WALK THE LINE:

BALANCING CONFLICTING GOALS THROUGH TENSION SYSTEMS

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Walk the line:

Balancing conflicting goals through tension systems

Abstract

Although our society esteems individuals who achieve it all, the 24-hour day and our limited resources means that attaining multiple goals is a difficult undertaking. This research draws upon Lewin's theorizing on goal conflict and goal interruption to predict how individuals balance important conflicting goals. We predict that when an individual experiences goal conflict, the individual will prioritize his/her goals by moving towards one goal. Counter-intuitively however, we also hypothesize that this movement away from the competing goal will facilitate its pursuit, thus enabling goal balancing. We suggest that when the individual moves towards goal A, the competing goal B's progress is interrupted. The psychological incompletion of goal B causes its state of tension to persist and consequently the individual feels the need to resume the goal. Accordingly, we expect affective and motivational consequences to this conflict-induced goal interruption. We found support for our hypotheses in 2 experiments that examined the conflict between academic and relationship goals. When individuals who are high in chronic relationship commitment experience goal conflict, they reported higher state relationship commitment (Chapter 2 and 3) and lower academic commitment (Chapter 3), relative to individuals who are low in chronic relationship commitment. However, in support of our conflict-induced goal interruption hypothesis, they also report lower partner affect (Chapter 2) and better performance in an academic-related task (Chapter 3).

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CHAPTER 1: INTRODUCTION

There is something intrinsically appealing about the American Dream. We are captivated by the idea that we can attain all our goals, be they fame, fortune or family, no matter how many we have. Yet we are reminded daily that the odds for achieving this ideal are stacked against us, as we struggle to achieve our goals. For example, a working mother with a two year old might be torn between wanting to spend as much time as possible with her child and wanting to be a productive researcher. Unfortunately, due to the constraints on time and resources, her relationship and career goals are bound to conflict. Both are important goals with meaningful and significant consequences, such that disengaging from one of the two goals is not an attractive option. Should she decrease her work hours to spend time with her child? Doing so will slow her career goal progress which may have negative consequences for the future. On the other hand, working at her usual pace, and continuing her progress up the corporate ladder, perhaps to ensure that her child has a secure future, means that she misses out on precious moments with her child. An all-or-nothing solution, where she completely abandons either one goal or the other, is clearly unsatisfactory. Instead she needs to balance the two conflicting goals in such a way that she can achieve them both. This thesis will examine what happens when individuals experience conflict between two important goals with significant long-term consequences. In particular, my hypotheses draw upon Lewin's theorizing on goal conflict and goal interruption to predict how individuals balance both goals.

Lewin (1935) hypothesized that when an individual stands between two goals or positive outcomes of approximately equal strength, the individual will move toward one and away from the other. I propose that the direction of locomotion is determined by individuals' chronic goal commitment (Wickland & Gollwitzer, 1982). The more committed an individual is to a goal, the more likely he/she will choose to prioritize and pursue that goal. Goal prioritization is a necessary condition for the individual to exit the conflict situation as this process transforms the Gestalt relations between goals within the field to allow purposeful and clear goal direction (Lewin, 1935, Festinger, 1957). As the field is transformed and restructured, the prioritized goal increases in value

(Festinger, 1957), thus enabling the individual to implement behaviours that will promote goal attainment (Gollwitzer, 1990). It follows that the individual will eventually disengage from the less committed competing goal. I argue, however, that whilst this might be the case if the individual is dealing with a goal of secondary importance, the individual cannot afford to disengage from a goal of paramount importance such as the goal to ensure the well-being of one's child.

Rather, I hypothesize that the movement away from the less committed competing goal will paradoxically facilitate its pursuit, thus allowing the individual to balance his/her goals. My rationale for this prediction is that the movement toward goal A interrupts the pursuit of the competing goal B leading to individuals redoubling their efforts toward achieving goal B (Lewin, 1935; Zeigarnik, 1934). Therefore, the locomotion toward goal A will ultimately also lead the individual to be more driven to pursue goal B, the competing goal.

Goal balancing

Goal research thus far has focused mainly on how people pursue and attain a single goal.

Goal pursuit is depicted by this research as, essentially, a closed-minded process that is fixed on that one central goal (Gollwitzer, 1990; Shah, Friedman & Kruglanski, 2002). Yet few people would deny that we are often motivated to pursue many different goals which sometimes are incompatible (e.g. Emmons & King, 1988; Higgins, 1997; Carver & Scheier, 1998; Kruglanski et al., 2002). For this reason, a growing number of researchers are examining how individuals self-regulate to achieve multiple goals. Their findings highlight the general phenomenon of goal balancing (Fishbach & Dhar, 2005; Fishbach, in review), whereby the individual oscillates about a position of equilibrium between two or more goals. For example, Ayelet Fishbach and her colleagues (Fishbach & Dhar, 2005; Fishbach & Zhang, 2008; Koo & Fishbach, 2008; Fishbach, in review) found that goal commitment and goal progress predict when people switch from one goal to the next. Importantly, people strive to balance their goals, particularly in personal and relational domains (Kumashiro, Rusbult & Finkel, in press).

