness as a "radar" of consciousness. Awareness functions as the constant monitor of inner and outer experience. Attention is the means by which consciousness is focused, yielding an increase in sensitivity to subtle differences in experience (Brown & Ryan, 2003). This attention to and awareness of one's present experience specifically involves an open frame of mind through which one observes one's experience (Brown & Ryan, 2003).

Open observation is essential to the construct of mindfulness and is implicit in the components and mechanisms that contribute to mindfulness. The components of mindfulness, according to Shapiro et al. (2006), include intention, attention, and attitude. Intention is what drives one toward becoming mindful; attention is the active observation of one's internal and external experience and the ability to focus while simultaneously inhibiting secondary elaborative and judgmental processes; and attitude is the curious and non-judgmental frame of mind with which one engages in mindfulness (Shapiro et al., 2006). Intention, attention, and attitude combine to assist mindful individuals in

recognizing different internal and external processes at work. Internal processes constitute natural inclinations and feelings, and external processes constitute the outside forces influencing one's thoughts and behaviors. One may attempt to actively gain more knowledge about those processes without assigning values or judgments to the processes. Thus mindfulness is a means by which to gain knowledge and a greater understanding of the forces (internal and external) that drive one. This gained knowledge can be employed in a way that can bring internal and external drives closer together. Therefore, if mindful, one may have the opportunity to bring one's goals into better alignment with one's motives.

Langer and Moldoveanu (2000) argued that when mindful, the entire individual is involved; which highlights that the individual integrates what is internal and external to that person. Mindfulness permits increased access to what is unconscious. By attending to subtle changes in internal experiences, individuals may gain access to what would otherwise be inaccessible. Bishop et al. (2004) explained that this increased access to private experiences can facilitate more personally effective behavior. Greater access to internal information helps individuals to make behavioral choices that are more concordant with what is internal. It is generally assumed that when alignment increases it is due to the external moving towards the internal as opposed to the internal moving toward the external. This assumption may spring from how internal and external processes are conceptualized. Internal processes, occurring at an unconscious level, are not only difficult to access but also difficult to adjust. External processes, occurring at a conscious level, appear to be less difficult to access and also less difficult to adjust. Thus it follows that if one is mindful, then external processes may become more concordant

with internal processes. Within the field motivation, this function of mindfulness translates to an individual's goals becoming more congruent with the individual's motives.

Brown and Ryan (2003) provided evidence for a connection between mindfulness and a different kind congruence than addressed in the present research. More mindful participants displayed more congruence between implicit affect and explicit affect than less mindful participants. This increase in affective congruence suggests that more mindful people may be more in touch with their implicit emotions, and being more in touch with implicit emotions may become reflected in their explicit reports (Brown & Ryan, 2003). Bishop (2004) proposed that mindfulness may yield an increased ability to see the connection among thoughts, feelings, and actions. Recognizing these connections may illuminate the causes of one's behavior. To extend the research connecting mindfulness with implicit and explicit congruence, motive-goal congruence is assessed in the present study, as opposed to affective congruence. Similar results can be expected for this research on motive-goal congruence given the close relationship between affect and motivation. Mindfulness may assist in increasing motive-goal congruence in part because of increased access to implicit emotional reactions to motivationally salient events and cues.

Therefore, in the third hypothesis the research question shifts from whether congruence is a "good" thing to who is higher in congruence. In this third hypothesis it is postulated that the interaction of mindfulness and motives will predict change in goal importance. Among people who are mindful, goals are expected to change to become more similar to one's motive, thereby increasing motive-goal congruence across time.

METHOD

Participants

A total of 107 undergraduates (49 males and 58 females) attending the College of Williams and Mary participated in the study. Participants had a mean age of M = 18.49 (SD = 0.82). Eleven were African American, two were Asian, eighty-one were Caucasian, seven were Hispanic, and six identified themselves as other. Participants completed the study in return for full credit toward their introductory psychology course.

Materials

Motives. Motives were assessed using the Multi Motive Grid (MMG; Schmalt, Langens, & Puca, 2000) a semi-projective questionnaire (see Appendix A). The MMG is comprised of 14 ambiguous pictures, each followed by a series of statements representing six motivation domains: hope of success (HS), fear of failure (FF), hope of affiliation (HA), fear of rejection (FR), hope of power (HP), and fear of loss of power (FP). Examples of these statements include: "Feeling confident to succeed at this task" (HS), "Thinking about lacking ability at this task" (FF), "Feeling good about meeting other people" (HA), "Being afraid of being rejected by others" (FR), "Trying to influence other people" (HP), and "Anticipating to loose standing" (FP). Research shows good reliability for the MMG with alpha coefficients ranging from .78 to .90 (Sokolowski et al., 2000). The yes-no format of the original MMG was changed to a 7-point Likert scale, with a midpoint label of "neutral" and yes-no anchors. The Likert scale was used in an effort to increase the variance across time within persons.

Personal Goals. To assess various goal dimensions, a Personal Goals Inventory was created (see Appendix B). The Personal Goals Inventory is an idiographic measure in which participants supply their own personal goals. These goals include two goals each for achievement approach, achievement avoidance, affiliating approach, affiliation avoidance, power approach, and power avoidance. Participants received instructions as to how to complete this Personal Goal Inventory (see Appendix C). Each participant then completed ratings on each of the 12 personal goals he or she supplied. Participants rated each goal on nine dimensions, three of which are used in the present investigation: importance of the goal ("How important is each goal to you at present?"), overall investment in the goal ("How much of your attention, time, and energy do you intend to invest in each goal during the next week?"), intended effort ("How much effort do you intend to put forth toward each goal during the next week?"; see Appendix D). A composite goal variable was created from the three goal variables importance, investment, and effort. This composite variable will hereafter be referred to as "goal importance." Six goal importance variables were created, two for each goal type (achievement, affiliation, and power) and within each goal type, one for each goal valence (approach and avoidance).

Congruence. Two types of congruence were examined, normative and ipsative. For each type, congruence was computed two separate ways. For the first method of assessment of normative congruence, an interaction term was created by multiplying the standardized score of the mean motive across the five time points by the standardized score of the mean goal across the five time points. A separate interaction term was created for each of the six domains of motives and goals (i.e., one for HS and

achievement-approach goals, one for FF and achievement-avoidance goals, one for HA and affiliation-approach goals, one for FR and affiliation-avoidance goals, one for HP and power-approach goals, and one for FP and power-avoidance goals). For the second assessment, normative congruence was computed using difference scores. As with the former computation of normative congruence, difference scores were created for each of the six motive-goal types. Difference scores were created for the normative version of congruence by taking the average of all five time points for each particular motive and goal variable. These averages were standardized with respect to the population. Then congruence was calculated by taking the absolute value of the difference of the motive and goal standardized scores.

