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Vicissitudes of goal commitment: Satisfaction, investments, and alternatives

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ABSTRACT

Constructs typically used to understand commitment between individuals were used to elucidate individual differences in goal commitment. In Study 1, 299 college students completed assessments of goal satisfaction, investments, alternatives and commitment regarding an academic goal. Structural equation modeling demonstrated confirmatory evidence for satisfaction's, investments', and alternatives' collective impact on people's goal commitment. In Study 2, the model components were manipulated by having 236 college students considered the goal to learn a new language and read information suggesting they were high or low in satisfaction, investments, and alternatives. Results demonstrated all three factors had a causal impact on people's level of goal commitment. Both studies found an individual's level of goal commitment was strongest when satisfaction and investments were high and the impact of alternatives was low.

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"There is no more remarkable difference in human character than that between resolute and irresolute natures." – William James

1. Introduction

Numerous factors impact whether people accomplish their goals; however, one primary component is goal commitment. In accordance with current conceptions of this construct (e.g., Oettingen et al., 2009), we define goal commitment as one's intention or determination to reach a particular goal. The importance of commitment was well appreciated by William James (1890) in recognizing one of the most notable differences in people is that between those who are committed and those who are not. As such, commitment is thought to have a vital influence on goal pursuit and is seen as a prerequisite for successful goal attainment (e.g., Jostmann & Koole, 2009; Oettingen et al., 2009).

A bevy of work has demonstrated that people high in commitment are more likely to put effort and time toward their goals, are more likely to persist at, and are subsequently more likely to achieve their goals, compared to those low in commitment (e.g., Fishbach & Dhar, 2005; Jostmann & Koole, 2009; Klinger, 1975; Oettingen et al., 2009; Shah & Higgins, 1997). But less is known

about the factors that determine why some people are more committed to their goals than others. As Oettingen and colleagues (2009) state, "although plenty of research examines the beneficial consequences of goal commitment, it is much less clear how goal commitment emerges" (p. 610). The few studies that have examined potential antecedents have focused almost exclusively on expectancy and value (Locke, Latham, & Erez, 1988). These findings suggest that people's commitment is a function of their expectancy of attaining the goal, the valence of that particular goal, and the interaction between them (Shah & Higgins, 1997). However, it is likely that person-level variables other than expectancy and value influence people's level of goal commitment (e.g., Klein, Molloy, & Brinsfield, 2012). The aim of the present work was to address this blind spot in the literature. In doing so, we relied on constructs typically used to predict relationship commitment as a general framework to better understand goal commitment.

1.1. Relationship commitment

Within the interpersonal relations literature, commitment is viewed as an intention of continuance with an interpersonal affiliation (e.g., romantic partner, group, organization). According to Rusbult and colleagues' Investment Model (1998), interpersonal commitment is a function of three determinants: satisfaction, alternatives, and investment. Satisfaction is conceptualized as the emotional sense that people's relational needs are being met by their partner. Alternatives are conceptualized as the attractiveness of the best obtainable alternative relationships (e.g., new romantic partner). Finally, investment is conceptualized as the amount of resources an individual puts into the relationship and that would be

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lost if the relationship was severed (e.g., time, money, personal identity).

All three constructs are thought to impact commitment in an additive manner, such that people are highest in relationship commitment when they are satisfied, invested, and the quality of their alternative relationships is low (Rusbult, Martz, & Agnew, 1998). As such, these factors have been used successfully to predict whether people stay with or leave their relationship partner (Rusbult et al., 1998).

1.2. Satisfaction, alternatives, and investments in the goals literature

Just as people decide to “stay with” or leave their romantic partner, people also decide to “stick with” or abandon their goals. Although these two conceptions of commitment are not identical to each other, factors that influence commitment between individuals may be analogous to the factors that influence goal commitment within the individual (Doise, 1986). Surprisingly, there is no direct evidence within the goal literature that shows the specific factors of satisfaction with, investments in, and alternatives to a goal directly impacting goal commitment. However, these three constructs have each been connected to goal-relevant outcomes that are similar (but not identical) to goal commitment. Below, we briefly review this suggestive evidence.

