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Interpersonal Dimensions of Goal Pursuit: Goal Support, Shared Goals, Communal Strength, and Generativity in Relationship to Self-Determination Theory

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UNIVERSITY OF MIAMI

INTERPERSONAL DIMENSIONS OF GOAL PURSUIT:
GOAL SUPPORT, SHARED GOALS,
COMMUNAL STRENGTH AND GENERATIVITY
IN RELATIONSHIP TO SELF-DETERMINATION THEORY

By

Christine O. Mollica

A DISSERTATION

Submitted to the Faculty
of the University of Miami
in partial fulfillment of the requirements for
the degree of Doctor of Philosophy

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December 2008

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Interpersonal Dimensions of Goal Pursuit: Goal Support, Shared Goals, Communal Strength and Generativity in Relationship to Self-Determination Theory.

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Self-Determination Theory (SDT) research on goal pursuit indicates that people with intrinsic goal pursuits experience greater well-being than those with extrinsic goal pursuits. Three nutrients have been suggested by SDT that facilitate intrinsic motivation: autonomy, competence and relatedness. These nutrients, considered social conditions by SDT, have been understudied. However, recent SDT research and the small literature on goal support in relationships suggest that social aspects of goal pursuit are quite relevant and warrant further investigation. This study examined interpersonal dimensions of goal pursuit including Goal Support, Shared Goals, Communal Strength and Generativity. This interpersonal cluster was examined in the context of “active involvement with others” in order to enrich our understanding of the link between goal pursuit and psychological well-being. This study was the first to explore these interpersonal dimensions of goal pursuit and well-being in the context of SDT. Correlations explored the relationships among the interpersonal dimensions and regression analyses were used to explore moderating effects the interpersonal dimensions had on the relationship between self-concordant (intrinsic/extrinsic) goal pursuit and well-being. Shared goal orientation was the only dimension to act as a moderator. Implications include continuing to identify the active role of others in one’s goal pursuits and adding further understanding to the relationship between goal pursuit and well-being.

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CHAPTER ONE

Introduction

Personal goals are intricately tied to our psychological well-being and sense of meaning in life (McGregor & Little, 1998). While goal pursuit is a complex, multifaceted psychosocial construct, research has largely focused on personal goals of individuals in isolation. This study expands on this important work by addressing the role of interpersonal dimensions in personal goal pursuits and the influence of these dimensions on the link between goal pursuits and well-being outcomes.

Self-Determination Theory (SDT; Ryan & Deci, 2000a) is an established theory of goal pursuit. A major focus of SDT is the distinction between extrinsic and intrinsic motivation. According to SDT, intrinsic motivation is the “natural inclination toward assimilation, mastery, spontaneous interest and exploration ...that represents a principal source of enjoyment and vitality through life” (Ryan & Deci, 2000a, p. 70) while extrinsic motivation is characterized as performing “an activity in order to attain some separable outcome” such that engaging in the activity does not provide satisfaction in itself (Ryan & Deci, 2000a, p. 71). Extrinsic and intrinsic motivations are conceptualized as existing on a single continuum (i.e., from extrinsic to intrinsic), with more intrinsic motivations associated with greater well-being (Kasser, T. & Ryan, 1996; Ryan, Chirkov, Little, Sheldon, Timoshina, & Deci, 1999).

SDT theorizes that when specific social needs, or nutrients, are met, an individual is better able to experience intrinsic motivation, engage in self-determined behavior, and thus achieve greater well-being. These three nutrients are autonomy, competence and relatedness. While they are social conditions by nature, research has

generally ignored the role that significant others play in personal goal motivation and pursuit. For instance, relatedness (i.e., secure attachment to others according to SDT) may be the most ‘social’ of the three conditions, but it is the least developed or defined construct and is considered a lesser or more distal nutriment. More recent SDT research suggests, however, that relatedness may be the strongest predictor of relationship well-being relative to the other two conditions (Patrick, Knee, Canevello, & Lonsbary, 2007). Emerging findings thus suggest that the interpersonal aspects of goal pursuit are relevant and warrant further investigation.

In addressing social influences within the SDT framework, the concept of autonomy support has been introduced as the behaviors of others that facilitate an environment in which one can act in accordance with the self. While autonomy support has been suggested to promote intrinsic motivation, it only broadly defines others as supportive or controlling. Thus, it does not adequately capture the complexity of interpersonal influences on motivation. Further, it does not account for the active role that others may take in one’s goal pursuits (e.g., partnering to pursue a shared goal). SDT literature thus focuses largely on the individual and relegates significant others to a relatively passive role.

Although the social dimensions of SDT have received some empirical attention, the majority of SDT research conceptualizes goals almost exclusively as individual pursuits. Given the potentially important role of interpersonal relatedness and support in the context of personal goals, I directly examine whether specific interpersonal dimensions may enrich our understanding of the link between goal pursuit and psychosocial well being.

Interpersonal dimensions of goal pursuit represent a level of social engagement and perceived responsibility towards others that have not been explored previously in SDT literature. Such dimensions (e.g., receiving Goal Support from significant others, partnering with others in joint pursuits, and having a sense of stewardship and accountability for the welfare of others) offer a more detailed understanding of the social context of goal pursuit. The dimensions direct our attention to more active forms of involvement in one another's goal pursuits, including joint behaviors such as teamwork and joint pursuits such as friendship.

This study examines four interpersonal dimensions of goal pursuit: Goal Support, Shared Goals, Communal Strength and Generativity. Goal Support refers to those specific behaviors by a friend or partner that bolster the pursuit and attainment of personal goals (Brunstein, Danglemayer, & Schultheiss, 1996). Shared Goals represent joint pursuits such as friendship or teamwork (Fowers, 2005). Communal Strength is the degree to which a person is willing to make sacrifices to help a friend or partner achieve his or her goal (Mills, Clark, Ford, & Johnson, 2004). Finally, Generativity is the level of concern for the next generation and the goals one undertakes to provide for future generations (McAdams & de St. Aubin, 1992). These four dimensions represent an interpersonal cluster of behaviors that have not been examined in SDT literature to date. They signify an active level of social interaction that contextualizes one's personal strivings.

This study investigates these four promising, but understudied, social aspects of goal pursuit and their integration with SDT. Findings increase our understanding of the active role of others in one's goal pursuits. Further, this study helps identify the role of

interpersonal dimensions in determining the relationship between goal pursuit and well being.

In brief, SDT is a well investigated and prominent theory, but it insufficiently characterizes the interpersonal dimensions of goal pursuit. While the theory does address the importance of relating to others (Ryan & Deci, 2001), theory and research are limited. SDT presents the three nutriments (i.e. autonomy, competence and relatedness) only as social contexts that are necessary to bolster what is already inherent to the self. Examining goal pursuits in the context of interpersonal dimensions thus represents a departure from the more prevalent emphasis on the individual. These dimensions reflect a social interplay that may influence how goal pursuits affect well-being. The dimensions may therefore provide a more robust understanding of SDT's nutriments and supporting concepts (such as autonomy support).

This study is the first to examine specific interpersonal dimensions in the context of SDT and their role as predictors of well-being. It is hypothesized that interpersonal elements will expand our understanding of the link between intrinsic versus extrinsic goal pursuits and well-being.

CHAPTER TWO

Literature Review

This review provides background on Self-Determination Theory (SDT), the brief literature on Goal Support in relationships and the four interpersonal dimensions of goal pursuit. The first section begins with a general review of SDT. This is followed by an examination of studies using SDT to understand goal behaviors. Research on SDT as it relates to supportive behaviors is then presented. The small body of literature on Goal Support in personal relationships is then discussed. Additionally, a new theory of Shared Goals will be presented along with two remaining dimensions of interpersonal goal pursuit: Communal Strength and Generativity. Finally, the chapter concludes with a summary of the literature and a presentation of the research hypotheses guiding this study.

Self-Determination Theory

SDT (Ryan & Deci, 2000a) was formalized in the mid 1980s by Deci and Ryan (1985) stemming from a decade of previous research on intrinsic and extrinsic motivation. Today, it is a prominent theory of motivation that has developed through empirical work across such disparate areas as sports and exercise (Gagne, Ryan, & Bargmann, 2003), mindfulness (Brown & Ryan, 2003), education (Grolnick, Farkas, Sohmer, Michaels, & Valsiner, 2007), health care (Williams, Lynch, & Glasgow, 2007), relationships (Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002), psychopathology (Soenens, Vansteenkiste, Vandereycken, Luyten, Sierens, & Goossens, 2008), organization and work (Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte, & Van

den Broeck, 2007), parenting (Assor, Roth, & Deci, 2004), self-esteem (Patrick, Neighbors, & Knee, 2004) and goals (Sheldon, Ryan, Deci, & Kasser, T., 2004).

In the broadest terms, SDT posits that there are three innate needs or “nutriments” that when met, will lead to psychological well-being and enhanced intrinsic motivation. These needs are autonomy, competence and relatedness.

Autonomy is defined as volitional and integrated self-regulation (Ryan & Deci, 2000a). It is imperative to differentiate SDT’s definition of autonomy as self-governance from the more common meanings (as levied by their critics) of free will, independence, detachment or individualism (Ryan & Deci, 2000a, 2006). It is decidedly not in this independence vein, as according to the theory, one can be behaving autonomously, yet acting in either a dependent or independent manner. For example, a fraternity member who truly desires to follow his brothers’ social norms is acting in a dependent manner, but it is still autonomous in nature as the behavior is innately satisfying and internally regulated (Deci & Ryan, 2000). Further, using samples from both the U.S. and Korea, their research has shown a stronger correlation between autonomous behavior and a collectivist mentality than autonomous behavior and an individualistic mentality (Kim, Butzel, & Ryan, 1998).

Another defining aspect of the theory is the idea of autonomy versus control, in that the more one experiences a controlling environment, the less autonomy one feels. The foundation for contrasting autonomy with control comes from studies demonstrating that extrinsic rewards ultimately weaken intrinsic motivation (e.g., Lepper, Green, & Nisbett, 1973). Deci (1975) deduced that the presence of external rewards is a type of control and therefore reduces feelings of autonomy.

Competence is defined as experiencing efficacy, as well as garnering positive feedback as opposed to critical evaluations. It is noteworthy that SDT stipulates that the experience of competence alone does not foster intrinsic motivation, but requires a sense of autonomy as well.

Lastly, relatedness can be understood best in terms of attachment theory. In borrowing that theory's language, SDT puts forward that intrinsic motivation is more likely to thrive in people who experience secure attachment in their relationships. V. Kasser and Ryan (1999) describe relatedness as "the need to feel securely connected with and loved by other people" (p. 939). Relatedness has been presented as the "least" of the needs and has been the focus of little SDT research. That is, while playing a role, relatedness is considered to play "a more distal one in the maintenance of intrinsic motivation" (Deci & Ryan, 2000, p. 235). As many "intrinsically motivated behaviors are happily performed in isolation, suggesting that proximal relational supports may not be necessary for intrinsic motivation, but a secure relational base does seem to be important for the expression of intrinsic motivation to be in evidence" (Ryan & Deci, 2000a, p. 71). My study aims to enhance our understanding of this "distal" need, by examining interpersonal dimensions of goal pursuit that have received scant attention in the literature. My study is designed to identify those interpersonal aspects that may be germane to the experience of intrinsic goal pursuit and well-being.

According to SDT, in order to truly act in a self-determined manner, one must experience all three conditions of autonomy, competence and relatedness. Specifically, SDT examines these needs as social contextual conditions that foster and maintain intrinsic motivation, as opposed to suppressing it. Simply put, autonomy, competence

and relatedness are the identified factors that allow an individual's intrinsic motivation to flourish rather than diminish (Ryan & Deci, 2000a).

In terms of research that supports these claims, Ryan and Deci (2000a) state that initial laboratory experiments and subsequent field work helped formulate the connection between autonomy and competence and the positive processes such as intrinsic motivation. The authors state that the “empirical methods used in much of the SDT research have been in the Baconian tradition, in that social contextual variables have been directly manipulated to examine their effects on both internal processes and behavioral manifestations” (Ryan & Deci, 2000a, p. 69). Specifically, they cite work by Fisher (1978), Ryan (1982) and Reeve (1996) in support of autonomy and competence being positively related to intrinsic motivation (as cited in Ryan & Deci, 2000a). Studies cited for supporting the need for relatedness involve children in the presence of cold and indifferent teachers (Ryan & Grolnick, 1986) or with adult strangers ignoring/not responding to them (Anderson, Manoogian, & Reznick, 1976) that result in the children exhibiting low intrinsic motivation (as cited in Ryan & Deci, 2000a and Deci & Ryan, 2000).

While SDT offers a detailed look at intrinsic motivation and the necessary social environment for its maintenance and growth, it also studies extrinsic motivation in contrast. According to SDT, extrinsic and intrinsic motivations operate on a single self-determination continuum (Ryan & Deci, 2000a). They range in increasing degree of self-determination from Nonself-Determined (complete amotivation), through four degrees of extrinsic motivation, and finally onto fully Self-Determined (intrinsic motivation).

At its most basic, this continuum describes not only the range of self-determined behaviors (and their increasing relative autonomy) but also four degrees of extrinsic regulation: external regulation, introjected regulation, identified regulation and integrated regulation (integrated regulation being the most self-determined and internalized out of the four extrinsic motivations). Although SDT theorists differentiate six levels of motivation conceptually—from amotivation, to the four extrinsic degrees and then onto intrinsic motivation, the majority of SDT research uses a single dimension measure of extrinsic and intrinsic motivation and does not further discriminate among the four finer degrees of extrinsic behavior. For the purposes of this study, the simple continuum of intrinsic and extrinsic motivation will also be employed. Therefore, I will refrain from providing a more detailed explanation into the varying degrees of extrinsic regulation of behaviors. (See Burton, Lydon, D’Alessandro, & Koestner, 2006 and Pelletier, Fortier, Vallerand, & Briere, 2001 for studies examining the varying degrees of extrinsic and intrinsic behavior.)

SDT defines extrinsic motivation as performing those behaviors whose outcomes will be discrete and distinguishable from the self, as opposed to intrinsically motivated behaviors that are done solely for the sake of enjoyment in the behavior and the resulting satisfaction (Deci & Ryan, 2000a). However, one of the finer points of SDT is that not only intrinsic behaviors can be autonomous, rather, extrinsic behaviors can also display varying degrees of autonomy. Deci and Ryan’s example of extrinsic motivation that exhibits relative autonomy is that of students completing homework because it is necessary for an intended career choice versus completing homework because parents make them. While both are examples of extrinsic motivation, as the students are not

completing the homework for the “joy” of doing homework, the student working towards achieving the career interest is exhibiting more autonomy in that there is a sense of personal agency or endorsement of the choice as opposed to simply obeying authority in the latter case. Thus, the “homework for my future career” student has a more internal perceived locus of causality, feels more autonomous and has a more fully integrated regulation of the extrinsic motivation that is “to do homework”.