For the first method of assessment of ipsative congruence, the correlation between motives and goals across five time points was computed separately for each participant. This variable was computed for each of the six types of motives and goals. For the second method of assessment, ipsative congruence was assessed using difference scores. Difference scores were created as an index of ipsative congruence by creating standardized motive and goal variables for each participant separately. Each participant had five time points for a given variable (e.g. achievement-approach motive, affiliation-avoidance goal, etc.). For each participant, five standardized scores were computed using the five time points corresponding only to that individual. Then congruence at each time point was computed by taking the difference between the motive standardized score and the goal standardized score. Each of these congruence scores for each time point was averaged together to create an overall ipsative difference score. This difference score was calculated for each of the six types of motives and goals. Difference scores are

technically measurements of incongruence. To eliminate confusion in the results, difference score variables were reversed scored to show that higher scores indicate greater congruence.

Well-being. Well-being was assessed using the Satisfaction With Life Scale (SWLS). The SWLS includes items such as "In most ways my life is close to ideal," "I am satisfied with my life," and "I have gotten the important things I want in life" (Diener, Emmons, Larson, & Griffin, 1985; See Appendix E). The reliability of the SWLS for each time point was good with alpha coefficients ranging from .83 to .92, and the overall reliability of the SWLS across all time points was also good with an alpha coefficient of .96.

Mindfulness. Mindfulness was measure using the Mindfulness Attention

Awareness Scale (MAAS). The MAAS uses items such as "I could be experiencing some emotion and not be conscious of it until some time later", "I break or spill things because of carelessness, not paying attention, or thinking of something else", and "I tend not to notice feelings of physical tension or discomfort until they really grab my attention" (Brown & Ryan, 2003; see Appendix F). These items are phrased in a manner that denotes mindlessness. The scale for the MAAS ranges from 1 ("Almost Always") to 6 ("Almost Never"). Therefore, higher one scores on this measure indicate the less mindlessness and greater mindfulness. The reliability for the MAAS was good with an alpha coefficient of .76.

Procedure

Participants attended five sessions, each one week apart. There were six possible sections for which participants could sign up: an 8 o'clock session and a 9 o'clock

session on Tuesday, Wednesday, and Thursday evenings. If a participant missed a session, it was made up during a subsequent session, or individually on Friday, Saturday, or Sunday. Research has shown that there is consistency in the occurrence of positive and negative affect across the weekdays (Thrash, in press). There is some evidence of increased positive affect and decreased negative affect on Fridays and Saturdays (Thrash, in press). This possible confound was lessened in that weekend make-up sessions were minimized by reminder emails. Only 12 participants made up a session on Friday, Saturday, or Sunday. Each session began with an instructional announcement from the study proctor (see Appendix G).

During the first session, participants received and signed the Informed Consent Form (see Appendix H) and then received packets including a blank Personal Goal Inventory and the questionnaire packet. Participants began the questionnaire packet by completing the MMG. Participants then completed several short questionnaires not used in this study, and then continued on to the personal goal section. Participants read directions for filling in their personal goals on the Goal Sheet. Once participants completed writing their goals, they rated each of their goals on nine variables. Following the goal ratings, participants completed measures of life satisfaction and other variables regarding the current day. Finally, participants filled out demographic measures. The sequence of measures was created for the purpose of limiting the influence the Personal Goal Inventory measure might have on the MMG. The MMG was given first so that scores from this projective measure would not be influenced by an awareness of one's goals. Similarly, the goal production and goal ratings were separated in proximity from the MMG so as to detract from the potential relatedness of the two measures.

The subsequent sessions proceeded in the same manner. Participants arrived, were read oral instructions, and received their individual packets containing their previously completed Goal Sheets and a new questionnaire packet, which was the same as the first except for the addition of different trait measures at each time point. Mindfulness was assessed during the fourth session. Additional trait variables were collected but are not used in the present study. At the end of the fifth session, participants responded to a Follow-up Question (see Appendix I) asking what they felt what was meant to be measured with the MMG. Thereafter, participants received a Debriefing form (see Appendix J) describing the purpose of the study.

RESULTS

Congruence and Well-being

Normative Congruence (NC). See Table 1 for descriptive statistics for the variables used in the following analyses. To test the hypothesis that congruence between motives and goals predicts change in life-satisfaction, a regression was performed predicting Time 5 life-satisfaction from goal importance, the motive, and the interaction of the two (NC), controlling for Time 1 life-satisfaction. This analysis was repeated six times, one regression for each combination of motive type (achievement, affiliation, and power) and valence (approach and avoidance). The interaction between HS motive and achievement-approach goal importance significantly predicted Time 5 life-satisfaction, β = .23 p < .01 (see Table 2 and Figure 2a). The interaction between FF motive and achievement-avoidance goal importance significantly predicted Time 5 life-satisfaction, β = .17, p < .05 (see Table 3 and Figure 2b). The remaining four regression analyses did not yield any significant interaction te $\rho\mu\sigma$.

NC was also analyzed using the difference score approach. For each motive domain a regression was performed predicting Time 5 life-satisfaction from NC difference score, IC difference score, and Time 1 life-satisfaction. The normative difference score of HS motive and achievement-approach goal importance significantly predicted Time 5 life-satisfaction with β = .18, p < .05 (see Table 4). All other NC difference scores where nonsignificant predictors of Time 5 life-satisfaction.

Ipsative Congruence (IC). To test whether ipsative congruence accounts for additional variance in Time 5 life-satisfaction above and beyond normative congruence, using the first method of assessment, the correlation of the motive and goal importance (IC) was added as a predictor to each of the first set of NC regressions. For each of the six motive domains a regression was performed predicting Time 5 life-satisfaction from goal importance, the motive, and the interaction of the two (NC), the correlation of the motive and goal importance (IC), Time 1 life-satisfaction, the standard deviation of the motive, and the standard deviation of the goal. The standard deviations of motives and goals were controlled because the correlation coefficient is confounded with the standard deviations of the two correlated variables. IC of FP motive and the power-avoidance goal importance negatively predict Time 5 life-satisfaction, $\beta = -.21$, p < .01 (see Table 5). The remaining five regression analyses did not yield any significant results for the correlation term.

For the second method of assessment, IC was also analyzed using the difference score approach. For each motive domain a regression was performed predicting Time 5 life-satisfaction from NC difference score, IC difference score, and Time 1 life-satisfaction The IC difference score of fear of FP motive and power-avoidance goal importance negatively predicted Time 5 life-satisfaction, $\beta = -.18$, p < .05 (see Table 6). All other IC difference scores where nonsignificant predictors of Time 5 life-satisfaction. Congruence and Mindfulness

To test the hypothesis that mindfulness may increase congruence, regressions were run for each of the six motive domains. In each regression, a motive, mindfulness, the interaction of the two, and Time 1 goal importance were used to predict Time 5 goal

importance. The interaction of the HS motive and mindfulness significantly predicted change in achievement-approach goal importance, $\beta=.20$, p<.05 (see Table 7 and Figure 3a). The interaction of the HP motive and mindfulness significantly predicted change in power-approach goal importance, $\beta=.18$, p<.05 (see Table 8 and Figure 3b). All other results for the motive by mindfulness interaction were nonsignificant.