By examining the consequences of a conflict situation in which the individual has to pick one goal over the other, we can further our understanding of how people naturally balance their goals. When people prioritize one goal over the other, what happens to the pursuit of the competing goal and how do people resume pursuing the competing goal? Although Lewin (1935) theorized that oscillation will occur between the two goals in the conflict situation, he did not elaborate on how this might occur. I propose that a possible mechanism of this oscillation is intrinsic to the conflict-induced locomotion toward one goal. When there is an unmet need or goal, a tension system within the individual exists until the goal is met or abandoned (Lewin 1935). I hypothesize that when there is goal conflict, movement toward one goal disrupts the progress of the other goal, and consequently inducing this tension state with regards to the competing goal (Lewin, 1935). Thus, as a natural outcome of one goal being selected, the individual should be driven to continue pursuing and to complete the competing goal (Lewin, 1935; Zeigarnik, 1934; Wickland & Gollwitzer, 1983; Forster, Liberman & Higgins, 2002). In addition, negative affect toward the interrupting factor arises as the individual is unable to make progress in that goal (Mandler, 1975; Berscheid, 1983; Carver & Scheier, 1998). Therefore, I hypothesize that the very act of selecting one goal should induce negative affect toward this goal, through its interruption of the competing goal.

Current Research

To test my hypotheses, I examined the consequences of conflict between romantic relationship goals and academic goals, two goals which have significant long-term consequences for undergraduate students, on state goal commitment. First, I predict that when individuals who are high in chronic relationship commitment experience goal conflict, they will move toward their romantic relationship and away from their academic goal. Therefore, I expect that they will report higher state

relationship commitment but lower state academic commitment, relative to individuals who are low in chronic relationship commitment. ¹

Second, I expect that there are both affective and motivational consequences to this interruption of the pursuit of the competing goal. I predict that individuals who are high in chronic relationship commitment will, as a result of their locomotion toward the relationship goal and its interruption of the academic goal, a) feel less positively toward their partner b) will pursue their academic goals more strongly when given an opportunity by performing better on an academic-related task relative to those who are low in chronic relationship commitment.

Experiments 1 and 2 test the hypothesis that individuals' chronic goal commitment will lead them toward one goal and away from the other when they experience conflict between the two goals. Experiment 1 further tests the affect hypothesis and Experiment 2 the motivational hypothesis of conflict-based goal interruption.

¹ I chose relationship goals commitment to predict the direction of locomotion as the distribution for academic goals commitment was positively skewed with a relatively little variance and thus not useful as a moderator (Klein, Wesson, Hollenbeck & Alge, 1999).

CHAPTER 2: GOAL CONFLICT AND AFFECTIVE CONSEQUENCE OF GOAL INTERRUPTION

In Experiment 1, I manipulated the extent to which participants perceived a conflict between their career and relationship goals. I tested the hypothesis that individuals who are chronically committed to their relationship goal will increase in state relationship commitment and decrease in academic goals commitment after reading about goal conflict. I also expected that this movement would interrupt their academic goal progress and result in greater negative affect toward their partner.

Method

Participants

Seventy-four students (51 females, 23 males) involved in exclusive dating relationships were recruited at a student center at the University of Waterloo in exchange for a chocolate bar. The mean age was 20.23 years (SD= 2.81 years) and the mean length of relationship was 18.6 months (SD=20.9 months).

Procedure

Participants were asked to read an article that was ostensibly from Psychology Today entitled "Balancing work and relationships". Before they read the article, they completed a measure of relationship goal commitment embedded among other filler items.

The following is an excerpt from the article from the goal conflict condition:

Dr. L. Koestner, a psychology professor at Columbia University, points out that we often believe that we can live the perfect balanced lifestyle and achieve both personal and relationship success. Contrary to this popular belief however, his research shows that pursuing personal success means working longer and more unpredictable hours, which in turn makes it harder for people to devote time to their social relationships. Inevitably they miss out on shared social events, quiet times together and opportunities for deeper conversation.

The latest report from Dr. Koestner's lab states that "there is strong evidence that Americans and Canadians have to sacrifice important aspects of their relationships with family and friends to achieve personal goals". We can't be high achievers and still expect to have relationships that are fully satisfying.

Participants in the no conflict condition read instead that:

Dr. L. Koestner, a psychology professor at Columbia University, points out that we often believe that we can live the perfect balanced lifestyle and achieve both personal and relationship success. Fortunately, his research supports this popular belief and shows that pursuing personal success does not have to mean working longer hours and more unpredictable hours. People can still maintain social relationships by participating in shared social events, quiet times together and meaningful conversation.

The latest report from Dr. Koestner's lab states that "there is no evidence that Americans and Canadians have to sacrifice their relationships with family and friends to achieve personal goals". We can be high achievers and still expect to have relationships that are fully satisfying.

Next, participants completed measures of commitment to relationship goals, commitment to academic goals, behavioural intention and partner-positivity. As a manipulation check, participants also rated the believability of the article's findings. Participants were debriefed and thanked for their participation. (Materials for Experiment 1 are presented in Appendix A.)

Materials

Chronic relationship commitment. This 3-item scale (α = .85) measures individuals' relationship goal commitment ("At this point in time, I want to maximize the development and strength of my romantic relationship as much as possible"; "At this point in time, it is of utmost importance for me to succeed at developing and strengthening my romantic relationship", and "At this point in time, I will be extremely upset if I do not successfully develop and strengthen my romantic relationship"). Participants rated each item on a 7-point scale (1= Strongly disagree, 7 = Strongly agree).

State relationship commitment. This 3-item scale (α = .78) measures individuals' commitment to their romantic relationship (e.g. "I am willing to make any kind of sacrifice necessary to maintain a loving romantic relationship", and "My romantic relationship is the single most significant aspect of my life"). Participants rated each item on a 7-point scale (1= Not at all, 7 = Extremely).

Behavioural intention. This single item measures individuals' intended allocation of time and resources toward their relationship goal ("Over the next month, I want to make sure I put in almost all my time and resources into maintaining my romantic relationship and not let my school work get in

the way of my relationship"). Participants rated this item on a 7-point scale (1= Strongly disagree, 7 = Strongly agree).

