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## There's more to me than just me: the relational self-construal and relational motivators for goals

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There's more to me than just me: The relational self-construal and relational  
motivators for goals

by

Jonathan Smith Gore

A thesis submitted to the graduate faculty

In partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

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Program of Study Committee:  
Susan E. Cross (Major Professor)  
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2002

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This is to certify that the Master's thesis of  
Jonathan Smith Gore  
Has met the requirements of Iowa State University

*Signatures have been redacted for privacy*

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## INTRODUCTION

The pursuit of goals is an element as unique to human beings as language and introspection. The sense of accomplishment that comes with the achievement of each goal is often rewarding, and encourages us to strive toward goals that provide the greatest satisfaction. Often times, goals do not enter conscious thought, but rather are part of daily routines or duties to the people around us and ourselves. While some goals are easily attained, and can be thought of as short-term (such as fixing a leaking faucet or grocery shopping), other goals require more contemplation as to how they can be attained and the steps used to reach these goals must be carefully planned (such as seeking a career, searching for a spouse, or planning for retirement).

Accomplishing either short-term or long-term goals does not require consideration of one's reasons for pursuing them. A person could achieve several goals without giving any thought as to what motivated them. The level of satisfaction that is gained once the goal is reached, however, depends greatly on the factors that influence our pursuit of such goals (see Sheldon & Elliot, 1999). The employee who does all the work required of her because she perceives working as a means to a financial end will not be as satisfied as the employee who works because the particular job is interesting and fun. The young man who wishes to get married because he sees a promising future with his fiancée will view marriage as more satisfying than the young man who wants to get married because he does not want to be the "last bachelor" in his group of friends. In both cases the goals are identical, but the motivations behind the goals are distinct and vary in the degree that they are personally rewarding.

According to the current literature on motivation and the self, goals that reflect a person's "core self" are goals that will be viewed as the most rewarding. Most literature on motivation, however, views the "core self" as having a base in autonomy and independence. As a result, much of the research on motivation has taken the perspective that external motivators for a goal cannot be as rewarding as goals that enhance autonomy. This narrow interpretation of the "core self" based in autonomy overlooks the possibility that goals driven by certain external motivators may provide as much satisfaction at attainment as autonomy-driven goals. Furthermore, individual differences in self-definition suggest that the self will be motivated by factors beyond autonomy, and that for many people, sacrificing one's autonomy for a reason deemed more important to the self may not result in a decreased level of goal satisfaction.

#### Self-Determination and Self-Concordance Theories

The notion that goals reflecting the "core self" are the types of goals that yield the greatest degree of satisfaction is widely accepted in the current literature on the self and motivation. In most of the research surrounding this notion, tapping into the "core self" involves a sense of choice, or "self-determination" (Deci & Ryan, 1984, 1991). In order for a goal to be truly rewarding, it must include a sense that it stems from one's personal beliefs and interests, and in its purest form, does not contain any influence from external factors.

Developed by Deci and Ryan (1984), Self-Determination Theory states that autonomy is a psychological need that must be met so that individuals can feel in control of their lives. This need for autonomy, according to the theory, is the primary influence behind a person's sense of goal satisfaction. The degree to which people perceive themselves as agents of their own actions is fundamental to their sense of self, and therefore to their psychological

well-being. It is this perception of choice that determines whether or not the goal will be viewed as stemming from the self.

It follows that the introduction of external influence will only undermine the person's choice, leading to a decreased level of motivation toward the particular goal. Two secondary needs (competency and relatedness) may be met with the attainment of particular goals, but will not reward the individual to the same extent as goals that promote autonomy. Such autonomy-promoting behavior is termed a "self-determined action" (Deci & Ryan, 1991). The need for competence, or mastery, is the need to feel that one is capable of completing a certain task. The need for relatedness describes the need to feel connected with other people. According to Self-Determination Theory (Deci & Ryan, 1991), these secondary needs do not have an origin in the self, but rather are components that originate from one's external environment.

Although Deci and Ryan (1991) make allowances for extrinsically motivated behavior originating from within the individual (e.g., internalizing the importance of money as a reward for working), they do not address the possibility that an intrinsically motivating behavior can have an origin external to the self. For example, some people enjoy being around close others because it gives them a sense of belonging and security. This would be associated with the relatedness need, and would therefore have an external origin (i.e., relationships with other people). However, this does not necessarily mean that the person who enjoys the company of others, even at the sacrifice of personal wants, is being extrinsically motivated. There are situations when this behavior would be extrinsically motivating, as when the person spends time with the group for the purpose of gaining

prestige. The person who spends time with the group for the sake of good company is intrinsically motivated because the action is rewarding in itself.

Deci and Ryan (1984, 1991) suggest that external influences can become internal motivators through two processes: internalization and integrated regulation. Primarily influenced by the psychological need for relatedness, internalization usually involves an initial resistance from the individual to the integration of the external factor into the internal self, but it eventually serves as a rewarding motivator. According to Self-Determination Theory, people who internalize do not initially want the external factor to influence them, but eventually “cave in.” Because of this element of resistance, however, such internalization cannot yield the same level of satisfying outcomes as an action that promotes autonomy, according to the theory. For example, pursuing a career in nuclear physics because doing so would make one’s parents happy may begin with an initial contempt for the parental intrusion. As one’s parents grow older, however, a person may find that the promotions he or she receives are much more rewarding because the parents will be thrilled to hear of one’s success. This also holds true for pursuing careers in order to support a family. At first, there may be resistance, but eventually one may find that supporting one’s family is a stronger motivator than personal interest in one’s career, and that doing so is more rewarding than simple “core self” satisfaction. The authors of Self-Determination Theory argue that, although the nuclear physicist eventually found satisfaction, the level of satisfaction would not be as high as the nuclear physicist who was always interested in atoms, fission and fusion, and pursued a career for this reason.

The other process, termed “integrated regulation” (Deci & Ryan, 1991), allows for a representation of the self without any initial conflict. Although the authors state that such a

process can occur for relatedness purposes, the action would still lack the level of satisfaction provided by self-determined actions (Deci & Ryan, 1991). In other words, pursuing a goal for a reason such as “because it would make my family happy” may stem from an internal motivation and may contain no initial conflict. However, the authors see pursuing a goal for such a reason as being a means to an end (possibly a desire to avoid conflict with family members), rather than an end in itself. It is therefore made clear in the theory that, although the inclusion of a relational reason can serve as a motivator with rewarding outcomes, it cannot serve as well as a reason that enhances one’s autonomy.

The Self-Concordance Model proposed by Sheldon and Elliot (1999) takes the fundamental elements of Self-Determination Theory further by looking at the goal inception-to-attainment process. Self-concordance is defined as the extent to which people pursue their goals with intrinsic interest and identity congruence, rather than with feelings of introjected guilt and compliance to situational factors (Sheldon & Houser-Marko, 2001). In short, the authors argue that goals reflecting the person’s “core self” will be seen as more important to pursue, will engage a higher level of effort, and will have a greater likelihood of being achieved (Sheldon & Elliot, 1998, 1999). Furthermore, longitudinal research has shown that the attainment of such goals leads to increased levels of psychological well-being (Emmons, 1986; Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). When a goal is self-concordant, there is a greater likelihood that the person will put forth a great deal of effort in order to attain it. As shown in self-concordance research, high levels of effort lead to the likelihood of goal attainment, and goal attainment consequently leads to positive psychological well-being (Sheldon & Kasser, 1998; Sheldon & Elliot, 1999, 2000).

In order for a goal to be self-concordant, it must reflect the self that is defined as “the integrated center of agentic activity” (Sheldon & Elliot, 1999, p. 483). Goals that tap into this agentic self are self-integrated, or *intrinsic* actions, and should yield the psychological benefits stated above. If a goal does not tap this “core self,” then the individual will either feel anxiety or guilt, since the goal is not concordant with the person’s interests or beliefs. A goal can only be self-concordant if it possesses a high degree of autonomy or sense of choice within the individual (Sheldon & Elliot, 1998). The Self-Concordance Model defines four types of actions along a hierarchy from most self-concordant to least self-concordant: intrinsic, identified, introjected and external. If the goal does not fully contain the autonomy component, it will be considered as identified (having an initial external base), and the individual cannot expect to be satisfied to the same extent as when the goal is free of external influence (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). The identified action example given by the authors is, “checking my baby’s diaper regularly” (p. 484), arguing that the importance of hygiene and health is valued (i.e., *identified*) by the parent, but not intrinsically rewarding. Nevertheless, pursuing this goal as opposed to a goal that stems from a perception of choice and autonomy would not be comparably satisfying. It is for this reason that the intrinsic action is considered to be the most self-concordant action, because it directly and wholly reflects the self. The intrinsic and identified actions are considered by Sheldon and Kasser (1998) to be actions that originate from within the individual, or “internal” actions.

An *introjected* action is one in which someone else demands or strongly suggests that one pursue the action. The demanding person can be anyone from a close relative to one’s boss or other authority figure. An example of an introjected action is getting engaged under the pressure of close relatives and friends before the couple is ready. An *extrinsic* action is

one in which the situation demands that one act in a certain way. An example would be dressing in several layers of clothing because the weather is cold. The introjected and extrinsic actions are considered by Sheldon and Kasser (1998) to be actions that originate from outside the individual, or “external” actions.

More recent research has shown that the attainment of self-concordant goals increases the likelihood that the individual will pursue similar goals in the future (Sheldon & Houser-Marko, 2001). This “upward spiral” suggests that goals pursued for self-concordant reasons are not only more likely to be attained and be more satisfying than goals that are not self-concordant, but they also increase the probability that future goals will stem from the goal pursued for self-concordant reasons. The individual will look for self-concordant properties in future goals, and will be more likely to pursue goals that seem to reflect the self. A goal that contains self-concordant properties, however, is limited to a set of specific characteristics.

As was the case with Self-Determination Theory, the definition of the self in Self-Concordance Theory is much too narrow, and mistakenly overlooks a great diversity in the ways people define themselves. The intention of this research is to go beyond autonomy as the best predictor of motivation. It is not the goal of this research to challenge the notion that self-integrated actions are more rewarding to the individual than situation-based actions, nor is it the purpose here to make the claim that goals failing to reflect one’s beliefs or interests can be as stimulating as goals originating from the self. How one chooses to define the “core self,” however, has a tremendous impact on the perceived value of the goals one pursues. Recent literature has found that defining the “core self” as autonomous and separated from external influence does not apply to human populations as universally as the aforementioned

theories imply (Cross & Markus, 1999; Schwartz, 2000). Furthermore, defining the self in a manner that deviates from the prescribed primary component of autonomy does not necessarily yield the detrimental outcome suggested by the two theories. One of the main purposes of this research is to identify motivating components outside the individual that have the same intrinsic motivation quality as autonomy-serving goals. Another purpose is to show differences in motivation depending on one's self-definition. The third purpose is to test a working upward spiral model for people who are motivated by relational components more so than autonomy components.

#### The Relational-Interdependent Self-Construal and Goal Inception

The relational-interdependent self-construal is a self-definition that is based on one's close relationships (Cross & Madson, 1997; Cross, Bacon & Morris, 2000). Rather than having a core self that is rigid and stable across situations, people with high relational self-construals have more elaborate self-definitions within the various contexts of their close relationships. When thinking of themselves, people with a high relational self-construal will characterize themselves by indicating their connections with other people. For example, people with highly relational self-construals will be more likely to bring their relationships with their friends or family members to mind when they are asked to describe themselves ("I am a good *son*," "I am a thoughtful *friend*"). Consequently, they perceive the maintenance of such relationships as being fundamental to their sense of self, and conflict with these close relationships has a direct effect on their psychological well-being.

Recent research has shown that people with highly relational self-construals are more likely to consider the thoughts and wishes of close others when making important decisions (Cross, Bacon & Morris, 2000). Rather than viewing this as an action caused by intrusive

desires of other people (i.e., introjected), people with a highly relational-interdependent self-construal will perceive this kind of consideration as being concordant with their interests and beliefs. One may still argue that these are only identified actions, and that the external influence of other people inhibits the person from finding full enjoyment within the action itself. This may be true for some goals, but there is reason to believe that pursuing a relational goal (e.g., “Keeping in regular contact with my parents”) for a relational reason (e.g., “Because it makes them happy to hear from me”) could be considered intrinsic if these relationships are included in the self.

If close others are included in the self, then considering their feelings and wishes may be as automatic and rewarding as considering one’s own. Maintaining relationships is a key element to the highly relational person’s identity, and doing so provides the person with a sense of personal accomplishment as well as a sense of interpersonal connection. In other words, a goal that is viewed as “identified” in the Self-Concordance Model (i.e., an internally motivating goal that originated from an external source) or “extrinsic” according to the Self-Determination Theory, may fully express the “core self” of a person who has defined the self relationally. As a result, the goal may provide the satisfaction normally attributed to intrinsic goals.

Cross-cultural research provides further evidence that personal, autonomous choice is not a primary motivator for everyone. People living in cultures valuing interdependence or collectivism show much more motivation than people from cultures valuing independence when a close other’s desires are factored into the decision to pursue a goal. Iyengar and Lepper’s (1999) experiment sampled Anglo-American and Asian-American children and asked them to complete a set of anagram puzzles. The experimenters manipulated who would

select the puzzles. In one condition, the experimenter told the children that they could pick any puzzle they wanted (*Personal choice condition*). In another condition, the experimenter chose the puzzle for the child (*Experimenter choice condition*), and in the third condition, the experimenter said that the child's own mother had picked which puzzle she wanted the child to do (*Mom choice condition*).

The results indicated that the Anglo-American children in the Personal choice condition performed best and had the highest levels of motivation when compared to the Anglo-Americans in the other conditions. The Asian-American children, however, performed best and had the highest levels of motivation when they were in the Mom choice condition (Iyengar & Lepper, 1999). Although the Asian-American children were more motivated in the Personal choice condition than in the Experimenter choice condition, it was clear that they most preferred that their choices were being made by a close and trusted other. The Anglo-American children showed no difference between the Experimenter choice and the Mom choice conditions, due to the fact that both of these conditions undermined their sense of choice. This experiment shows that cultural values influence the degree to which an individual will be motivated by factors internal to themselves and factors external to themselves. This research also indicates that the assumption that autonomy is the major factor behind intrinsic motivation only applies to a fraction of the human population. For the Asian-American children in the experiment mentioned above, they perceived a relational benefit to trusting their mothers' decisions. These children more than likely included their mothers in their self-definitions, and therefore were careful to make sure this relationship remained secure and intact.