DISCUSSION

Three hypotheses were tested in this study. The first hypothesis was put forth to replicate the relationship between motive-goal congruence and well-being that has been documented in previous research. The results showed that for the achievement-approach domain congruence positively predicted change in life-satisfaction. This finding was consistent across both methods of assessment of normative congruence. Similar results were found for the achievement-avoidance domain using the interaction method, where fear of failure motive and avoidant achievement goal congruence positively predicted change in life-satisfaction. These findings confirm the predictive relationship previous literature has found between motive-goal congruence and well-being. Essentially, having goals that are in line with what one is spontaneously motivated to do facilitates satisfaction with one's life. Being spontaneously driven to accomplish what one values makes the pursuit of such goals more enjoyable and less taxing. This holds true for the achievement domain regardless of whether the motive and goal have an approach or an avoidance valence. Despite research documenting that avoidance oriented individuals experience less well-being than approach oriented individuals, having goals that are congruent with one's motives still predicts higher well-being. Therefore, although avoidance oriented individuals tend to experience less well-being, having goals appropriately aligned with achievement-avoidance motives is nonetheless beneficial. Setting goals that are misaligned with one's motives my produce more difficulty in

achieving those goals than if the goals were aligned with one's motives, which could contribute to a lack of well-being.

No significant results were found for normative congruence for the affiliation or power motive domains with either approach or avoidance valence. It is unclear why this pattern of results emerged for the achievement domain and not for the affiliation and power domains. One reason for this pattern of results may be that given that the sample was comprised of college students, these participants may generally derive greater satisfaction from achievement oriented pursuits than from affiliation and power oriented pursuits.

The fact that both methods of assessment (congruence as an interaction of motives and goals, and congruence as a difference score) produced similar results makes these findings more robust. However, the hypothesis was confirmed more often and more strongly for the interaction method than the difference score method. This indicates that the interaction method of assessment may be more sensitive to congruence than the difference score method. Difference score assessments have some methodological problems. Edwards (1994) stated that difference scores are not mathematically equal to the two components that comprise the difference score, and that difference scores are directionless in that they represents a discrepancy between two components but not how the two scores are discrepant. A difference score for a given motive and goal does not yield information on whether the motive is high and the goal is low for example.

Therefore, the interaction method of assessment proves to be a more robust way to measure congruence, and the difference score assessment simply functions to further support the results found with the interaction method.

The second hypothesis was put forth in order to assess motive-goal congruence from a different conceptual standpoint. Previous literature has documented a positive relationship between congruence and well-being but has only examined congruence at a normative level of analysis. Congruence can be assessed as ipsative congruence which is based on whether motives and goals vary together across time. This establishes the individual as the basis of comparison. Congruence is a personal phenomenon, involving the internal and external demands of an individual. Therefore, it follows that information on ipsative congruence should contribute to additional explained variance above and beyond normative congruence when predicting well-being. The results did not support this hypothesis. Ipsative congruence provided no additional significant prediction for the approach valence. Furthermore, for the power-avoidance domain congruence negatively predicted change in life-satisfaction. Therefore, given the ipsative congruence assessment, when one's FP motive is aligned with how much importance, investment and effort one gives to one's power-avoidant goals, life-satisfaction decreases over time. It is unclear why this pattern of power-avoidance congruence, as assessed as an ipsative variable, would negatively predict well-being. Perhaps goals that focus on avoidance of the loss of power are ill defined and hard to execute generally or for a college population. Furthermore, due to the number or regression analyses performed it is possible that this unexpected finding is due to chance.

The third hypothesis was put forth to evaluate how the interaction between mindfulness and motives could predict changes in one's goals. The results showed that the interaction between mindfulness and the hope for success motive predicted the change in the achievement-approach goal. This result indicates that individuals higher in

mindfulness change their goals in the direction of greater motive-goal congruence.

Mindfulness constitutes awareness and attention to internal and external experience. It follows that those who are more mindful may have more information about what their motives are, due to this increased awareness and attention. The increased information that mindfulness provides may allow mindful individuals to evaluate their goals and accordingly give more importance to, investment in, and effort towards goals that correspond with their motives.

The primary limitation of this study is the number of time points. The sample was drawn from a pool of introductory psychology students; these students receive research credit in exchange for participation. This credit is applied to the grade they receive for the semester. The parameters of the research pool constrained the study in that the students had three hours of research participation to fill. Given the timing of each session, these three hours could only be distributed across five time points. Due to the limited number of time points it was harder to determine systematic variance for the ipsative congruence components.

Also, the use of the MMG may be considered a limitation for this study. Each experimental session was one week apart, and once each session was underway, the questionnaires began with the MMG. Although the order of pictures in the MMG was randomly varied at each time, some participants may have approached the questionnaire consistently differently from other participants. Some participants may have recognized the pictures and questions and responded in the same manner at each time point out of habit, as opposed to responding genuinely at each time point. On the other hand, some participants may have tried to make a conscious effort to vary their answers, which again

calls into question how genuine participants' responses were. Additionally, the reliabilities for motives at time one were less than desirable. The reliabilities for the subsequent times were all acceptable. This reliability issue indicates that other projective tests may be better measures of motives than the MMG.

These limitations should be addressed in future research. Given that ipsative congruence may not have been accurately assessed with only five time points, using 10 to 15 time points may yield a more accurate assessment of ipsative congruence. This could be accomplished by using shortened measures of motives and goals in conjunction with a daily diary assessment method. Therefore, using more time points will help to better gain more information about and better operationalize ipsative congruence in future research. Furthermore, given less time constraints it would be beneficial to employ the Thematic Apperception Test (TAT). Using the TAT may help reduce some of the error variance that may have been caused by using the MMG. The MMG is a relatively new measure of motives, and lacks the extensive research establishing and replicating the reliability and validity that is available in support for the TAT.

Finally, further research is also needed to explore the behavioral implications of the connection between mindfulness and motive-goal congruence. Given that motives are associated with automatic engagement and goals are associated with planned behavior, it follows that, when mindful, the increased congruence between motives and goals would yield greater consistency between automatic behaviors and one's planned behaviors.

Behavior may change in two possible ways when mindful individuals increase in motive-goal congruence. One possibility is that goal-oriented behavior may become more spontaneous and automatic like the behaviors associated with motives. Mindfulness,

however, emphasizes active observation which should produce the deautomization of automatic or mindless behaviors. Therefore, the second possibility is that conscious attention and awareness of motives may produce more deliberate, planned behavior.