1.2.1. Satisfaction

It has long been held that affect plays an important role in motivation, both as an outcome and a determinant of goal-directed behavior. In terms of an outcome, people who are successful in their goal pursuits are happier (Emmons & Diener, 1986), more satisfied with life (Brunstein, 1993) and display greater positive affect (Hsee & Abelson, 1991; Lawrence, Carver, & Scheier, 2002); whereas people who are unsuccessful display negative affect (Emmons & Diener, 1986). In terms of a determinant, however, the picture is less clear. Some theorists argue positive affect decreases goal-directed effort (e.g., Carver & Scheier, 1998; Fishbach & Dhar, 2005); however, many other theorists argue positive affect increases motivation and propels the individual toward goal attainment (Deci & Ryan, 1985; Gollwitzer, 1990; Vohs & Baumeister, 2008). To complicate the issue further, some researchers have examined the influence of general positive affect (e.g., Fishbach & Labroo, 2007) whereas others have focused exclusively on positive affect associated with goal progress (e.g., Louro, Pieters, & Zeelenberg, 2007). Consistent with other researchers' conceptualization (Carver & Scheier, 1998; Vohs & Baumeister, 2008), we define *goal satisfaction* as positive affect associated with achieving desired progress toward a goal. In line with hedonic and reinforcement principles (e.g., James, 1890) and positive emotion theories (e.g., Cacioppo, Gardner, & Berntson, 1999), we predict the more people are satisfied with their goal in this way, the greater their goal commitment.

1.2.2. Alternatives

People often pursue numerous goals at any given moment (Little, 1989) and therefore must balance their multiple goals when deciding where to contribute their limited resources (e.g., Kanfer, Ackerman, Murtha, Dugdal, & Nelson, 1994; Muraven, Shmueli, & Burkley, 2006). Whenever a current goal interferes with the attainment of at least one other goal that the individual simultaneously wants to achieve, *goal conflict* occurs (Emmons, King, & Sheldon, 1993). We therefore define *goal alternatives* as the presence of conflicting goals that interfere with one's focal goal (Shah, Friedman, & Kruglanski, 2002).

Successful goal pursuit relies on how people manage alternative goals (Beckmann & Kuhl, 1984; Kuhl, 2000; Shah et al., 2002) and people high in goal commitment are better able to do so (Fishbach & Dhar, 2005; Shah et al., 2002). But it remains to be seen if the

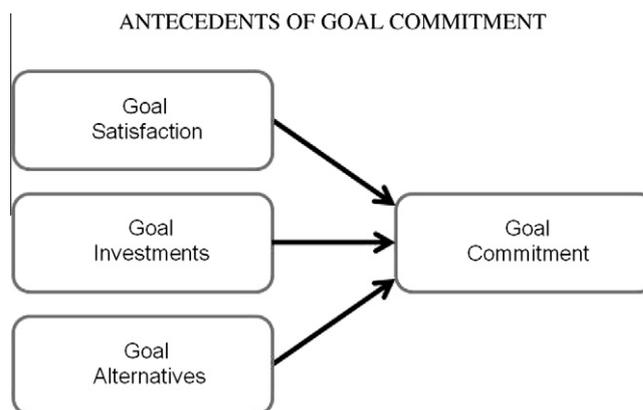


Fig. 1. Model of goal commitment: commitment to goal as a function of goal satisfaction, goal investments, and goal alternatives.

reverse is also true, such that the presence of alternative goals decreases goal commitment. We predict that the more people feel there are alternative goals that take them away from their focal goal, the less committed they will be toward their focal goal.

1.2.3. Investments

We define *goal investments* as the amount of resources (e.g., time, energy, effort, money) people have put into the pursuit of their goal.¹ The construct of investments has largely been ignored within the goals literature, although a few constructs may be tangentially related. For instance, in the management and organizational literature, the *sunk cost effect* demonstrates that people with monetary investments in an activity are more likely to continue with this activity to ensure these investments have not been wasted (Arkes & Blumer, 1985; Staw, 1981). By applying this concept to goals, we predict that the more invested people are in their goal, the more committed they will be to the goal as a way of ensuring their time and energy have not been in vain.