In review, a key point of the theory is that autonomy, competency and relatedness facilitate both intrinsic motivation and the integration of extrinsic behaviors, but there are also conditions that undermine or thwart these nutrients (such as alienation and inauthenticity) and therefore stall the experience of intrinsic motivation or the integration of extrinsic motivation (for a brief review of the research supporting the empirical relationship between need fulfillment and well-being see Patrick, Knee, Canevello, & Lonsbary, 2007). Further, SDT posits that when these needs are not met, well-being suffers (V. Kasser & Ryan, 1999; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

This concern for psychological well-being is now the main outcome variable of interest within SDT. To review, from the theory’s infancy, the initial questions concerned 1) how to define intrinsic motivation, 2) identification of the processes that integrated regulation of extrinsic motivations into more self-determined behaviors and finally, 3) definition of the psychological needs, that when met, best allowed for these internal regulations (again, autonomy, competence and relatedness in a non-controlling social environment). While SDT research has since focused on the relationship between psychological well-being and the satisfaction of the three essential needs, attention also

turned toward the pursuit of goals that met these needs. (See Deci & Ryan [2000] for an in-depth review).

SDT and Goals Research

Self-Determination theorists hypothesized that goals which were in line with satisfying the three needs would lead to greater psychological well-being (Ryan, Sheldon, T. Kasser, & Deci, 1996) as opposed to those goals that detracted from the three needs and instead lead to alienation, conflict and psychopathology. Further research (T. Kasser & Ryan, 1993, 1996) explored the different outcomes of pursuing intrinsic versus extrinsic goals. They found that individuals placing importance on intrinsic goals, or those goals that are in alignment with the basic needs (which in the early SDT research of the 1990s included such concepts as self-acceptance, personal affiliations and community feeling), were positively associated with outcomes such as vitality, greater self-actualization, self-esteem and less anxiety and depression. In contrast, those pursuing extrinsic goals (such as wealth and social status) which are described as indirectly satisfying the basic needs, were found to be associated with negative indicators of well-being. More research followed (Ryan, Chirkov, Little, Sheldon, Timoshina, & Deci, 1999; Sheldon & T. Kasser, 1998; Sheldon & Elliot, 1999) that strengthened the theory that the attainment of intrinsic goals was positively linked to psychological well-being whereas success at extrinsic goals contributed little to indicators of well-being (see Figure 1).

Ryan and Deci (2000a) attribute the propensity of people to pursue goals that are unfulfilling to a variety of causes, citing studies that implicate the media's influence toward consumerism to non-nurturing or controlling home environments during

development. In general, they state that the lack of basic need fulfillment can change the types of goals we value and can lead to compensatory behaviors such as extrinsic goal pursuits.

Cross-cultural validity of the theory was supported with two studies. Ryan et al. (1999) replicated previous findings (T. Kasser & Ryan, 1996) with a comparative Russian sample, and Schmuck, T. Kasser, and Ryan (2000) studied a sample of German and U.S. college students which bore out similar findings to the initial U.S. samples that extrinsic goals are related to diminished well-being. While Ryan and Deci are quick to specify that specific goal content and meaning will vary by cultural influence, they claim that the link between basic need satisfaction and resulting well-being is universal (Ryan & Deci, 2000b).

Sheldon and colleagues (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001) expanded on SDT by exploring intrinsic motivation and well-being via the construct of “Self-Concordance”. Self-Concordance is operationally defined as the “the rated extent to which people pursue their set of personal goals with feelings of intrinsic interest (Csikszentmihalyi, 1993) and identity congruence (Brunstein & Gollwitzer, 1996; Little, 1993), rather than with feelings of introjected guilt and external compulsion (Deci & Ryan, 1985, 1991)” (Sheldon & Houser-Marko, 2001, p. 153).

Results indicated that people with high self-concordance were not only more likely to attain their goals, but that those attained goals brought increased well-being, with the “attainment-to-well-being” effect mediated by the satisfaction of the three nutrients (Sheldon & Elliot, 1999). Sheldon and Houser-Marko (2001) also found that self-concordance in one’s goals led to greater well-being, but their results also indicated

that attaining self-concordant goals led to even greater self-concordance and greater well-being in subsequent goal pursuits creating an “upward spiral” over time. Additionally, Sheldon and Houser-Marko (2001) cite previous research (Sheldon & T. Kasser, 1995, 1998) of which they state “participants with higher self-concordance scores perceived more linkages between their goals and their long term values and better enjoyed the process of goal pursuit” (p. 153).

Further, Koestner, Lekes, Powers and Chicoine (2002) conducted three meta-analyses and found that 1) self-concordant goals are linked to greater goal progress, 2) goal progress leads to increased positive affect and 3) goal implementation intentions facilitate goal attainment. Additionally, in their subsequent research with undergraduates, they replicated two previous findings in the literature and added their own original findings as well. The first replication study confirmed Sheldon and colleagues (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001) conclusions that self-concordant goals are positively related to goal progress; while the second replication study confirmed that goal progress is correlated with both decreased negative affect and increased positive affect. The authors’ results indicate that the combination of self-concordant goals and implementation intentions is a strong predictor of goal progress.

Another important aspect of the self-concordance research is that it all makes use of idiographic goals, meaning goals that are actually written by the participants in their own words. This is in contrast with the “generic” lists of personal goals that are typically provided to participants in order to test researchers’ claims as in the majority of SDT goal research. For example, a study by Vansteenkiste, Simons, Lens, Sheldon and Deci (2004), which explored “synergistic effects of intrinsic goal contents and autonomy

supportive contexts” experimentally manipulated intrinsic and extrinsic texts to represent goal content. Participants then responded to these experimentally manipulated goals. Like many studies in the SDT goal pursuit literature, the high school and college student participants were not working with idiographic goals in order to ascertain their motivation.

Sheldon and Elliot (2000) also provide some important methodological findings. They begin by stating that using the participant’s actual, or idiographic, goals are more “personologically valid” in that they lend themselves to versatile measure construction as well as “naturally occupy participants’ attention over time” (p. 52). Also important is their finding that aggregating goal scores across multiple goals produces valid results, except when investigators have specific interest in contrasting the content of goals. While my study is not longitudinal in nature, it uses an aggregate scoring model in which ratings are summed across participants’ idiographic goals.

Finally, a debated area of SDT and goals research concerns the process and content of goals, or the “what” (striving for intrinsic or extrinsic goal content) and the “why” (striving for autonomous vs. controlled motives) as put forth by Deci and Ryan (2000). Their theoretical article makes the point that while the process of goal pursuit is surely important, simply pursuing any type of goal (whether intrinsic or extrinsic in content) is not enough to explain well-being outcomes. For example, the negative effects on well-being of an extrinsic pursuit is not completely accounted for only looking at the “why” process. However, Carver and Baird (1998) have critiqued this aspect of SDT, stating that while they are not in disagreement with the underlying “spirit” of SDT, their findings suggest that the primary emphasis should be placed on *why*, or the reasons, one

aspires to their goal as opposed to greater emphasis on goal content in order to better understand motivation. That is, it is not the extrinsic content that is the problem so much as why people are pursuing the extrinsic goals that affects well-being (i.e. whether they are acting from autonomous or controlled motives). These ideas suggest that SDT proponents may have conflated the autonomy of the actor and the intrinsic value of goals (Fowers, Mollica, & Procacci, 2007). This critique is again answered by Sheldon et al. (2004), who feel that their position has not been fully understood and reiterate that their research supports that “it’s both what you pursue *and* why you pursue it” (p. 484).

In summary, SDT views intrinsic and extrinsic goals as vehicles for need fulfillment (or need compensation) and subsequent well-being (or ill-being). This understanding of psychological needs allows for prediction of the conditions necessary for those goals that will lead to better performance and mental health outcomes. While many studies have explored the three conditions needed for facilitating self-determination, it is a problem that studies have not specifically examined the interpersonal dimensions of goal pursuit. Instead of studying people and their goal pursuits within these interpersonal contexts, the focus has more frequently been on people acting in isolation.

SDT and Types of Support

Since Ryan and Deci’s (2000a) most recent formulation of SDT, studies have focused on testing and broadening facets of the theory across many disparate fields, but most have focused on exploring aspects of the three needs, or social conditions, in more detail. For example, there are many studies from various areas that have examined

“autonomy support” (e.g., Chirkov & Ryan, 2001; Reeve, 2006; Vansteenkiste et al., 2004).

Deci, Eghrari, Patrick and Leone (1994) studied baseline components of an autonomy supportive context as “a combination of meaningful rationale, an acknowledgment of conflicting feelings, and a style that...conveys choice” (p. 125). Autonomy support in a recent study using a sample of personal friendships is defined as “one relational partner acknowledging the other’s perspective, providing choice, encouraging self-initiation, and being responsive to the other” (Deci, LaGuardia, Moller, Schiener, & Ryan, 2006, p. 313).

Autonomy support has taken on flexible meanings in other studies according to the population. For example, Gagne (2003) examined prosocial engagement and/or volunteer work where autonomy supportive contexts are defined “as giving people choice and encouragement for personal initiative and also support people’s competence in a climate of relatedness...” whereas the opposite is a controlling context (p. 203). The definition is quite general referring to broad concepts of choice, encouraging personal initiative and acknowledging another’s perspective. This general concept of autonomy support is then modified in studies to fit the particular context (e.g. Williams, Gagne, Ryan, & Deci, 2002).

There have been numerous studies conducted with elementary school through college age populations examining parental and teacher autonomy support and resulting outcomes (e.g. Black & Deci, 2000; Reeve, 2006; Soenens & Vansteenkiste, 2005; Soenens, Vansteenkiste, Lens, Luyckx, Goossens, Beyers et al., 2007) as well as autonomy support in the sports/exercise domain with adolescents and coaches (e.g.

Cumming, Battista, Standage, Ewing, & Malina, 2006; Pelletier et al., 2001). Another well studied area concerning autonomy support is adherence to healthcare regimes in populations specific to adolescents (e.g. Hill & Sibthorp, 2006) as well as to adults and their health care providers (e.g. Williams, Lynch, McGregor, Ryan, Sharp, & Deci, 2006; Williams, McGregor, Sharp, Levesque, Koudes, Ryan et al., 2006; Zoffmann & Lauritzen, 2006). These studies have found that autonomy support from a teacher, parent, coach or health care professional is beneficial for self-determined behavior. However, there is only one study that has addressed autonomy support within the context of non-hierarchical, adult, personal relationships using the SDT framework (i.e. Deci et al., 2006).

Deci et al. (2006) studied the benefits of giving and receiving autonomy support in “close friendships”. Autonomy support in Deci et al.’s study is defined as “one relational partner acknowledging the other’s perspective, providing choice, encouraging self-initiation and being responsive to the other” (Deci et al., 2006, p. 313). The authors’ measure was a self-report measure of autonomy support that assessed whether the participant perceived his or her friend providing choices and understanding of the respondents’ perspective.

The results indicate that receiving autonomy support from a friend strongly influenced the relationship quality, psychological health and experience of need satisfaction. Interestingly, the authors also conclude that in mutual autonomy supportive friendships, it is better to give than to receive autonomy support when predicting well-being.

Overall, the value in this study is that it is a first attempt within SDT to look at mutual relationships in terms of support. However, the idea of autonomy support seems limited to offering choice, understanding and encouragement, but no real active involvement in the behaviors by significant others. It seems reasonable that the active involvement of friends and family in one's goals and activities would have a more potent effect on goal pursuit and well-being than the more "passive" involvement of others described in SDT. One way to build on this initial SDT examination of the interpersonal and its relationships to well-being is to begin studying aspects such as responsibility to others and joint pursuits in relation to goal seeking and well-being.

Apart from autonomy support, there is one other type of support that has been explored in the context of SDT. In a single study, Ryan, La Guardia, Solky-Butzel, Chirkov and Kim (2005) examine "Emotional Reliance". Emotional Reliance (ER) is defined as:

...not a measure of emotional support per se but rather of a person's readiness to enter into interactions where emotional support may be available. We suggest that ER represents an individual difference variable in the sense that people differ in their overall willingness to turn to others for support. Yet, ER also varies within individuals from relationships as a function of the qualities of these specific relationships. (Ryan, et al, 2005, p.146)

Findings from Ryan et al. (2005) indicate that one's experience of ER is significantly assisted by a relationship partner that supports our needs for autonomy, relatedness and competence; that ER is positively related to well-being; and that need fulfillment mediates the relationship between ER and well-being. Meaning, people are going to rely more on those who meet their needs best and therefore experience greater well-being mainly because of the very fact that they are choosing to rely on those who best meet their needs.

While Ryan et al. (2005) focused on a specific type of emotional support, acknowledged the importance of relationships, and looked at well-being as an outcome, they did not examine goal pursuit behaviors or interpersonal dimensions of goals in any way. Instead, the study focused on how participants responded to “emotionally significant events” such as being anxious, experiencing a tragedy, feeling depressed, or being proud, etc.

SDT and Relationships

More recent SDT literature has begun to look at personal relationships with an SDT lens (e.g., Knee, Patrick, Viator, Nanayakkara, & Neighbors, 2002). The following two studies examine relationships and SDT; however, they do not include any type of support measures as in the previous section.

Patrick, Knee, Canevello and Lonsbary (2007) conducted three studies investigating SDT need fulfillment in the context of dyadic relationship well-being (as opposed to individual well-being) with undergraduate romantic partners. This study measured all three SDT needs and concluded that relatedness was the strongest predictor of relationship well-being; that mutual need fulfillment predicted one’s greater relationship well-being and finally, that relationship motivation mediated the association between need fulfillment and relationship quality. The mediation analysis outcome suggested that relatedness (theoretically the least powerful of the three needs) may be key in accounting for intrinsic relationship motivations in the context of close relationships. Most significantly, their conclusion that overall relatedness was the single strongest, and in many cases the only unique, predictor of relationship well-being indicates the importance of further exploring interpersonal dimensions. These results suggest the

importance of taking the next step to continue examining interpersonal dimensions and well-being in terms of intrinsic (or self-concordant) behaviors.

La Guardia, Ryan, Couchman, and Deci (2000) examined within-person variations in relationships with an SDT perspective using attachment to investigate need fulfillment and well-being. They found that need fulfillment (defined as fulfillment of the three SDT needs) predicts within person variations in attachment, that is, an individual will have different attachment styles based on different partners and be more securely attached to partners that meet their three needs. Results also indicated that “where satisfaction of the three needs competed for variance in predicting the attachment variables, the relatedness need was the strongest predictor...” (p. 380). This suggests the importance of acknowledging in the literature that relationships matter. That is, when researchers examined relatedness more closely, it was no longer “distal” but rather the strongest predictor of secure attachment. Therefore, it is not enough to simply study the intrinsic or extrinsic behaviors of an individual, or their autonomy supportive or controlling contexts (as in the earlier SDT literature), rather we should fully acknowledge the importance of relatedness. One way to further acknowledge the importance of relatedness is to include interpersonal dimensions such as mutual support and concern for others pursuits as variables of interest.

In review of the SDT literature, there remain “holes” in respect to the contributions that interpersonal dimensions of goal pursuit can make to further understand intrinsic motivation and well-being. This includes a more robust understanding of relatedness and autonomy support that denotes a richer, more active

interplay between individuals as relevant, and not just as the experience of passive encouragement from the sidelines.