Academic commitment. This 5-item scale (α = 80) measures individuals' commitment to their academic goal (e.g. "I am willing to make any kind of sacrifice necessary to achieve my academic and career goals" and "I am extremely committed to my academic success"). Participants rated each item on a 7-point scale (1= Not at all, 7 = Extremely).

Partner affect. This 8-item scale (α = .88) assesses current mood when thinking about one's partner (e.g. happy, disappointed (reversed score), pleased). Participants rated each item on a 7-point scale (1= Not at all, 7 = Extremely).

Results and Discussion

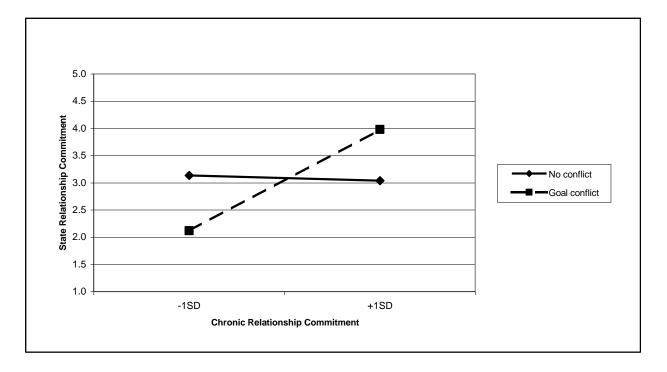
Preliminary analyses

Participants did not differ by condition on their rating on how believable the article was (t(72) = -.011; M for both conditions = 4.8).

State relationship commitment

I regressed state relationship commitment on chronic relationship commitment and condition and found the predicted two-way interaction, β =.48, t(69)=3.18, p<.01 (Figure 1). As expected, participants high in relationship commitment reported significantly higher state relationship commitment in the conflict condition (M=4.0), compared to the no-conflict condition (M=3.04) (β =.32, t(69)=2.97, p<.01). Interestingly, participants low in commitment showed the opposite effect and significantly decreased in relationship goal commitment in the conflict condition (M=2.12) compared to the no-conflict condition (M=3.13) (β =-.36, t(69)=-3.36, p<.01).

Figure 1: State relationship commitment by chronic relationship commitment and condition in Experiment 1.



Behavioural intention

I regressed the single item behavioural intention measure on chronic relationship commitment and condition and again found the predicted two-way interaction, β = .34, t(69)=2.15, p<.05. As expected, participants high in relationship commitment were significantly more likely to endorse allocating almost all of their time and resources to their romantic relationships in the conflict condition, compared to the no-conflict condition (β = .39, t=3.38, p<.01). However, the effect was not significant for participants low in goal commitment (β =-.11, t<1).

Academic commitment

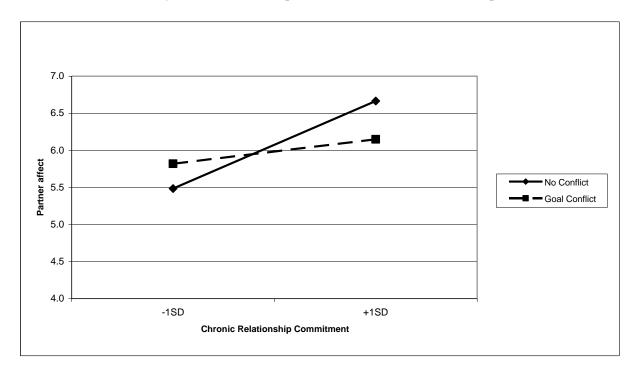
I did not find the predicted effect for academic commitment (β =-.18, t<1). I expected that individuals who are high in relationship commitment will also report a decrease in academic commitment. There is a non-significant trend, such that they report lower academic commitment (M=4.53) in the conflict condition relative to the no conflict condition (M=4.98). However, this effect

might have been weakened due to the manipulation highlighting the conflict between career and relationship goals instead of academic and relationship goals. Experiment 2 will address this problem by manipulating the conflict between relationship and academic goals directly.

Partner affect

Finally, I regressed partner affect on chronic relationship commitment and condition and found the predicted two-way interaction, β =-.31, t(69)=-2.02, p<.05 (Figure 2). Participants high in goal commitment reported a significant decrease in partner affect in the conflict condition relative to the no conflict condition (β =-.26, t=2.50, p<.05). The simple effect was not significant for participants low in goal commitment.

Figure 2: Partner affect by chronic relationship commitment and condition in Experiment 1.



Thus, I found partial support for the hypothesis that individuals move toward prioritized goal and away from the other competing goal when they experience goal conflict. Participants who are strongly committed to their romantic relationship indeed enhanced this commitment when they experienced goal conflict, but did not simultaneously *decrease* their academic commitment.

I also found support for the hypothesis that this movement toward one goal interrupts the progress of other goals. Unfortunately, the decision to recommit to one's romantic relationship comes at a cost; that is, participants are consciously giving up their important academic goals (as reflected in the behavioural intention measure). Choosing to devote more time and resources to one's relationship means that progress of their academic goals will suffer. Consequently, participants feel less positively toward their partner. Interestingly, individuals low in relationship commitment showed the opposite pattern, reporting less commitment to their relationship when they experienced a goal conflict. This reflects on their relatively weaker commitment to their romantic relationship, such that they were unwilling to bear the cost of choosing their romantic relationship over their important academic goals.

CHAPTER 3: GOAL CONFLICT AND MOTIVATIONAL CONSEQUENCES OF GOAL INTERRUPTION

In Experiment 2, I further explore the consequences of conflict-based goal interruption by presenting participants an opportunity to pursue their academic goal by completing an anagram task, following the goal conflict manipulation. I also modified the manipulation by making it specific to the conflict between relationship goals and academic goals, as opposed to career goals.