1.3. Present research

1.3.1. Overview of studies

Although there are a number of tangentially relevant studies, to our knowledge no study has directly assessed whether individual differences in goal satisfaction, goal investments, and/or goal alternatives impact goal commitment, either independently or collectively. The present investigation seeks to fill this void in the literature. Guided by theories of relationship commitment, we posit a model that indicates people's goal commitment is comprised of their satisfaction, investments, and alternatives that collectively build on each other in an additive way (see Fig. 1). Thus, people would be most committed to their goals when their satisfaction and investments were high and their quality of alternatives was low.

1.3.2. Measuring goal commitment

Measuring goal commitment can be a challenge because the concept tends to be vaguely-defined in the motivation literature. Furthermore, the most commonly used measure of commitment (Hollenbeck, Williams, & Klein, 1989) has been shown to be confounded with the antecedent of expectancy (DeShon & Landis,

¹ *Goal investment* is not to be confused with how Pomerantz, Saxon, and Oishi (2000) use this term. Those authors define goal investment as the level of personal importance placed on the goal. Although importance certainly plays a role in goal pursuit, it is not how we define goal investment (i.e., the resources put into the attainment of the goal).

1997). For this reason, Klein and colleagues (2012) recently called for researchers to develop cleaner measures of commitment that are not contaminated by such antecedents. Further, measuring goal commitment is made more complicated by the fact that some researchers rely on a direct assessment (e.g., “I am committed”), whereas others infer commitment indirectly by relying on known consequences of commitment (e.g., time spent on a task). When measuring commitment it is therefore advisable to include items that directly assess commitment and items that indirectly assess commitments’ affective, cognitive, and behavioral aspects (Oettingen et al., 2009; Tubbs, 1993). As such, the commitment items used across these studies included direct assessments (e.g., “I am committed to obtaining this goal”) and affective (e.g., “I would feel upset if I didn’t obtain this goal”), cognitive (e.g., “I am not very focused on this goal”), and behavioral (e.g., “I should stop this goal”) reflections of commitment.

2. Study 1

2.1. Method

2.1.1. Participants

Two hundred and ninety-nine students (123 women) from a large Midwestern university participated in the study for course credit (mean age was 20 years). Demographic variables (e.g., gender, race, age) were not significantly related to goal commitment and therefore are not discussed further.

2.1.2. Procedure and materials

For this study we selected a focal goal common among college students: the goal to do well in school. Participants were instructed to consider their goal of “doing well in school” and with this goal in mind, answered four questions ($\alpha = .80$) regarding their satisfaction with this goal (e.g., “I feel satisfied with this goal”) and seven questions ($\alpha = .94$) regarding their investment with this goal (e.g., “I have put a great deal into this goal”). To ensure we selected an alternative goal common among our sample, we conducted a pilot study ($N = 44$) asking participants to list their most common goals currently being pursued. The most frequent goal (50%) was “to be fit” and therefore represented the goal most likely to interfere with students’ goal to perform well in school. Consequently, participants answered four questions ($\alpha = .82$) regarding how the alternative goal to “be fit” interfered with their focal goal (e.g., “This alternative makes it hard to pursue my goal to perform well in school”). These items used to assess satisfaction, investment and alternatives were created by modifying items from the Investment Model Scale (Rusbult et al., 1998).

Participants then completed a measure of goal commitment, created by modifying relationship commitment items from the Investment Model Scale (Rusbult et al., 1998). Specifically, participants responded to four items (e.g., “I am committed to maintaining this goal,” “I would feel upset if I didn’t obtain this goal”). These items demonstrated good internal consistency ($\alpha = .88$) and were averaged to create a composite score, with higher values indicating higher goal commitment. All items utilized a 1 (*strongly disagree*) to 7 (*strongly agree*) rating scale.

2.2. Results and discussion

Means and standard deviations for the variables are as follows: Satisfaction ($M = 5.50$, $SD = 1.13$), Investments ($M = 5.78$, $SD = 1.20$), Alternative ($M = 3.32$, $SD = 1.31$), and Commitment ($M = 6.11$, $SD = 1.04$).

Structural equation modeling was used to assess the overall fit of the proposed model (Bollen, 1989). Analyses were conducted

with AMOS 7 (Arbuckle, 2006) using maximum likelihood estimation. Based on prior recommendations (Hu & Bentler, 1999), model fit was judged through the use of the Tucker–Lewis-Index (TLI), the incremental fit index (IFI), the comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA). A model that is a good fit is reflected by values greater than or equal to .95 for the TLI, IFI, and CFI and less than or equal to .06 for the RMSEA. The chi-square and confidence intervals for the RMSEA were also calculated.