Interpersonal Dimensions of Goal Pursuit

Van Lange (2000) comments upon an area of research yet to be explored within SDT that “focuses on relationship-relevant features, such as sympathy, commitment and trust, and interaction processes through which individuals communicate sympathy, commitment and trust” (p. 311). That is, “although SDT emphasizes the importance of social influences, SDT does not advance a systemic analysis of concepts such as social structures” and therefore limits understanding of the “basic situational features” that support the three needs (p. 310). While Van Lange presents alternative reasons for the demotivating effects of extrinsic rewards using interpersonal explanations (e.g. prosocial, reciprocal and strategy explanations), the focus of the argument is that SDT may be providing a “reasonable account of motivational processes in interpersonal situations” but that it must be understood in “light of alternative theories that focus on the sequence of behavior (i.e. patterns of social interaction) and relationship-relevant features that shape motivation, behavior and interaction” (p. 310). To further illustrate this point, he offers that one could behave in a self-sacrificing manner (such as sacrificing one’s time and energy to help someone else), that in effect would thwart the needs of competence and autonomy, but ultimately still be rewarding because of the “liking, trust and related forms of positive intent that such acts reveal” (p. 311).

While SDT has the needs of autonomy, competence and relatedness that are favorable social conditions for promoting intrinsic behavior, there have been no studies examining how these may play out in distinctly interpersonal domains. Rather, the

interpersonal dimensions proposed here (Goal Support, Shared Goals, Communal Strength and Generativity) perhaps offer a richer perspective on how individuals experience and actively partner with one another in personal goal pursuits as well as in their resulting well-being. That is, by focusing on the interpersonal dimensions of goal pursuit as possible predictors of well-being, these four dimensions, while distinct, may further define SDT's concept of relatedness and autonomy support. In accordance with this unexplored interpersonal area of research, the following provides a more in-depth look at each of the interpersonal dimensions being examined in my study (see Figure 2).

Goal Support

Goal Support is defined as “perceptions of how much goal-related social support [one] receive[s] from their partner”; while in contrast, negative support suggests “social undermining rather than a pure lack of support” (Brunstein et al., 1996, p.1007). More specifically:

A person is said to receive high support for personal goals from his or her partner if this partner (a) proves favorable opportunities to work on personal goals, (b) is responsive to the pursuit of personal goals, and (c) reliably assists the accomplishment of personal goals. Individuals who perceive their partner in this way are expected to feel both encouraged to enact personal goals and satisfied with the relationships to their highly supportive partner. In contrast, a person is said to perceive his or her partner as undermining the pursuit of personal goals if this partner (a) leaves no opportunities to work on personal goals, (b) is unresponsive to the pursuit of personal goals, and (c) behaves in ways that directly conflict with attaining personal goals. Individuals who appraise their partner in this way are expected to display both impaired enactment of personal goals, even if they feel committed to these goals, and lowered relationship satisfaction (Brunstein et al., 1996, p. 1007).

Although Goal Support may be related to one of the three needs (perhaps autonomy support or even relatedness), studying Goal Support can help to expand the reach of SDT. By exploring definitions of autonomy support versus Goal Support,

important differences emerge between the two constructs. For example, La Guardia et al. (2000) measured autonomy support by querying the degree to which one generally feels a significant other allows them to decide matters for themselves. This is in contrast to the specificity of the Goal Support measure which examines exactly how a partner is helping one succeed at one's goals. Other examples of autonomy support measures in the literature focus on the extent to which people in a position of authority, such as a parent or a coach, pressure the participant to behave in a certain way or to run their life accordingly (Gagne, 2003; Pelletier et al., 2001).

Conceptually, autonomy support can be viewed as keeping the supportive others at “arms-length”, while the individual decides on their path or action; versus Goal Supportive behaviors that require more active engagement of the other. Or to put it more succinctly, autonomy support is cheerleading, while Goal Support is partnering.

Evidence of Goal Support as a unique predictor of well-being is found in the small literature on relationships and Goal Support that exists outside the SDT area. Brunstein, Dangelmayer and Schultheiss (1996) conducted two studies examining the support of personal goals by a partner as it relates to subsequent satisfaction with the relationship. Their work concluded that Goal Support from significant others predicted both relationship satisfaction and personal goal enactment. These studies are a follow-up to Brunstein's (1993) previous longitudinal research with undergraduates that indicated the strongest predictor of subjective well-being was personal Goal Support by significant others. It is noteworthy that these results apply to those goals that are “personally meaningful”, or to translate into SDT language, goals that are most internalized or self-

determined. Likewise, the effects of this predictive social support on non-personally meaningful, or more extrinsic goals, has not been studied.

Shah (2003a; 2003b) has also researched how significant others impact goal pursuit. While a major aim of his work is to explore “automaticity”, the specific context is whether a significant other can automatically affect or influence our goal behaviors. The findings indicate that perceptions of significant others’ expectations not only affect one’s own goal expectations but also task performance, persistence, perceived value of goal attainment as well as influencing the response to success or failure of the goal pursuit. Further, Shah suggests that participants’ goals are actually primed by the presence of a significant other and that this priming affects goal pursuit and the amount of attention paid (or not paid) to a goal. This line of inquiry is pertinent not only in that it indicates significant others strongly affect our goal pursuits but that significant others have rightfully earned a place in goal research both in terms of Goal Support and Shared Goal pursuits.

Fitzsimons and Bargh (2003) found support in four priming studies for their hypothesis that interpersonal goals (meaning those goals that “attain, maintain, or avoid a specific end state for the partner or relationship such as to help the partner, maintain closeness or avoid rejection” (p. 150) form some of the very features of relationship schemas and that being primed with these representations can evoke and activate the goals and even guide behavior in a “nonconscious” manner.

Other research (Feeny, 2004; Kaplan & Maddox, 2002) examined Goal Support in marital couples. Feeny (2004) explores Goal Support in terms of attachment theory. Feeny’s results indicate that support for a relationship partner’s goal pursuits have

“important implications for the recipient’s happiness, self-esteem, and perceived likelihood of achieving specific goals” (p. 631). Additionally, Kaplan and Maddox (2002) found that perceived Goal Support increases marital satisfaction.

It is clear that Goal Support is not synonymous with autonomy support or emotional reliance. After all, the contrasting state of Goal Support is not controlledness, as is the case with autonomy support; nor does Goal Support inherently mean support for volition or self-determined behaviors, as again is the case with autonomy. Goal Support is a more narrowly defined construct when compared to autonomy support. That is, Goal Support is specific to supporting goal pursuit behaviors and not general support toward someone else’s autonomy.

These studies from a small area of the literature suggest well-being outcomes are fostered by receiving Goal Support from significant others; just as the SDT literature makes a case for intrinsic goal pursuit leading to well-being. My study applies the knowledge gained from the Goal Support literature to explore how Goal Support influences well-being while in pursuit of extrinsic and intrinsic (i.e. self-concordant) goals.

Shared Goals

In the same way that Goal Support may offer us a richer understanding of what autonomy support entails, so may the pursuit of Shared Goals offer us a richer understanding of intrinsic goal pursuits. Shared Goals are another type of personal goals in that they are shared pursuits. Kaplan and Maddox (2002) examined “collective goals” and Brunstein et al. (1996) looked at “relationship goals”, both of which expand the goal literature beyond purely individual goals.

Fowers (2005) offers a Virtue Theory (VT) perspective on personal goals by introducing a distinction between shared and individual goals. According to Fowers' theory:

Individual goals are desirable outcomes, experiences, or states of affairs that can be possessed or experienced by an individual. Examples include money, fame, and pleasure. Although others may be involved in pursuing and achieving any of these goals, others are not necessary for their pursuit or possession. In contrast, Shared Goals can only be pursued and achieved with others. Some common examples of Shared Goals are democracy, harmony, and friendship. As an individual, one cannot pursue or possess these goals independently because they are communal in nature. From a virtue ethics perspective, Shared Goals are among the most important aims for humans (Fowers, Procacci, & Mollica, 2007, p. 1).

Shared Goals, such as teamwork, solidarity and democracy have three features. First, they can only be accomplished with others; in fact the only way to have the goal is to have it together (Fowers, 2004). For example, no one can possess democracy on their own; it is a shared achievement that people can only experience through participation in communal endeavors. Second, "Shared Goals are not just ephemeral ideas or feelings; they are always embodied" (Fowers, 2004, p. 7). This means that a Shared Goal such as democracy "is only viable to the extent that the citizens participate in it through respecting the law, becoming informed, voting and accepting majority rule" (p. 8) as without these behaviors there is no democracy. Third, "because Shared Goals cannot be individually possessed, there is no division of them" (p. 8). Therefore Fowers suggests that there is no competition for Shared Goals or dividing them up, they are inherently held in common or they do not exist at all. That is, one person can not have more teamwork than another or more democracy than another or even attempt to possess teamwork or democracy without anyone else. In contrast, in the case of individual goals "such as money or status...there is only so much of each available and the more one

person possesses, the less there is for others” (p. 8). As Fowers (2004) states, “the concept of shared [goals] clarifies how, in many important areas of life, what is good for me is often inseparable from what is good for others” (p. 8).

The concept of Shared Goals is distinct from intrinsic goals, as in SDT research intrinsic goal pursuits are discussed as exclusively individual pursuits (regardless of autonomy support). It is important to note that while the concept of autonomous goal pursuit is not defined as exclusively independent by SDT, but rather could be in the context of “dependent...collectivist or individualist” (Ryan & Deci, 2000a, p. 74), the research to date has only examined individual goal pursuits. In comparison, according to Fowers’ theory, Shared Goals should demonstrate a strong relationship to well-being that goes beyond the contribution of intrinsic goal pursuits. They do not delineate the harmonious and inherently joint nature of Shared Goals that lends itself to a greater experience of human well-being.

Communal Strength

The construct of Communal Strength “refers to the degree of responsibility a person feels for a particular communal partner’s welfare” (Mills et al., 2004, p. 214). Communal relationships are distinct from both exchange relationships and exploitative relationships. The degree a partner feels responsible for the welfare of another person being the main quantitative difference among the different relationships, as Communal Strength can vary in degree (e.g., a communal relationship between a parent and child is generally stronger than a communal relationship with a friend). To further explicate these interpersonal dimensions, a noteworthy distinction between Goal Support and Communal Strength is in the nature by which they are bestowed. That is, the participant

receives Goal Support from a chosen person, whereas Communal Strength measures the participant's willingness to act *on the behalf* of the chosen person supporting that person's goals.

Ways to further conceptualize Communal Strength include “the costs the person is willing to incur to benefit the other...the greater the Communal Strength toward the other, the greater the cost or sacrifices the person will be willing to incur to benefit the other when the other has a need” (Mills et al., 2004, p. 214). The authors illustrate this concept with the example that most parents will spend a great sum of money on their child's college education, but would not do the same for a friend. Another aspect the authors offer is how much distress or guilt one would feel if they were either unable to meet, or neglected, their communal partner's needs. Additionally, Communal Strength is proportionate to the positive feelings a person feels when the partner has been helped or had a positive experience. There is a hierarchy of potency to communal relationships, from strong to weak: e.g. from spouse, to relative, to friend down to stranger. The degree of Communal Strength will predict which communal partner's needs take priority. Mills et al. (2004) provided the example of choosing to attend the graduation of one's child over the graduation of one's niece, if held on the same day. Finally, the authors state that “the concept of Communal Strength can be summarized by saying that the greater the motivation to be responsive to the communal partner's needs, the greater the Communal Strength toward that partner” (Mills et. al, 2004, p. 214).

While early work on communal relationships focused on the distinction between the construct of a communal relationship and an exchange relationship (e.g., Clark & Mills, 1993), more recent research (e.g., Clark & Finkel, 2005) explores areas such as the

expression or suppression of emotions in dyads as related to levels of communal orientation (see Mills & Clark, 1994; Clark, Ouellette, Powell, & Milberg, 1987) as well as the Communal Strength of the relationships. This more recent research indicates that the degree of Communal Strength relates positively to outcomes such as marital quality, giving and receiving help, emotional expression and physical health (Clark & Finkel, 2005; Mills et al., 2004; Troxel, 2007).

It is important to contrast Communal Strength from the construct of relatedness. While early SDT studies (T. Kasser & Ryan, 1993; V. Kasser & Ryan, 1999) posit that intrinsic goal content would be in alignment with “communal feeling” (which later becomes enveloped in the nutriment relatedness), relatedness is based in attachment theory and does not necessarily capture the feelings of responsibility for another represented in the Communal Strength construct. That is to say, my investment in you is not just about how you feel, but are you actually accomplishing your goals and achieving what you wish to achieve? While further, how much would I, as your communal partner be willing to sacrifice in order to help you achieve it? It is reasonable to suggest that the interpersonal relationship dimension of Communal Strength would be related to well-being as there are mutual feelings of emotional sustenance and caring about one’s outcomes.

Therefore, in the same way that Goal Support offers us a richer understanding of what autonomy support entails, so may the examination of Communal Strength offer a richer understanding of STD’s nutriment relatedness, or perhaps, provide a unique interpersonal perspective altogether. To revisit a metaphor used previously, the purpose in exploring Communal Strength as an interpersonal dimension of goal pursuit behavior

is to determine what effects the construct has on well-being as it too, like Goal Support and Shared Goals, allows for a genuine partnering perspective on goal pursuit as opposed to simply cheerleading.

Generativity

Generativity stems from the Eriksonian life-span development theory. McAdams and de St. Aubin (1992) define Generativity as a grouping of seven features: cultural demand, inner desire, generative concern, belief in the species, commitment, generative action and personal narration. It is the feature of generative concern that is of interest to my aims in this proposal because it is a willingness to invest in another's well-being and it demonstrates a concern for others even without benefit to the self. Generative concern is defined as "providing for the next generation" and having "a conscious concern for the next generation" (McAdams & St. Aubin, 1992, p.1004).

Generativity is not a well researched area of SDT and goal pursuit. While it is mentioned as a construct to be understood within the spirit of intrinsic pursuits (Ryan, 1995; Sheldon & T. Kasser, 2001), few, if any, SDT studies have measured it directly (e.g., T. Kasser & Ryan, 1993, 1996). Researchers who have studied generative concern have examined aging and transitions in the life span (McAdams, de St. Aubin, & Logan, 1993) employment (Kim & Youn, 2002), parenting (Pratt, Danso, Arnold, Norris, & Filyer, 2001) and wisdom (Webster, 2007). While Generativity has been linked to well-being (Vaillant, 1993), it has not been examined specifically in the context of personal goal pursuit and well-being.

It is reasonable to suggest that an individual with strong Generativity would pursue intrinsic, or self-concordant goals, in ways that would engage the actor more

intensively with others. Generativity captures an important sense of stewardship, not just for a significant other, but for future generations from which one would not necessarily benefit. Generativity involves taking a long term view and investing oneself in others. A generative mind set may buffer the relationship between low self-concordant behaviors and well-being.

Moderation Rationale

A complex relationship is expected between the interpersonal dimensions of goal pursuit, self-concordance and well-being (see Figure 3). Moderation is the most sensible and theory driven approach. The moderation model in this study follows a common theoretical approach found in the social support literature where social support buffers, or acts as a protective factor, against diminished well-being due to stressful life events (Stroebe & Stroebe, 1996). This moderation model has been termed the “buffering hypothesis” in the social support literature (Cohen & Wills, 1985).