As in Experiment 1, I predicted that in the context of goal conflict, individuals who were high in chronic relationship commitment would show movement toward their relationship goal, and away from their academic goals. Thus, I expect that they will report higher relationship commitment and lower academic commitment. I also predict that this movement will interrupt their academic goals. Accordingly, I expect that the persisting state of tension of their academic goals will be evident in better performance in an academic-related task. I do not expect, however, that self-report anagram motivation to be affected for several reasons. If participants consciously decide that they are less committed to their academic goals, it is unlikely that they will report being more motivated at an academic task. In addition, the intention or compulsion to complete an interrupted goal often occurs without any consciousness (Ovianskina, 1928).

Method

Participants

Thirty-three participants (21 females and 11 males) in exclusive dating relationships participated in exchange for course credit. The mean age is 18.9 years (SD = 1.3 years) and the mean relationship length is 9.3 months (SD = 12 months).

Procedure

During online mass-testing sessions, all participants completed the chronic relationship commitment measure as used in Experiment 1. They completed the in-lab session approximately 2 to 8 weeks later.

During the in-lab session, participants were told that they would complete an anagram task which is a measure of verbal fluency, a skill ostensibly important for reading and writing, so that they would associate task performance with their academic goals. Next, participants read that recent research found that students in romantic relationships do worse (goal conflict condition) or better (noconflict condition) on difficult academic tasks. This information was embedded in an information sheet on verbal fluency that participants were asked to read before completing the task.

Next, participants were instructed that they had to solve a number of anagrams by unscrambling a series of letters to make as many real words as possible, using all the letters in the series. They were also told that individuals with good verbal fluency find about 80% of all possible words.

After completing the anagram task, participants rated how strongly they were motivated to solve the anagrams, their relationship closeness and commitment, and their commitment to academic goals. Participants were debriefed and thanked for their participation. (Materials for Experiment 2 are presented in Appendix B.)

Measures

Task Performance. A mean score for an agram performance was created by averaging the number of correct words found in the critical set.

Anagram Motivation. This 5 item scale (α = .90) assesses motivation during the anagram task (e.g. "I tried my best to solve the anagrams" and "I put in a lot of effort into solving the anagrams."). Participants rated each item on a 7-point scale (1= Strongly disagree, 7 = Strongly agree).

Relationship commitment. I chose to measure relationship commitment using a more established measure by Berscheid, Synder and Omoto (1989). This 4 item scale (α =.80) adapted from Subjective Closeness Index measures relationship closeness and commitment ("Relative to your other relationships, how close are you and your partner?" and "Relative to your other relationships, how committed are you to your relationship with your partner?"). Participants rated each item on a 7-point scale (1= Not at all, 7 = Extremely).

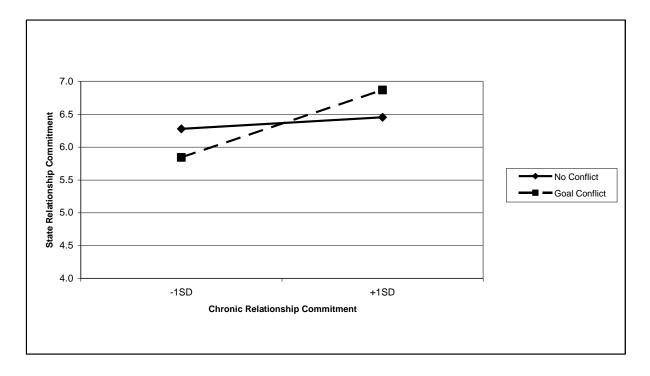
Academic commitment. The same 5-item scale (α = .85) used in Experiment 1 was used to measure individuals' commitment to their academic goals.

Results and Discussion

Two participants were excluded from the analyses for failing to properly understand the anagram task as they did not use all the letters in the series to form new words. To control for a general motivational state, such that highly motivated individuals tend to self-report strong commitment on most goals, I controlled for one goal when predicting the other in the regression analysis. Indeed, I found that there was a trending correlation between state relationship commitment and academic commitment (r=.28, p=.12). As expected, there was no difference in self-reported motivation to solve the anagrams by condition (t(30)=-1.12; M(conflict) = 4.8, M(no conflict)=5.1). *State relationship commitment*

Controlling for academic commitment, I regressed state relationship commitment on chronic relationship commitment and condition and found the predicted significant two-way interaction, B=-.33, t(24)=-2.21, p<.05 (Figure 3). As expected, participants high in relationship commitment felt closer and more committed to their partner in the conflict condition (M=5.28) relative to the no conflict condition (M=4.86) (B=-.43, t=-2.20, p<.05). Interestingly, I again found the opposite effect for participants low in relationship commitment, who showed a decrease in subjective closeness and commitment in the conflict condition (M=4.26) relative to the no-conflict condition (M=4.69) (B=.48, t=2.31, p<.05).

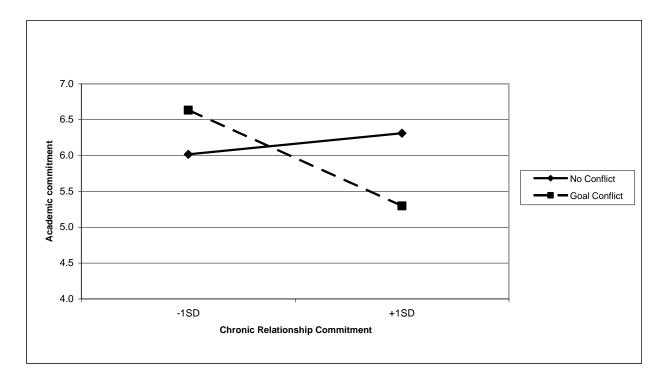
Figure 3: State relationship commitment by chronic relationship commitment and condition in Experiment 2.