The overall chi-square was significant, $\chi^2(146, N = 299) = 345.34$, $p < .001$. However, Bentler and Bonett (1980) indicate this is often the case with samples larger than 200 ($N = 299$). Therefore, other fit indices were examined and demonstrated excellent model fit across the board: TLI = .95, IFI = .96, CFI = .96, RMSEA = .06, 90% CI of RMSEA = .05–.07. Indeed, the model accounted for 41% of variance in goal commitment. Although there are always other potential models that may fit the data equally well (MacCallum, Wegener, Uchino, & Fabrigar, 1993), these results provide good evidence for the veracity of the proposed model.

Furthermore, as expected, all three factors were significant predictors of goal commitment. As can be seen in Fig. 2 (using standardized estimates), higher satisfaction was associated with higher commitment ($\gamma = .29$, $p = .007$), higher investment was associated with higher commitment ($\gamma = .31$, $p = .003$), and lower alternatives was associated with higher commitment ($\gamma = -.15$, $p = .008$). Thus, all three factors significantly predicted goal commitment in a manner consistent with the proposed model.

Although Study 1 offered support for the model, the correlational design did not allow for the assessment of a direct causal connection between the factors and goal commitment. Study 2 therefore utilized an experimental design to more fully test the model’s assertions.

3. Study 2

3.1. Method

3.1.1. Participants

Two hundred and thirty-six students (123 women) from a large Midwestern university participated in the study for course credit (mean age was 20 years). Demographic variables (e.g., gender, race, age) were not significantly related to goal commitment and therefore are not discussed further.

3.1.2. Procedure and materials

To manipulate the model antecedents, we adopted a goal simulation technique commonly used in prior goal research (e.g., Louro et al., 2007; Shah & Higgins, 1997). Specifically, we followed Shah and Higgins’ (1997) procedure which instructed participants to imagine they had been trying to learn a new language and then presented them with three pieces of information concerning this goal. The first statement indicated whether participants were high or low in satisfaction (i.e., “You are extremely *pleased/displeased* with the progress you have made because your language skills have *improved more quickly/not improved as quickly* as you expected”). Whereas Study 1 assessed satisfaction more generally, this study sought to narrow the concept of satisfaction by focusing specifically on positive affect associated with goal progress. The second statement indicated whether participants were high or low in investments (i.e., “You *have/have only* been taking classes in this language for *over three years/three weeks* and *have/have not* invested a great deal of time or money in learning this language”). The third statement indicated whether participants were high or low in alternative goals (i.e., “In addition to learning this new language, there are *lots of/no other* activities that you are