In this study, the interpersonal dimensions act as the protective factors against diminished well-being due to pursuing goals low in self-concordance. In accordance with the social support literature, it is conceptualized that these interpersonal dimensions act as a buffer against diminished well-being resulting from pursuing goals low in self-concordance.

Specifically, Goal Support, Shared Goals, Communal Strength and Generativity are conceptualized as the protective factors, much like social support in the literature on stress. Having more Shared (as opposed to individual) Goals should buffer poor well-being as the very nature of having Shared Goals orients the participant toward social connectedness and inherent support. Finally, Communal Strength and Generativity imply

an interested and active mindset toward others, and one's own, goal pursuits that reasonably suggests protection from the diminished well-being outcomes of low self-concordance.

Summary of Literature Review

This literature review argues that the interpersonal dimensions of goal pursuit influence the experience of self-concordant behavior and well-being. This cluster of four interpersonal dimensions represents a departure from the focus in the literature on self-determined goal pursuit as inherently self-regulated, with passive involvement of others. Rather, this interpersonal cluster allows an assessment of the role of active engagement, mutual pursuits, and responsibility and concern for the welfare of others in goal pursuits and well-being.

In the SDT literature, there is strong support for the relationship between well-being and the pursuit of intrinsic, or personally meaningful goals. However, of the three nutriments needed to allow intrinsic motivation to flourish, relatedness has been understudied. This study hypothesized that Shared Goals, Communal Strength and Generativity influence self-concordant pursuits and well-being, adding depth to what it means to relate to others in goal pursuit.

Additionally, a small literature on relationships and goals has indicated that social/relational support for these personal goals is a strong predictor of subjective well-being. However, what the concept of Goal Support could add to the construct of autonomy support and further, what effect Goal Support may have on self-concordant pursuits in relationship to well-being has not yet been examined.

It is through this grouping of interpersonal dimensions of goal pursuit consisting of Goal Support, Shared Goals, Communal Strength and Generativity, that this study aimed to provide a richer understanding not only of SDT's need for relatedness and concept of autonomy support, but of interpersonal goal behavior in general. I conceptualized these interpersonal dimensions to act as buffers against the effects of diminished well-being due to extrinsic, or low self-concordant, goal pursuit.

Hypotheses

Research Question: Is self-concordance related to well-being?

1. Self-Concordance will be positively related to well-being
 - a. Self-concordance will be positively related to Purpose in Life
 - b. Self-concordance will be positively related to Satisfaction with Life

Research Question: Are the interpersonal dimensions of goal pursuit related?

2. The interpersonal dimensions of goal pursuit will be positively related: Goal Support, Shared Goals, Communal Strength, and Generativity.

Research Question: Are the interpersonal dimensions of goal pursuit related to well-being?

3. The interpersonal dimensions of goal pursuit (Goal Support, Shared Goals, Communal Strength, and Generativity) will be directly and positively related to well-being measures (Purpose in Life and Satisfaction with Life).

Research Question: Do the interpersonal dimensions affect the relationship between self-concordant (intrinsic/extrinsic) goal pursuit and well-being?

4. Goal Support will moderate the relationship between self-concordance and well-being.
 - a. Goal Support will moderate the relationship between self-concordance and Purpose in Life.
 - b. Goal Support will moderate the relationship between self-concordance and Satisfaction with Life.
5. Shared Goals will moderate the relationship between self-concordance and well-being.
 - a. Shared Goals will moderate the relationship between self-concordance and Purpose in Life.
 - b. Shared Goals will moderate the relationship between self-concordance and Satisfaction with Life.
6. Communal Strength will moderate the relationship between self-concordance and well-being.
 - a. Communal Strength will moderate the relationship between self-concordance and Purpose in Life.
 - b. Communal Strength will moderate the relationship between self-concordance and Satisfaction with Life.

7. Generativity will moderate the relationship between self-concordance and well-being.
 - a. Generativity will moderate the relationship between self-concordance and Purpose in Life.
 - b. Generativity will moderate the relationship between self-concordance and Satisfaction with Life.

CHAPTER THREE

Methods

Participants

Participants were a group of 168 undergraduates (M age=20.0, SD =2.17) who participated in exchange for course credit (see Table 1 for participant demographics). Data collection was completed during the 2005-2006 academic year as part of a larger study.

Measures

Personal Goals

A Personal Goals Worksheet was created for this study (see Appendix A).

Participants were given the following prompt:

We would like you to list 5 of your most important personal goals. Goals are the outcomes that you are trying to attain over the course of time. Goals are projects or strivings that you think about, plan for, carry out, and sometimes (though not always) complete and succeed at. They can be something that you are trying to do or something that you are trying to avoid. Some examples of personal goals are: trying to seek new and exciting experiences, trying to stay healthy, or trying to avoid getting into arguments with others. Please describe 5 of your most important personal goals in the spaces provided below.

Self-Concordance Scale

Self-Concordance is described as “the feelings of ownership people have (or do not have) regarding their self-initiated goals” (Sheldon & Houser-Marker, 2001, p. 152). Sheldon and Elliot (1999) created a goal scoring system to reflect their self-concordance model. The goals are defined as “projects that we think about, plan for, carry out, and sometimes (though not always) complete or succeed at.” Participants rated the five goals they provided in the Personal Goals Worksheet in terms of self-concordance (external, introjected, identified or intrinsic) on a 9-point Likert scale (see Appendix B). An

example of external pursuit is, “You strive for this goal because somebody else wants you to, or because the situation seems to compel it” whereas an example of an intrinsic pursuit is, “You strive for this goal because of the enjoyment or stimulation which that goal provides you”. The self-concordance score is determined by summing the identified and intrinsic ratings, and subtracting the external and introjected ratings. The participants’ self-concordance will be summed across goals. A freshman validation sample, used over the course of two semesters, produced a first semester Cronbach’s alpha of .78 and a second semester alpha of .75 (Sheldon & Houser-Marker, 2001). Sheldon and Elliot (1999) found that self-concordance as a construct correlated positively with subjective well-being measures, as expected by their model that predicts the pursuit of self-concordant goals satisfies the three SDT nutrients and leads to greater well-being. Cronbach’s alpha for this study was adequate ($\alpha = .71$).

Relationship Goal Support Scale

Brunstein et al. (1996) conducted two studies examining the importance of social support as related to the pursuit of personal goals in accounting for individual satisfaction with close relationships. The first study used a sample of German university students in long term relationships and used a Goal Support measure culled from relevant items in a goal-attainability scale used in Brunstein’s (1993) study on personal goals and well-being. These items were then modified to fit the context of Goal Support in participants’ close relations by altering the wording. The current measure uses six items, two items to assess each of the domains of opportunity, responsiveness and assistance on a 1-7 Likert scale with the anchors ranging from “completely disagree” to “completely agree” (see Appendix C). The participants were asked to select two people with whom they are very

close. They rated support from each person separately on each of the five goals they provided in the Personal Goals Worksheet. A sample item is, “[Name of individual] reliably assists my attempts to accomplish this goal when I ask.” The Goal Support items will be summed across goals. Brunstein (1993) reported a 10-week stability coefficient of .85 for the goal attainability scales. Cronbach’s alpha for this study was adequate ($\alpha = .91$).

Shared Goal Orientation

As described in Fowers, Procacci and Mollica (2007), the personal goals were rated using a shared versus individual measure created for this study. Trained raters evaluated the degree to which each goal was individually possessed or must be held in common with others. This rating system results in a rating from 1 to 6, with higher ratings indicating a stronger Shared Goal Orientation.

Rater training was conducted with lists of goals gleaned from the goal seeking literature. Using the lists of “practice” goals from the goal seeking literature, raters developed substantial interrater reliability during training, with rater pairs attaining linear weighted kappas ranging from .88 to .97 (p. 1).

The rater pairs again demonstrated very good interrater reliability with this study’s data attaining linear weighted kappas ranging from .90 to .98. The dataset of 920 goals were divided among three expert raters, with 10% overlap of all goal ratings (92) made by two raters. The ratings from each participant’s five goals were then summed to obtain their Shared Goal Orientation score. Examples of Shared Goals included, “to work on the relationship I have with my father” and “to start a family with my

boyfriend”; while examples of individual goals included, “be successful in my career” and “write a good science fiction book”.

Communal Strength Measure

The construct of Communal Strength “refers to the degree of responsibility a person feels for a particular communal partner’s welfare” (Mills et al., 2004, p. 214). The measure consists of 10 items. This scale measures the Communal Strength toward another specific person, not just the general communal orientation of the responder. The authors report six studies (Mills et al., 2004) in the development and/or validation of the measure. All studies used undergraduate samples except for one, which used married couples. Sample items include, “How reluctant would you be to sacrifice for [name of person here]” and “How readily can you put the needs of [name of person here] out of your thoughts?” Responses are on a 10 point Likert scale with the anchors being “Not at all” to “Extremely” (see Appendix D). In this study, participants rated Communal Strength for each of the two people they listed as being very close separately, creating 20 data points.

The reported alpha coefficients for the 10 item scale ranged from .83 to .95. The Communal Strength measure correlated strongly and positively with intimacy and the other person’s responsiveness to responder’s needs. The authors also found evidence for the divergent validity of Communal Strength from “liking”.

Finally, an exploration of predictive validity concerning the giving and receiving of help between those in a communal relationship (friendship) was also undertaken. Significant differences were found in the amount of help given and received between

friends of the highest communal scores and those with the lower Communal Strength scores. Cronbach's alpha for this study was adequate ($\alpha = .80$).

The Loyola Generativity Scale

The Loyola Generativity Scale (LGS) is a 20-item self-report scale which measures the construct of generative concern, or literally concern for the next generation (McAdams & de St. Aubin, 1992). The response set is a 4-point Likert scale ranging from "the statement never applies to you" to "the statement applies to you very often." The items chosen represent principal topics in the Generativity literature including passing on knowledge and skills to others; making significant contributions to better one's community/neighborhood; doing things that will be remembered for a long time, having a lasting impact and leaving an enduring legacy; being creative and productive; and caring for/taking responsibility for other people. Sample items include, "I feel as though I have made a difference to many people" and "I feel as though my contributions will exist after I die" (see Appendix E).

The authors initially administered a 39-item version of the LGS to two samples (an undergraduate population and a voluntary adult population) and garnered the 20 best items for the final version. Cronbach's alpha coefficient for the adult sample was .83 and .84 for the college sample, suggesting the scale has high internal consistency. Additionally, both college and adult samples demonstrated convergent validity with strong correlations to external measures of Generativity (i.e., based on Eriksonian theory) and discriminate validity via low correlations with the social desirability response pattern.

Finally, a factor analysis of the LGS was conducted for each sample. Across both samples a general factor entitled "Positive Generativity" emerged that accounted for 26%

(adult) and 29% (college) of the variance in the scores. A second factor entitled “Generative Doubts” accounted for another 10% (adult) and 9% (college) of the variance in the scores. A single factor will be used in this study as the literature does not indicate the use of sub-scales. Cronbach’s alpha for this study was adequate ($\alpha = .84$).

Psychological Well-Being Inventory

The theoretical basis for this scale (Ryff, & Keyes, 1995) was developed from decades of previous research in the area of psychological well-being, beginning with Bradburn’s affect studies in the 1960’s (Bradburn, 1969; Bradburn & Caplovitz, 1965). The six dimensions in this multidimensional model of well-being are: Self-Acceptance, Personal Growth, Purpose in Life, Positive Relations with Others, Environmental Mastery, and Autonomy. The measure is comprised of operationalized definitions for these six dimensions and as such, each of these six scales can be thought of as “theoretically and empirically distinguishable dimensions” in themselves (Chang, 2006). The original inventory had 20 items per scale. The version used in this study has 14 items per scale (see Appendix F).

This study will use the “Purpose in Life” dimension as the measure of psychological well-being as it best captures well-being in the context of goal pursuit. A high score indicates the participant “has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose and has aims and objectives for living” (Ryff, 1989, p. 1072). The response set is a 6-point Likert scale ranging from “strongly disagree” to “strongly agree”.

Prior research with the 20-item measure indicated test-retest reliability of .81 to .88 for a six week period. The validation sample for the 14-item scale consisted of 215

parents, all in their early 50's. The coefficient alpha of the Purpose in Life scale is .88 and its correlation with the original 20-item scale is .98. Cronbach's alpha for the Purpose in Life scale for this study was adequate ($\alpha = .89$).

Satisfaction with Life Scale

The Satisfaction with Life Scale (SWLS) assesses global life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). The measure consists of 5 items with a 7-point Likert scale response set with "strongly disagree" and "strongly agree" as anchors. Sample items include: "In most ways my life is close to my ideal" and "The conditions of my life are excellent" (see Appendix G).

Three validation studies were conducted (two with a college student sample and one with a geriatric sample) and it was found that the 5-item scale had a two month test-retest correlation coefficient of .82 and coefficient alpha of .87 (Diener et al., 1985). Factor analysis indicated a single latent factor, accounting for 66% of the variance (Diener et al., 1985). Further, scores on the SWLS showed moderate to high correlations with other measures of subjective well being and personality indicators of well-being. Cronbach's alpha for this study was adequate ($\alpha = .86$).

Procedures

Participants were solicited from undergraduate education courses and the undergraduate psychology pool at the university. Before beginning the study, participants were told by the graduate research assistant that they were participating in a study about their goals and that it would take approximately one hour to one and a half hours of their time to complete the study. The participants completed informed consent procedures. Following this, they completed a series of questionnaires administered on

personal computers in groups of 4 to 15. The study took place in a computer lab at the university with rows of desks and personal computers.

The questionnaires were created using the data base program "Filemaker Pro". Participants completed the entire study on a computer and their data was identified only by a random participant number. Participants began by entering demographic data including age, gender, ethnicity, relationship status and frequency of religious service attendance. After the participants entered their five personal goals, each individual goal, in turn, was automatically populated onto the subsequent pages of the questionnaire so it would be properly inserted into the question stems as to eliminate any confusion in the participants regarding which specific goal was being addressed. Similarly, the names of the close others chosen by the participants also automatically populated the appropriate screens. Data was directly transferred from the Filemaker Pro database software to the SPSS program to eliminate possible human error in data entry.

CHAPTER FOUR

Results

Preliminary Analysis

Statistical analyses were conducted using SPSS 14.0 and 15.0 (SPSS Inc., Chicago, IL). Univariate analyses were conducted to test for normality of the data. For continuous variables, skewness and kurtosis was assessed to determine the nature of the distribution. Finally, reliability statistics were calculated for each measure.

Univariate distributions of all variables were found to be normal using an informal “rule of thumb” method where the skew and kurtosis values all fell within a +2 to -2 range. However, using a more conservative and formalized method such as transforming skew and kurtosis values to standardized z-scores (Field, 2005) Goal Support and Communal Strength showed skewed values (as well as kurtosis for Goal Support). This can be explained by the presence of a restricted range, as participants were instructed to choose only supportive people to rate. Therefore, and not surprisingly, a positive tendency is reflected in the scores for these two variables creating a negative skew in the distribution. Finally, the Shared Goal Orientation variable is also limited in range as the majority of goals were rated as individual. Therefore, the distribution being examined statistically is really only the range of individual goals distributing normally among the individual scores of 1 through 3. Not surprisingly, this would be a positively skewed distribution of goals given an unrestricted range.