Academic commitment

Controlling for state relationship commitment, I regressed academic commitment on chronic relationship commitment and condition and found the predicted two-way interaction, B=-.63, t(24)=2.52, p<.05 (Figure 4). As expected, participants high in relationship commitment decreased significantly in academic commitment in the conflict condition (M(conflict)=5.30 vs M(no conflict)=6.31) (B=1.23, t=3.13, p<.01) whereas participants low in relationship commitment showed a marginal increase in the conflict condition (M(conflict)=6.63 vs M(no conflict)=6.02) (B=-.08, t=-1.90, p<.07).

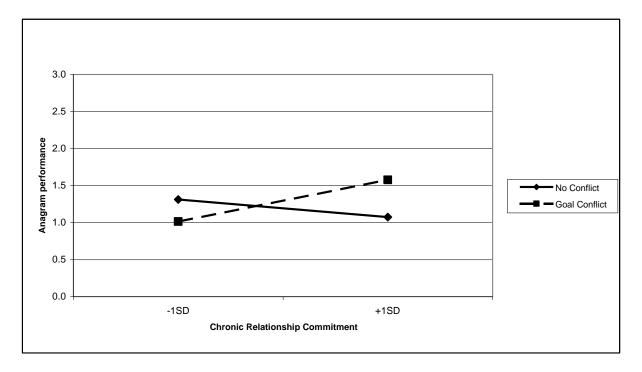
Figure 4: Academic commitment by chronic relationship commitment and condition in Experiment 2.



Anagram performance

Finally, I regressed anagram performance on chronic relationship commitment and condition and found the predicted significant two-way interaction, B=-.31, t(27)=-2.41, p<.05 (Figure 5). As expected, participants high in relationship goal commitment performed better on the anagram task in the conflict condition relative to the no conflict condition (B=-.50, t=3.02, p<.01). The effect was not significant for participants low in goal commitment (B=.30, t=1.79, p<.1). Thus, even though participants who are strongly committed to their romantic relationship reported lower commitment toward their academic goal, they performed better on the anagram task.

Figure 5: Anagram performance by chronic relationship commitment and condition in Experiment 2.



In Experiment 2, I found support for both hypotheses. As predicted, participants who are strongly committed to their romantic relationship moved toward their relationship goal and away from their academic goal when they experience goal conflict. The converse was true for participants who are not as committed to their romantic relationship, although a weaker effect. As expected, I also found that participants who are high in chronic relationship commitment performed better on the anagram task, even though they reported lower academic commitment. Simply put, when participants experience goal conflict, they consciously prioritize their goals by committing to their relationship goal. However, this action interrupts their academic goal, which leads participants to feel compelled to complete the goal. This compulsion is revealed in the participants exerting more effort in the anagram task.

CHAPTER 4: GENERAL DISCUSSION

In a world where individuals are constantly told that they can have it all, that ideal life is but a step away if they just *do* it, the fact that goals can and often do conflict is overlooked. Few individuals manage to publish a journal article every month and still have time to spend time with their families and socialize with their friends, not to mention achieve third, fourth and fifth goals. Not only are people limited by time and resources, but different goals may also require opposite means (Carver & Scheier, 1998). I set out to examine what happens when individuals have to choose between two important goals.

My model was based on two important Lewinian concepts – goal conflict and goal interference. First, I predicted that when faced with goal conflict individuals would move toward one goal, away from the other, and that the direction of the movement would depend on their chronic goal commitment. Second, I predicted that by moving toward one goal, progress on the other goal is interrupted, which leads to negative affect toward the chosen goal and an increased drive to complete the interrupted goal.

The findings from two experiments were consistent with our hypotheses. Participants who were chronically committed to their relationship goal further increased their state relationship commitment (both experiments) and decreased their state academic commitment when they experienced a goal conflict (Experiment 2). As predicted, however, they were paradoxically less positive toward their partner (Experiment 1) and performed better on an academic-related task (Experiment 2). My results show the spreading of alternatives alà Festinger (1957), reflecting participants' conscious decision to prioritize their relationship goal. As participants move from a mere motivational state of mind to volitional state of mind (Heckhausen & Gollwitzer, 1987), their chosen relationship goal becomes more attractive and their academic goal less so. Despite goal prioritization however, participants are unable to simply disengage from their academic goal, a highly significant and meaningful goal. Instead, they continue to pursue their academic goal, albeit nonconsciously, in a fantastic goal balancing act.

I also found evidence of an opposite locomotion pattern among individuals who are lower in chronic romantic relationship commitment. They reported a significant decrease in state relationship commitment (both experiments) and a slight increase in state academic commitment (Experiment 2). Even though I did not predict this finding, it fits into my goal-balancing model. It is likely that participants who are lower in chronic romantic relationship commitment are high in academic commitment, as previous mass-testing data indicated that most participants are strongly committed to their academic goals. Thus, when they experience goal conflict, they consciously prioritize their goals by increasing in academic commitment and decreasing in relationship commitment. Had I presented them with an opportunity to pursue their relationship goal, I expect that they would show the same conflict-based goal interruption effect that individuals high in chronic romantic relationship showed toward their academic goal.