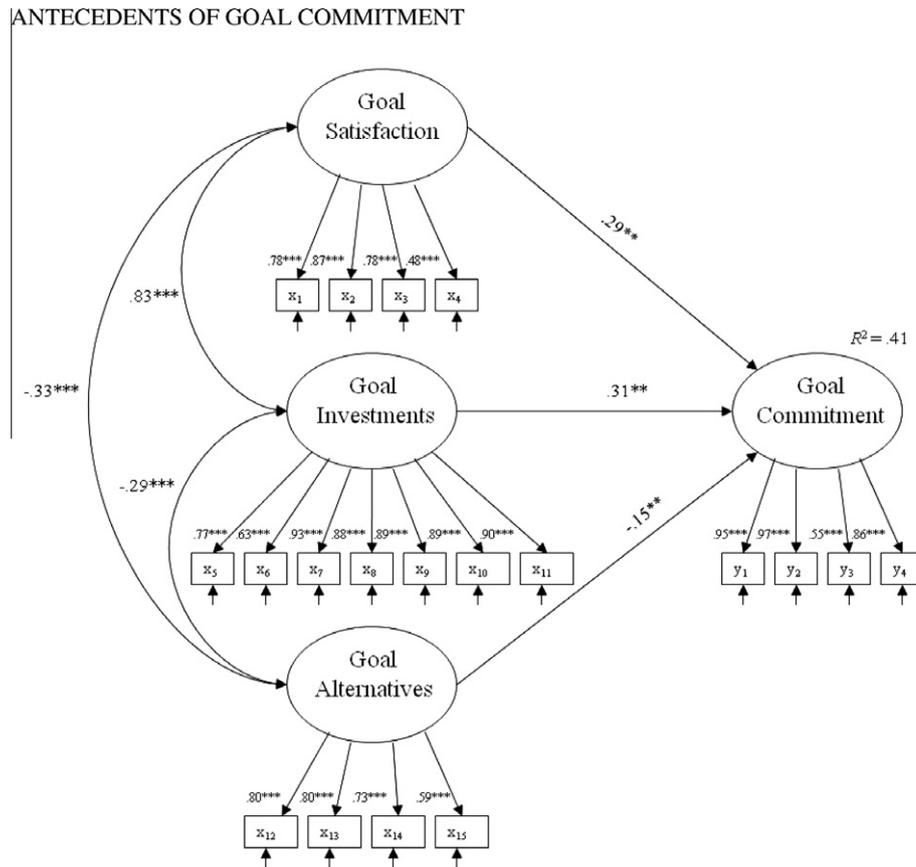


Fig. 2. Structural model: goal satisfaction, goal investments, and goal alternatives as determinants of goal commitment in Study 1. $N = 299$, $^{**}p < .01$, $^{***}p < .001$.

currently pursuing”). Whereas Study 1 assessed alternatives more generally, this study focused specifically on the presence of other goals. In sum, participants were randomly assigned to one of eight possible conditions, using a 2 (satisfaction: high vs. low) \times 2 (investment: high vs. low) \times 2 (alternatives: high vs. low) between-subjects design.

After reading this information, participants responded to three manipulation checks items: “Based on the previous information... you are satisfied with learning this new language (satisfaction),” “...you have put a great deal into learning this new language (investments),” and “...you have several alternative activities other than learning this new language (alternatives). Finally, participants completed the perceived goal commitment measure. This included modified versions of the items used in Study 1 (e.g., “You are committed to learning this language”), and also indirect items relevant to cognitive (e.g., “You are not very focused on learning this language”) and behavioral (e.g., “You should stop taking your language lessons”) reflections of commitment. In total, participants responded to nine commitment items ($\alpha = .94$) that were averaged to create a composite score, with higher values indicating higher perceived commitment. Responses to all items were made using a -3 (strongly disagree) to $+3$ (strongly agree) rating scale.

3.2. Results and discussion

3.2.1. Manipulation checks

All three manipulation check items were significant and in the predicted direction. Participants in the high satisfaction condition reported higher satisfaction ($M = 2.36$, $SD = 0.78$) than those in the low condition ($M = -1.37$, $SD = 1.46$), $t(177) = -24.59$,

$p < .001$. Participants in the high investment condition reported higher investments ($M = 2.42$, $SD = 0.93$) than those in the low condition ($M = -1.28$, $SD = 1.57$), $t(194) = -22.21$, $p < .001$. And participants in the high alternatives condition reported having more alternatives ($M = 2.33$, $SD = 1.03$) than those in the low condition ($M = -2.14$, $SD = 1.59$), $t(199) = -25.57$, $p < .001$.

3.2.2. Goal commitment

Results from a factorial analysis of variance (ANOVA) indicated that, as predicted, all three main effects were statistically significant (see Table 1 for means and standard deviations). Those in the high satisfaction condition rated themselves as more committed ($M = 1.62$, $SD = 1.06$) than those in the low satisfaction condition ($M = 0.45$, $SD = 1.42$), $F(1,228) = 74.48$, $p < .001$, $\eta_p^2 = .25$. Those in the high investments condition rated themselves as more committed ($M = 1.75$, $SD = 1.09$) than those in the low investments condition ($M = -0.35$, $SD = 1.28$), $F(1,228) = 107.93$, $p < .001$,

Table 1
Means and standard deviations for commitment by experimental condition (Study 2).

Predictor Levels			Commitment	
Satisfaction	Investments	Alternatives	M	SD
High	High	Low	2.26	0.94
High	High	High	2.20	0.74
Low	High	Low	1.37	1.17
High	Low	Low	1.22	0.85
Low	High	High	1.16	1.03
High	Low	High	0.83	0.92
Low	Low	Low	-0.09	1.19
Low	Low	High	-0.56	1.30

Note: $N = 236$.