The need for relatedness described earlier was judged as subordinate to the need for autonomy, especially in Self-Determination Theory. However, recent research has shown that the perception of belonging to a group, intimate or otherwise, is a fundamental component of a person's self-esteem (see Baumeister & Leary, 1995; Leary, Tambor, Terdal, & Downs, 1995). As a result, a goal that provides the individual with a sense of belonging can have a positive impact on the person's psychological well-being. Even Sheldon and Ryan (both advocates for Self-Determination and Self-Concordance Theories) have conducted research showing that the fulfillment of the need for relatedness has a significant role in predicting daily well-being (see Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

For people with highly relational self-construals, this need to belong is not only important, but also crucial to their sense of self. Therefore, a self-concordant goal for the relational person not only includes relational reasons for pursuing it, but also has an expected relational benefit. Considering the wishes of close others when deciding which goals to pursue will directly tap into the relational person's self, while concurrently maintaining the connection with these close others, consequently leading to enhanced self-esteem. In short, it is in the interest of people with relational self-construals to include these so called "external" influences in order to affirm their identity and self-worth. Whether the person with a highly relational self-construal attains the goal or not still depends on the effort exerted by the individual, but the degree of effort put forth will greatly depend on whether or not there is a perceived relational benefit.

The perceived state of their current relationships is also very important to people with highly relational self-construals. In particular, the depth of their relationships are strong predictors of life satisfaction and depression for people with high relational self-construals

(Cross & Morris, under review). People with relational self-definitions are more likely to feel satisfied when the relationships they have with other people are close and contain a certain depth of commitment, and are also more likely to feel depressed when such relationships are not close or lack depth of commitment. Having a highly relational self-construal will therefore cause one to attend to close relationships to a greater extent, as well as allow one's psychological well-being to be affected by the state of current relationships, when compared to a person with a low relational self-construal.

When their close relationships provide them with interpersonal security and intimacy, people with highly relational self-construals maintain a sense of self-worth and happiness. When their relationships show signs of failure (lack of closeness or commitment), people with highly relational self-construals are more likely to have a sense of personal failure, and suffer emotionally as a result. They may, therefore, base self-worth on relationship quality rather than intrinsic goal attainment. It follows that attainment and positive progress of relational goals, or goals pursued for relational reasons, will provide people with highly relational self-construals a sense of positive well-being. In addition, receiving support from others while pursuing personal goals will add to the sense of closeness and commitment in the relationship, and lead to an overall sense of positive well-being for people with high relational self-construals.

### The Current Study

The present study takes an idiographic approach to explore how people with highly relational self-construals construct and pursue their goals. The primary purpose of this study is to show the differences between high and low relationals in terms of how they are motivated and what influences their well-being, and to show that people with highly

relational self-construals are more motivated by relationships than the degree to which the goal reflects personal desires. The second purpose of this study is to show that relational motivators will be a significant predictor of motivation toward goals as the degree of the goals' self-concordance for everyone, and this association will be strongest for people with highly relational self-construals. The third purpose of this study is to provide support for a Relational Upward Spiral Model, such that goals pursued for relational reasons are continued through a high degree of effort and successful progress.

Results from a pilot study ( $n = 222$ ) provide evidence for how the highly relational person is motivated. Participants listed 10 goals they were currently pursuing. They then categorized each goal within a domain (e.g., academic, relationships, work). Participants then rated each goal across several attributes, including how much effort they put forth toward the goal, the degree to which they were pursuing the goal because it was important to someone close to them, and the degree to which each goal was self-concordant. The self-concordance measure consisted of an index of the standardized internal reasons for goals minus the external reasons for goals (self-concordance = intrinsic + identified – introjected – external). Linear regression analyses showed that the relational-interdependent self-construal, measured using the Relational-Interdependent Self-Construal scale (RISC; Cross, Bacon & Morris, 2000; Cronbach's  $\alpha = .85$ ), predicted the degree to which a person pursued a goal for a relational reason ( $\beta = .16, p < .05$ ), which in turn predicted the degree of effort directed toward the goal ( $\beta = .20, p < .01$ ). The degree of effort directed toward the goal then predicted psychological well-being ( $\beta = .23, p < .01$ ; see Figure 1).

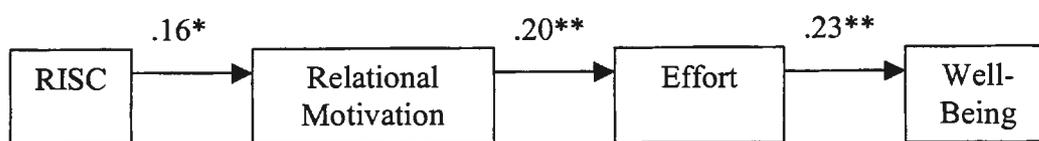


Figure 1. *Path Model of Relational Motivators*

Further analyses showed some interesting patterns. Goal variables were constructed separately for relationship goals and academic goals. The RISC scale correlated with the perceived importance of relationship goals ( $r = .16, p < .05$ ), but not as strongly with perceived importance of academic goals ( $r = .12, n.s.$ ), whereas self-concordance correlated with both, although stronger for academic goal importance ( $r = .16$  for relationship goal importance,  $r = .22$  for academic goal importance;  $p$ 's  $< .05$ ). Pursuing a goal for a relational reason predicted commitment to the goal ( $\beta = .30, p < .01$ ), effort directed toward a goal ( $\beta = .27, p < .01$ ), clarity of the goal ( $\beta = .17, p < .05$ ), confidence in goal attainment ( $\beta = .21, p < .01$ ), and probability of the goal's attainment ( $\beta = .23, p < .01$ ), even after controlling for self-concordance. In other words, relational motivation explained evaluations even after variance due to self-concordance was accounted for. Thus, relational motivation influenced the individual's pursuit of goals apart from the degree to which it was self-concordant.

Self-concordance correlated negatively with having a relational reason for the goal ( $r = -.41, p < .01$ ), but not with the RISC scale ( $r = -.06, n.s.$ ). When the internal and external components of self-concordance were separated, both correlated with the RISC scale ( $r = .13, p < .05$  for internal;  $r = .16, p < .05$  for external). Finally, hierarchical regression analyses showed that the RISC scale moderated the relations of commitment to the goal and perceived probability of goal attainment predicting life satisfaction. The associations between the

commitment and probability attributes and life satisfaction were stronger for people with low relational self-construals than for people with high relational self-construals (see Figure 2). For people with low relational self-construals, the associations between commitment and life satisfaction and probability of attainment and life satisfaction were consistent with self-concordance theory. The weaker associations found among people with highly relational self-construals was not consistent with self-concordance theory, and therefore requires further examination.

People with low relational self-construals are less likely than people with highly relational self-construals to include close others in their self-definition. They will be less likely than people with highly relational self-construals to listen to the suggestions or wishes of close others (Cross et al., 2000). Therefore, they are more likely to determine their sense of satisfaction by their personal attitudes toward their goals. People with highly relational self-construals are more likely to take into account the thoughts and feelings of others, and are therefore less likely to be satisfied based solely on their personal feelings toward the goal.

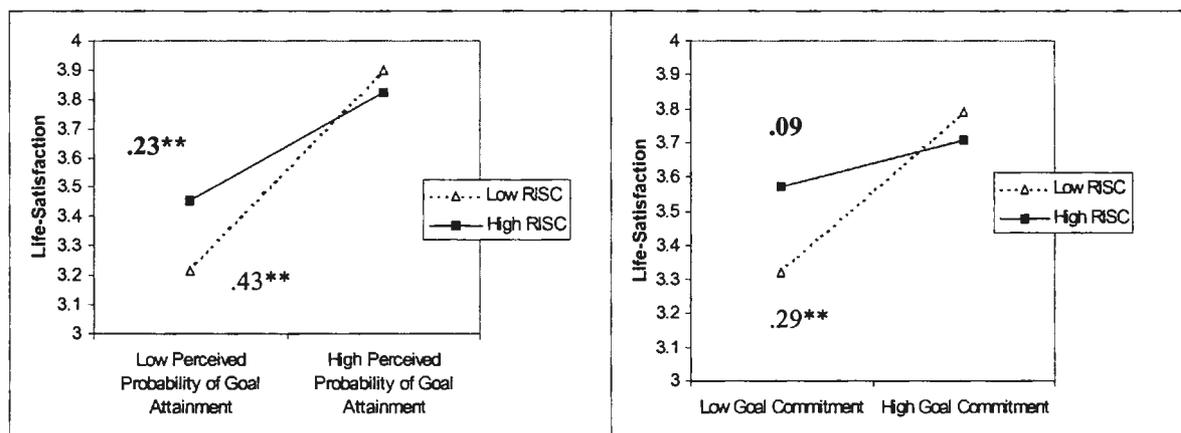


Figure 2. Interactions of RISC with Commitment and Probability of Attainment Predicting Life-Satisfaction

They are more likely than people with low relational self-construals to consider factors external to themselves when determining how they feel about themselves and their life. Thoughts and feelings not shared with others are perhaps not as important for people with highly relational selves as they are for people who do not define themselves as highly relational.

Attainment of goals was not measured in the pilot study for two reasons. First, the types of goals described by the participants often did not have an attainment endpoint. For example, a goal to “always be kind to my friends” is not a goal that is ever attained. Instead, the individual must constantly pursue this goal. Second, it is a safe assumption that the degree of effort directed toward the goal increases the likelihood that a goal with a foreseeable endpoint will be attained; Sheldon and Elliot’s (1999) study found effort and attainment to be highly correlated ( $r = .71, p < .01$ ). The current study addresses this further, by including a measure of perceived progress (created especially for goals that have no foreseeable endpoint) and a follow-up session to assess which goals were attained and perceived progress toward long-term goals.

Further exploration of the association between the relational self-construal and goal inception would provide a better understanding of what motivates the relational self. People who define themselves based on relationships are more likely to find satisfaction when their goals reflect their relationships. They may do this by either having relational goals (e.g., “Spending more time with my friends”), or by pursuing non-relational goals that still satisfy a relational need (e.g., “Seeking a career that pays well so that my future family will be financially secure”). Maintaining close relationships while pursuing goals will be weighed more heavily than a strong sense of autonomy. High degrees of relatedness fulfillment will

be seen as more important to the person with a highly relational self-construal than high degrees of autonomy fulfillment.

As stated earlier, people with high relational self-construals are more likely to pursue a goal for a relational reason. Relational reasons, however, vary in the degree to which the relational influence is considered to be intrusive or motivating. This distinction between inhibiting and enhancing relational influences can be viewed in the same way as the extrinsic and intrinsic motivators from Self-Determination and Self-Concordance Theories. Self-concordance is operationally defined by Sheldon and Elliot (1998) as the internal reasons for pursuing a goal (intrinsic + identified) minus the external reasons for pursuing a goal (introjected + external). Consequently, the relational reason for goals will be subdivided into several types, each having a varying degree of internal origin, as is the case with the self-concordance measure (see Table 1). Pursuing a goal because the people included in the attainment process make the process fun would be the relational reason with the highest intrinsic value. Instead of focusing on the personal benefit of the goal, as in the self-

Table 1

*Operationalization of the Self-Concordance and Relational Motivation Measures*

Motivation Factors	<i>Self-Concordance</i>	<i>Relational Motivation</i>
Intrinsic	I am pursuing this goal because it is fun and interesting	I am pursuing this goal because the people involved make it fun and enjoyable
Identified	I am pursuing this goal because it is an important goal to have	I am pursuing this goal because it is important to someone close to me
Introjected	I am pursuing this goal because I would feel guilty, ashamed, or anxious if I did not	I am pursuing this goal because I would let someone else down if I did not
Extrinsic	I am pursuing this goal because the situation demands it	I am pursuing this goal because other people expect me to

concordance measure, this relational reason focuses on the relational benefit of pursuing the goal. Conversely, pursuing a goal because someone expects you to do it would be extrinsically motivating. Instead of focusing on the situational factors outside of one's control, the relational reason focuses on the relational factors outside of one's control. Relational reasons that run parallel to the other self-concordant reasons (introjected and identified) will also be included. The relational reason measure will be operationalized in the same manner as the self-concordance measure, but the factors involved refer to relatedness needs rather than autonomy needs. Therefore, the relational reason measure is constructed so that the intrinsic + identified relational reasons minus the introjected + external relational reasons provides an overall measure of relational reasons for goals.

### *Overview and Hypotheses*

The current study explores the influence of relational motivation over a four week period. Participants completed a questionnaire that assessed their level of the relational self-construal and their well-being, which included psychological well-being (self-esteem, life satisfaction, depression, positive and negative affect), relational well-being (positive relations with others and relational esteem), well-being based on their degree of autonomy, and well-being based on how much purpose they perceived in their lives. The measure of relational well-being was included in order to get a broader scope on the benefits to the person through their close relationships. The autonomy measure was included to show the strong association between self-concordance, personal feelings toward goals, and autonomy. The purpose in life measure was included because I feel it reflects a type of well-being more conducive to goal pursuits, as goals should be more likely to provide purpose in one's life than a sense of happiness.

Participants then completed a list of seven goals they were currently working on or would be pursuing in the future. They then rated their goals along four dimensions: effort, progress, support from others, and the degree to which the goal stems from themselves (goal authenticity). The measures of effort and progress were included in order to explore participants' perceived motivation toward their goals. The support and authenticity measures were included to explore the relational and personal benefits the goals provided. Support is an external component to goal motivation, whereas authenticity is an internal component to motivation. For future reference, these goal measures will be called Time 1 effort, Time 1 progress, Time 1 support, and Time 1 authenticity.

Participants returned four weeks later to complete a Time 2 well-being questionnaire using the Time 1 measures, then rated their original goal list on four dimensions: future effort toward the goal and similar goals, progress toward the goal since the initial session, support and authenticity. For future reference, these goal measures will be called Time 2 effort, Time 2 progress, Time 2 support, and Time 2 authenticity. Participants also indicated whether or not they had attained the goal since the first session.

The association of self-concordance and goal motivation found in the studies conducted by Sheldon and Elliot (1999) and Sheldon and Houser-Marko (2001) should be supported and expanded. First, self-concordance should serve as a strong predictor of Time 1 effort, as well as Time 1 progress, Time 2 progress and Time 2 effort. In addition, self-concordance should be shown to have a strong relation to measures that promote a core self (such as the Autonomy measure), but not with measures that involve relationships (such as the Relational-Interdependent Self-Construal scale). Therefore, I expect that self-

concordance should correlate with autonomy, but not with the relational self-construal, positive relations with others, or relational esteem (**Hypothesis 1A**).