Contributions and implications

This research is one of the first attempts to empirically test Lewin's theorizing on goal conflict. More importantly, it extends what we know about goal balancing through the integration of two Lewinian concepts. This paper suggests that tension systems can facilitate goal balancing, such that, the psychological incompletion of the interrupted goal causes the state of tension to persist and the individual to feel a need to resume the goal (Ovsiankina, 1927; Zeigarnik, 1938). This model also implies that an individual need not be conscious of balancing his/her multiple goals. The compulsion or intention to pursue an interrupted goal happens naturally and sometimes even against the conscious will (Ovsiankina, 1927).

One implication of this goal balancing model is that an individual can reduce the state of tension through substitute activities (Lewin, 1935). For example, the working mother who chooses to spend time with her two-year old child instead of writing a journal article may decide to read journal articles to her child in lieu of Dr. Seuss. The more similar the substitution activity is to the original activity, the greater its substitution value (Lewin, 1935). If the mother feels that reading a journal article is equivalent to writing a journal article, the state of tension dissipates and the goal is attained.

However, if reading a journal article is not seen as a substitute for writing an article, the state of tension will continue and the mother would feel a need to continue her writing activities.

Limitations

One limitation to the current research is that I was unable to examine relative goal commitment as there was little variance in academic goal commitment. By examining other high-order goals, I can use individuals' relative goal commitment to predict the direction of locomotion. This will also allow me to examine goal interruption effects for both goals.

Another limitation is that there are two alternative explanations that I did not fully rule out. It is possible that the observed rebound effects (i.e., improved performance on the anagram task among high-relationship-commitment individuals faced with goal conflict) are due not to goal interruption but suppression. Individuals who are high in chronic relationship commitment may have been suppressing their academic goal which could have led to increased performance on the anagram task. It is also possible that the rebound effect was due to participants reacting against the elimination of choice (Brehm, 1966). When participants are told that their goals conflict (and thus they can only have one or the other), they may feel like their freedom of choice is being impinged upon and react by performing better in the anagram task. However, these two alternative explanations do not account for why the effect was only significant for individuals with high relationship commitment or for why participants felt negatively toward their partners in Experiment 1. Future experiments can test these alternative hypotheses by looking at the post-fulfillment inhibition effect, that shows that goal-related constructs are inhibited once the goal is attained (Liberman, Forster & Higgins, 2007). Thus, if the findings are due to goal interruption, I should observe a decrease in accessibility in the unchosen goal when participants are given an opportunity to attain it. However, if the findings are due to suppression or reactance, accessibility should be unaffected by goal attainment (see Liberman et al., 2007 for a more complete discussion).

Future directions

Drawing further upon the wealth of knowledge on single-goal single-action theories also allows us to make other predictions on goal balancing. An alternative to goal balancing is goal *shielding*, or single-mindedly protecting one single goal from interruption and setting the others aside. In particular, the implemental mindset has been shown to facilitate single-goal pursuit. An individual in an implemental mindset seeks ways to implement the initiation of action that will lead to attainment of the focal goal (Gollwitzer, 1990). In contrast, an individual in a deliberative mindset is open-minded and weighs the pros and cons of the available goals. It is possible that the deliberative mindset facilitates goal balancing as it allows the individual to move more effortlessly from one goal to the next.

In conclusion, goal conflict is a common occurrence in our multiple goal lives. Inevitably, at that point of conflict, we have to prioritize our goals and decide which goals matter the most to us and which goals matter less. Fortunately, my research shows that this does not have to mean disengaging from the goals of relatively lesser importance. We can have our cake and eat it too by balancing our goals through tension systems.

Appendix A: Materials used in Experiment 1

Sometimes peoples' responses can be influenced by their age, gender, and ethnicity. In order to investigate the effects that these factors might have on your previous responses, please answer the following items. You may decline answering any of the following questions. All of these responses are totally confidential and will not be linked to you in any way.

1) Gender (circle one): Male Female	
2) Age:	
B) In which country were you born?	
#) Ethnicity: Aboriginal/Native Black Asian East Indian Hispanic Middle Eastern White Other:	
5) Are you in a romantic relationship: Yes No	
6) How long have you been in a romantic relationship: yearsmonths	

We are interested in how much you care about attaining your academic and relational goals.

Please read the following items carefully and think about your academic goal at this point in time. We are interested in how motivated you are to succeed at school.

Not at all true								Extre true	mely			
1	2 3 4				5 6					7		
At this poin much as pos		vant to maximiz	e my success as	1	2	3	4	5	6	7		
At this point in time, it is of utmost importance for me to succeed at my academic goal.					2	3	4	5	6	7		
At this point in time, I will be extremely upset if I do not succeed at my academic goal.					2	3	4	5	6	7		

Instructions: Please carefully read the following article taken from the Psychology Today. We are looking at how well information is retained in a distracting environment.

We will be asking you questions about the article later in the booklet.

Psychology Today Here To Help

Balancing work and relationships

WHY WE CAN'T HAVE IT ALL

Imagine...

You earn a six figure salary, you drive a Porsche and you own several homes including a beautiful summer cottage in Florence.

Imagine...

You come home to a loving partner, you have a supportive family and great friends.

Dr. L. Koestner, a psychology professor at Columbia University, points out that we often believe that we can live the perfect balanced lifestyle and achieve both personal and relationship success. Contrary to this popular belief however, his research shows that pursuing personal success means working longer and more unpredictable hours, which in turn makes it harder for people to devote time to their social relationships. Inevitably they miss out on shared social events, quiet times together and opportunities for deeper conversation.

The latest report from Dr. Koestner's lab states that "there is strong evidence that Americans and Canadians have to sacrifice important aspects of their relationships with family and friends to achieve personal goals". We can't be high achievers and still expect to have relationships that are fully satisfying.