TABLE 1
DESCRIPTIVE STATISTICS

Variable	Т: о	Maan	Standard	Min	Morr	Internal
Variable	Time	Mean	Deviation	Min	Max	Consistency
Mindfulness	-	3.69	0.61	2.33	4.87	.76
HS						
	1	4.37	0.68	2.55	6.09	.54
	2	4.35	0.77	2.18	6.55	.68
	3	4.37	0.84	1.55	7.00	.77
	4	4.38	0.91	1.00	6.55	.80
	5	4.37	0.81	2.27	6.36	.75
HA						
	1	4.08	0.76	2.00	6.00	.61
	2	4.04	0.86	1.92	5.83	.76
	3	4.04	1.00	1.08	7.00	.83
	4	4.01	0.94	1.00	6.18	.80
	5	4.01	0.91	1.25	6.33	.80
HP						
	1	4.62	0.81	2.25	6.08	.67
	2	4.75	0.97	1.83	6.83	.81
	3	4.64	1.03	1.92	7.00	.84
	4	4.69	0.99	1.25	7.00	.83
	5	4.82	0.96	1.92	7.00	.81
FF						
	1	3.86	0.91	1.25	5.83	.69
	2	4.03	0.99	1.67	6.08	.78
	3	4.03	1.09	1.00	6.42	.83
	4	4.20	1.03	1.50	7.00	.81
	5	4.10	1.07	1.00	6.18	.84

TABLE 1 CONTINUED

			Standard			Internal
Variable	Time	Mean	Deviation	Min	Max	Consistency
FR						
	1	3.58	1.00	1.33	6.00	.79
	2	3.69	1.06	1.25	6.00	.86
	3	3.59	1.16	1.00	6.42	.89
	4	3.81	1.19	1.09	6.73	.89
	5	3.63	1.21	1.00	6.42	.90
FP						
	1	3.83	0.94	1.33	6.08	.69
	2	3.99	1.09	1.08	6.50	.83
	3	3.82	1.15	1.00	7.00	.85
	4	3.92	1.15	1.00	6.50	.87
	5	3.83	1.19	1.00	6.25	.87
Ach-Ap Goal						
Cour	1	5.59	1.06	2.83	7.00	.87
	2	5.44	1.19	2.17	7.00	.88
	3	5.20	1.38	1.50	7.00	.91
	4	5.30	1.43	1.00	7.00	.94
	5	5.18				
Aff-Ap Goal	3	3.18	1.50	1.00	7.00	,94
	1	5.14	1.21	1.33	7.00	.85
	2	4.81	1.35	1.00	7.00	.87
	3	4.78	1.38	1.67	7.00	.88
	4	4.72	1.45	1.00	7.00	.91
	5	4.77	1.39	1.00	7.00	.90

TABLE 1 CONTINUED

			Standard			Internal
Variable	Time	Mean	Deviation	Min	Max	Consistency
Pow-Ap Goal						
	1	4.51	1.18	1.67	7.00	.80
	2	4.06	1.40	1.00	6.83	.85
	3	3.79	1.52	1.00	7.00	.90
	4	3.82	1.53	1.00	7.00	.88
	5	3.72	1.54	1.00	7.00	.88
Ach-Av Goal						
	1	5.14	1.21	1.83	7.00	.87
	2	4.93	1.32	1.17	7.00	.84
	3	4.67	1.54	1.00	7.00	.94
	4	4.68	1.50	1.00	7.00	.92
	5	4.63	1.56	1.00	7.00	.92
Aff-Av Goal						
	1	4.43	1.14	1.67	6.67	.79
	2	4.01	1.29	1.00	6.67	.84
	3	3.90	1.48	1.00	7.00	.89
	4	3.82	1.44	1.00	7.00	.89
Pow-Av	5	3.87	1.48	1.00	7.00	.90
Goal						
	1	4.72	1.36	1.17	7.00	.83
	2	4.16	1.48	1.00	7.00	.84
	3	3.95	1.65	1.00	7.00	.90
	4	3.86	1.75	1.00	7.00	.91
	5	3.97	1.69	1.00	7.00	.90

TABLE 1 CONTINUED

Variable	Time	Mean	Standard Deviation	Min	Max	Internal Consistency
Life-						
Satisfaction						
	1	4.37	1.31	1.00	7.00	.83
	2	4.45	1.38	1.00	7.00	.88
	3	4.55	1.36	1.00	7.00	.88
	4	4.47	1.43	1.00	7.00	.92
	5	4.57	1.38	1.00	7.00	.90

Note. N = 107

HS = Hope for Success

HA = Hope for Affiliation

HP = Hope for Power

FF = Fear of Failure

FR = Fear of Rejection

FP = Fear of Loss of Power

Ach-Ap = Achievement-Approach

Aff-Ap = Affiliation-Approach

Pow-Ap = Power-Approach

Ach-Av = Achievement-Avoidance

Aff-Av = Affiliation-Avoidance

Pow-Av = Power Avoidance

TABLE 2 REGRESSION PREDICTING TIME 5 LIFE-SATISFACTION FROM ACHIEVEMENT-APPROACH VARIABLES

Variable	В	SE B	β
HS Motive	0.80	0.50	0.12
Achievement-approach Goal	0.38	0.50	0.05
NC Interaction	1.43	0.44	0.23**
Time 1 Life-satisfaction	0.65	0.08	0.61**

** p < .01.

Notes. HS = Hope for Success

NC = Normative Congruence

TABLE 3 REGRESSION PREDICTING TIME 5 LIFE-SATISFACTION FROM ACHIEVEMENT-AVOIDANCE VARIABLES

Variable	В	SE B	β
FF Motive	-0.03	0.53	0.00
Achievement-avoidance Goal	0.94	0.52	0.13
NC Interaction	1.12	0.51	0.17*
Time 1 Life-satisfaction	0.65	0.08	0.61**

* p < .05. ** p < .01. Notes. FF = Fear of Failure

NC = Normative Congruence

TABLE 4

REGRESSION PREDICTING TIME 5 LIFE-SATISFACTION FROM DIFFERENCE

SCORES BETWEEN HS MOTIVE AND ACHIEVEMENT-APPROACH GOAL

Variables	В	SE B	β
NC Difference	1.18	0.50	0.18*
IC Difference	0.33	0.52	0.05
Time 1 Life-satisfaction	0.66	0.08	0.63**

^{*} *p* < .05. ** *p* < .01.

Notes. NC = Normative Congruence

IC = Ipsative Congruence

TABLE 5

REGRESSION PREDICTING TIME 5 LIFE-SATISFACTION FROM POWERAVOIDANCE VARIABLES

Variables	В	SE B	β
FP Motive	-0.34	0.51	-0.05
Power-avoidance Goal	1.69	0.50	0.24**
NC Interaction	0.52	0.46	0.08
IC Correlation	-2.78	0.96	-0.21**
Time 1 Life-satisfaction	0.70	0.08	0.66**
SD FP Motive	0.03	0.14	0.02
SD Power-avoidance Goal	-0.32	0.52	-0.05

^{**} *p* < .01.