Further analyses conducted in this research should provide support for the research on self-concordance motivation, particularly in the domain of academic goals, as these are the goals most often studied in the self-concordance literature (Sheldon & Kasser, 1998; Sheldon & Houser-Marko, 2001). I expect that self-concordance will moderate the association between number of academic goals and effort, and number of academic goals and purpose in life, so that the relation between number of academic goals and effort and the relation between number of academic goals and purpose in life are stronger at high levels of the Self-Concordance measure (**Hypothesis 1B**).

Finally, the Self-Concordance Upward Spiral Model proposed by Sheldon and Houser-Marko (2001) should be supported in this research (see Figure 3 for the version of this model proposed in this research). I propose that self-concordance should display the same type of upward spiral trend proposed by Sheldon and Houser-Marko (2001) by predicting Time 1 effort, which should predict Time 2 attainment/progress. Time 2 progress should then predict well-being, which in turn should predict future effort (**Hypothesis 1C**). Time 1 effort should also predict Time 2 effort, due to the similarity of the construct.

For people with highly relational self-construals, relational motivation should serve as a stronger predictor of goal progress and effort than for people with low relational self-construals. This strong association between relational motivation and progress and relational motivation and effort for people with highly relational self-construals (I will refer to these people as “high relationals” in the interest of space) should be found even when controlling for the variance explained by self-concordance. This is because Self-Concordance Theory

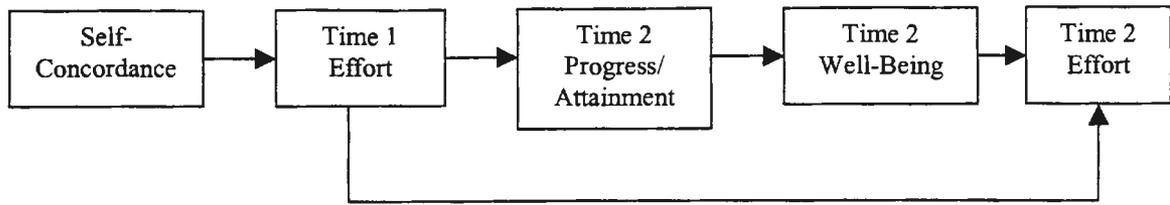


Figure 3. *The Proposed Self-Concordance Upward Spiral Model*

stresses autonomy more than is assumed to be important by high relationals. For people with low relational self-construals (or, “low relationals” as they will now be called), self-concordance should serve as a stronger predictor of goal progress and effort than for people with highly relational self-construals. Again, this is expected because of the emphasis placed on autonomy in self-concordance. I therefore propose that the relational self-construal should moderate the relation between relational motivation and progress, and relational motivation and effort, so that the relations between relational motivation and the goal variables are stronger for high relationals (**Hypothesis 2A**).

This moderation effect should also be evident after controlling for self-concordance. I expect that the relational self-construal should moderate the relation between self-concordance and progress, and self-concordance and effort, so that the associations between self-concordance and the goal variables are stronger for low relationals (**Hypothesis 2B**). This moderation effect should also be evident after controlling for relational motivation.

High relationals should perceive the progress of relationship goals as more valuable than low relationals. If relationship goals are going well, high relationals will have a heightened sense of psychological and relational well-being. Conversely, if relationship goals are going poorly, high relationals will have a lowered sense of psychological well-being and

relational well-being. This relation for high relationals will be especially strong for relational well-being. I therefore hypothesize that the relational self-construal should moderate the relation between relationship goal progress and well-being, such that the effect will be stronger for high relationals, especially for relational well-being (**Hypothesis 3A**).

Low relationals should show a stronger association between progress of academic goals and well-being. This relation for lows should be especially strong for psychological well-being. I propose that the relational self-construal should moderate the relation between academic goal progress and well-being, such that the effect will be stronger for low relationals, especially for psychological well-being (**Hypothesis 3B**).

Receiving support from other people for goals should predict psychological well-being to a higher degree for high relationals compared to low relationals. By basing their self-definitions on close relationships, high relationals strongly prefer harmony in their relationships, and obtaining positive reactions from those close others is important and meaningful to their sense of well-being. Conversely, not receiving support (or receiving negative reactions) from close others concerning their goals may be interpreted by high relationals to be a negative indicator of their sense of worth. Therefore, I propose that the relational self-construal will moderate the relation between goal support and well-being, such that the effect will be stronger for highs, especially for relational well-being (**Hypothesis 4**).

Additional support should be found for a relational upward spiral trend, as was found in the pilot study (see Figure 4). The added elements to this model are the Time 2 measures of well-being, perceived goal progress, effort and attainment, which should show the predictive power of relational motivation, particularly for high relationals. The relational self-construal should predict relational motivation, which in turn should predict effort toward

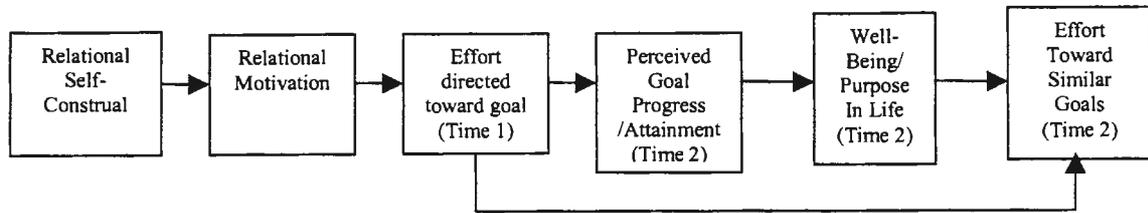


Figure 4. *The Proposed Relational Upward-Spiral Model*

goals. Effort will then predict perceived progress at a later date. This, in turn, will predict well-being and purpose in life, which will then predict future effort toward the goal. This is an extension of the relational model from the pilot study mentioned earlier as well as an addition to the “upward spiral” phenomenon (described by Sheldon & Houser-Marko, 2000). Time 1 effort should also predict Time 2 effort, due to the similarity of the construct. This proposed model is **Hypothesis 5**.

## METHOD

### *Participants*

Participants were 190 undergraduates (55 males, 129 females, 6 unspecified) from Iowa State University, who participated in exchange for extra course credit. Participants who were not United States citizens and participants who were not native speakers of English were dropped, due to previous findings of confounding effects of culture on the relational self-construal. Two participants were dropped due to being outliers ( $Z$  score  $> 2.5$  or  $< -2.5$ ) on more than three of the measures, suggesting they had response biases toward the

extremes. This resulted in an overall sample of 166 participants (47 males, 117 females, 2 unspecified).

### *Time 1 Materials*

The same 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) was used for all measures, unless otherwise stated. For the following measures, the mean of the items was obtained for an overall score so that high scores reflect high levels of the construct.

*Relational-Interdependent Self-Construal.* The Relational-Interdependent Self-Construal scale (RISC; Cross, et al., 2000; Cronbach's  $\alpha = .74$ ) was used to measure a person's tendency to include close relationships in one's self-definition. The scale has been found to correlate moderately with the Clark, Ouellette, Powell, and Millberg (1987) Communal Orientation Scale ( $r = .41$ ), Singelis' (1994) Interdependent Self-Construal Scale ( $r = .41$ ), and Davis' (1980) Empathic Concern Scale ( $r = .34$ ). An example item is, "My close relationships are an important reflection of who I am."

*Psychological Well-Being.* The Rosenberg Self-Esteem scale (RSES; Rosenberg, 1965; Cronbach's  $\alpha = .87$ ) was used to measure global self-esteem. This scale is well known for its high reliability and validity for measuring global self-esteem. An example of an item is, "I feel that I am a person of worth, at least on an equal plane with others." The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985; Cronbach's  $\alpha = .76$ ) was used to measure a general feeling of well-being. The scale has been used extensively and has good psychometric properties. An example item is, "The conditions of my life are excellent." The Positive And Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988; Cronbach's  $\alpha = .88$  for positive; Cronbach's  $\alpha = .85$  for negative) was used to measure participants' tendencies toward positive (e.g., "attentive") or negative

feelings (e.g., “ashamed”). Participants were asked to indicate the extent to which they had experienced these feelings during the past 2 weeks. Participants rated items using a 5-point scale (1 = *never*, 5 = *very often*). The Center for Epidemiological Studies Depression scale (CES-D; Radloff, 1977; Cronbach’s  $\alpha = .89$ ) was used to measure depression. The CES-D correlates strongly with the number of negative life events and other measures of depression, such as the Beck Depression Inventory (Beck, 1967). Respondents were asked to indicate how often they had felt certain ways in the past two weeks. Examples of items include, “I felt depressed” and “I had crying spells.” Participants rated the items using a 5-point scale (1 = *never*, 5 = *very often*). The Self-Esteem, Life Satisfaction, and Positive Affect measures were summed together, and the sum of the Negative Affect and Depression measures was subtracted from the three positive measures. The total was standardized to form the Psychological Well-Being index (Composite Reliability = .84).

*Relational Well-Being.* Ryff’s (1989) Positive Relations With Others subscale (Cronbach’s  $\alpha = .85$ ) measures the degree to which individuals base their well-being on their relationships. An example item here is, “I feel like I get a lot out of my friendships.” A modified version of the Collective Self-Esteem scale (CSE; Luhtanen & Crocker, 1989; Cronbach’s  $\alpha = .86$ ) has been used in past studies to measure the extent to which individuals base their self-esteem on their involvement and satisfaction with their ingroups. A modification was implemented to focus on close relationships. An example item is, “I am a cooperative participant in the close relationships I have.” The Positive Relations With Others and Relational Esteem measures were summed, and standardized to form the Relational Well-Being index (Composite Reliability = .90).

*Autonomy.* Carol Ryff's (1989) Autonomy subscale (Cronbach's  $\alpha = .82$ ) was used as a measure of individuals' desire to stand out and not be influenced by other people. An example item is, "Being happy with myself is more important to me than having others approve of me."

*Purpose In Life.* Ryff's (1989) Purpose In Life subscale (Cronbach's  $\alpha = .84$ ) was used to measure the degree to which a person has a sense of direction in life. An example item is, "I am an active person in carrying out the plans I set for myself."

*Goal Attributes.* These statements were used to examine participants' perceptions of their goals and how they view the attainment of the goals. The goal attribute statements were adopted from Emmons (1986) and Sheldon and Elliot (1998). Attributes of goals were categorized into one of four domains (effort, progress, support, and authenticity). Participants were asked to rate each statement using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). *Effort* (Cronbach's  $\alpha = .77$ ) was measured using the following items: "I am very committed to this goal," "I put a lot of effort every week to attain this goal," "I often find myself thinking of this goal," "The work I put into this goal is often effective," and "I find myself 'slacking off' when I work on this goal." *Progress* (Cronbach's  $\alpha = .75$ ) was measured using the following items: "I am happy with the progress I've made toward this goal," "I often monitor how close I am to reaching this goal," and "The progress I've made toward this goal is close to where I think I should be." *Support* (Cronbach's  $\alpha = .83$ ) was measured using the following items: "A lot people close to me support my pursuit of this goal," "Whenever I receive support for this goal from people who I am close to, I find it to be rewarding," and "I wish I were receiving more support from people close to me when

pursuing this goal.” *Authenticity* (Cronbach’s  $\alpha = .87$ ) was measured using the following items: “I believe this goal reflects who I am as a person,” “The pursuit of this goal gives me a sense of purpose,” and “When I work on this goal, I feel like I am working on something meaningful.”

*Reasons for Goals.* The following statements were used to measure the reasons for pursuing each goal. Participants were instructed that several reasons may apply to each goal, and to think of each reason as a possibility. Participants were asked to rate each statement using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). The first four statements are from Sheldon and Elliot’s (1999) Self-concordance measure, and the next four items are the relational equivalents. *Self-Concordance* was measured using the following items: “I am pursuing this goal because the situation demands it” (extrinsic;  $\alpha = .63$ ), “I am pursuing this because I would feel guilty, ashamed, or anxious if I did not” (introjected;  $\alpha = .79$ ), “I am pursuing this because I really believe it is an important goal to have” (identified;  $\alpha = .74$ ), and “I am pursuing this because of the fun and enjoyment it provides me” (intrinsic;  $\alpha = .61$ ). *Relational motivation* was measured using the following items: “I am pursuing this goal because other people expect me to” (extrinsic;  $\alpha = .79$ ), “I am pursuing this goal because I would let someone else down if I did not” (introjected;  $\alpha = .67$ ), “I am pursuing this goal because it is important to someone who is close to me” (identified;  $\alpha = .70$ ), and “I am pursuing this goal because the people involved make it fun and enjoyable” (intrinsic;  $\alpha = .67$ ). Both the Self-Concordance and Relational Motivation indices were constructed using the following procedure: the sum of the introjected and extrinsic items was subtracted from the sum of the intrinsic and identified items. This total was then standardized to create each index (Composite Reliability = .48 and .80, respectively).

### *Time 2 Materials*

*Well-Being.* The same 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) was used for all scales, unless otherwise stated. As was done for the Time 1 measures, the mean of the items was obtained for an overall score so that high scores reflect high levels of the construct. Participants completed the following scales again during this session: *Self-Esteem* (Cronbach's  $\alpha = .81$ ), *Satisfaction With Life* (Cronbach's  $\alpha = .86$ ), *Positive Affect* (Cronbach's  $\alpha = .89$ ), *Negative Affect* (Cronbach's  $\alpha = .85$ ), *Depression* (Cronbach's  $\alpha = .90$ ), *Relational-Esteem* (Cronbach's  $\alpha = .84$ ), *Positive Relations With Others* (Cronbach's  $\alpha = .87$ ), *Autonomy* (Cronbach's  $\alpha = .86$ ), and *Purpose In Life* (Cronbach's  $\alpha = .85$ ). The Psychological and Relational Well-Being indices were constructed in the same manner for the Time 2 measures as was done for the Time 1 measures (Composite Reliability = .79 and .86, respectively).

*Goal Attributes.* Participants rated each statement using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) unless otherwise stated. *Future Effort* (Cronbach's  $\alpha = .90$ ) was measured using the following items: "I plan to continue working toward this goal in the future," "I expect to put some time into this goal every week," "I will be committed to this goal for a while," "I probably will not work on this goal as much as I did in the past," and "I plan to work on goals similar to this one in the future." *Progress* (Cronbach's  $\alpha = .84$ ) was measured using the following items: "I am happy with the progress I've made toward this goal," "I often monitor how close I am to reaching this goal," and "The progress I've made toward this goal is close to where I think I should be." *Support* (Cronbach's  $\alpha = .90$ ) and *Authenticity* (Cronbach's  $\alpha = .92$ ) were measured using the same items from Time 1.

*Attainment* was measured using the following item: “I have already attained this goal.”