The data were not transformed given the following reasons: the skew is due to range restriction; multiple regression is rather robust to violations of this type (Bohrnstedt

& Carter, 1971); and not transforming will best maintain the integrity and interpretability of the unstandardized beta value.

Means, standard deviations, range and reliability values for all variables are displayed in Table 2.

Covariates of Purpose in Life and Satisfaction with Life

ANOVAs and independent samples t-tests were conducted to test relationships between categorical demographic variables and well-being outcomes. Among potential covariates, only relationship status predicted Satisfaction with Life. While the planned strategy was to compare traditional age college students to non-traditional age college students, preliminary screening indicated that students above age 22 comprised only 3% of the sample. Given the skewed distribution, age was not retained as a covariate; nor were gender, ethnicity or religious status as none significantly predicted well-being.

Satisfaction with Life was significantly higher in participants in relationships ($M=26.92$ [$SD=5.41$]) relative to singles ($M=25.04$ [$SD=6.28$]; $t[166]=-2.02$, $p<.05$). There was no significant difference in relationship status and Purpose in Life. A dummy coded vector representing relationship status (in a relationship=1, single =0) was therefore retained as a covariate in subsequent models including Satisfaction with Life as an outcome variable.

Primary Analysis

Regression Model of Well-Being

1. It is hypothesized that Self-Concordance will be positively related to well-being

Multiple regression was conducted to determine whether there was a significant relationship between people with self-concordant goal pursuits and well-being, after

controlling for relevant covariates. A separate analysis was conducted for each well-being outcome (i.e. Purpose in Life and Satisfaction with Life). Relationship status was retained as a covariate and entered in step one for the Satisfaction with Life regression. The continuous variable of Self-Concordance was entered in step two. Results from both multiple regression analyses supported this hypothesis indicating that higher Self-Concordance predicted greater well-being.

a. Self-Concordance will be positively related to Purpose in Life

Results from the Purpose in Life regression were significant ($R^2 = .16$, $F(1,165) = 30.33$, $p < .001$), see Table 3. Self-Concordance predicted greater Purpose in Life and accounted for 16% of the variance in well-being.

b. Self-Concordance will be positively related to Satisfaction with Life

Results from the Satisfaction with Life regression were significant ($R^2 = .06$, $F(2,164) = 5.43$, $p < .01$). After controlling for relationship status, Self-Concordance predicted greater Satisfaction with Life (see Table 4). Self-Concordance accounted for 4% of the variance in Satisfaction with Life, with relationship status accounting for 2%.

Pearson Correlation Results

2. It is hypothesized that the interpersonal dimensions of goal pursuit will be positively related: Goal Support, Shared Goal Orientation, Communal Strength, and Generativity.

Pearson correlation analysis was used to examine the relationships between moderator variables (see Table 5). Communal Strength was correlated with Goal Support ($r = .37$, $p < .01$), Shared Goal Orientation ($r = .14$, $p < .05$) and Generativity ($r = .14$, $p < .05$).

Generativity was also correlated with Shared Goal Orientation ($r=.15, p<.05$). Goal Support was not correlated with Shared Goal Orientation or Generativity.

3. It is hypothesized that the interpersonal dimensions of goal pursuit (Goal Support, Shared Goal Orientation, Communal Strength, and Generativity) will be directly and positively related to well-being measures (Purpose in Life and Satisfaction with Life).

A moderate correlation was found between Purpose in Life and Satisfaction with Life ($r=0.54, p<.01$). Purpose in Life was related to Goal Support ($r=.18, p<.01$), Generativity ($r=.57, p<.01$) and Shared Goal Orientation ($r=.21, p<.01$). Satisfaction with Life was related to Goal Support ($r=.20, p<.01$) and Generativity ($r=.29, p<.01$). No other relationships between moderator variables and outcome variables were significant.

Using the zero order Pearson correlations, there was a significant difference between the 15% of variance accounted for by Self-Concordance in Purpose in Life than with than the 4% accounted for in Satisfaction with Life ($t[164]=2.91, p<.005$) (Howell, 1997). See Table 5 for correlations of all variables.

Moderated Regression Model of Well-Being

4. It is hypothesized that Goal Support will moderate the relationship between Self-Concordance and well-being.

Hierarchical multiple regression analyses were used to test whether Goal Support interacted with Self-Concordance and well-being. A separate analysis was conducted for each well-being outcome. The Self-Concordance and Goal Support variables were centered to facilitate interpretation of results.

In order to measure Goal Support, a correlation was conducted on the whole sample between both of the Goal Supporters listed by the participant. It was determined that if there was a correlation greater than .60, an aggregate score of Goal Support would be used while a correlation below .60 would use Goal Support from the first person listed by the participant. As the correlation was less than .60, the Goal Support score for the first person listed was used as the value.

The Self-Concordance and Goal Support variables were centered to facilitate interpretation of results. The relationship status covariate was entered in the first step when warranted. Self-Concordance and Goal Support were entered in the next step. An interaction term representing the interaction between Self-Concordance and Goal Support was entered in the final step.

a. Goal Support will moderate the relationship between Self-Concordance and Purpose in Life.

Contrary to the hypothesis, Goal Support did not moderate the relationship between Self-Concordance and Purpose in Life. In a model that included Self-Concordance, Goal Support, and an interaction term representing Self-Concordance by Goal Support, only Self-Concordance remained a significant predictor of Purpose in Life (standardized beta=.37, $t=5.01$, $p<.001$). See Table 6 for details.

b. Goal Support will moderate the relationship between Self-Concordance and Satisfaction with Life.

After controlling for relationship status and the main effect of Goal Support, the interaction term representing Self-Concordance by Goal Support was not significantly related to Satisfaction with Life. See Table 7.

5. It is hypothesized that Shared Goal Orientation will moderate the relationship between Self-Concordance and well-being.

Hierarchical multiple regression analyses were used to test whether Shared Goal Orientation interacted with Self-Concordance and well-being. A separate analysis was conducted for each well-being outcome. Self-Concordance and the Shared Goal Orientation variables were centered to facilitate interpretation of results. The relationship status covariate was entered in the first step when warranted. Self-Concordance and Shared Goal Orientation were entered in the next step. An interaction term representing the interaction between Self-Concordance and Shared Goal Orientation was entered in the final step.

a. Shared Goal Orientation will moderate the relationship between Self-Concordance and Purpose in Life.

After including the main effect of Self-Concordance, the interaction term representing Self-Concordance by Shared Goal Orientation was significantly related to Purpose in Life ($\Delta R^2 = .02$, $F(1,163) = 4.31$, $p = .04$; see Table 8). The overall model was significant ($F[3,163] = 12.66$, $p < .001$) and accounted for 19% of the variance in Purpose in Life.

A simple slope analysis was conducted to determine the nature of the Shared Goal Orientation moderation of Self-Concordance and Purpose in Life (Preacher, Curran, & Bauer, 2006). The findings of this analysis support the buffering hypothesis. Participants with an overall higher Shared Goal Orientation indicated higher levels of well-being at low levels of Self-Concordance, with a mean difference of 7.40 ($t = 2.02$, $p = .05$) between the high and low ends of the Shared Goal Orientation slope. Participants with an overall

average Shared Goal Orientation indicated moderate well-being at low levels of Self-Concordance, with a difference of 16.15 ($t=4.40, p<.001$) between the high and low ends of the Shared Goal Orientation slope. Finally, participants with an overall low Shared Goal Orientation had the lowest scores for well-being at low levels of Self-Concordance, with a mean difference of 24.89 ($t=2.02, p=.05$) between the high and low ends of the Shared Goal Orientation slope.

These results can be interpreted as support for the buffering hypothesis in that higher levels of Shared Goal Orientation protected those with low Self-Concordance from diminished well-being. Overall, the well-being benefit of having a Shared Goal Orientation lies with below average levels of Self-Concordance. See Figure 4 for graphic representation.

b. Shared Goal Orientation will moderate the relationship between Self-Concordance and Satisfaction with Life.

Contrary to the hypothesis, Shared Goal Orientation did not moderate the relationship between Self-Concordance and Satisfaction with Life. In a model that included relationship status, Self-Concordance, Shared Goal Orientation, and an interaction term representing Self-Concordance by Shared Goal Orientation, only the covariate and Self-Concordance remained significant predictors of Satisfaction with Life. See Table 9 for details.

6. It is hypothesized that Communal Strength will moderate the relationship between Self-Concordance and well-being.

Hierarchical multiple regression analyses were used to test whether Communal Strength interacted with Self-Concordance and well-being. A separate analysis was

conducted for each well-being outcome. The Self-Concordance and Communal Strength variables were centered to facilitate interpretation of results.

In order to determine the Communal Strength value, the same correlation method used for Goal Support was employed. As the correlation between the two people chosen by the participant was lower than $r = .60$, the first person listed by the participant was used.

Self-Concordance and the Communal Strength variables were centered to facilitate interpretation of results. The relationship status covariate was entered in the first step when warranted. Self-Concordance and Communal Strength were entered in the next step. An interaction term representing the interaction between Self-Concordance and Shared Goal Orientation was entered in the final step.

a. Communal Strength will moderate the relationship between Self-Concordance and Purpose in Life.

Contrary to the hypothesis, Communal Strength did not moderate the relationship between Self-Concordance and Purpose in Life. In a model that included Self-Concordance, Communal Strength, and an interaction term representing Self-Concordance by Communal Strength, only Self-Concordance remained a significant predictor of Purpose in Life. See Table 10 for details.

b. Communal Strength will moderate the relationship between Self-Concordance and Satisfaction with Life.

Contrary to the hypothesis, Communal Strength did not moderate the relationship between Self-Concordance and Satisfaction with Life. In a model that included relationship status, Self-Concordance, Communal Strength, and an interaction term

representing Self-Concordance by Communal Strength, only the covariate and Self-Concordance remained significant predictors of Satisfaction with Life. See Table 11 for details.

7. It is hypothesized that Generativity will moderate the relationship between Self-Concordance and well-being.

Hierarchical multiple regression analyses were used to test whether Generativity interacted with Self-Concordance and well-being. A separate analysis was conducted for each well-being outcome. The Self-Concordance and Generativity variables were centered to facilitate interpretation of results.

The relationship status covariate was entered in the first step when warranted. Self-Concordance and Generativity were entered in the next step. An interaction term representing the interaction between Self-Concordance and Generativity was entered in the final step.

a. Generativity will moderate the relationship between Self-Concordance and Purpose in Life.

After accounting for the main effects of Self-Concordance and Generativity, the interaction term representing Self-Concordance by Generativity was not significantly related to Purpose in Life. See Table 12 for details.

b. Generativity will moderate the relationship between Self-Concordance and Satisfaction with Life.

Contrary to the hypothesis, Generativity did not moderate the relationship between Self-Concordance and Satisfaction with Life. In a model that included the relationship status covariate, Self-Concordance, Generativity, and an interaction term

representing Self-Concordance by Generativity, only the covariate and Generativity remained significant predictors of Satisfaction with Life. See Table 13 for details.

CHAPTER FIVE

Discussion

Primary Findings

The purpose of this study was to investigate the relationships between Self-Concordance, interpersonal dimensions of goal pursuit, and well-being in the context of Self-Determination Theory (SDT). In establishing a link between Self-Concordance and well-being, the SDT literature has largely ignored the social milieu (Van Lange, 2000). A growing body of research suggests, however, that social support and the presence of significant others are related to both goal pursuits and well-being outcomes (Brunstein et al., 1996; Shah, 2003a, 2003b). Research questions were thus generated to address the gap in our understanding of interpersonal influences on the relationship between goal Self-Concordance and well-being.

The current study explored whether active participation with others would moderate the relationship between self-concordant goal pursuit and well-being. Specifically, with the interpersonal dimensions buffering the effects of diminished well-being due to low self-concordant goal pursuit. Four specific interpersonal dimensions were tested: Goal Support, Shared Goal Orientation, Communal Strength and Generativity. Each dimension was tested as moderator of the relationship between Self-Concordance and two indicators of well being: Purpose in Life and Satisfaction with Life. The relationships among Self-Concordance, interpersonal dimensions and well-being were also explored.

Self-Concordance as a predictor of well-being

Regression analyses were conducted to replicate the relationship between Self-Concordance and well-being that has been demonstrated in prior SDT research (Sheldon & Elliot, 1999; Sheldon & Houser-Marker, 2001). These studies suggest that both pursuit and attainment of self-concordant goals is associated with greater well-being. Current results indicated that self-concordant goal pursuit predicted greater well-being, as measured by both Purpose in Life and Satisfaction with Life. These results are also consistent with the more general previous findings that intrinsic pursuits are related to well-being (Deci & Ryan, 1993, 1996).

A closer examination of the extent to which Self-Concordance predicted each outcome revealed a unique pattern. Specifically, Self-Concordance accounted for 15% of the variance in Purpose in Life, in comparison to 4% of the variance in Satisfaction with Life. While out of scope for this dissertation, there is an aspect of Virtue Theory (VT; Fowers, 2005) that may help account for this difference. For one, VT conceptualizes well-being as two-dimensional: hedonic and eudaimonic. These terms are generally defined as follows:

The first of these can be broadly labeled hedonism (Kahneman et al 1999) and reflects the view that well-being consists of pleasure or happiness. The second view, both as ancient and as current as the hedonic view, is that well-being consists of more than just happiness. It lies instead in the actualization of human potentials. This view has been called eudaimonism (Waterman 1993), conveying the belief that well-being consists of fulfilling or realizing one's daimon or true nature. The two traditions—hedonism and eudaimonism—are founded on distinct views of human nature and of what constitutes a good society. (Ryan & Deci, 2001, p. 143)

Satisfaction with Life is considered to be a hedonic type of well-being (Diener & Lucas, 1999) whereas Purpose in Life is considered to be eudaimonic (Ryff & Singer, 2006). In

the SDT literature, Ryan and Deci (2001) posit that autonomy, competence and relatedness foster both hedonic and eudaimonic well-being. In a review of the literature, Ryan and Deci (2001) state:

We wholly concur that well-being consists in what Rogers (1963) referred to as being fully functioning, rather than as simply attaining desires. We also are largely in agreement concerning the content of being eudaimonic— e.g. being autonomous, competent, and related. However, our approach theorizes that these contents are the principal factors that foster well-being, whereas Ryff and Singer’s approach uses them to define well-being. (p. 147)

Their perspective concerning goal pursuit and eudaimonic well-being is that “SDT in particular has taken a strong stand on this by proposing that only self-endorsed goals will enhance well-being, so the pursuit of herteronymous goals, even when done efficaciously, will not” and further, “...it makes sense that autonomy as well as efficacy would be important for eudaimonic well-being...” (Ryan & Deci, 2001, p. 157).

In contrast, VT predicts a stronger relationship of intrinsic and interpersonal dimensions with eudaimonic outcomes than with hedonic outcomes. The results of this study are in line with VT in that eudaimonic well-being is more strongly related to Self-Concordance and the interpersonal dimensions of goal pursuit than with hedonic well-being. Specifically, the correlations of Shared Goal Orientation and Generativity are greater with Purpose in Life than with Satisfaction with Life. This recognizable pattern is consistent with VT.