Notes. FP = Fear of Loss of Power

NC = Normative Congruence

IC = Ipsative Congruence

SD = Standard Deviation

TABLE 6

REGRESSION PREDICTING TIME 5 LIFE-SATISFACTION FROM DIFFERENCE

SCORES BETWEEN FP MOTIVE AND POWER-AVOIDANCE GOAL

Variables	В	SE B	β
NC Difference	0.32	0.55	0.04
IC Difference	-0.76	0.31	-0.18*
Time 1 Life-satisfaction	0.71	0.08	0.66**

^{*} *p* < .05. ** *p* < .01.

Notes. NC = Normative Congruence

IC = Ipsative Congruence

TABLE 7 REGRESSION PREDICTING TIME 5 ACHIEVEMENT-APPROACH GOAL FROM

HS MOTIVE AND MINDFULNESS

Variables	В	SE B	β
Achievement-approach Goal Time 1	0.65	0.12	0.46**
HS Motive	0.26	0.25	0.09
Mindfulness	-0.25	0.25	-0.08
Motive X Mindfulness	0.55	0.24	0.20*

* p < .05. ** p < .01.

Note. HS = Hope for Success

TABLE 8 REGRESSION PREDICTING TIME 5 POWER-APPROACH GOAL FROM HP MOTIVE AND MINDFULNESS

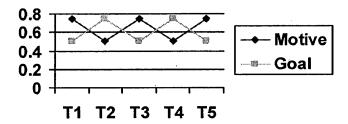
Variables	В	SE B	β
Power-approach Goal Time 1	0.67	0.11	0.51**
HP Motive	-0.12	0.27	-0.04
Mindfulness	0.05	0.27	0.02
Motive X Mindfulness	0.51	0.25	0.18*

* p < .05. ** p < .01. Note. HP = Hope for Power

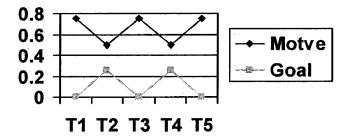
FIGURE 1

GRAPHICAL REPRESENTATIONS OF CONGRUENCE

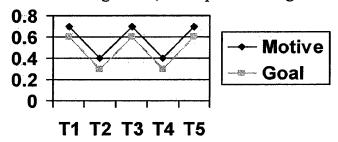
1A. High Normative Congruence, Low Ipsative Congruence



1C. High Normative Congruence, High Ipsative Congruence



1B. Low Normative Congruence, Low Ipsative Congruence



1D. Low Normative Congruence, High Ipsative Congruence

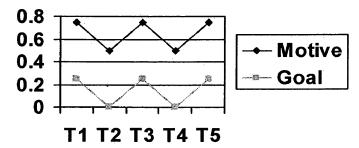
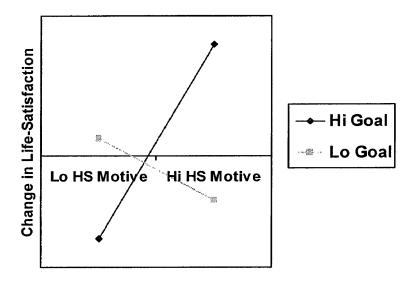


FIGURE 2 NORMATIVE CONGRUENCE INTERACTIONS

2A. Hope for Success Motive by Achievement-Approach Interaction



2B. Fear of Failure Motive by Achievement-Avoidance Interaction

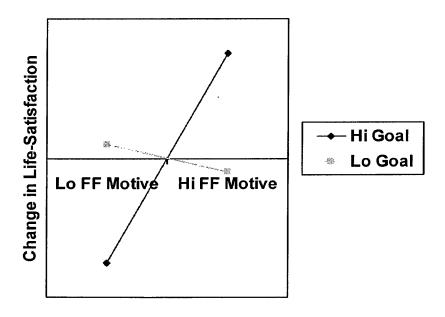
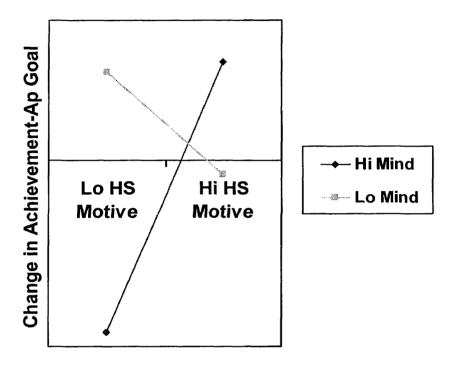
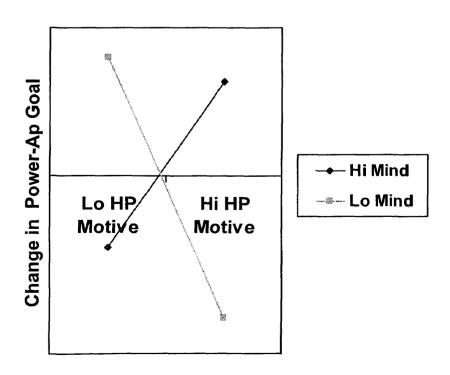


FIGURE 3 MINDFULNESS AND MOTIVE INTERACTIONS

3A. Mindfulness by Hope for Success Motive Interaction



3B. Mindfulness by Hope for Power Motive Interaction



APPENDIX A

MULTI MOTIVE GRID

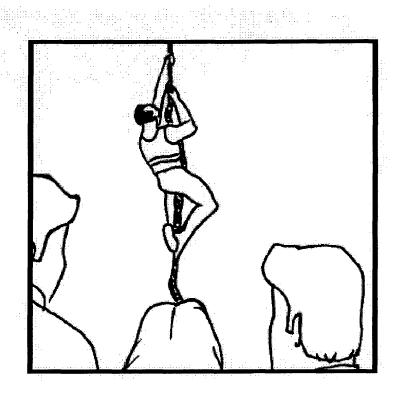
Instructions

People deal with different and changing situations every day. The change of a situation is always accompanied by a change of thoughts and feelings. People differ in the way they experience different situations. We are interested in these differences and you can help us to learn more about them.

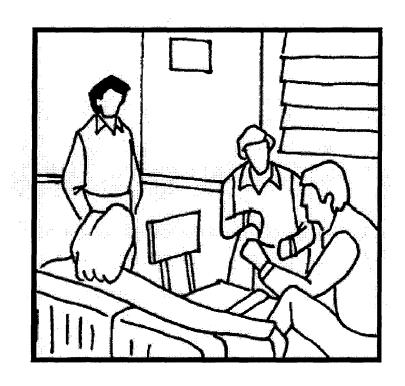
On the following pages, you will see a set of pictures depicting all kinds of everyday situations. We did not choose very clear and detailed pictures because we want you to use your imagination in guessing what might be going on in these pictures. Please try to put yourself in the position of one of the persons who are shown in these pictures.

Below these pictures, you will also find a set of statements describing the way people could think and feel in this situation. Please decide for each statement whether it describes this situation. If it does, check "YES", if it does not, check "NO". Please do not think about a single statement too long and try to follow your spontaneous impression.