"This is essentially a zero sum relationship", says Dr. Koestner. We have to choose between achieving **personal goals** (e.g., having a fun social life, getting good grades and being fit) or achieving **relationship goals** (e.g., being a supportive friend and being a loving partner).

"YOU CAN'T HAVE YOUR CAKE AND EAT IT TOO"

Furthermore, Dr. Koestner worries that our modern fast-paced lives will only increase the conflict between our personal and relationship goals.

This suggests that the old English proverb "have your cake and eat it too" is mere wishful thinking in today's world.

- Justin Webb

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Dr. L. Koestner, a psychology professor at Columbia University, points out that we often believe that we can live the perfect balanced lifestyle and achieve both personal and relationship success. Fortunately, his research supports this popular belief and shows that pursuing personal success does not have to mean working longer hours and more unpredictable hours. People can still maintain social relationships by participating in shared social events, quiet times together and meaningful conversation.

The latest report from Dr. Koestner's lab states that "there is no evidence that Americans and Canadians have to sacrifice their relationships with family and friends to achieve personal goals". We can be high achievers and still expect to have relationships that are fully satisfying.

"This is not a zero sum relationship", says Dr. Koestner. We can achieve **personal goals** (e.g., having a fun social life, getting good grades and being fit) and still achieve **relationship goals** (e.g., being a supportive friend and being a loving partner).

"YOU CAN HAVE YOUR CAKE AND EAT IT TOO"

Furthermore, Dr. Koestner states independence is the key to a good relationship in our modern fast-paced lives. Both partners need the space for personal growth which then enables them to live life to the fullest.

This suggests that the old English proverb "have your cake and eat it too" still holds true in today's world.

- Justin Webb

At this moment in time, when I think about spending time with my romantic partner, I feel...

Not at all	Very slightly	Somewhat	Moderate	Much	1	Ve	ry muc	h :	Extrem	nely
1	2	3	4	5		6			7	
1. Нарру	7			1	2	3	4	5	6	7
2. Regre	tful			1	2	3	4	5	6	7
3. Uncor	mfortable			1	2	3	4	5	6	7
4. Anxio	ous			1	2	3	4	5	6	7
5. Enthu	siastic/Motivate	ed		1	2	3	4	5	6	7
6. Please	ed			1	2	3	4	5	6	7
7. Dejec	ted/Disappointe	ed		1	2	3	4	5	6	7
8. Confu	sed/Torn			1	2	3	4	5	6	7
9. Frustr	ated			1	2	3	4	5	6	7
10. Excite	ed			1	2	3	4	5	6	7

We are interested in your pursuit of academic and relational goals. Please rate the extent to which you agree with the following statement.

Not at all						Extremely
1	2	3	4	5	6	7

1. Over the next month, I want to make sure I put in almost all my time and resources into maintaining my romantic relationship and not let my school work get in the way of my relationship.

1 2 3 4 5 6 7

We are interested in looking at how much you care about attaining your relationship goal.

Not at all	·	Ť			·			Extre	mely	
1	2	3	4	5		6			7	
-		ying and close in my day-to-day	relationships plays life.	1	2	3	4	5	6	7
	-	y kind of sacrifi onships with oth	•	1	2	3	4	5	6	7
My romantic relationship is the single most significant aspect of my life.					2	3	4	5	6	7
I am will maintain	1	2	3	4	5	6	7			

We are interested in how much you care about attaining your academic goal

Not muc						Extre	mely			
1	2	3	5	5 6						
I am exti	remely commi	tted to my acader	nic success.	1	2	3	4	5	6	7
It is of utmost importance to me that I maximize my success at my academic and career goals.					2	3	4	5	6	7
My personal goals to succeed at university play the biggest role in my day-to-day life.				. 1	2	3	4	5	6	7
I am willing to make any kind of sacrifice necessary to achieve my academic and career goals.				1	2	3	4	5	6	7
Achievir of my lif		y is the single mo	st important aspect	1	2	3	4	5	6	7

Not much							l	Extren	nely	
1	2	3	4	5		6		7	7	
To what ex	tent do you t	hink this article	is believable?	1	2	3	4	5	6	7

To what extent do you think this article is believable?

Goal conflict manipulation

VERBAL FLUENCY



HOT OFF THE PRESS!!

Students in romantic relationships do worse on difficult academic related tests!

Dr. John Holmes from the University of Waterloo: "This is due to the taxing demands of a romantic relationship, leaving students with less cognitive and attentional resources for other tasks. The evidence is clear. Being in a romantic relationship simply leads to students performing worse academically."

What is verbal fluency?

Verbal fluency is the ease with which a person can produce words

Why is verbal fluency important?

Verbal fluency is an essential skill for reading and writing. . Good verbal fluency requires:

- •Efficient organisation of verbal retrieval and recall
- ·Effortful self-initiation
- Inhibition of responses when appropriate

How is verbal fluency assessed?

The most widely used test of verbal fluency is the Cameron Anagram test.

Individuals with good verbal fluency can find approximately 80% of the words in each anagram.

What does verbal fluency predict?

Verbal fluency predicts:

- ·Students' orientation and interest in academic achievement
- ·Commitment to academic excellence and goals

VERBAL FLUENCY Second Edition, Nov 2007



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- ·Commitment to academic excellence and goals

Please rate the extent to which you feel close to your partner and committed to your romantic relationship at this moment in time.