Participants indicated that they either attained the goal or not (1 = *Yes*, 2 = *No*). The goal attainment measure was constructed by dividing the number of goals attained by seven to obtain a proportion of attained goals. This number ranged from 0.00 to 1.00, and the mean attainment proportion was 0.28. Forty participants had a goal attainment proportion of 0.00, illustrating the necessity of studying both short-term and long-term goals within this study, and highlighting the focus of this study on goal progress rather than attainment.

### *Procedure*

Upon arrival to the laboratory, participants were greeted and asked to provide informed consent. Participants then completed measures of the relational self-construal, psychological well-being, relational well-being, autonomy, and purpose in life. Participants then listed seven goals that they were either currently working on or planned to start working on in the near future. Participants then categorized each goal into one of eight domains: personal characteristics, school, work, relationships, leisure, health/appearance, money, and other. Participants also indicated whether each goal fit in the category of short-term (the goal can be achieved within a month), long-term (the goal will take longer than a month to attain), or ongoing (the goal has no distinct point when it will be attained). Next, participants rated each goal for each of the goal attributes. Upon completion, participants were reminded of the second session, which would take place four weeks after the first session, and dismissed. The second session took place four weeks after the first session.

Participants received a message over email two days before they were to return, in order to remind them of their second session. All 166 participants returned for the second session. Upon arrival, participants were again placed in a cubicle and reminded of their

voluntary participation with a second consent form. Participants were then given a questionnaire that measured Time 2 psychological well-being, relational well-being, autonomy, and purpose in life. Participants then received their goal list from Time 1, and were asked to rate each goal for each of the Time 2 goal attributes. Upon completion, participants were fully debriefed, thanked, and dismissed.

## RESULTS

### *Gender Differences*

Independent sample t-tests showed that women scored higher than men on the RISC scale, Time 1 Relational well-being, Time 2 Relational well-being, Time 1 Support, Time 1 Authenticity, Time 2 Support, Time 2 Authenticity, and Number of relationship goals (see Table 2). There were no significant gender differences in autonomy (Time 1 and 2), purpose in life (Time 1 and 2), goal effort (Time 1 and 2), goal progress (Time 1 and 2), goal attainment (Time 1 and 2), self-concordance, relational motivation, number of academic goals, or psychological well-being (Time 1 and 2). Participant gender did not interact with any of the findings below ( $p > .1$ ), and will not be discussed further.

### *Testing Hypotheses*

**Hypothesis 1A** stated that self-concordance would correlate positively with autonomy, but not with the relational-interdependent self-construal, positive relations with others, or relational esteem. Self-concordance correlated positively with both Time 1 and Time 2 autonomy ( $r$ 's = .27 and .28,  $p$ 's < .01). Self-concordance, however, also correlated positively with RISC scale scores ( $r = .19$ ,  $p < .05$ ), Time 1 and Time 2 positive relations with others ( $r$ 's = .27 and .26,  $p$ 's < .01), and Time 1 and Time 2 relational esteem ( $r$ 's = .20

Table 2  
*Gender Differences on the Well-Being and Goal Attributes Measures*

	<i>Males</i>		<i>Females</i>		<i>t</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	
RISC scale	3.70	0.42	4.02	0.48	4.06**
Relational Motivation	0.002	0.95	0.12	0.92	-0.76
Self-Concordance	0.12	0.88	0.13	1.04	-1.44
Time 1 Psychological Well-Being	0.03	1.00	0.02	1.06	0.04
Time 1 Relational Well-Being	-0.47	0.96	0.26	0.95	4.48**
Time 1 Autonomy	3.43	0.54	3.46	0.63	0.31
Time 1 Purpose In Life	3.83	0.56	3.94	0.54	1.24
Time 1 Effort	3.64	0.40	3.68	0.35	0.71
Time 1 Progress	3.31	0.57	3.29	0.49	0.28
Time 1 Support	3.45	0.47	3.67	0.53	2.54*
Time 1 Authenticity	3.77	0.51	4.02	0.49	2.88**
Time 2 Psychological Well-Being	0.03	0.94	0.04	1.04	0.04
Time 2 Relational Well-Being	-0.37	0.96	0.26	0.88	3.67**
Time 2 Autonomy	3.53	0.57	3.63	0.59	0.84
Time 2 Purpose In Life	3.72	0.79	3.93	0.77	1.60
Time 2 Effort	3.47	0.45	3.57	0.37	1.43
Time 2 Progress	3.31	0.62	3.36	0.55	0.46
Time 2 Support	3.57	0.59	3.84	0.63	2.49*
Time 2 Authenticity	3.87	0.68	4.10	0.59	2.16*
Attainment	0.25	0.28	0.29	0.25	0.95
Number of Academic Goals	1.96	0.98	2.05	1.01	0.54
Number of Relationship Goals	1.15	0.96	1.48	0.92	2.06*

\*\* $p < .01$ , \* $p < .05$

and .38,  $p$ 's  $< .01$ ). This hypothesis was therefore only partially supported (see Table 3 for correlations of the RISC scale, Relational Motivation, Self-Concordance, Time 1 and Time 2 variables across all goals).

**Hypothesis 1B** stated that self-concordance should moderate the relation between the number of academic goals and effort, and the relation between the number of academic goals and purpose in life. The self-concordance index and standardized number of academic goals and their interaction term were entered as independent variables into the hierarchical regression analyses. Separate analyses were conducted using Time 1 effort and Time 1 purpose in life as the dependent variables. The hypothesis was not supported. The results

Table 3

*Correlations Among the RISC scale, Relational Motivation, Self-Concordance, Time 1 and Time 2 Well-Being Indices, Time 1 and Time 2 Goal Indices*

Time 1 Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1. RISC	---																		
2. Relational Motivation	<b>.17</b>	---																	
3. Self-Concordance	<b>.19</b>	<b>.42</b>	---																
4. Time 1 Psychological Well-Being	<b>.24</b>	<b>.34</b>	<b>.26</b>	---															
5. Time 1 Relational Well-Being	<b>.48</b>	<b>.36</b>	<b>.24</b>	<b>.65</b>	---														
6. Time 1 Autonomy	.03	<b>.32</b>	<b>.27</b>	<b>.48</b>	<b>.43</b>	---													
7. Time 1 Purpose In Life	<b>.29</b>	<b>.32</b>	<b>.28</b>	<b>.74</b>	<b>.70</b>	<b>.41</b>	---												
8. Time 1 Effort	<b>.32</b>	<b>.34</b>	<b>.28</b>	<b>.47</b>	<b>.42</b>	<b>.37</b>	<b>.50</b>	---											
9. Time 1 Progress	.11	.12	<b>.20</b>	.13	-.12	-.02	.05	<b>.51</b>	---										
10. Time 1 Support	<b>.42</b>	<b>.34</b>	<b>.33</b>	<b>.42</b>	<b>.61</b>	<b>.33</b>	<b>.43</b>	<b>.44</b>	.09	---									
11. Time 1 Authenticity	<b>.39</b>	<b>.26</b>	<b>.28</b>	<b>.22</b>	<b>.41</b>	<b>.37</b>	<b>.32</b>	<b>.54</b>	<b>.17</b>	<b>.45</b>	---								

All bold/underlined coefficients,  $p < .05$

Table 3 (continued)

Time 2 Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
12. Time 2 Psychological Well-Being	<b>.18</b>	<b>.22</b>	.16	<b>.73</b>	<b>.50</b>	<b>.20</b>	<b>.52</b>	<b>.42</b>	<b>.33</b>	<b>.29</b>	.08	---							
13. Time 2 Relational Well-Being	<b>.38</b>	<b>.34</b>	<b>.36</b>	<b>.54</b>	<b>.82</b>	<b>.20</b>	<b>.50</b>	<b>.33</b>	<b>.19</b>	<b>.44</b>	<b>.28</b>	<b>.65</b>	---						
14. Time 2 Autonomy	-.08	<b>.34</b>	<b>.28</b>	<b>.24</b>	<b>.20</b>	<b>.77</b>	<b>.20</b>	<b>.27</b>	.10	<b>.19</b>	<b>.29</b>	<b>.29</b>	<b>.31</b>	---					
15. Time 1 Purpose In Life	<b>.31</b>	<b>.33</b>	<b>.19</b>	<b>.71</b>	<b>.77</b>	<b>.46</b>	<b>.79</b>	<b>.45</b>	-.13	<b>.49</b>	<b>.36</b>	<b>.68</b>	<b>.66</b>	<b>.27</b>	---				
16. Time 2 Effort	<b>.31</b>	<b>.27</b>	<b>.20</b>	<b>.51</b>	<b>.63</b>	<b>.42</b>	<b>.51</b>	<b>.59</b>	-.02	<b>.48</b>	<b>.48</b>	<b>.32</b>	<b>.33</b>	.16	<b>.72</b>	---			
17. Time 2 Progress	<b>.21</b>	<b>.17</b>	.15	<b>.38</b>	<b>.31</b>	<b>.28</b>	<b>.35</b>	<b>.59</b>	<b>.49</b>	<b>.28</b>	<b>.32</b>	<b>.43</b>	<b>.26</b>	.15	<b>.43</b>	<b>.51</b>	---		
18. Time 2 Support	<b>.46</b>	<b>.31</b>	<b>.25</b>	<b>.48</b>	<b>.64</b>	<b>.40</b>	<b>.49</b>	<b>.48</b>	.09	<b>.79</b>	<b>.49</b>	<b>.40</b>	<b>.55</b>	<b>.27</b>	<b>.61</b>	<b>.59</b>	<b>.42</b>	---	
19. Time 2 Authenticity	<b>.33</b>	<b>.31</b>	<b>.37</b>	<b>.42</b>	<b>.54</b>	<b>.44</b>	<b>.47</b>	<b>.55</b>	.05	<b>.56</b>	<b>.76</b>	<b>.24</b>	<b>.40</b>	<b>.30</b>	<b>.58</b>	<b>.69</b>	<b>.40</b>	<b>.68</b>	---
Mean	3.90	0.09	0.06	0.03	0.04	3.50	3.90	3.70	3.30	3.60	4.00	0.05	0.08	3.60	3.90	3.50	3.40	3.80	4.00
SD	0.48	0.92	1.00	1.00	1.00	0.61	0.55	0.37	0.51	0.52	0.51	1.00	0.96	0.59	0.77	0.39	0.58	0.63	0.62

All bold/underlined coefficients,  $p < .05$

Table 4  
*Summary of Hierarchical Regression Analyses for Self-Concordance and Number of Academic Goals Predicting Time 1 Effort, and Time 1 Purpose In Life*

Variable	Time 1 Effort				Time 1 Purpose In Life			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.08**				.08**
Self-Concordance	.11	.03	.30**		.16	.04	.29**	
Number of Academic Goals	.03	.03	.09		.02	.04	.03	
Step 2				.003				.02
Self-Concordance	.15	.06	.40		.29	.09	.52**	
Number of Academic Goals	.03	.03	.09		.02	.04	.03	
Self-Concordance X Number of Academic Goals	-.02	.03	-.12		-.07	.04	-.26	

\*\*p < .01, \*p < .05

revealed significant main effects of self-concordance for Time 1 effort, and Time 1 purpose in life, but there were no significant interaction effects in these analyses (see Table 4).

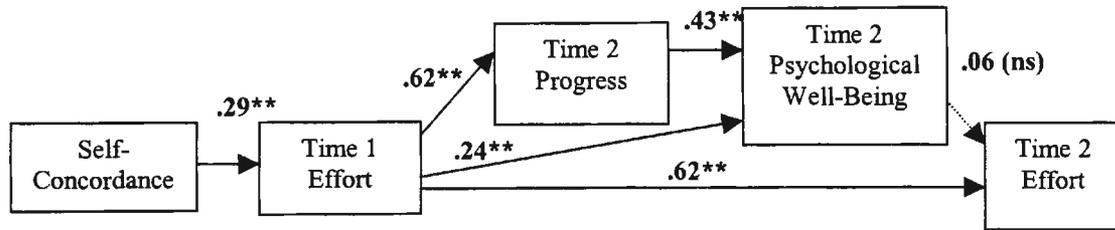
**Hypothesis 1C** stated that self-concordance should display the upward spiral trend of predicting Time 1 effort, and Time 1 effort predicting Time 2 attainment/progress. Time 2 attainment/progress should then predict Time 2 psychological well-being, which in turn should predict Time 2 effort (see Figure 3). The path from Time 1 effort to Time 2 effort was also entered into the model. The relations among variables were first tested using linear regression. For these analyses, all potential predictors were entered as independent variables (see Table 5). Self-concordance predicted Time 1 effort. Time 1 effort predicted Time 2 progress, but not goal attainment. Due to this finding, goal attainment was excluded from all subsequent analyses and models. Both Time 1 effort and Time 2 progress predicted Time 2 psychological well-being. Time 1 effort and Time 2 progress predicted Time 2 effort, but Time 2 psychological well-being did not.

Table 5  
*Linear Regression Results for the Self-Concordance Upward Spiral Model*

Variables	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>
Time 1 Effort				.08**
Self-Concordance	.10	.03	.28**	
Time 2 Progress				.35**
Self-Concordance	-.01	.04	-.02	
Time 1 Effort	.93	.10	.60**	
Goal Attainment				
Self-Concordance	-.004	.02	-.02	.02
Time 1 Effort	.09	.06	.13	
Time 2 Psychological Well-Being				.23**
Self-Concordance	.05	.07	.06	
Time 1 Effort	.58	.27	.22*	
Time 2 Progress	.52	.17	.29**	
Time 2 Effort				.44**
Self-Concordance	.02	.02	.07	
Time 1 Effort	.37	.06	.51**	
Time 2 Progress	.08	.04	.17*	
Time 2 Psychological Well-Being	.005	.02	.02	

\*\*p < .01, \*p < .05

This suggests that a different upward spiral model should be proposed, where the path between Time 1 effort and Time 2 psychological well-being is also included. This also argues against the inclusion of attainment in the model, and instead focusing on goal progress. The remainder of the analyses therefore will use goal progress as the mediator between goal effort and well-being. This model was tested using LISREL 8.5 (Jöreskog & Sörbom, 2001; see Figure 5). Self-concordance predicted Time 1 effort. Time 1 effort predicted Time 2 progress, Time 2 psychological well-being, and Time 2 effort. Time 2 progress predicted Time 2 psychological well-being. Psychological well-being did not predict Time 2 effort. To evaluate the overall fit of the model (and all subsequent models), we used the chi-square statistic, and the goodness-of-fit index (GFI), which is recommended



$$X^2(4, 166) = 8.23, p > .10; GFI = 0.98$$

\*\*  $p < .01$

Figure 5. *The Self-Concordance Upward Spiral Model (with Psychological Well-Being)*

by Jöreskog & Sörbom (1993). This model showed a good fit,  $X^2(4, N=166) = 8.23, p > .10$ ;  $GFI = 0.98$ . Thus, this upward spiral trend was only partially supported, due to the non-significant path between well-being and Time 2 effort.