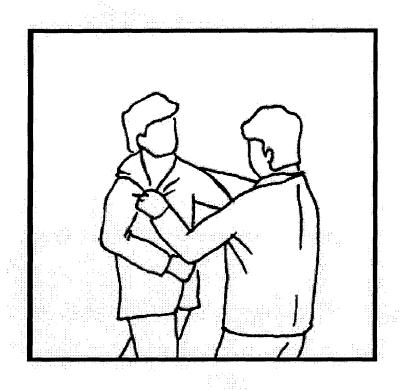
Please turn to the next page when you have finished working on the statements of the first page. Answer the following situations in the same manner until you have finished all pages.



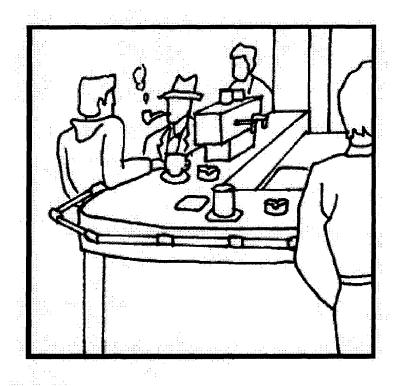
	No		N	leuti	ral		Yes	
Feeling good about meeting other people	1	2	3	4	5	6	7	
Anticipating to lose standing	1	2	3	4	5	6	7	
Thinking about lacking abilities at this task	1	2	3	4	5	6	7	
Being afraid of being overpowered by other people	1	2	3	4	5	6	7	
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7	
Hoping to get in touch with other people	1	2	3	4	5	6	7	
Hoping to acquire a good standing	1	2	3	4	5	6	7	



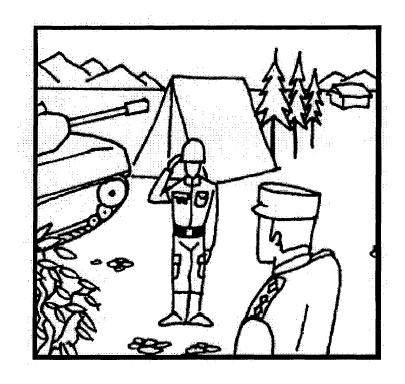
	No	N	eutr	Yes			
Anticipating to lose standing	1	2	3	4	5	6	7
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Being afraid of being boring to others	1	2	3	4	5	6	7



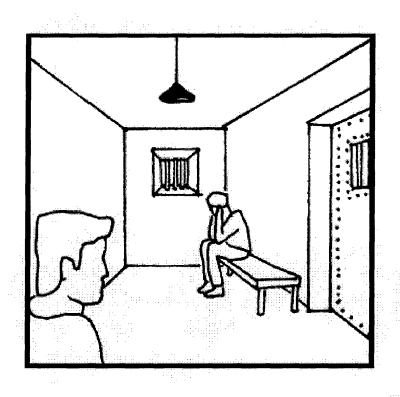
	No		N	eutr	Yes		
Feeling good about meeting other people	1	2	3	4	5	6	7
Anticipating to lose standing	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7



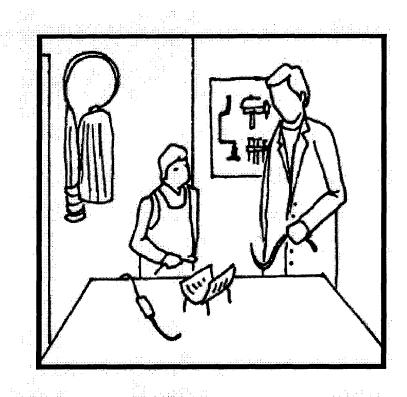
	No	lo Neutral				Yes		
Feeling confident to succeed at this task	1	2	3	4	5	6	7	
Being afraid of being rejected by others	1	2	3	4	5	6	7	
Thinking about lacking abilities at this task	1	2	3	4	5	6	7	
Feeling good about one's competency	1	2	3	4	5	6	7	
Being afraid of being boring to others	1	2	3	4	5	6	7	
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7	
Hoping to acquire a good standing	1	2	3	4	5	6	7	



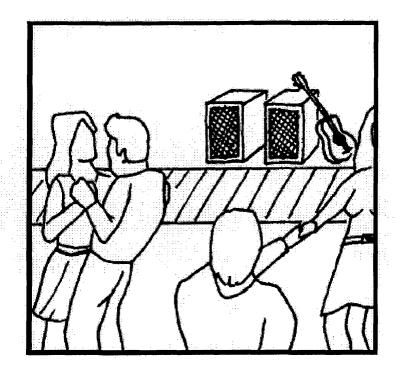
	No		N	eutr	al	`	es/
Feeling good about meeting other people	1	2	3	4	5	6	7
Anticipating to lose standing	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7



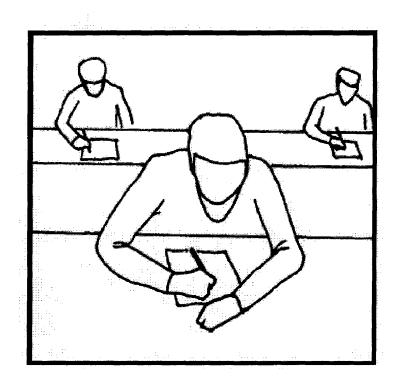
	No		1	l eut	ral	_ \	es_
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Being afraid of being boring to others	1	2	3	4	5	6	7
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7



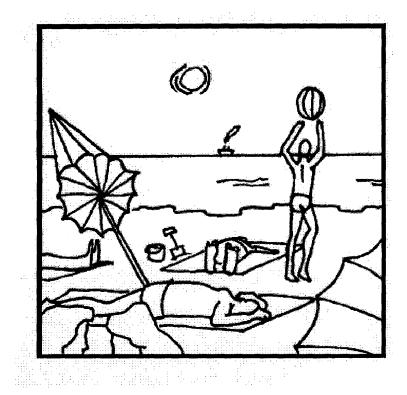
		1.	1.1				
	No		Neutral			Yes	
Anticipating to lose standing	1	2	3	4	5	6	7
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No		N	eutr	al		es_
Feeling good about meeting other people	1	2	3	4	5	6	7
Anticipating to lose standing	1	2	3	4	5	6	7
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Being afraid of being boring to others	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No	N	leutr	Yes			
Anticipating to lose standing	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7



	No		N	eutr	al	\	es_
Feeling good about meeting other people	1	2	3	4	5	6	7
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Being afraid of being boring to others	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No		N	leutr	al		es /
Feeling good about meeting other people	1	2	3	4	5	6	7
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No		N	eutr	al	_ \	es_
Feeling confident to succeed at this task	1	2	3	4	5	6	7
Thinking about lacking abilities at this task	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Wanting to postpone a difficult task for a while	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No		Neutral			Yes	
Feeling good about meeting other people	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Trying to influence other people	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7
Hoping to acquire a good standing	1	2	3	4	5	6	7



	No		N	eutr	al		es_
Anticipating losing standing	1	2	3	4	5	6	7
Being afraid of being rejected by others	1	2	3	4	5	6	7
Being afraid of being overpowered by other people	1	2	3	4	5	6	7
Feeling good about one's competency	1	2	3	4	5	6	7
Being afraid of being boring to others	1	2	3	4	5	6	7
Hoping to get in touch with other people	1	2	3	4	5	6	7

APPENDIX B

PERSONAL GOAL INVENTORY

Listing of personal goals

Please do not complete this page until you are directed to do so in the questionnaire packet.