VT would thus suggest that current findings reflect that the inherent good embodied in intrinsic and interpersonal behaviors leads to a greater sense of Purpose in Life relative to Satisfaction with Life. In contrast, SDT does not offer a differential explanation for the effect of Self-Concordance on hedonic or eudaimonic well-being, other than being autonomous or true to oneself. For this reason, these results do not fit

SDT as they are unable to make differential predictions about Self-Concordance and the two types of well-being. Rather, according to VT, it is the positive good that is embodied in these interpersonal behaviors that lead to increased eudaimonic well-being. That is, shared goals are good in themselves, not just a means to a positive end. This interesting difference in the predictions of these two theoretical accounts of well-being requires additional research to provide an adequate test of their relative merits.

Relationships between Self-Concordance, interpersonal dimensions and well-being

Correlation analyses were used initially to explore relationships between interpersonal dimensions (i.e. Goal Support, Shared Goal Orientation, Communal Strength and Generativity), Self-Concordance and well-being. Small to moderate correlations between interpersonal dimensions supported the assumption that they were related but distinct constructs. Furthermore, each interpersonal dimension was related to Self-Concordance. Results thus indicated support for SDT's conceptualization that intrinsic pursuits are inclusive of interpersonal factors (Kasser & Ryan, 1993).

Interpersonal dimensions as moderators of the relationship between Self-Concordance and well-being

Goal Support. Goal Support was not found to moderate the relationship between Self-Concordance and either well-being outcome. Lack of results may have reflected the restricted range of Goal Support data as measured in the current study. Specifically, participants were asked to evaluate Goal Support provided by people in their life whom they already identified as supportive, effectively ruling out any selections in the limited to non-supportive range. However, Goal Support did remain a significant predictor of Satisfaction with Life. This finding is a replication of prior work in which Goal Support

accounted for Satisfaction with Life (Brunstein, 1993), as well as being consistent with Goal Support accounting for relationship well-being among marital couples and intimate student couples (Brunstein, 1996).

Shared Goal Orientation. The current study hypothesized that Shared Goal Orientation would moderate relationships between Self-Concordance and well-being outcomes. Results were partially consistent with expectations, such that Shared Goal Orientation interacted with Self-Concordance to predict Purpose in Life, but not Satisfaction with Life.

There are two independent results occurring regarding Shared Goal Orientation, Self-Concordance and well-being. First, participants prospered by having a higher Shared Goal Orientation, being there was a positive relationship between Shared Goal Orientation and Purpose with Life. Second, participants prospered by having high levels of Self-Concordance, which, as indicated by regression results, predicted well-being in both outcome measures. Finally, there is a “combination” result, or interaction, of Shared Goal Orientation and Self-Concordance. The relationship between Self-Concordance and Purpose in Life differed at varying levels of Shared Goal Orientation. Specifically, the nature of this moderation is the protective, or buffering effect, that benefits participants lower in Self-Concordance, but with higher Shared Goal Orientation, from diminished well-being.

Of note, the role of Shared Goal Orientation again may be better understood in the context of VT (Fowers, 2005). Specifically, results suggest that the Shared Goal construct may play a protective factor beyond possession of intrinsic, or self-concordant, motivation as conceptualized by SDT. These results are consistent with VT in that a

stronger Shared Goal Orientation “protected” individuals with low Self-Concordance from diminished eudaimonic well-being.

While the results with this new construct are interesting, there are potential limitations due to range restriction. Meaning, the restriction in range of Shared Goal Orientation scores may have underestimated the effect Shared Goal Orientation had on well-being. If a wider range was present, it is possible the results would have indicated a stronger correlation between well-being and Shared Goal Orientation. It can be concluded that the measure is problematic: correlations with it were attenuated due to a restricted range. At its simplest, these results indicate the Shared Goal Orientation is a construct that warrants further exploration.

Communal Strength. Surprisingly, the dimension of Communal Strength did not moderate the relationship between Self-Concordance and well-being and did not directly predict either well-being outcome. However, as with Goal Support, the lack of findings for Communal Strength may have reflected the restricted data range for this variable. Similarly, participants were asked to evaluate Communal Strength among individuals in their life that were already identified as supportive, thus limiting responses on the low end of the Communal Strength scale. Nevertheless, Communal Strength was the only interpersonal dimension to correlate with all other dimensions, suggesting good convergent validity with the possible higher order interpersonal construct.

Generativity. Similar to Goal Support findings, Generativity was not found to moderate the relationship between Self-Concordance and well-being. This interpersonal dimension did, however, directly predict both Purpose in Life and Satisfaction with Life.

The current relationship between Generativity and well-being is consistent with prior literature (Vaillant, 1993).

Primary analysis summary. Overall, the moderator and outcome variables correlated with Self-Concordance. There were small to moderate correlations among the interpersonal dimensions. Apart from main effects of Goal Support and Generativity on well-being, only Shared Goal Orientation buffered those individuals low in Self-Concordance from diminished well-being.

Study Implications

The results of this study can be understood in the context of SDT (Ryan and Deci, 2000a) and of VT (2005).

Current findings expand the existing SDT literature by highlighting the role of interpersonal factors. Results are in line with more recent literature (Horowitz et al., 2006; Sheldon & Cooper, 2008) suggesting that interpersonal dimensions can impact both goals and well-being. The results of this study, while not strong, are certainly consistent with this line of inquiry. The timeliness of these research questions in the literature suggest that these dimensions warrant further exploration to better define how they may be shaping goal pursuits and well-being outcomes.

A primary aim of the current study was to test whether interpersonal dimensions influenced the relationship between Self-Concordance and well-being. Results suggested that, among the dimensions tested, Shared Goal Orientation may buffer individuals from decreased Purpose in Life due to the impact of low Self-Concordance. Findings also provide preliminary support for VT regarding Self-Concordance and interpersonal dimensions as stronger eudaimonic outcome predictors.

However, the research question, “Do interpersonal dimensions of goal pursuit exist, and if so, do they buffer individuals from diminished well-being due to low Self-Concordance?” needs to be revisited. While it is reasonable to see it as a critical research problem in the literature, I did not find support for my hypotheses regarding three out of the four interpersonal dimensions. It is appropriate then to re-examine the theory and measures and discern or suggest what may work better.

Yet, as the measures had problems with attenuation of range, it seems appropriate to first either correct the measures or develop new ones, prior to altering the theory. Therefore, the key aspect to rethink is how aspects of interpersonal dimensions should be explored and measured, because the measurement in this study did not provide a good way to assess interpersonal dimensions of goal pursuit. Recent SDT literature not only corroborates this conclusion but points to some promising avenues (Knee et al., 2007; Sheldon & Cooper, 2008).

For instance, Sheldon and Cooper (2008) examined goal strivings and well-being within “agentic” and “communal” roles. The authors cite Bakan (1966) for defining these terms:

“...agency refers to the organism as a separate individual, whereas communion entails participation of the individual in a larger social unit of which he or she is a part. Agency manifests itself in self-assertion, self-protection, mastery, self-promotion, and self-expansion. In contrast, communion manifests itself in cooperation, solidarity, openness, caring, intimacy, and connection with others. (Sheldon & Cooper, 2008, pp. 415-416)

Interestingly, the authors found that attainment of agentic (work and school) and communal (relationship and parenting) goals each offered a unique pathway to increased well-being. However, they concluded that “participants felt more autonomous motivation for their communal goals and better attained their communal goals [and]...attainment

was more strongly associated with increases in well-being and satisfaction and with reductions in distress, compared to the effects of agency goal attainment” (p. 439).

Further, the authors continue that their results “suggest that communal strivings may provide the more certain path to enhanced well-being, perhaps because people can enjoy and identify with communal goals to a greater extent...” (p. 440). The authors also offer up explanations such as greater Self-Concordance, greater attainment, more direct ties to significant psychological needs, better environmental support, and ease of achievement for why communal goals lead to increased well-being. It is noteworthy that the authors employed SDT, specifically Self-Concordance, as a foundational theory of their study. They also reiterate the importance of the SDT nutriment of relatedness to this idea of communal goals and well-being.

It is reasonable to draw similarities between aspects of their communal roles and the idea of interpersonal dimensions, particularly Shared Goals and Communal Strength. The similarities are evident when revisiting Bakan’s definition of communion as the “participation of the individual in a larger social unit of which he or she is a part”. This idea suggests a movement away from individual or passive involvement by others and toward active involvement, or “partnering”, as described in the current study.

This recent research from the SDT perspective serves to confirm the direction taken in this study, and aligns well with VT, that the interpersonal dimensions hold a unique place in the goal pursuit and well-being literature, not just as a supplement to the SDT nutriments. However, the reasons why Sheldon et al.’s (2008) communal roles, or interpersonal dimensions, lead to increased well-being will continue to be at issue, as this

study conceptualized the interpersonal dimensions as protective factors against diminished well-being due to low Self-Concordance, rather than as direct causal factors.

A general implication of this study is to continue exploring interpersonal dimensions of goal pursuit, particularly Shared Goal Orientation, while also identifying the role of other pertinent social aspects of goal pursuit and well-being. As current literature corroborates, this study has broached a novel and important area of goals research. The literature now calls for what this study has merely begun to deliver, namely a more comprehensive evaluation of goal pursuit and well-being that increases our understanding of the role of the social realm.

Limitations

Limitations to this study include the cross-sectional design, which precluded causal inferences about relationships among Self-Concordance, interpersonal dimensions, and well-being as there was only one time point being surveyed. Multiple time points would provide a richer understanding of the influences on participants' perceived well-being over time (Sheldon & Cooper, 2008).

The use of a convenience sample of undergraduates in a private university limits generalizability to other populations. The exclusive use of self-report data and subjective outcome measures only provide one source of data. This single source of data could raise questions regarding the participants' ability to observe themselves and others accurately. Finally, the "Shared Goal Orientation" measure was created for this study; therefore, there is no independent construct validity as this is the first time it has been used.

There is a larger point to be made regarding measurement of study constructs. Apart from Shared Goal Orientation, the measures chosen for this study represent a

sampling from an initial survey of the literature for all relevant measures relating to interpersonal dimensions of goal pursuit. While it was hoped that the measures culled from the literature would quantify the interpersonal dimensions of goal pursuit, results indicate that these were not successful measures. Future work may benefit from measures specifically developed to test VT and the interpersonal dimensions of goal pursuit.

Future Directions and Conclusion

Based on the implications and limitations of this study, the following recommendations for future studies and research direction are made. Given preliminary support for VT generated by this study, and the direction taken in recent SDT literature, a critical eye should be taken toward study measures, as opposed to revamping the theory. Further studies are needed to establish the construct validity of the Shared Goals orientation measure, a questionnaire and rating system developed specifically to test VT. Validation with diverse samples would strengthen the measure as well as provide a unique cross-cultural perspective on Shared Goal Orientation. More studies with well-validated measures will help strengthen the existing and growing body of literature on interpersonal dimensions of goal pursuit.

As data restriction was a particular limitation in the current study, one way to improve distributions on the Shared Goal Orientation measure would be to prompt participants to report distinct individual goals and goals that involve others (Shared Goals). This method would continue to allow for collection of idiographic goals data, and would draw more Shared Goal responses by providing the participant with explicit parameters for producing both types of goals. However, while this increases our knowledge of Shared Goal content and provides a more even distribution of goal types, it

does not allow for further exploration into Shared Goal Orientation. That is, the participants are being instructed to create a certain number of Shared Goals by prompting. Yet, by instructing participants to create both individual and shared goals, it would eliminate the need for an expert rating system (and potential human judgment errors therein), as the participants would be determining which goals were created as either individual or shared.

Another retooling of the Shared Goal Orientation measure could involve moving away from the self-report of personal goals, by actively involving the other person mentioned in the shared goal. The researcher could then query them either by mail, phone or in person, to ascertain the validity of the “sharedness” of the goal. Thus, while individual goals remain self-report, any Shared Goals would involve input from the close other.

A third option for optimizing variance in Shared Goal Orientation would be to expand sample demographics. For instance, a valuable extension of the research would be to include older age participants. It is reasonable to suggest that an older population may garner different individual and Shared Goal content as well as experience a more salient reading of those interpersonal dimensions such as Generativity and Communal Strength. It is likely the Shared Goal Orientation is more prevalent as you age, since older individuals are more likely to have reached the milestones of marriage and children. Meaning, their worldview now includes consideration of these close others and more easily allows for thinking with the interpersonal dimensions in mind, such as having a generative mindset, having greater feelings of Communal Strength or simply producing more Shared Goals. For these reasons, an older population may contribute to learning a

great deal more about the actual content of Shared Goals as well as the role that a stronger Shared Goal Orientation would have in regard to well-being outcomes.

Finally, in terms of addressing the Shared Goal Orientation measure, it is helpful to look to the current literature for suggestions. Sheldon and Cooper (2008) asked participants to create goals specifically tied to the roles of student, worker, romantic partner and parent. They assumed that romantic partner and parent goals would fulfill the communal goal designation. The authors then prompted participants to rate the extent to which each goal was self-concordant, and used those scores to identify “communal” versus “agentic” participants. Meaning, they determined the agentic participants were those that had higher Self-Concordance with agency goals (work and school) and those communal participants would have greater Self-Concordance with communal goals (relationship and parenting) (Sheldon & Cooper, 2008). This method could be employed with Shared Goal Orientation to eliminate the need for expert raters and to retain the ability to contrast high and low Shared Goal Orientation. Specifically, participants can be asked to give individual goals and goals that involve others (Shared Goals) and then rate each goal for Self-Concordance. Then like the cited study, those with higher Self-Concordance on Shared Goals will be assigned a high Shared Goal Orientation and those with greater Self-Concordance on their individual goals will be assigned to a low Shared Goal Orientation comparison group.

In conclusion, this study’s findings as well as current literature, emphasize that interpersonal dimensions continue to be a worthwhile target for research. While the literature on interpersonal dimensions of goal pursuit is still in relative infancy, exploratory studies can continue to hone in on these constructs. This study represents a

significant contribution to the literature in its continuation of a line of inquiry that departs from the individualistic orientation of previous work within SDT, as well as the broader goal literature. It is through this type of work that we will continue to increase our understanding of what is personally meaningful and what will promote psychological well-being. With this knowledge, we may be more easily able to identify individuals lacking in such protective factors who are at greater risk for diminished well-being.