Purpose in life was strongly correlated with Time 1 effort, Time 2 progress and Time 2 effort ( $r$ 's = .45, .43, and .72,  $p$ 's < .01). When Time 2 purpose in life was substituted for Time 2 psychological well-being, the upward spiral trend was supported, and more closely resembled the model proposed by Sheldon and Houser-Marko (2001). The paths between Time 1 effort and Time 2 effort, and Time 1 effort and Time 2 purpose in life were included, as is suggested by the previous model (see Figure 6). Self-concordance predicted Time 1 effort. Time 1 effort predicted Time 2 progress, Time 2 purpose in life, and Time 2 Effort. Time 2 progress predicted Time 2 purpose in life. Time 2 purpose in life then predicted Time 2 effort. This model fit the data well,  $X^2(4, N=166) = 4.23, p > .10$ ;  $GFI = 0.99$ . Therefore, the upward spiral trend proposed by Sheldon and Houser-Marko (2001) was strongly supported when purpose in life was the well-being component of the model.

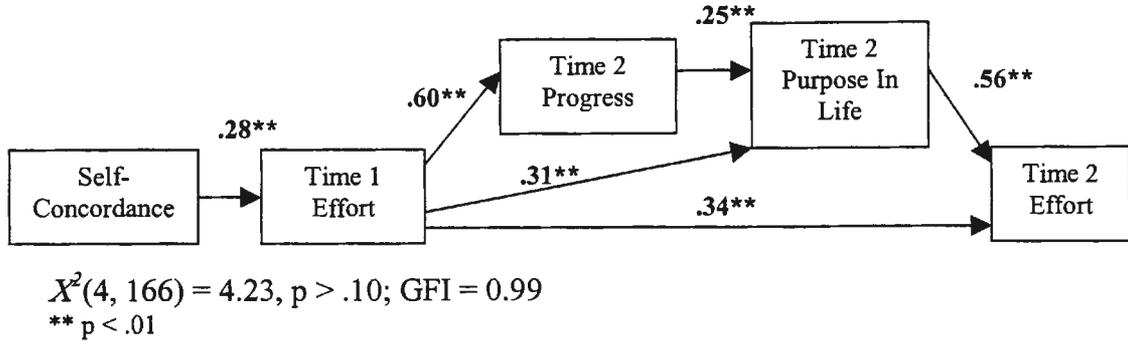


Figure 6. *The Self-Concordance Upward Spiral Model (with Purpose In Life)*

**Hypothesis 2A** stated that the relational self-construal should moderate the relation between relational motivation and progress, and relational motivation and effort. The centered RISC scale scores and standardized relational motivation index and their interaction term were entered as independent variables in the hierarchical regression analyses. Separate analyses were conducted using Time 1 progress and Time 1 effort as the dependent variables (see Table 6). Results yielded significant main effects for the RISC scale and relational motivation predicting Time 1 effort. There were no main effects for the RISC scale or relational motivation predicting Time 1 progress. There were no significant interaction effects in the analyses. In additional analyses, self-concordance was included as a control variable. The main effects of RISC and relational motivation predicting Time 1 effort remained significant after controlling for self-concordance ( $\beta_{RISC} = .26, p < .01$ ;  $\beta_{Relational Motivation} = .24, p < .01$ ), but there was still no interaction effect. In addition, there were no significant main effects or interaction effects predicting Time 1 progress.

Table 6

*Summary of Hierarchical Regression Analyses for the RISC Scale and Relational Motivation Predicting Time 1 Effort, and Time 1 Progress*

Variable	Time 1 Effort				Time 1 Progress			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.19**				.02
RISC	.21	.06	.27**		.10	.08	.09	
Relational Motivation	.12	.03	.29**		.06	.04	.11	
Step 2				.003				.002
RISC	.21	.06	.28**		.09	.08	.09	
Relational Motivation	.12	.03	.31**		.05	.05	.10	
RISC X Relational Motivation	-.05	.06	-.06		.05	.09	.04	

\*\*p < .01, \*p < .05

**Hypothesis 2B** stated that the relational self-construal should moderate the relation between self-concordance and Time 1 progress, and self-concordance and Time 1 effort. The centered RISC scores and standardized self-concordance indices and their interaction term were entered as the independent variables into the hierarchical regression analyses. Separate analyses were conducted using Time 1 progress and Time 1 effort as the dependent variables (see Table 7). Results yielded a significant main effect for the RISC scale and for self-concordance predicting Time 1 effort, and a significant main effect for self-concordance predicting Time 1 progress, but no main effect for the RISC scale. Again, there were no significant interaction effects in these analyses. When relational motivation was entered as a control variable, the main effect of the RISC scale predicting Time 1 effort remained significant ( $\beta_{RISC} = .26, p < .01$ ), whereas the main effect of self-concordance became weaker ( $\beta_{Self-Concordance} = .13, n.s.$ ). The main effect of self-concordance predicting Time 1 progress remained significant ( $\beta_{Self-Concordance} = .16, p < .05$ ), but there was still no interaction effect. There was still no main effect for RISC predicting Time 1 progress, nor an interaction effect. Hypothesis 2 was therefore not supported.

Table 7  
*Summary of Hierarchical Regression Analysis for the RISC Scale and Self-Concordance Predicting Time 1 Effort, and Time 1 Progress*

Variable	Time 1 Effort				Time 1 Progress			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.15**				.04**
RISC	.22	.06	.28**		.08	.08	.08	
Self-Concordance	.08	.03	.23*		.09	.04	.18*	
Step 2				.002				.002
RISC	.22	.06	.28		.08	.08	.08	
Self-Concordance	.09	.03	.23		.10	.04	.19	
RISC X Self-Concordance	-.03	.05	-.04		-.04	.07	-.05	

\*\*p < .01, \*p < .05

To test Hypothesis 3, the progress items were re-coded to include only items that were rated for either relationship goals or academic goals. The mean value of these items were used to create scales for relationship goals and academic goals (this procedure was also employed for all other Time 1 and Time 2 goal attributes). There were therefore two scales for Time 1 progress in particular goal domains: perceived progress for relationship goals and perceived progress for academic goals. **Hypothesis 3A** stated that relational self-construal should moderate the association between relationship goal progress and well-being. The centered RISC scale and relationship goal progress scores and their interaction term were entered as independent variables into the hierarchical regression analyses. Separate analyses were conducted using the Time 1 psychological well-being and relational well-being indices as the dependent variables. Results showed a significant main effect of RISC score predicting both psychological well-being ( $\beta = .18, p < .05$ ) and relational well-being ( $\beta = .48, p < .01$ ). There were no significant interaction effects (see Table 8).

Table 8  
 Summary of Hierarchical Regression Analyses for the RISC scale and Relationship Goal Progress Predicting Time 1 Psychological Well-Being, and Relational Well-Being

Variable	Time 1 Psychological Well-Being				Time 1 Relational Well-Being			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.04 <sup>+</sup>				.23**
RISC	.40	.19	.18*		.98	.16	.48**	
Relationship Goal Progress	.10	.11	.08		-.02	.09	-.02	
Step 2				.009				.001
RISC	.40	.19	.18*		.98	.16	.48**	
Relationship Goal Progress	.10	.11	.07		-.02	.09	-.01	
RISC X	.26	.23	.10		-.10	.20	-.04	
Relationship Goal Progress								

\*\*p < .01, \*p < .05

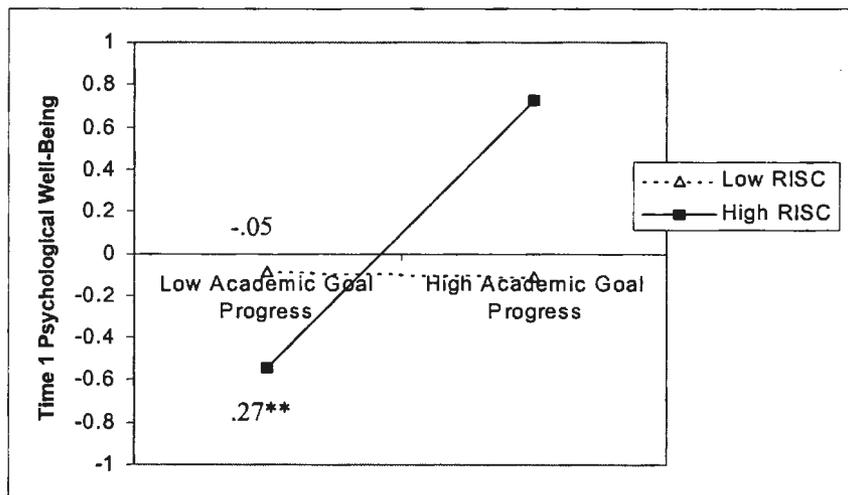
**Hypothesis 3B** stated that relational self-construal should moderate the relation between academic goal progress and well-being. The Time 1 psychological and relational well-being indices were the dependent variables. The centered RISC and academic goal progress scores and their interaction term were entered into two separate hierarchical regression analyses. The results showed a significant main effect of RISC score predicting Time 1 psychological well-being, but no main effect of academic goal progress predicting Time 1 psychological well-being. The results also indicated a significant interaction effect (see Table 9 and Figure 7). Contrary to the prediction, simple slopes analyses showed that the relation between academic goal progress and psychological well-being was strongest at high levels of the RISC scale,  $\beta_{progress} = .27, p < .01$ . There was no relation at low levels of the RISC scale,  $\beta_{progress} = -.05, n.s.$  There was a significant main effect of RISC scale score predicting relational well-being, but no main effect for progress of academic goals, and no interaction effect (see Table 9).

Table 9

Summary of Hierarchical Regression Analyses for the RISC scale and Academic Goal Progress Predicting Time 1 Psychological Well-Being, and Relational Well-Being

Variable	Time 1 Psychological Well-Being				Time 1 Relational Well-Being			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.07**				.22**
RISC	.46	.17	.21**		1.01	.15	.48**	
Academic Goal Progress	.17	.11	.12		-.16	.10	-.12	
Step 2				.11**				.02
RISC	.43	.16	.20**		1.00	.15	.47**	
Academic Goal Progress	.17	.11	.12		-.16	.10	-.12	
RISC X Academic Goal Progress	.94	.21	.33**		.36	.19	.13	

\*\* $p < .01$ , \* $p < .05$



\*\* $p < .01$

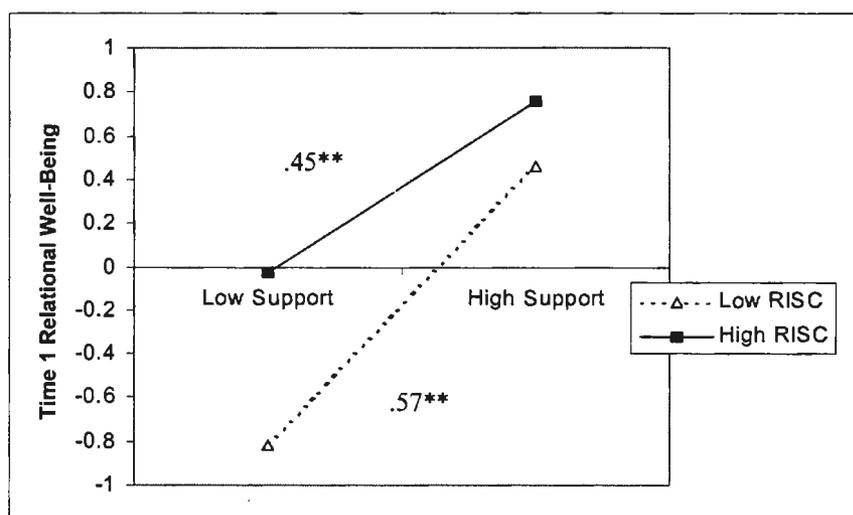
Figure 7. Interaction of RISC with Academic Goal Progress Predicting Time 1 Psychological Well-Being

**Hypothesis 4** stated that the relational self-construal should moderate the relation between goal support and well-being. The Time 1 psychological well-being and relational well-being indices were the dependent variables. The centered RISC scale, centered support scores and their interaction term were entered into two hierarchical regression analyses (see

Table 10  
*Summary of Hierarchical Regression Analyses for the RISC scale and Time 1 Support Predicting Time 1 Psychological Well-Being, and Relational Well-Being*

Variable	Time 1 Psychological Well-Being				Time 1 Relational Well-Being			
	B	SE B	$\beta$	$\Delta R^2$	B	SE B	$\beta$	$\Delta R^2$
Step 1				.18*				.43**
RISC	.16	.17	.08		.58	.16	.28**	
Time 1 Support	.78	.16	.39		.95	.09	.49**	
Step 2				.00				.02*
RISC	.16	.17	.08		.58	.16	.28**	
Time 1 Support	.78	.16	.39		.99	.13	.50**	
RISC X Time 1 Support	-.05	.29	-.01		-.48	.23	-.12*	

\*\*p < .01, \*p < .05



\*\*p < .01

Figure 8. *Interaction of RISC with Support Predicting Relational Well-Being*

Table 10). Results showed a significant main effect for support predicting psychological well-being but no effect for the RISC scale. There was no interaction effect. Results also showed a significant main effect of both RISC and support predicting relational well-being, which were qualified by a significant interaction (see Table 10 and Figure 8). Simple slopes

analysis showed that the relation between goal support and relational well-being was strong at low levels of the RISC scale,  $\beta_{support} = .57, p < .01$ , and weaker at high levels of the RISC scale,  $\beta_{support} = .45, p < .01$ . Hypothesis 4 was therefore not supported, as the results were opposite of the prediction.

The purpose of **Hypothesis 5** was to test a relational version of the upward spiral model (see Figure 4). This model predicts that the relational self-construal should predict relational motivation, which should then predict Time 1 effort. Time 1 effort should then predict Time 2 progress. Time 2 progress should predict Time 2 well-being, which will then predict Time 2 effort. Time 1 effort should also predict Time 2 effort. The relations among variables were first tested using linear regression analyses using the same procedure as was done for the Self-Concordance Upward Spiral Model (see Figure 9). The results of these analyses showed that the RISC scale predicted relational motivation. The RISC scale and relational motivation then predicted Time 1 effort. Time 1 effort predicted Time 2 progress, and Time 2 progress predicted Time 2 psychological well-being. Time 1 effort and Time 2 progress predicted Time 2 effort, but Time 2 psychological well-being did not. Based on these results, the proposed path model for the Relational Upward Spiral Model is insufficient, and these results suggest that several paths should be added for the model to fit the data (such as the RISC scale to Time 1 effort, and Time 2 progress to Time 2 effort). The weak path from psychological well-being and future effort once again is evident, and suggests that, although the upward spiral trend for relational motivation is present, the Time 2 well-being mediation effect proposed by Sheldon and Houser-Marko (2001) does not apply to this model. A revised version of this model is therefore needed.