In the spaces below, please list the personal goals that you are presently pursuing and will be pursuing during the next month, according to the type of goal. Please list goals that describe, as accurately and completely as possible, what you are typically trying to do in your daily life. Of course, some of the goal types will apply to you more so than others. Nevertheless, please be sure to list 2 goals of each type, even if some of the goal types are not as important to you.

Please read the directions in the questionnaire packet carefully before completing this page.

Achievement – approach Goal #1: Goal #2: Achievement – avoidance (note: this doesn't mean "avoidance of achievement"; see directions) Goal #3: Goal #4: Affiliation - approach Goal #5: Goal #6: Affiliation - avoidance (note: this doesn't mean "avoidance of affiliation"; see

directions)

#7:	Goal	
	Goal	
	r – approach	
#9:	Goal	
	Goal	
	r - avoidance (note: this doesn't mean "avoidance of power"; see direction	ıs)
#11:	Goal	
	Goal	

APPENDIX C

Personal Goals: Directions

Next you will be providing information about your "personal goals" – that is, the things that you are typically or characteristically trying to do in your daily life.

Achievement, affiliation, and power goals

Most personal goals may be classified into one of the following categories:

- * Achievement goals are focused on succeeding (or doing well), or avoiding failure (or doing poorly)
- * <u>Affiliation goals</u> are focused on friendly relationships with others, or avoiding rejection by others
- * <u>Power goals</u> are focused on having an impact on or power over other people, or avoiding being controlled or overpowered by others

Approach and avoidance goals

Regardless of whether a goal is focused on achievement, affiliation, or power, it may also be classified in terms of approach and avoidance:

- * Approach goals are focused on getting or maintaining something positive.
- * Avoidance goals are focused on preventing or getting rid of something negative.

Goal listing task

Combining the distinctions above produces 6 specific types of goals, as shown below. Please think about the personal goals that you are presently pursuing and will be pursuing during the next month. On the separate sheet entitled, "Listing of personal goals," please list 12 goals of the following types:

	Goal type	<u>Example</u>
Goals 1 and 2: Goals 3 and 4:	achievement-approach achievement-avoidance	"to improve my grades" "to avoid losing tennis matches"
Goals 5 and 6: girlfriend"	affiliation-approach	"to keep things happy with my
Goals 7 and 8:	affiliation-avoidance	"to avoid angering my roommate"
Goals 9 and 10: Goals 11 and 12: me."	power-approach power-avoidance	"to become a leader in my sorority" "to stop letting others make decisions for

Once you have listed your 12 goals on the separate sheet, you may continue this questionnaire packet.

APPENDIX D

PERSONAL GOAL RATINGS

Please answer the following questions for <u>each</u> of your 12 personal goals:

I. <u>Importance</u> . How important is each goal to you at present?						
1 not at all impo	2 rtant	3	4	5	6 very	7 important
Goal #1 (achievement Goal #2 (achievement)						
Goal #3 (achievement Goal #4 (achievement)		-				
Goal #5 (affiliation-a	~ -	•				
Goal #7 (affiliation-a Goal #8 (affiliation-a		•				
Goal #9 (power-appr Goal #10 (power-appr	•					
Goal #11 (power-ave Goal #12 (power-ave	-					
II. Overall investment. How much of your attention, time, and energy do you intend to invest in each goal during the next week?						
1 none	2	3	4	5	6	7 reat deal
Goal #1 (achievement Goal #2 (achievement)		-			 6.	
Goal #3 (achievemer Goal #4 (achievemer		•				
Goal #5 (affiliation-a Goal #6 (affiliation-a	~ -	,				
Goal #7 (affiliation-a Goal #8 (affiliation-a		,				
Goal #9 (power-appr Goal #10 (power-app						
Goal #11 (power-ave Goal #12 (power-ave	-					

III. <u>Effort</u>. How much effort do you intend to put forth toward each goal during the next week?

	1	2	3	4	5	6	/	
	none					a g	reat deal	
Goal #1 (ach Goal #2 (ach			-					
Goal #3 (ach Goal #4 (ach			-					
Goal #5 (affi Goal #6 (affi								
Goal #7 (affi Goal #8 (affi			-					
Goal #9 (pov Goal #10 (po								
Goal #11 (po Goal #12 (po		,						

APPENDIX E

SATISFACTION WITH LIFE SCALE

Using the following scale, please indicate how strongly you agree or disagree with each of the following statements regarding how you have felt <u>today</u>.. Please circle your answers.

1 strongly strongly	2	3	4 neither agree	-	5		6		7
disagree			nor disagree						agree
Today, I have	felt that	•••							
1in most w 7	ays, my l	ife is close 1	to ideal.	1	2	3	4	5	6
2the condit7	tions of m	y life are ex	ccellent.	1	2	3	4	5	6
3I am satis	fied with	my life.		1	2	3	4	5	6
4if I could 7 almost no	•	fe over, I w	ould change	1	2	3	4	5	6
5I have got 7 in life.	tten the in	nportant thin	ngs I want	1	2	3	4	5	6

APPENDIX F

MINDFULNESS

Instructions: Below is a collection of statements about your every day experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

l Almost Almost	2 Very	3 Somewhat	4 Somev	vhat	5 V	ery		6
Always	Frequently	Frequently	Infrequ	ently	Infre	equent	tly	Never
	eriencing some t until some time		t be	1	2	3	4	5
;	l things because on, or thinking o			1 6	2	3	4	5
I find it difficuin the present.	ult to stay focuse	ed on what's ha	ppening	1 6	2	3	4	5
	quickly to get won to what I expe			1 6	2	3	4	5
	otice feelings of til they really gra			1 6	2	3	4	5
I forget a perso told it for the f	on's name almos first time.	st as soon as I'v	e been	1 6	2	3	4	5
1	"running on auto what I'm doing.	omatic," withou	it much	1 6	2	3	4	5
I rush through to them.	activities witho	ut being really a	attentive	1 6	2	3	4	5
•	d on the goal I what I'm doing			1 6	2	3	4	5
I do jobs or tas of what I'm do	sks automatically oing.	y, without being	g aware	1 6	2	3	4	5
1	istening to some e at the same tim		ar, doing	1 6	2	3	4	5
I drive places of why I went the	on 'automatic pi ere.	lot' and then w	onder	1 6	2	3	4	5

I find myself preoccupied with the future or the past.	1 6	2	3	4	5	
I find myself doing things without paying attention.	1 6	2	3	4	5	
I snack without being aware that I'm eating.	1 6	2	3	4	5	

APPENDIX G

PROCTOR SCRIPTS

Session 1:

Hi, I'm Anne Hurst, a second year masters student in psychology, and I am conducting this study for my masters thesis. I am going to defend this research in May to complete the program. It would definitely be good to graduate! So please take this study seriously.