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FIGURES

Figure 1. Self-Determination Theory (SDT)

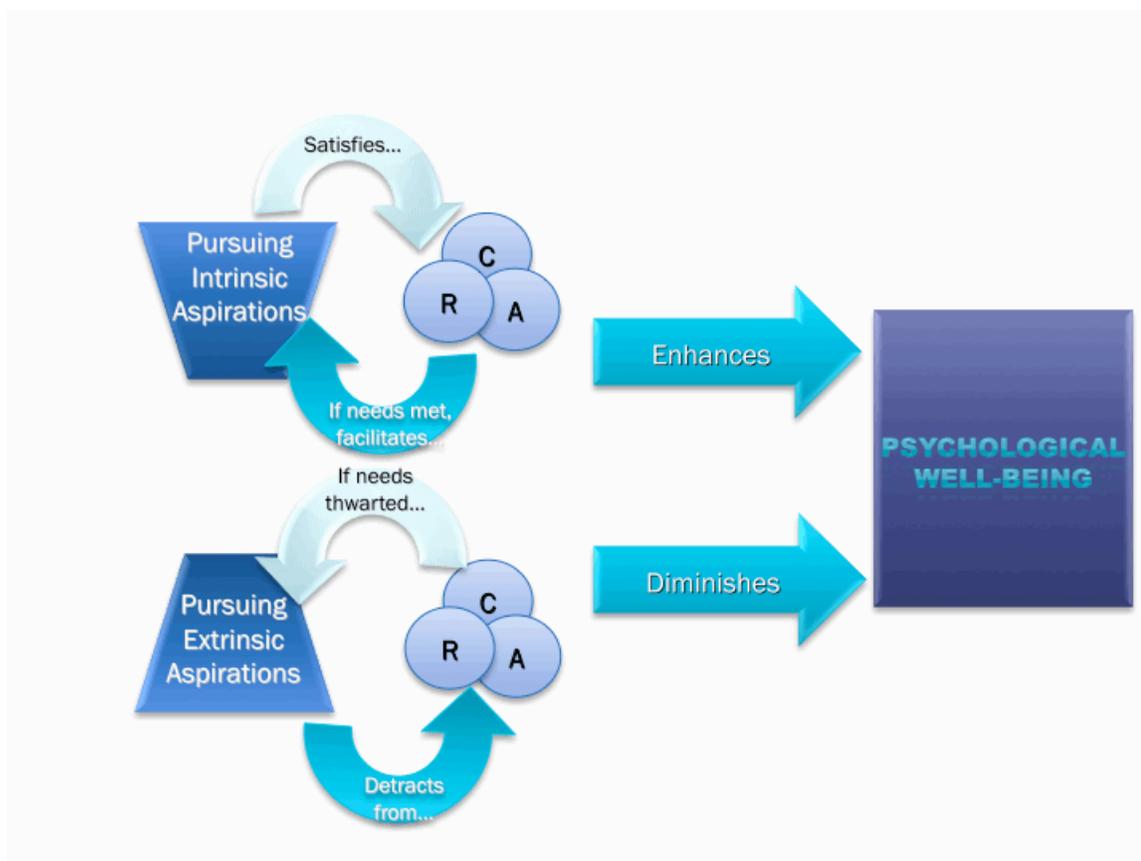


Figure 2. SDT and Interpersonal Dimensions

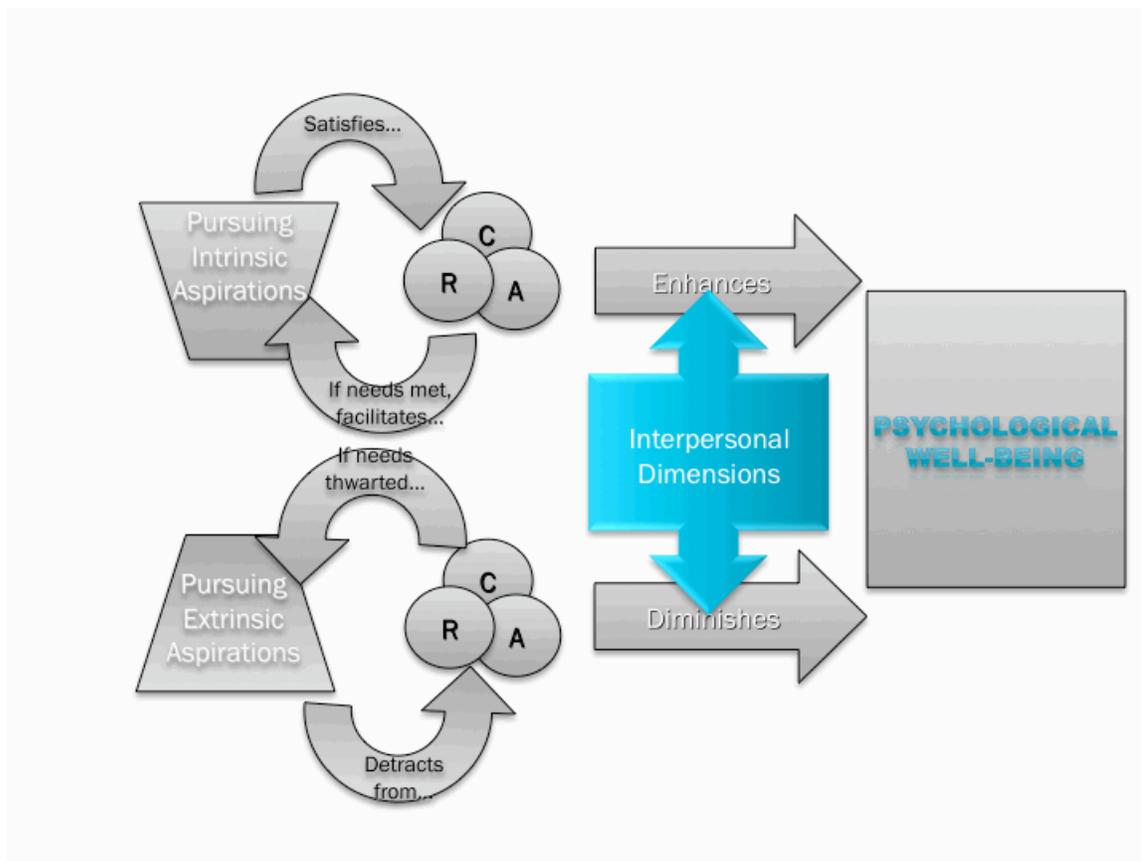


Figure 3. Moderation Model

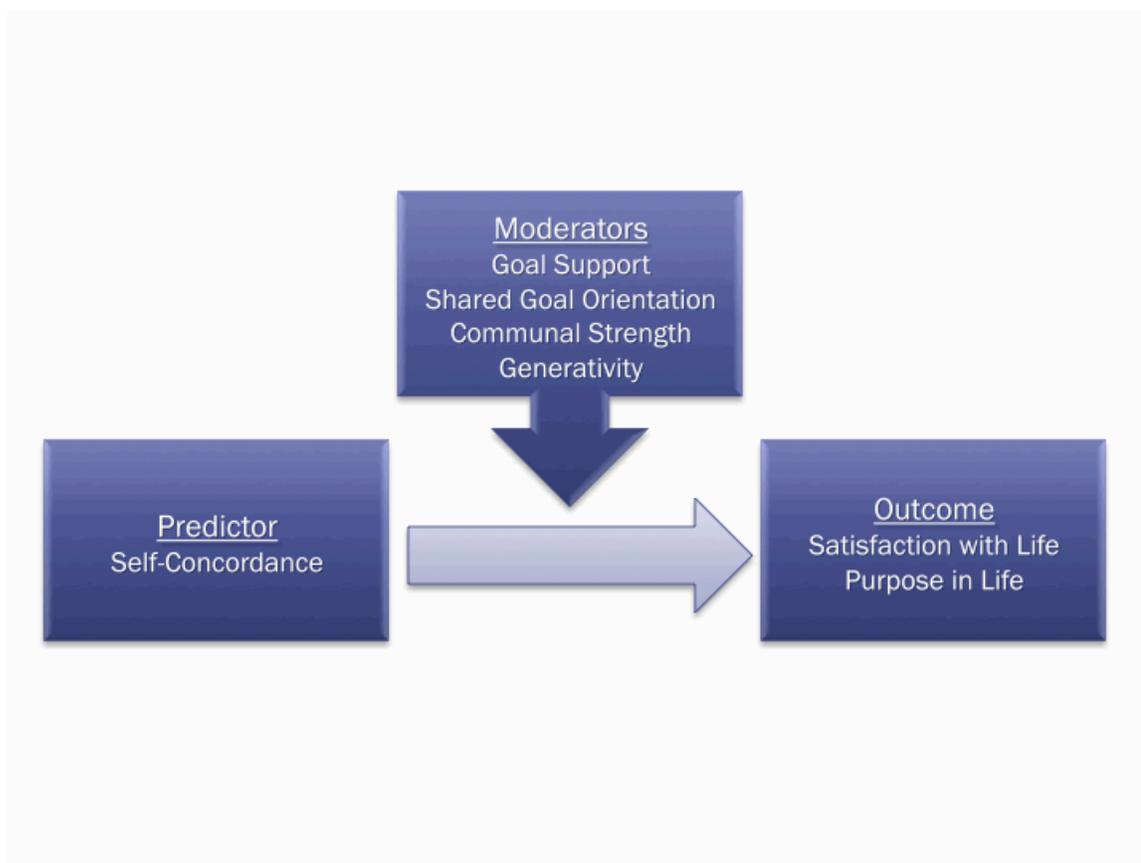
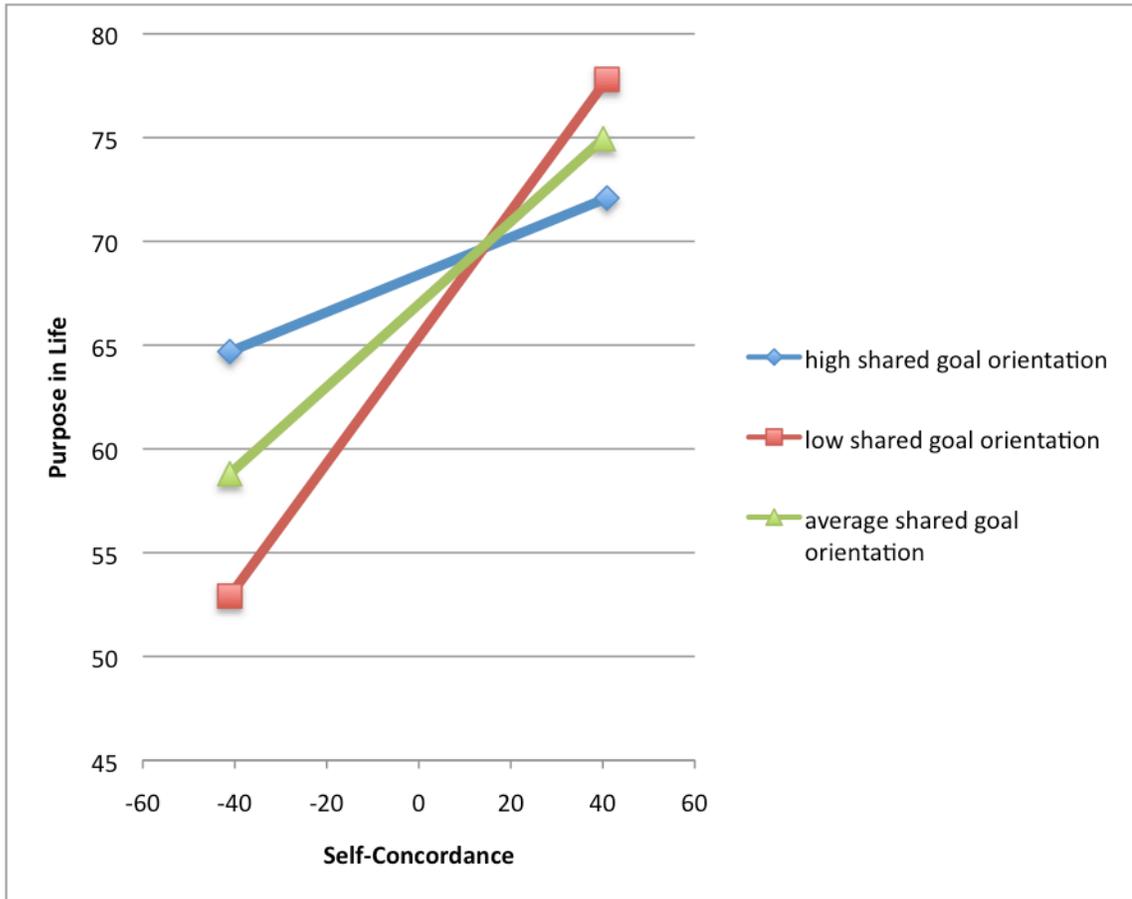


Figure 4. Simple Slope Graph



TABLES

Table 1

Demographic Characteristics of Participants (N= 168)

Characteristic	<i>n</i>	%	<i>M</i>	<i>SD</i>
Age (years)			20.00	2.17
18-22	160	95.2		
23-39	5	3.0		
Not specified	3	1.8		
Characteristic	<i>n</i>	%		
Gender				
Male	71	42.3		
Female	95	56.5		
Not specified	2	1.2		
Ethnicity				
White	99	58.9		
Hispanic	41	24.4		
Black, Non-Caribbean	8	4.8		
Black, Caribbean	4	2.4		
Asian	2	1.2		
Bi-racial	4	2.4		
Other	10	6.0		
Relationship Status				
Single, not in a committed relationship	97	57.7		
Single, in a committed relationship	61	36.3		
Single, cohabitating with a partner	5	3.0		
Engaged	5	3.0		
Married, living together	0	0		
Married, separated	0	0		
Religious Attendance				
Never	35	20.8		
Once a year	22	13.1		
A few times a year	64	38.1		
About monthly	24	14.3		
At least once a week	23	13.7		

Table 2

Descriptive statistics for Predictor, Moderator and Outcome Variable(s)

Measure	<i>M</i>	<i>SD</i>	<i>n</i>	<i>Range</i>	<i>Cronbach's Alpha</i>	<i>Kappa</i>
Self-Concordance	39.09	18.60	167	(-2) - 80	.71	
Goal Support	169.51	23.22	166	70 - 198	.85	
Shared Goal Orientation	11.67	4.43	168	5 - 24		.90-.98
Communal Strength	83.87	9.98	167	43 - 97	.80	
Generativity	48.44	8.60	168	19 - 66	.84	
Purpose in Life	66.36	11.70	168	31 - 84	.89	
Satisfaction with Life	25.83	5.98	168	11 - 35	.86	

Table 3

Regression Analysis Summary for Self-Concordance predicting Purpose in Life

Variable	B	SE B	β
Self-Concordance	.25	.05	.39***

Note. $R^2 = .16$ ($N = 167$, $p < .001$).

*** $p < .001$.

Table 4

Hierarchical Regression Analysis Summary for Self-Concordance predicting Satisfaction with Life (N= 167)

Variable	B	SE B	β	R ²	ΔR^2
Step 1					
Relationship Status	1.87*	.93	.16	.02	.02*
Step 2					
Relationship Status	2.01*	.92	.17		
Self-Concordance	.06**	.02	.20	.06	.04**

Note. Final Model $F(2,164) = 5.43, p < .01, R^2 = .06$.

* $p < .05$; ** $p < .01$.

Table 5

Pearson Correlations for Predictor, Moderator and Outcome Variable(s)

Measure	1	2	3	4	5	6
1. Self-Concordance						
2. Goal Support	.22**					
3. Shared Goal Orientation	.27**	.07				
4. Communal Strength	.13*	.37**	.14*			
5. Generativity	.28**	.12	.15*	.14*		
6. Purpose in Life	.39**	.18**	.21**	.11	.57**	
7. Satisfaction with Life	.19**	.20**	.08	.06	.29**	.54**

Note. **coefficients are significant at $p < .01$ (1-tailed).

* coefficients are significant at $p < .05$ (1-tailed).