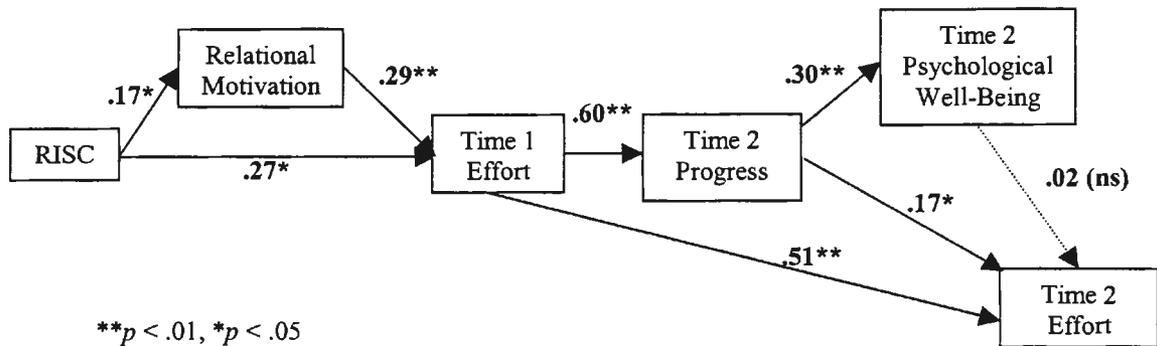


Figure 9. *Linear Regression Analyses of the Relational Upward Spiral Model (with Psychological Well-Being)*

When Time 2 relational well-being was substituted into the model in the place of Time 2 psychological well-being, the results were the same from the RISC scale to Time 2 progress. The relations among variables were again tested using linear regression (see Figure 10). The RISC scale and relational motivation predicted Time 2 relational well-being, whereas neither Time 1 effort nor Time 2 progress predicted Time 2 relational well-being. Time 1 effort and Time 2 progress predicted Time 2 effort, but Time 2 relational well-being did not. This again argues against the inclusion of well-being in the Relational Upward Spiral Model, and suggests that several paths are missing from the model (such as the RISC scale to Time 2 relational well-being, and relational motivation to Time 2 relational well-being). If these paths were added, however, the model ceases to become an upward spiral model of motivation, and instead explains little more than the degree to which relational variables, such as the RISC scale and relational motivation predict relational well-being, but not future effort.

When Time 2 purpose in life was substituted into the model in the place of Time 2 psychological well-being (see Figure 11), the results were identical to the results above from the RISC scale to Time 2 progress. The RISC scale, relational motivation, Time 1 effort, and Time 2 progress all predicted Time 2 purpose in life. Time 1 effort and Time 2 purpose in life then predicted Time 2. The RISC scale, relational motivation and Time 2 progress did not predict Time 2 effort. Although this more closely resembles an upward spiral pattern, the shared variance between purpose in life and all of the predictors makes for a complex explanation. The inclusion of well-being indices in general within these models appears to be problematic, and the argument for excluding them from these models will be discussed.

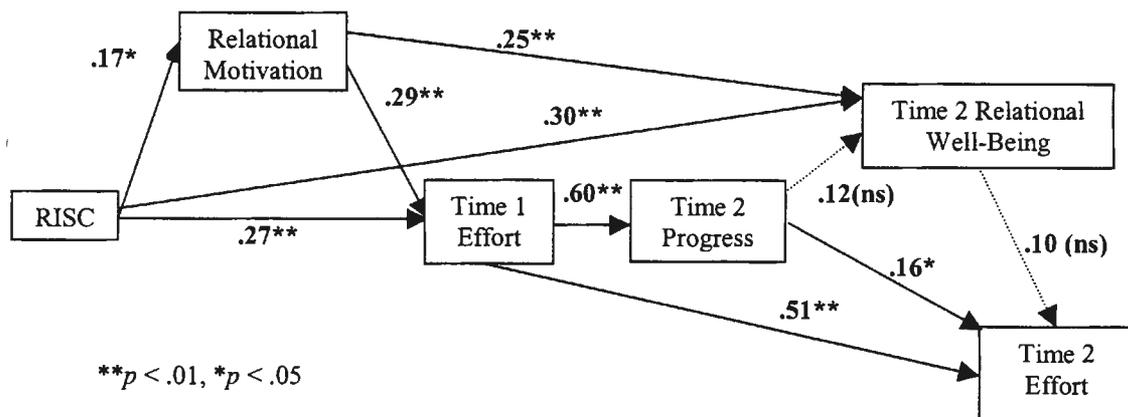


Figure 10. Linear Regression Analyses of the Relational Upward Spiral Model (with Relational Well-Being)

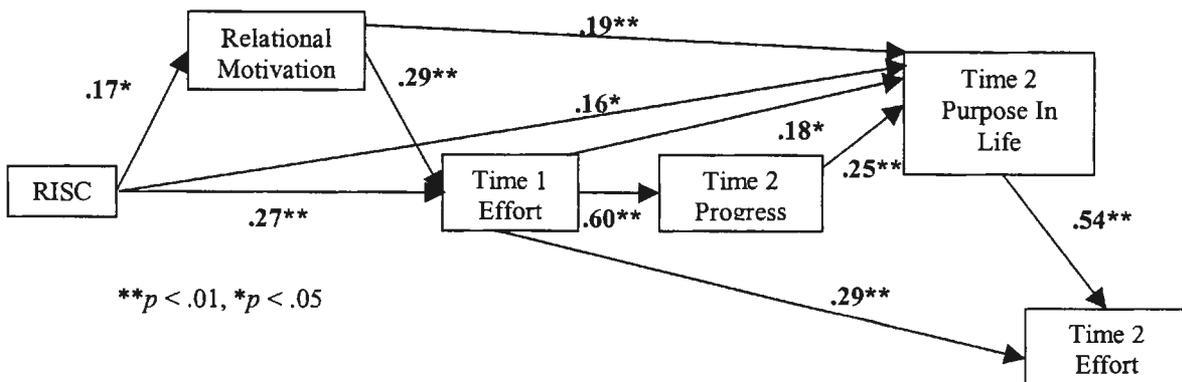


Figure 11. Linear Regression Analyses of the Relational Upward Spiral Model (with Purpose In Life)

### *Post-hoc Hypotheses and Additional Analyses*

Based on the findings above, it is evident that much of the observed moderation effects did not support the hypotheses. In most cases, the hypothesized effects were not present. This suggests that new analyses should be conducted by exploring mediation effects. The above analyses also suggest that the differences between relational motivation and self-concordance should be explored further. The differences between relationship goals and academic goals and the differences between short-term and long-term goals should be explored as well. The following post hoc hypotheses were added to the original hypotheses. They expand on the analyses conducted above, in addition to exploring some effects not proposed in the original hypotheses.

The previous analyses focused primarily on the degree to which the relational self-construal moderated the associations between goal measures and well-being measures, thus following one of the purposes of this research. The previous analyses also focused on the Self-Concordance and Relational Motivation Upward Spiral Models, although the Relational Model results were difficult to interpret. This next section focuses primarily on the third purpose of this study: that relational motivation should predict goal motivation over and above the degree to which one's goals are self-concordant. I also explored the influence of support for one's goals in predicting future effort, and the differences between short-term and long-term goals. The latter part of this section focuses on improving the Relational Upward Spiral Model.

One of the main focuses of this section was to explore the predictive power of relational motivation on goal attributes. I therefore propose that relational motivation should predict Time 1 and Time 2 goal variables for all goals (effort, progress, support and

authenticity) after controlling for the variance explained by self-concordance (**Hypothesis 6A**). I expect to find that relational motivation should be especially predictive of goal motivation for relationship goals, whereas self-concordance should be especially predictive of motivation for academic goals. Therefore, I hypothesize that relational motivation should strongly predict goal attributes over and above self-concordance for the relationship goals (**Hypothesis 6B**), and self-concordance should predict goal attributes after controlling for relational motivation, but should have the strongest predictive power for academic goals (**Hypothesis 6C**).

To test **Hypothesis 6A**, self-concordance and relational motivation scores were the independent variables in eight linear regression analyses. All Time 1 and Time 2 goal variables for all goals were entered as the dependent variables in separate linear regression analyses (see Table 11). Results showed that both self-concordance and relational motivation predicted Time 1 effort, Time 1 support, Time 1 authenticity, and Time 2 authenticity. Self-concordance predicted Time 1 progress, but relational motivation did not. Relational motivation predicted Time 2 effort and Time 2 support, but self-concordance did not. Neither self-concordance nor relational motivation predicted Time 2 progress. Hypothesis 6A was therefore supported. For six of the eight goal variables, relational motivation was a significant predictor controlling for self-concordance.

To test the second part of Hypothesis 6, self-concordance and relational motivation scores were the independent variables, and all Time 1 and Time 2 goal variables for relationship goals were the dependent variables in separate linear regression analyses (see Table 11). Results showed that relational motivation, but not self-concordance, significantly predicted Time 1 effort, Time 1 progress, Time 1 authenticity, Time 2 effort, and Time 2

Table 11  
*Linear Regression Analyses for Relational Motivation and Self-Concordance Predicting Time 1 and Time 2 Goal Variables*

Variables	Relational Motivation	Self-Concordance
	$\beta$	$\beta$
All Goals		
Time 1 Effort	.27**	.16*
Time 1 Progress	.05	.17*
Time 1 Support	.22**	.22**
Time 1 Authenticity	.17*	.21**
Time 2 Effort	.23**	.10
Time 2 Progress	.25**	.14
Time 2 Support	.13	.09
Time 2 Authenticity	.19*	.29**
Relationship Goals		
Time 1 Effort	.35**	.02
Time 1 Progress	.21**	.08
Time 1 Support	.16	.21**
Time 1 Authenticity	.24**	.10
Time 2 Effort	.19*	-.13
Time 2 Progress	.20*	-.08
Time 2 Support	.13	.24**
Time 2 Authenticity	.18*	.23**
Academic Goals		
Time 1 Effort	.11	.21**
Time 1 Progress	.08	.25**
Time 1 Support	.20*	.20*
Time 1 Authenticity	.00	.21*
Time 2 Effort	.07	-.03
Time 2 Progress	.06	.21*
Time 2 Support	.17*	.18*
Time 2 Authenticity	.04	.29**

\*  $p < .05$ , \*\*  $p < .01$

progress. Self-concordance, but not relational motivation, significantly predicted Time 1 support and Time 2 support. Both self-concordance and relational motivation predicted Time 2 authenticity. Hypothesis 6B was also supported. Relational motivation was the strongest predictor for five of the eight goal variables for relationship goals.

To test the third part of Hypothesis 6, self-concordance and relational motivation were the independent variables in eight linear regression analyses. All Time 1 and Time 2 goal variables for academic goals were the dependent variables in separate linear regression

analyses (see Table 11). Results showed that self-concordance, but not relational motivation significantly, predicted Time 1 effort, Time 1 progress, Time 1 authenticity, Time 2 progress, and Time 2 authenticity. Both self-concordance and relational motivation predicted Time 1 support and Time 2 support. Neither self-concordance nor relational motivation predicted Time 2 effort. Part three of Hypothesis 6 was therefore supported. Self-concordance was the strongest predictor for six of the eight goal variables for academic goals.

Little research has been conducted to investigate the differences between short-term and long-term goals. This, however, is an oversight of goal research. As contemporary goal research focuses on short-term academic goals, it would seem that the exploration of other types of goals has been ignored. As academic goals are formed during only a specific period of time, the term on these goals should be relatively short, compared to typical long-term goals, such as getting married, starting a family, and so on. Particularly striking is the lack of focus on these long-term goals, and most important the lack of recognition that many of these long-term goals are relationship goals. Further exploration of these differences is therefore needed in order to spark discussion regarding short-term academic goals, long-term and ongoing relationship goals. Ongoing goals are defined as goals that have no endpoint (e.g., always be kind to my friends), whereas long-term goals are defined as goals that would take a year or more to achieve. The current research has the potential to answer these questions, as well as determine which of the two types of goal motivators (relational motivation or self-concordance) is related to these types of goals, and the types of goals that high relationals are more likely to have. I therefore propose that relationship goals should be more likely to be long-term or ongoing goals, whereas academic goals should be more likely to be short-term goals (**Hypothesis 7A**). I also propose that self-concordance should be strongly associated

with the number of short-term goals a person has, as well as the number of academic goals a person has, and relational motivation should be strongly associated with the number of long-term and ongoing goals a person has, and the number of relationship goals a person has (**Hypothesis 7B**). Finally, I expect that the relational self-construal will be strongly associated with the number of relationship goals a person has, as well as the number of long-term and ongoing goals (**Hypothesis 7C**).

To test **Hypothesis 7A**, frequencies of goal terms (short-term, long-term, and ongoing) were conducted on all relationship goals, and all academic goals, so that an overall analysis was conducted for the entire sample. Percentages were calculated by determining the number of goals within a domain (relationship or academic) that were short-term, long-term or ongoing, which was then divided by the total number of goals within the domain. Results showed that, of the academic goals ( $n = 310$ ), 44% were short-term goals, whereas 56% were long-term or ongoing goals. Of the relationship goals ( $n = 219$ ), 17% were short-term goals, whereas 83% were long-term or ongoing goals. Particularly striking was the difference between the percentage of ongoing goals in each category. Ongoing academic goals composed 11% of the academic goals, whereas ongoing relationship goals composed 64% of the relationship goals.

To test **Hypotheses 7B** and **7C**, correlations were obtained between the Relational Motivation and Self-Concordance indices and the RISC scale with the following variables: number of short-term, long-term, and ongoing goals, and the number of relationship and academic goals (see Table 12). Contrary to prediction, self-concordance was negatively related to number of short-term goals and the number of academic goals. Self-concordance was positively related with the number of relationship goals. Relational motivation was

Table 12  
*Correlations of Goal Term and Domain Variables with Relational Motivation, Self-Concordance, and RISC*

Variables	Relational Motivation	Self-Concordance	RISC
# short-term goals	.02	-.22**	-.14
# long-term goals	-.08	.12	.16*
# ongoing goals	.08	.10	.09
# relationship goals	.11	.17*	.18*
# academic goals	-.08	-.23**	-.16*

\*\* p < .01, \* p < .05

unrelated to the number of long-term and the number of ongoing goals. The relational self-construal was positively related to the number of relationship goals and the number of long-term goals. The relational self-construal was negatively related to the number of academic goals. Thus, Hypotheses 7B and 7C were mostly unsupported. The type of motivation a person has does not seem to influence how long they expect to be working on their goals or how many goals fit into a particular domain. It would seem, instead, that the reasons for pursuing these goals is more important.