Not at	all								Extre	mely
1	2	2 3 4					5 6			
1.	Relative to you you and your p		nips, how close are	1	2	3	4	5	6	7
2.	2. Relative to what you know about other people's relationships, how close are you and your partner				2	3	4	5	6	7
3.	•	r other relationsl you to your relat	nips, how ionship with your	1	2	3	4	5	6	7
4.	•	nt you know abou ow committed a th your partner?		1	2	3	4	5	6	7

We are interested in how much you care about attaining your academic goal

Not at	all						Extre	mely
1	2 3 4	5		6			7	
1.	I am very committed to my academic success.	1	2	3	4	5	6	7
2.	It is important to me that I succeed at my academ and career goals.	ic 1	2	3	4	5	6	7
3.	My personal goals to succeed at university play a major role in my day-to-day life.	. 1	2	3	4	5	6	7
4.	I am willing to make sacrifices to achieve my academic and career goals.	1	2	3	4	5	6	7
5.	Achieving at university is one of the most important aspects of my life.	1	2	3	4	5	6	7

Please rate the extent to which you agree with the following statements.

Strongly disagree			Neither disagree nor agree					·	Strong agree	gly
1	4	5		6			7			
I concentrate	nagrams.	1	2	3	4	5	6	7		
I tried my bes	st to solve the ar		1	2	3	4	5	6	7	
I put in a lot	of effort to solvi	s.	1	2	3	4	5	6	7	

Sometimes peoples' responses can be influenced by their age, gender, and ethnicity. In order to investigate the effects that these factors might have on your previous responses, please answer the following items. You may decline answering any of the following questions. All of these responses are totally confidential and will not be linked to you in any way.

1) Gender (circle one):	Male	Female			
2) Age:					
3) In which country were	e you bo	orn?			
4) Ethnicity: Aboriginal/Nativ Black Asian East Indian Hispanic Middle Eastern White Other:	ve				
5) Are you in a romantic	relation	nship: Yes	No		
6) How long have you be	een in a	romantic rela	tionship:	years	months

References

- Berscheid, E. (1983). Emotion. In H.H. Kellwey, E. Berscheid, A. Christiansen, J.H.Harvey, T.L. Huston, G. Levinger, E. McClintock, L.A. Peplau & D.R. Peterson (Eds.),Close relationships (pp. 110-168). San Francisco: Freeman.
- Berscheid, E., Snyder, M. & Omoto, A.M. (1989). The Relationship Closeness Inventory:

 Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology*, *57*(5), 792-807.
- Brehm, J. W. (1966) A theory of psychological reactance. New York: Academic Press.
- Carver, C.S. & Scheier, M. (1998). *On the self-regulation of behaviour*. New York: Cambridge UP.
- Emmons, R. A., & King, L. A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality & Social Psychology*, *54*, 1040–1048.
- Festinger, L. (1957). A theory of cognitive dissonance. New York: Row, Peterson & Company.
- Fishbach, A. & Dhar.R. (2005). Goals as excuses or guides: The liberating effect of perceived goal progress on choice. *Journal of Consumer Research*, 32(3), 370-377.
- Fishbach, A. & Zhang, Y. (2008). Together or apart: When goals and temptations complement versus compete. *Journal of Personality and Social Psychology*, 94(4), 547-559.
- Fishbach, A. (in review). The dynamics of self-regulation. In J. Forgas, R.Baumeiester & D.Tice (Eds.), *The Sydney Symposium of Social Psychology*. New York: Psychology Press.
- Förster, J., Liberman, N. & Higgins. E.T. (2005). Accessibility from active and fulfilled goals. *Journal of Experimental Social Psychology*, 41(3), 220-239.
- Gollwitzer, P.M. (1990). Action phases and mind-sets. In E.T. Higgins & R.M.

 Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social*behaviour (pp.53-92). New York: Guilford Press.

- Heckhausen, H. & Gollwitzer, P.M. (1987). Thought contents and cognitive functioniong in motivational versus volitional states of mind. *Motivation and Emotion*, 11(2), 101-120.
- Higgins, E.T. (1997). Beyond pleasure and pain. American Psychologist, 52, 1280–1300.
- Klein, H.J., Wesson, M.J., Hollenbeck, J.R. & Alge, B.J. (1999). Goal commitment and the goal-setting process: Conceptual clarification and empirical synthesis. *Journal of Applied Psychology*, 84(6), 885-896.
- Koo, M. & Fishbach, A. (2008). Dynamics of self regulation: How (un)accomplished goal actions affect motivation. *Journal of Personality and Social Psychology*, 94(2), 193-195.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 34, pp. 331–378). San Diego: Academic Press.
- Kumashiro, M., Rusbult, C.E. & Finkel, E.J. (in press). Navigating personal and relational concerns: The quest for equilibrium. *Journal of Personality and Social Psychology*.
- Liberman, N., Förster, J. & Torry, H.E. (2007). Completed vs. interrupted priming:

 Reduced accessibility from post-fulfillment inhibition. *Journal of Experimental Social Psychology*, 43(2), 258-264.
- Lewin, K. (1935). A dynamic theory of personality: Selected papers. (D.K. Adams & K.E. Zener, Trans.). New York: McGraw-Hill.
- Mandler, G. (1975). Mind and emotion. New York: John Wiley & Sons.
- Ovsiankina, M.R. (1928). The resumption of interrupted activities. *Psychologische Forschung*, 2, 302-379.
- Shah, J.Y., Friedman, R. & Kruglanski, A.W. (2002). Forgetting all else: On the antecedents and consequences of goal shielding. *Journal of Personality and Social Psychology*, 83(6), 1261-1280.
- Wicklund, R.A. & Gollwitzer, P.M. (1982). Symbolic self-completion. New Jersey:

Lawrence Erlbaum Associates.

Zeigarnik, B. (1938). On finished and unfinished tasks. In W.D. Ellis (Ed.), A source

book of Gestalt psychology (pp. 300-314). London: Kegan Paul, Trench, Trubner & Co.