Table 6

Hierarchical Regression Analysis Summary for Goal Support as Moderator of the Relationship Between Self-Concordance and Purpose in Life (N= 165)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Self-Concordance	.24***	.05	.37		
Goal Support	.06	.04	.11	.17	.17***
Step 2					
Self-Concordance	.24***	.05	.37		
Goal Support	.06	.04	.11		
Interaction: Self-Concordance by Goal Support	.00	.00	-.01	.17	.00

Note. Final model: $F(3,161)=10.86$, $p<.001$, $R^2=.17$.

*** $p < .001$.

Table 7
Hierarchical Regression Analysis Summary for Goal Support as Moderator of the Relationship Between Self-Concordance and Satisfaction with Life (N= 165)

Variables	B	SE B	β	R ²	ΔR^2
Step 1					
Relationship Status	1.84*	.94	.15	.02	.02*
Step 2					
Relationship Status	2.32**	.92	.19		
Self-Concordance	.05*	.03	.16		
Goal Support	.06**	.02	.20	.10	.08***
Step 3					
Relationship Status	2.36**	.92	.19		
Self-Concordance	.05	.03	.15		
Goal Support	.06**	.02	.22		
Interaction: Self-Concordance by Goal Support	.00	.00	.10	.11	.01

Note. Final model: $F(4,160)=4.92$, $p<.001$, $R^2=.11$.
 * $p < .05$; ** $p<.01$; *** $p <.001$.

Table 8

Hierarchical Regression Analysis Summary for Shared Goal Orientation as Moderator of the Relationship Between Self-Concordance and Purpose in Life (N= 167)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Self-Concordance	.23***	.05	.36		
Shared Goal Orientation	.30	.20	.12	.17	.17***
Step 2					
Self-Concordance	.20***	.05	.31		
Shared Goal Orientation	.34	.19	.13		
Interaction: Self-Concordance by Shared Goal Orientation	-.02*	.01	-.15	.19	.02*

Note. Final model: $F(3,163)=12.67$, $p<.001$, $R^2=.19$.

* $p < .05$; *** $p<.001$.

Table 9

Hierarchical Regression Analysis Summary for Shared Goal Orientation as Moderator of the Relationship Between Self-Concordance and Satisfaction with Life (N= 167)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Relationship Status	1.87*	.93	.16	.02	.02*
Step 2					
Relationship Status	2.10*	.93	.17		
Self-Concordance	.06*	.03	.18		
Shared Goal Orientation	.08	.11	.06	.07	.04*
Step 3					
Relationship Status	2.13*	.93	.18		
Self-Concordance	.06*	.03	.17		
Shared Goal Orientation	.08	.11	.06		
Interaction: Self-Concordance by Shared Goal Orientation	-.00	.01	-.04	.07	.00

Note. Final model: $F(4,162)=2.88$, $p<.05$, $R^2=.07$.

* $p < .05$.

Table 10

Hierarchical Regression Analysis Summary for Communal Strength as Moderator of the Relationship Between Self-Concordance and Purpose in Life (N= 166)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Self-Concordance	.24***	.05	.39		
Communal Strength	.08	.09	.07	.16	.16***
Step 2					
Self-Concordance	.24***	.05	.38		
Communal Strength	.09	.09	.07		
Interaction: Self-Concordance by Communal Strength	.01	.01	.07	.16	.01

Note. Final model: $F(3,162)=10.63$, $p<.001$, $R^2=.16$.
*** $p < .001$.

Table 11

Hierarchical Regression Analysis Summary for Communal Strength as Moderator of the Relationship Between Self-Concordance and Satisfaction with Life (N= 166)

Variables	B	SE B	β	R ²	ΔR^2
Step 1					
Relationship Status	1.96*	.93	.16	.03	.03*
Step 2					
Relationship Status	2.07*	.92	.17		
Self-Concordance	.06**	.03	.19		
Communal Strength	.01	.05	.02	.07	.04*
Step 3					
Relationship Status	2.05*	.92	.17		
Self-Concordance	.06*	.03	.18		
Communal Strength	.02	.05	.03		
Interaction: Self-Concordance by Communal Strength	.00	.00	.11	.08	.01

Note. Final model: $F(4,161)=3.35$, $p<.01$, $R^2=.08$.

* $p < .05$; ** $p < .01$.

Table 12

Hierarchical Regression Analysis Summary for Generativity as Moderator of the Relationship Between Self-Concordance and Purpose in Life (N= 167)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Self-Concordance	.16***	.04	.25		
Generativity	.68***	.09	.50	.38	.38***
Step 2					
Self-Concordance	.17***	.04	.26		
Generativity	.66***	.09	.49		
Interaction: Self-Concordance by Generativity	-.00	.00	-.06	.39	.00

Note. Final model: $F(3,163)=34.07$, $p<.001$, $R^2=.39$.

*** $p < .001$.

Table 13

Hierarchical Regression Analysis Summary for Generativity as Moderator of the Relationship Between Self-Concordance and Satisfaction with Life (N= 167)

Variables	B	SE B	β	R²	ΔR^2
Step 1					
Relationship Status	1.87*	.93	.16	.02	.02*
Step 2					
Relationship Status	2.33**	.89	.19		
Self-Concordance	.04	.03	.12		
Generativity	.19***	.05	.28	.13	.11***
Step 3					
Relationship Status	2.36**	.89	.20		
Self-Concordance	.04	.03	.13		
Generativity	.19***	.05	.27		
Interaction: Self-Concordance by Generativity	-.00	.00	-.05	.14	.00

Note. Final model: $F(4, 162)=6.34$, $p<.001$, $R^2=.14$.

* $p < .05$; ** $p<.01$; *** $p<.001$.

APPENDICES

Appendix A
Personal Goals Worksheet

We would like you to list 5 of your most important personal goals. Goals are the outcomes that you are trying to attain over the course of time. Goals are projects or strivings that you think about, plan for, carry out, and sometimes (though not always) complete and succeed at. They can be something that you are trying to do or something that you are trying to avoid. Some examples of personal goals are: trying to seek new and exciting experiences, trying to stay healthy, or trying to avoid getting into arguments with others.

Please describe 5 of your most important personal goals in the spaces provided below:

1. _____
2. _____
3. _____
4. _____
5. _____

Appendix B
Self-Concordance Measure

Please tell us why you are pursuing this goal:

1	2	3	4	5	6	7	8	9
<i>Not at all because of this reason</i>							<i>Completely because of this reason</i>	

1. You strive for this goal because somebody else wants you to, or because the situation seems to compel it.
2. You strive for this goal because you would feel ashamed, guilty, or anxious if you didn't.
3. You strive for this goal because you really believe that it's an important goal to have.
4. You strive for this goal because of the enjoyment or stimulation which that goal provides you.

Appendix C
Measure of Goal Support in a Close Relationship

Please select *two* people with whom you are very close. Write their first name and last initial in the space provided below. Please indicate what relationship you have with each individual. For example, let's say you feel close to Mary R. and she is your sister. The people you choose can be family members, friends, romantic partners or spouses, teachers, and so forth.

Individual to whom you are close	Relationship to that individual
1. _____	_____
2. _____	_____

Please indicate how you see them influencing you in seeking your goals by answering the following questions. Please complete one sheet for each of these individuals. Rate each item using the 7-point scale below ranging from completely disagree (1) to completely agree (7).

1	2	3	4	5	6	7	
<i>Completely disagree</i>					<i>Completely agree</i>		

1. _____ gives me many opportunities to work on this goal.
2. _____ scarcely leaves me any opportunities to work on this goal.
3. _____ shows me that she or he has a lot of understanding for this goal.
4. _____ shows me that she or he does *not* feel enthusiastic about this goal.
5. _____ reliably assists my attempts to accomplish this goal when I ask her or him to do so.
6. _____ behaves in ways that conflict with my attempts to accomplish this goal.

Appendix D
Communal Strength Measure

Keeping in mind the specific person you named, answer the following questions. As you answer each question, fill in the person's initials in the blank. Choose one answer for each question on the scale from 0=not at all to 10=extremely before going on to the next question.

0 1 2 3 4 5 6 7 8 9 10
Not at all *Extremely*

1. How far would you be willing to go to visit _____?
2. How happy do you feel when doing something that helps _____?
3. How large a benefit would you be likely to give _____?
4. How large a cost would you incur to meet a need of _____?
5. How readily can you put the needs of _____ out of your thoughts?
6. How high a priority for you is meeting the needs of _____?
7. How reluctant would you be to sacrifice for _____?
8. How much would you be willing to give up to benefit _____?
9. How far would you go out of your way to do something for _____?
10. How easily could you accept not helping _____?

Appendix E
Loyola Generativity Scale

Please respond to each item using this scale:

- 1 = the statement never applies to you
- 2 = the statement only occasionally applies or seldom applies to you
- 3 = the statement applies to you fairly often
- 4 = the statement applies to you very often

1. ____ I try to pass along the knowledge that I have gained through my experiences.
2. ____ I do not feel that other people need me.
3. ____ I think I would like the work of a teacher.
4. ____ I feel as though I have made a difference to many people.
5. ____ I do not volunteer to work for a charity.
6. ____ I have made and created things that have had an impact on other people.
7. ____ I try to be creative in most things I do.
8. ____ I think that I will be remembered for a long time after I die.
9. ____ I believe that society cannot be responsible for providing food and shelter for all homeless people.
10. ____ Others would say that I have made unique contributions to society.
11. ____ If I were unable to have children on my own, I would like to adopt children.
12. ____ I have important skills that I try to teach others.
13. ____ I feel that I have done nothing that will survive after I die.
14. ____ In general, my actions do not have a positive effect on others.
15. ____ I feel as though I have done nothing of worth to contribute to others.
16. ____ I have made many commitments to many different kinds of people, groups, and activities in my life.
17. ____ Other people say that I am a very productive person.
18. ____ I have a responsibility to improve the neighborhood in which I live.
19. ____ People come to me for advice.
20. ____ I feel as though my contributions will exist after I die.

Appendix F
Psychological Well-Being Inventory: Purpose in Life

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers. Choose the number that best describes your present agreement or disagreement with each statement.

- 1 = strongly disagree
 - 2 = disagree somewhat
 - 3 = disagree slightly
 - 4 = agree slightly
 - 5 = agree somewhat
 - 6 = strongly agree
-
- 5. I feel good when I think of what I've done in the past and what I hope to do in the future.
 - 11. I live life one day at a time and don't really think about the future.
 - 17. I tend to focus on the present, because the future nearly always brings me problems.
 - 23. I have a sense of direction and Purpose in Life.
 - 29. My daily activities often seem trivial and unimportant to me.
 - 35. I don't have a good sense of what it is I'm trying to accomplish in life.
 - 41. I used to set goals for myself, but that now seems like a waste of time.
 - 47. I enjoy making plans for the future and working to make them a reality.
 - 53. I am an active person in carrying out the plans I set for myself.
 - 59. Some people wander aimlessly through life, but I am not one of them.
 - 65. I sometimes feel as if I've done all there is to do in life.
 - 71. My aims in life have been more a source of satisfaction than frustration to me.
 - 77. I find it satisfying to think about what I have accomplished in life.
 - 83. In the final analysis, I'm not so sure that my life adds up to much.

Appendix G
Satisfaction with Life Scale

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 1 = strongly disagree
 - 2 = disagree
 - 3 = slightly disagree
 - 4 = neither agree nor disagree
 - 5 = slightly agree
 - 6 = agree
 - 7 = strongly agree
-
1. ____ In most ways my life is close to my ideal.
 2. ____ The conditions of my life are excellent.
 3. ____ I am satisfied with my life.
 4. ____ So far I have gotten the important things want in life.
 5. ____ If I could live my life over, I would change almost nothing.

Appendix H Glossary

A

autonomy One of the three nutrients in Self-Determination Theory; defined as volitional and integrated regulation of the self.

autonomy support Behaviors by others conducive to an environment that conveys choice and acknowledgement of feelings.

C

communal strength Degree of responsibility a person feels for a particular communal partner's welfare.

competence One of the three nutrients in Self-Determination Theory; defined as experiencing efficacy.

E

emotional reliance Person's readiness to enter into interactions where emotional support may be available; varies by individual as a function of the quality of specific relationships.

external regulation Most extrinsic and least regulated of the four extrinsic regulations that make up extrinsic motivation in the continuum of self-determined behaviors.

external rating An extrinsic reason for pursuing a goal from the Self-Concordance scale as derived from Self-Determination Theory's continuum of extrinsic motivations.

extrinsic motivation Drive to perform an activity in order to attain a separable outcome such that engaging in the activity does not provide satisfaction in itself.

G

generativity Stems from Eriksonian life-span development theory; specifically generative concern defined as providing, or having a conscious concern, for the next generation.

goal support perceptions of how much goal-related social support one receives from their partner while the contrasting negative support suggests social undermining rather than a pure lack of support.

I

idiographic goals Personal goals that are created by the participant, in contrast with goals that are created by the researcher.

identified rating An extrinsic reason for pursuing a goal from the Self-Concordance scale as derived from Self-Determination Theory's continuum of extrinsic motivations.

identified regulation Second least extrinsic and second most regulated state of the four extrinsic regulations that make up extrinsic motivation in the continuum of self-determined behaviors.

individual goals Pursuits that do not require another person to achieve.

interpersonal dimensions Four constructs that are unidimensional in nature consisting of Goal Support, Shared Goal Orientation, Communal Strength and Generativity.

intrinsic motivation Natural inclination toward assimilation, mastery, spontaneous interest and exploration that

represents a principal source of enjoyment and vitality through life.

intrinsic rating An intrinsic reason for pursuing a goal from the Self-Concordance scale as derived from Self-Determination Theory's continuum of motivation.

introjected rating An extrinsic reason for pursuing a goal from the Self-Concordance scale as derived from Self-Determination Theory's continuum of extrinsic motivations.

introjected regulation Second most extrinsic and second least regulated of the four extrinsic regulations that make up extrinsic motivation in the continuum of self-determined behaviors.

P

purpose in life Outcome measure of well-being; one of the six components of the Psychological Well-Being Scale. Defined as having goals, aims and objectives for living, a sense of directedness and feeling there is meaning and purpose to life.

R

relatedness One of the three nutrients in Self-Determination Theory; defined as the need to feel securely connected with an loved by other people.

S

satisfaction with life Outcome measure of well-being; operationalized by the Satisfaction with Life Scale, defined as global life satisfaction.

self-concordance Rated extent to which people pursue goals with feelings of ownership, intrinsic interest and identity congruence rather than with feelings of

introjected guilt and internal compulsion.

self-determination Degree to which human behaviors are volitional.

self-determination theory Developed by social psychologists as a theory of human motivation concerned with the degree of volitional or self-determined behavior experienced by individuals and the social contexts which support this natural behavioral tendency.

shared goal orientation

Operationalization of the Shared Goal construct as a single dimension that has individual goals and Shared Goals at opposite poles of the Shared Goal Orientation scale.

shared goals Goals that can only be pursued and accomplished with others and can not be divided up or competed for such as friendship or teamwork.

V

virtue theory Posits that human flourishing arises from the virtuous pursuit of constitutive and shared goods.

W

well-being outcomes Two dependent measures consisting of Purpose in Life and Satisfaction with Life.