$\eta_p^2 = .32$. Finally, those in the high alternatives condition rated themselves as less committed ($M = 0.90$, $SD = 1.41$) than those in the low alternatives condition ($M = 1.18$, $SD = 1.34$), $F(1, 228) = 4.48$, $p = .04$, $\eta_p^2 = .02$. All interactions were non-significant, $F_s < 1$. Thus, each of the three factors exerted an independent influence on goal commitment ($R^2 = .46$).

Further analyses compared the means from different conditions (Table 1) based on model predictions. As expected, participants in the most optimal group (high satisfaction, high investments, low alternatives) were significantly higher in commitment than participants in the least optimal group (low satisfaction, low investments, high alternatives), $t(228) = -10.50$, $p < .001$. Second, participants in the most optimal group were significantly higher in commitment than those in all other groups combined, $t(228) = 6.78$, $p < .001$. Finally, participants in the least optimal group were significantly lower in commitment than those in all other groups combined, $t(227) = -9.11$, $p < .001$. These analyses support the assertion that satisfaction, investments and alternatives combine in an additive way to impact goal commitment.

4. General discussion

Although a great deal is known about the consequences of goal commitment, far less is known about its antecedents (Oettingen et al., 2009). Across two studies, results indicated satisfaction, investment and alternatives independently contributed to goal commitment. People were highest in goal commitment when they were satisfied with their goal, felt like they had invested a great deal into their goal, and perceived fewer goal alternatives. Current models of goal commitment (e.g., Locke et al., 1988) focus almost exclusively on the internal antecedents of expectancy and value and therefore fail to recognize the importance of satisfaction, investments and alternatives. Furthermore, Klein and colleagues' (2012) reconceptualization of commitment explicitly states that alternatives and investments do not determine commitment. The present studies therefore represent a unique approach to this body of knowledge by providing the first empirical evidence of the independent and additive effects of these three antecedents. Our work also demonstrates that these antecedents collectively account for a large proportion of variability in overall goal commitment. Importantly, this evidence was found across a comprehensive set of studies utilizing different types of goals (i.e., academics, hobbies), different goal sources (i.e., self-selected, experimenter provided goals), and different research methods (i.e., correlational, experimental).

The current model may also aid in understanding behaviors that are largely unexplained by the current goal literature. For example, why would a person stay committed to a goal when they are dissatisfied? According to the pattern of results displayed in Table 1, this is probably likely to occur when people's investments are high and they have no viable alternative goals (Jostmann & Koole, 2009). Such knowledge could be particularly useful in helping people to abandon harmful or unattainable goals (Wrosch, Scheier, Miller, Schulz, & Carver, 2003). The current model also offers some novel suggestions on how to potentially increase people's goal commitment. It is possible that having people reflect on their goal progress and investments and having them decrease the impact of alternatives may be viable ways to increase goal commitment and therefore make people more likely to attain their goals. Such implications are beyond the scope of the present paper but future research should explore these possibilities.

Although the present studies represent an important extension to the research on goal commitment, several questions remain. First, the present work relied on short-length questionnaires to assess satisfaction, investment, alternatives and goal commitment. Future research would benefit from the development of longer,

more thorough measures of these constructs. Similarly, we echo Klein and colleagues' (2012) sentiment that the field would greatly benefit from the development of a thorough, theory-free measure of goal commitment. Second, the present studies drew their samples from the college student population and therefore focused on goals frequently pursued by college-aged students. Future research should include more diverse samples, along with more diverse goals, to determine the generalizability of the present results. Finally, the present studies focused exclusively on the three internal antecedents of commitment suggested by the Investment Model of relationship commitment. However, future studies should examine if satisfaction, investments, and alternatives interact with other internal antecedents of commitment, including expectancy and value. Future studies should also examine how our model's three antecedents interact with environmental, contextual or organizational variables known to impact commitment, such as reward structure or workplace culture (Klein et al., 2012; Locke et al., 1988).

In sum, it has been stated that "most research on the antecedents of commitment do so without guidance" of a model (Hollenbeck & Klein, 1987, p. 213). The present studies provide empirical evidence for such a model and in doing so offer one route to a better understanding of why some people are more committed to their goals than others.

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