The correlations of self-concordance and the number of relationship and academic goals and the correlations of the relational self-construal and number of relationship and academic goals were puzzling. Both self-concordance and the relational self-construal were related to a higher number of relationship goals and a lower number of academic goals. The question arises as to why high relationals would show patterns similar to people with highly self-concordant goals. Perhaps high relationals have more relationship goals and fewer academic goals for reasons other than the goals being self-concordant. For example, pursuing

a goal of making more friends during the semester may be driven by an interest in more personal control of the environment for low relationals (self-concordance), but may be driven by an implicitly valuable desire to have more relationships by high relationals. For high relationals, pursuing a relationship goal for a reason other than for relational benefit would be less satisfying, and therefore high relationals will be less likely to pursue such goals. This led to an additional hypothesis, that the relational self-construal should moderate the relation between self-concordance and number of relationship goals pursued, so that the relation will be negative for high relationals (**Hypothesis 7D**).

Hierarchical regression analyses were conducted to test **Hypothesis 7D**. The centered RISC scale score, the self-concordance index for relationship goals and their interaction term were entered as independent variables, and the number of relationship goals was the dependent variable. There were no main effects of RISC or self-concordance predicting number of relationship goals, but there was a significant interaction effect (see Table 13 and Figure 12). Simple slopes analyses showed that the relation between self-concordance for relationship goals and number of relationship goals was marginally negative at high levels of the RISC scale (1 SD above the mean),  $\beta_{self-concordance} = -.17, p = .06$ . There was no relation between self-concordance for relationship goals and number of relationship goals at low levels of the RISC scale (1 SD below the mean),  $\beta_{self-concordance} = .01, n.s.$  This suggests that for high relationals, relationship goals are *less* likely to be pursued if they are highly self-concordant. Instead, relationship goals are more likely to be pursued if they are less self-concordant. For low relationals, the degree of self-concordance did not predict how many relationship goals they pursued. This again supports the notion that motivation for relationship goals has an origin other than the core self. When people make a relationship

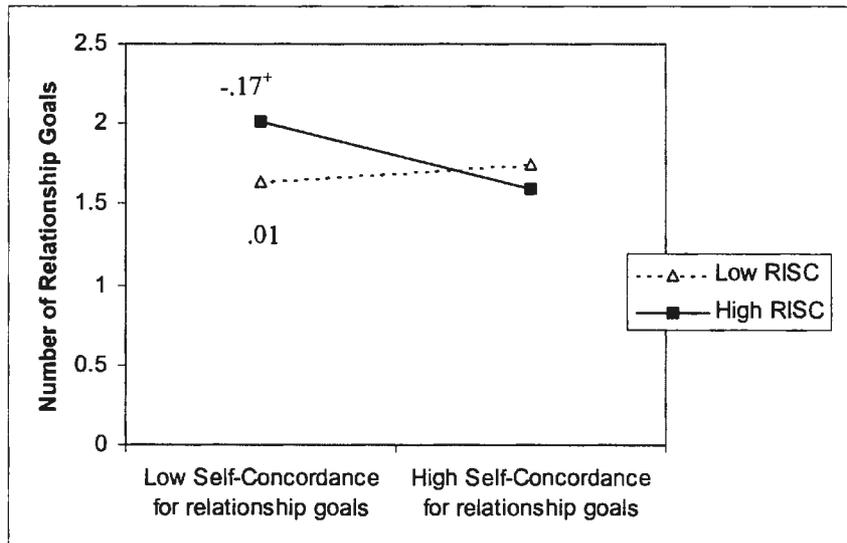
goal (e.g., calling their parents every week), the degree to which this goal stems from the “core self” is unimportant. Instead, the reason why people pursue these relationship goals are for the purpose of bettering one’s relationships. For high relationals, pursuing relationship goals are very important, and they may see personal interests and desires interfering with the

Table 13

*Summary of Hierarchical Regression Analysis for RISC and Self-Concordance for Relationship Goals Predicting Number of Relationship Goals Pursued*

Variables	B	SE B	$\beta$
Step 1			
RISC	.09	.14	.06
Self-Concordance	.13	.07	-.13
Step 2			
RISC	.12	.14	.08
Self-Concordance	-.06	.07	-.09
RISC X Self-Concordance	-.27	.13	-.18*

Note.  $R^2 = .02$  for Step 1, *n.s.*;  $\Delta R^2 = .03$  for Step 2,  $p < .05$ . \*  $p < .05$ , +  $p = .06$



+  $p = .06$

Figure 12. *Interaction of RISC with Self-Concordance for Relationship Goals Predicting Number of Relationship Goals Pursued*

maintenance of relationships. Instead, high relationals may be more interested in following the interests and desires of all people in the relationship context. Pursuing personal desires in relationships can be detrimental to relationships, and high relationals seem to recognize this when they pursue their relationship goals.

One possible origin of motivation external to the core self is the degree of support received from close others. Support could also be the reason why high relationals are more likely to be relationally motivated. If a highly relational person is relationally motivated, this is probably because he or she perceives a certain degree of support for their goals from close others. Therefore, I hypothesized that the association between the relational self-construal and relational motivation should be mediated by the amount of perceived support for one's goals (**Hypothesis 8**). To test **Hypothesis 8**, LISREL 8.5 (Jöreskog & Sörbom, 2001; see Figure 13) was employed to test the model of mediation. The results showed that the RISC scale predicted Time 1 support ( $\beta_{RISC} = .42, p < .01$ ), and Time 1 support predicted relational motivation ( $\beta_{Support} = .34, p < .01$ ). The indirect effect of RISC on relational motivation was significant ( $\beta = .14, p < .01$ ), and the fit of the model was very good,  $X^2(1, N = 166) = 0.20, p > .10$ ; GFI = 1.00. Thus, support mediated the association between the relational self-construal and relational motivation, as predicted.

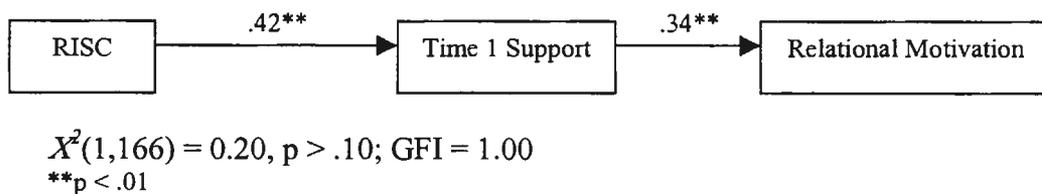
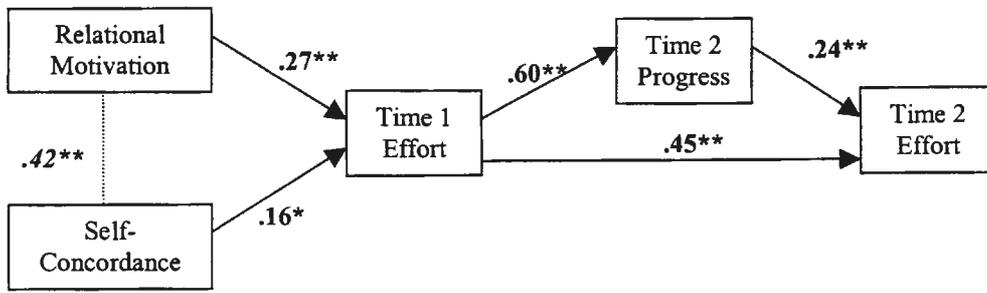


Figure 13. *The Support Mediation Model*

The Relational Upward Spiral Model was not supported in the earlier analyses. One of the possible reasons for this was because of the inclusion of well-being variables in the models. **Hypothesis 9** attempts to make improvements on the Relational Upward Spiral Model. Based on the linear regression analyses used to test the original Relational Upward Spiral Model, the well-being indices were excluded. The results of Hypothesis 6 suggest that relational motivation should predict the goal variables over and above self-concordance.

Based on the results of the previous models (see Figures 5, 6, 9, 10 and 11), Time 1 effort should mediate the relation between the relational motivation and self-concordance variables and Time 2 progress. Time 2 progress should predict effort at Time 2, even after controlling for Time 1 effort. Thus, the upward spiral model will be tested by including both self-concordance and relational motivation (“Model 1”). Another model that should be tested is an expansion of the social support mediation effect, where the relational self-construal predicts Time 1 support, which predicts relational motivation. Relational motivation should then predict Time 1 effort, and should follow the same modified upward spiral trend mentioned above. This model should be tested for relational motivation alone (“Model 2”), and for both relational motivation and self-concordance (“Model 3”). The second and third models should *not* be significantly different, based on the findings of Hypothesis 6, and the predictions of Model 1.

All models were first tested using linear regression. For Model 1, both self-concordance and relational motivation predicted Time 1 effort ( $\beta_{Self-Concordance} = .16, p < .05$ ;  $\beta_{Relational Motivation} = .27, p < .01$ ), and Time 1 effort predicted Time 2 progress ( $\beta_{Effort} = .60, p < .01$ ). Time 1 effort and Time 2 progress predicted Time 2 effort ( $\beta_{Effort} = .42, p < .01$ ;  $\beta_{Progress} = .25, p < .01$ ). The overall model was tested using LISREL 8.5 (Jöreskog & Sörbom, 2001;



$$X^2(4, 166) = 2.17, p > .10; \text{GFI} = 0.99$$

\*\* $p < .01$ , \* $p < .05$

Figure 14. *Model 1: The Upward Spiral Model*

see Figure 14). For Model 1, both self-concordance and relational motivation predicted Time 1 effort. Time 1 effort then predicted Time 2 progress and Time 2 effort. Time 2 progress then predicted Time 2 effort. This model fit the data well,  $X^2(4, N=166) = 2.17, p > .10$ , GFI = 0.99.

To test Model 2, linear regression analyses showed that the RISC scale predicted Time 1 support ( $\beta_{RISC} = .42, p < .01$ ), and Time 1 support predicted relational motivation ( $\beta_{Support} = .33, p < .01$ ). The RISC scale, Time 1 support, and relational motivation all predicted Time 1 effort ( $\beta_{RISC} = .16, p < .05$ ;  $\beta_{Support} = .31, p < .01$ ;  $\beta_{Relational\ Motivation} = .21, p < .01$ ). Time 1 effort then predicted Time 2 progress ( $\beta_{Effort} = .59, p < .01$ ). Time 1 support, Time 1 effort, and Time 2 progress all predicted Time 2 effort ( $\beta_{Support} = .24, p < .01$ ;  $\beta_{Effort} = .32, p < .01$ ;  $\beta_{Progress} = .24, p < .01$ ). Based on these findings, the paths from Time 1 support to Time 1 effort and Time 2 effort were added to the model. The path from the RISC scale to Time 1 effort was not included to maintain a parsimonious model that should still fit the data. The overall model was tested using LISREL 8.5 (Jöreskog & Sörbom, 2001; see Figure 15).

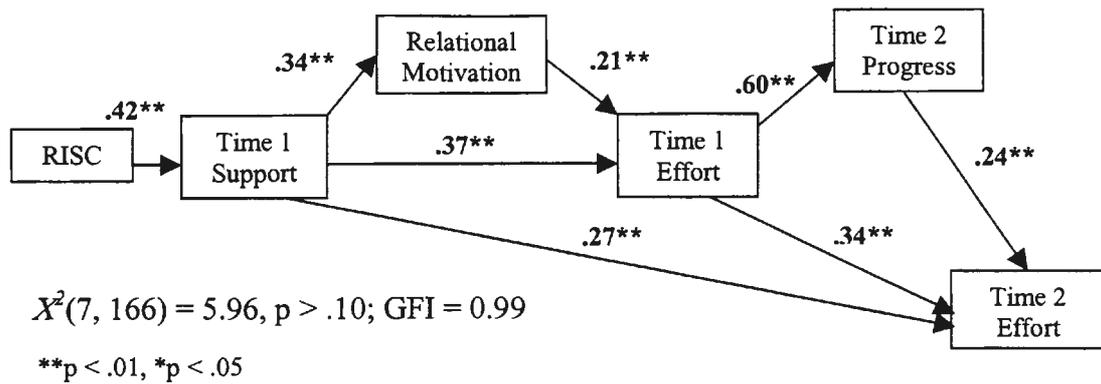


Figure 15. Model 2: The Relational Upward Spiral Model

The results of this analysis showed that the RISC scale predicted Time 1 support. Time 1 support then predicted relational motivation, Time 1 effort, and Time 2 effort. Relational motivation predicted Time 1 effort. Time 1 effort then predicted Time 2 progress and Time 2 effort and Time 2 progress also predicted Time 2 effort. The model fit the data well,  $X^2(7, N=166) = 5.96, p > .10, GFI = 0.99$ .

To test Model 3, the results of linear regression analyses were identical for the trend of RISC scale predicting Time 1 support, and Time 1 support predicting relational motivation. Time 1 support also predicted self-concordance ( $\beta_{Support} = .30, p < .01$ ). The RISC scale, Time 1 support, and relational motivation all predicted Time 1 effort ( $\beta_{RISC} = .16, p < .05; \beta_{Support} = .29, p < .01; \beta_{Relational\ Motivation} = .18, p < .05$ ), but self-concordance did not predict Time 1 effort ( $\beta_{Self-Concordance} = .08, n.s.$ ). Time 1 effort then predicted Time 2 progress ( $\beta_{Effort} = .60, p < .01$ ). Time 1 support, Time 1 effort, and Time 2 progress all predicted Time 2 effort ( $\beta_{Support} = .25, p < .01; \beta_{Effort} = .32, p < .01; \beta_{Progress} = .24, p < .01$ ).