This study will involve five questionnaire sessions, once a week for 5 questionnaire sessions, once a week for five weeks. We ask that you only begin this study if you expect that you will be available for all five sessions. All of your credit will be given at the end of the study.

Today's session will take a little less than one hour, and the remaining four sessions will take approximately a half an hour or a little more. I would encourage you to no schedule or plan something directly after the upcoming sessions incase it takes you a little more than 30 minutes to finish. All of these sessions will sum to three hours total.

Now, I will read through the informed consent with you. There are two copies. One is for our records and one is for your own. (Experimenter reads informed consent aloud to participants.) Does anyone have any questions? If you choose to participate, please sign both consent forms and I will collect one of them. (Experimenter collects informed consents.)

Now, I want to make a few comments about the questionnaire:

- 1. There are some items that may seem repetitive, these aren't put there to waste your time or torture you! In psychological research it is crucial to see whether a certain set of items do or do not measure the same idea.
- 2. Again, please take this questionnaire seriously and respond as accurately and honestly as possible. You have full confidentiality
- 3. Don't feel daunted by the thickness of the questionnaire packet. It should not be too exhausting
- 4. Please remember to put your email address at the top of the questionnaire packet, and the separate page in your envelope. Again, you have full confidentiality guaranteed.

Now I will pass out the questionnaires. (Experimenter passes out questionnaire packets.) Please turn off your cell phones and do not discuss the questionnaire. I'll be outside the door, so please bring your questionnaire to me when you are finished. And

if you have any questions at all about any of the materials, feel free to come ask me at any time. Thanks.

Session 2-3:

Thanks again for participating in our study. This session will take approximately 30 minutes. I will pass out the questionnaires. Please take the questionnaire that corresponds with your email address. (Experimenter passes out questionnaire packets.) Again, please respond as accurately and honestly as possible. Please turn off your cell phones and do not talk amongst yourselves or discuss the questionnaire. And please do not forget to put your email address at the top of the questionnaire packet. I'll be outside the door, so please bring your questionnaire to me when you are finished. And if you have any questions, feel free to come and ask at any time. Thanks.

Session 4:

Thanks again for participating in our study. I would like to remind you that this study is for my masters' thesis, and you will receive more information about the purpose of this study at the end of your next session. I would also like to say that there is a purpose behind the administration of the questionnaires in this research, so please take all of the questions seriously, and answer the questions as requested in the instructions for each measure. For example, please note when the instructions say "today" or "this week". So, this session will take approximately 30 minutes. I will pas out the questionnaires. Please take the questionnaire that corresponds with your email address. (Experimenter passes out questionnaire packets.) Again, please respond as accurately and honestly as possible. And please do not forget to put your email address at the top of the questionnaire packet. I will wait until all questionnaire packets are dispersed, so please wait to being until I've left the room. I'll be outside the door, so please bring your questionnaire to me when you are finished. And if you have any questions, feel free to come and ask at any time. Thanks.

Session 5:

Thanks again for participating in our study. This session will takie approximately 30 minutes. I will pass out the questionnaires. I will wait until all of the questionnaires are distributed. Please wait until I have left the room to begin on your packet. (Experimenter passes out questionnaire packets.) Again, please respond as accurately and honestly as possible. Please turn off your cell phones, please do not discuss the questionnaire, and please do not talk amongst yourselves. I'll be outside the door, so bring your questionnaire to me when you are finished. At that point, I'll give you one follow-up question and a brief description of the study. And if you have any questions, feel free to come ask at any time. Thanks.

APPENDIX H

INFORMED CONSENT



The College of William & Mary Department of Psychology P.O. Box 8795 Williamsburg VA 23187-8795 757-221-3870 fax 757-221-3896

Consent form: Goals and Personality

I,	, agree to participate in a
study of personality, "everyday" experiences, a	and well-being. The purpose of this
study is to examine the ways in which personal	lity, experiences, and well-being
interact across time.	

I understand that I will be asked to attend five sessions, each a week apart. These five sessions will span a 4-week period. At each session, I will be asked to complete questionnaires about my personality, goals, experiences, and well-being. The first session will take approximately 1 hour, and the remaining four sessions will take roughly 30 minutes each, for a total time commitment of 3 hours.

I understand that I will receive 3 hours of research participation credit to apply toward my research participation requirement in my introductory psychology course.

I understand that my email address will be used in order to link my five sets of data together and to contact me about upcoming sessions. Upon completion of the study, my email address will be removed from the data sets in order to maximize confidentiality and anonymity. The researchers will take other standard measures to ensure confidentiality, such as storing data in a locked room.

I understand that no personal risk or harm to participants is expected, and that I am free to withdraw my consent and discontinue participation in this study at any time, without negative consequences. However, I am also aware that the compensation that I receive for my participation (research participation credit for my introductory psychology course) will be granted in proportion to how much of the study that I complete.

If I have any questions or if problems arise in connection with my participation in this study, I may contact Anne Hurst (alhurs@wm.edu; 917-690-4098), director of this research project, or Glenn Shean (gdshea@wm.edu, 221-3886), chair of the human subjects ethics committee in the psychology department at the College of William & Mary.

My signature below signifies that I am at least 18 years of age and that I have received a copy of this consent form.

Date:	
Name (printed):	

Signature of	participant:		

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3901) ON 2005-09-30 AND EXPIRES ON 2005-12-25.

APPENDIX I

FOLLOW-UP QUESTION

Please indicate in the space below your thoughts as to what the question he pictures were trying to assess:	ns concerning

APPENDIX J

DEBRIEFING

The purpose of this study was to assess the congruence between motive and goals for individuals across time. This research stems from the logic that we have both underlying motivations and explicit goals, and the two of these may or may not compliment each other. Thus, by having a longitudinal study assessing motivation and goal endorsement over the period of five weeks, we not only can see whether congruence varies across time, but also attempt to find a direction of causality between congruence and other variables, such as well-being and mindfulness to name a few. If you have any questions about this research you can contact Anne Hurst at alhurs@wm.edu. Also, if you want information about the results of this study you may contact Anne Hurst in 3 to 4 months. Thank you again for your participation.

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VITA

Anne Lytton Hurst

Anne Lytton Hurst was born in Dallas, Texas on July 9th 1982. She graduated from Plano East Senior High School in Plano, Texas in May 2000. Anne Hurst earned her B.A. in Psychology from Wake Forest University in May 2004 and graduated *cum laude* with Honors in Psychology. In August 2004 the author entered the College of William and Mary as a graduate student and teaching assistant in the Department of Psychology. Anne Hurst defended her thesis in July 2006.