These analyses suggest that adding self-concordance to the model does not change the results

very much. The overall model was tested using LISREL 8.5 (Jöreskog & Sörbom, 2001; see Figure 16). For Model 3, the path coefficients of the RISC scale predicting Time 1 support, predicting relational motivation was the same as in Model 2. Time 1 support also predicted self-concordance. The residuals of relational motivation and self-concordance were positively correlated in this model. Both relational motivation and self-concordance predicted Time 1 effort. Time 1 effort then predicted Time 2 progress and Time 2 effort. Time 2 progress then predicted Time 2 effort ( $\beta_{Progress} = .24, p < .01$ ). The model fit the data well,  $\chi^2(10, N=166) = 6.52, p > .10$ , GFI = 0.99, see Figure 15. The chi-square difference test showed that Models 2 and 3 were not significantly different from each other,  $\Delta\chi^2(\Delta df = 3, N = 166) = 0.56, p > .10$ . Thus, adding self-concordance into the model did not significantly change the results of Model 2. Most important here, the addition of self-concordance in the model did not reduce the effects of relational motivation.

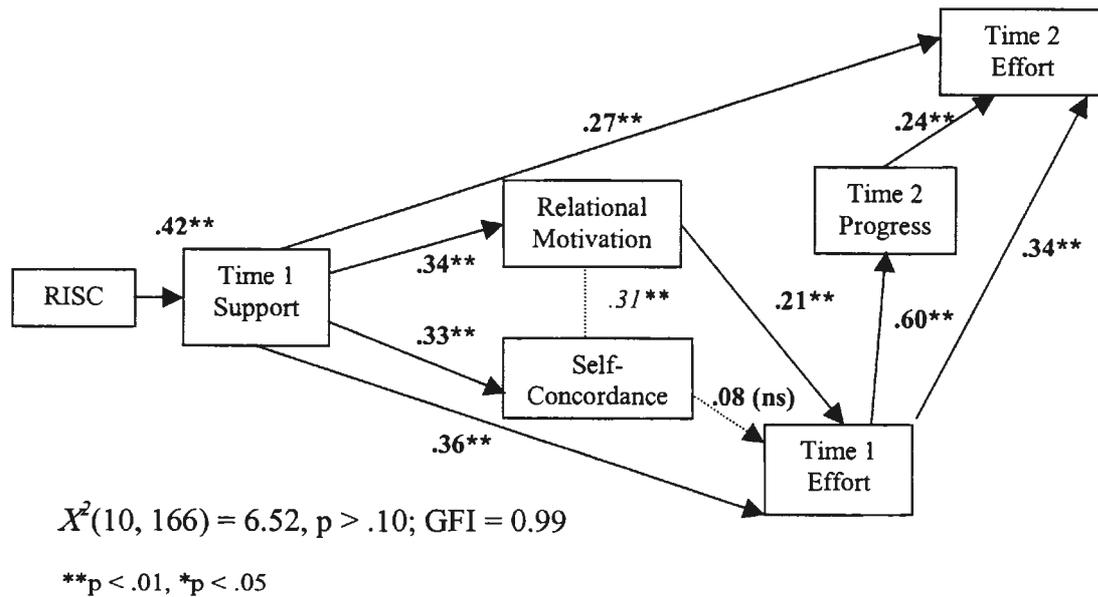


Figure 16. Model 3: The Relational Upward Spiral Model (with Self-Concordance)

## DISCUSSION

*The Relational Self-Construal, Relational Motivation and Self-Concordance*

One of the main purposes of this research was to test the theory that relational motivation for goals would serve as a motivator equal to that of goal self-concordance. In most cases, this theory was supported. Both self-concordance and relational motivation were related to goal effort, support and authenticity during the first session. The theory was strengthened when relational motivation was found to predict effort and support over and above self-concordance a month later (see Table 11). Particularly interesting were the patterns when academic goals and relationship goals were examined separately. Relational motivation showed a strong relation to the goal variables for relationship goals, whereas self-concordance showed a weak relation. This suggests that relational motivation would best be suited when examining the pursuit of goals that enhance, maintain or form current and future relationships. If we broadened our perspective to lifelong goals, it could be argued that relationship goals are just as important, if not more important, than academic, career, or otherwise personal goals, as relationships are fundamental to positive human functioning from birth to death. The pursuit of goals that are driven by personal wishes and desires (such as academic and career goals) seems to be constrained to a specific period during the life span, when people are establishing themselves within their career paths or creating a secure financial base. Self-concordance showed a strong relation to the academic goal variables. This supports what has already been found in the self-concordance literature, as most of the goals this research focuses on are academic goals. When looking at the typical population from which samples are taken (i.e., young adult students), self-concordance is a better predictor of attainment and perceived progress of goals that enhance one's academic, and

possibly career, pursuits. If the purpose of this research, however, is to expand beyond the period of academic pursuits, the inclusion of relational motivation must be considered.

Self-concordance was also a good predictor of relational components in goals. The findings of this study showed that self-concordance displayed a strong association with support and the number of relationship goals being pursued. The current research suggests, however, that the number of relationship goals pursued by low relationals differs from the number of relationship goals pursued by high relationals. Low relationals pursue relationship goals no matter the degree to which those goals are self-concordant. Perhaps the degree to which relationship goals are self-concordant does not factor into the reasons for pursuing these goals, and may factor into goals that only significantly affect the individual (see Figure 12). On the other hand, high relationals are less likely to pursue relationship goals when they serve a self-concordant function. For example, forming relationships in one's classes may be valuable in of themselves for high relationals, but if there is a possibility that this relationship could serve a personal interest (e.g., getting better grades), the relationship becomes less valuable because the implicit value of the relationship decreases. This is contrary to the Self-Determination and Self-Concordant literature's argument that goals reflecting the need for relatedness are pursued to serve a purpose of boosting autonomy. For high relationals, goals that reflect the need for relatedness are more valuable when they do *not* serve other needs.

This does not mean that high relationals have a low need for autonomy or are unaffected by goals that boost this need. Successful progression of academic goals for high relationals is related to their psychological well-being (see Figure 7). In fact, this relation is stronger for high relationals than low relationals. The argument here is that academic goal progress is a strong predictor of psychological well-being for high relationals but it is not a

strong predictor of their relational well-being. Why is there no relation between academic goal progress and psychological well-being for low relationals? This could perhaps be due to low relationals having a core self-worth that is unaffected by the degree to which they excel in school. Low relationals may feel that doing well in school does not reflect their worth as a person, but rather possessing positive traits should determine one's worth. This argument is only speculative, however, and needs to be explored in future research.

### *Comparisons of Upward Spiral Models*

The Self-Concordance Upward Spiral Model was supported in this study, especially when purpose in life was used as the well-being component. The inclusion of other well-being indices (i.e., psychological and relational well-being) in this model, however, is not recommended (see Figures 9, 10 and 11). When psychological and relational well-being were included, the model did not show an upward spiral trend, especially in the case of psychological well-being, which was found to have a weak relation to future effort toward goals. Thus, it is recommended that future research in the domain of the self-concordance model should only use purpose in life or some other well-being measure that is more related to goal pursuits.

The inclusion of social support for goals in the relational model (see Figure 14) was based on the finding that support mediated the relation between the relational self-construal and relational motivation. The importance of studying the effects of support in goal research is discussed in more detail below. When support is included, the model showed a good fit, suggesting that support is an important component in the pursuit of goals, especially when the focus is on relational motivators for goals. Thus, future research on the relational model should include a measure of support, as it is a fundamental component within this model.

When relational motivation and self-concordance are both included in the upward spiral model (see Figure 15), we find that both make a significant contribution to the model, though relational motivation was a stronger predictor of effort. This suggests that the pursuit of goals for relational reasons follows the same upward spiral trend as self-concordance influencing the degree of effort committed to goals, which then follows the pattern of leading to successful progress toward the goal, which then serves as a motivator for future effort toward the goal. This again supports the original theory that the degree to which a goal possesses a relational component influences effort over and above the degree to which the goal is self-concordant.

#### *The Role of Social Support*

Support for goals was found to mediate the relation between the relational self-construal and relational motivation. This suggests that the degree to which high relationals are motivated for relational reasons is based upon the degree to which they are receiving social support for those goals. In other words, a person who is highly relational will pursue a goal for relational reasons, but if they are not receiving support from their close others to pursue the goal they will be less motivated. This is why support was included in the relational model (see Figure 14). In addition, support for goals was found to predict future effort over and above progress of goals in the relational model. This suggests that support has a powerful function in the pursuit of goals. Whether or not one's efforts are paying off, the degree to which close others support one's pursuits serves as a strong motivator for future effort toward the goal. Consider the difference in a child's motivation to do well in school in the case where the parents are highly supportive, versus another case where the parents are not supportive. The child who is encouraged by close others should be more motivated to do

well, despite the fact that he or she may not like school very much (i.e., school is not self-concordant).

Particularly puzzling in this study was the relation between support and relational well-being for low relationals compared to high relationals (see Figure 8). Although there was a strong positive association between support and relational well-being for both high and low relationals, low relationals showed a stronger association. This can be explained in the same manner as before, where high relationals have a set level of relational well-being, which supercedes the influence of external stimuli, much in the same manner as low relationals may have a certain “immunity” within their personal well-being in response to external stimuli. The importance of close relationships is very high for high relationals, but receiving support for goals does not seem to influence their relational well-being as much as it does for lows. For low relationals, receiving support for goals may be one of the few indicators of successful relationships, whereas for high relationals there may be several indicators for successful relationships that go beyond what the individual receives from close others. These indicators could include time spent together, intimacy, or commitment. Regardless of the explanation for this effect, future exploration would be beneficial.

#### *Long-Term and Short-Term Goals*

The research on goal motivation tends to focus on goals that can be achieved within a relatively short period of time. This is yet another distinction between relationship and academic goals. Most academic goals are formed with a foreseeable endpoint where the goal can either be achieved or not. In addition, the progress and attainment of academic goals are objective. A person can perceive academic success based on grades, time spent in school, or

some other tangible indicator. Relationship goals are more subjective and are less likely to have a foreseeable endpoint.

Many students want to be successful in school, and many want to have a successful marriage. For the academic goal, the years involved in the assessment process are easily calculated, as it is typically assumed that one will not be in school for more than a few years. As mentioned before, success is typically measured in terms of grades or some other objective assessment. For the relationship goal, the assessment of success is not agreed upon, as couples remain together for different reasons. The only tangible indicators of failure are number of arguments or likelihood of divorce, although even these indicators are subjective. In addition, years in a marriage are unknown. The current study showed that relationship goals are more likely than academic goals to be ongoing, and academic goals are more likely than relationship goals to be short-term. Part of this is because of the uncertainty of the outcome of relationship goals, and another part is that people seek to form long-lasting relationships with others. If lifelong goals are of interest in psychology, then considerable attention should be directed toward the inception process and determinants of success for such goals. In addition, if relational goals are to be studied in more detail, new methodologies must be employed that are better suited for examining ongoing goal processes.

#### *Limitations and Future Research*

One of the more obvious limitations of this study was the age and ethnicity of the sample. Almost all of the participants were young adult, European-American students. Therefore, the degree to which these findings may be applied to a more global population remains to be seen. Current research is being conducted using a Japanese sample to determine if these results are replicated within a culture that places a greater overall emphasis

on relationships. Both the self-concordance and relational models will be tested, as well as the degree to which relational motivation predicts goal variables controlling for self-concordance. In addition, we will explore the degree to which social support for goals comes into play within the Japanese culture. We expect to find strong support for the relational model in East Asian cultures, as they tend to be more interdependent than Americans, and less support for the self-concordance model. This is one direction in which we will expand. The age of the Japanese sample will be the same as in the current study, which means that the exploration of goals among other age groups will not be explored, though we hope to test the relational model across several social categories.

Another limitation of this study was that the self-concordance upward spiral model in the current study was quite different from the model tested by Sheldon & Houser-Marko (2001). The well-being measures were different in scope (psychological well-being in the current study; adjustment in the 2001 study), and the time intervals were longer in the 2001 study (several months) than in the current study (one month). In addition, the attainment of goals was measured differently in each study. The 2001 study used a measure for attainment that more closely resembled the progress measure of the current study than the attainment measure of the current study. Thus, direct comparisons of the two models should be done carefully, as the methodologies were distinct, although the conceptual structures of the two models are arguably quite similar. With further exploration, more direct comparisons can be made, and the degree to which each form of motivation contributes to goal striving will be ascertained.

### *Conclusions*

There is more to the self than personal interests and desires. For people with highly relational self-construals, disconnecting the self from others is nearly impossible, which calls into question the argument that goals fulfilling a need for autonomy are the most valuable. Goals that only benefit the individual are seen as lacking in value, and such goals are passed over for goals that instead enhance or maintain relationships. As social beings, humans in general are driven by several relatedness needs that are often overlooked in the contemporary literature. More often than not, the emphasis is placed on needs for autonomy or control, with less of an emphasis on needs for social connection and intimacy. If these relational components are important human needs, then they deserve more than marginal discussion in the context of motivation. The current study is a step toward giving the need for relatedness a stronger voice in the goal literature and placing it on an equal, if not superior, level to other human drives. To understand the nature of goals, we must first understand the nature of motivation. To understand motivation, we must first understand what drives human beings. One of the most basic of these drives is the need for relatedness, and this drive has been deemed subordinate to other drives if not in theory, then in practice. This drive is fundamental to our goals, just as goals are fundamental to our lives.

## REFERENCES

- Baumeister R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Beck, A. T. (1967). *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania Press.
- Clark, M. S., Ouellette, R., Powell, M. C., & Millberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology*, 53, 94-103.
- Cohen, S., Karmarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122, 5-37.
- Cross, S. E., & Markus, H. R. (1999). The cultural constitution of personality. In Pervin, L. A. & John, O. P. (Eds.), *Handbook of personality: Theory and research* (2<sup>nd</sup> ed.) (pp.378-396). New York, NY: The Guilford Press.
- Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*, 78, 791-808.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS: Catalog of Selected Documents in Psychology*, 10, 85.
- Deci, E.L., & Ryan, R. M. (1984). The basis of self-determination: Intrinsic motivation and integrated internalizations. *Academic Psychology Bulletin*, 5, 21-29.

Deci, E.L., & Ryan, R.M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Vol. 38. Perspectives on motivation* (pp. 237-288). Lincoln: University of Nebraska Press.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.

Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349-366.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518-530.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence and relatedness. *Personality and Social Psychology Bulletin*, 26, 419-435.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.

Schwartz, B. (2000). Self-determination: The tyranny of freedom. *American Psychologist*, 55, 79-88.

Sheldon, K. M., & Elliot, A.J. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons for goals as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, 24, 546-557.

Sheldon, K. M., & Elliot, A.J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482-497.

Sheldon, K. M., & Hauser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *Journal of Personality and Social Psychology*, 80, 152-165.

Sheldon, K. M., & Kasser, T. (1988). Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Personality and Social Psychology Bulletin*, 24, 1319-1331.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580-591.