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### **Glancing Back: Recalling Organizational Commitment in a Growing Organization**

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Glancing Back: Recalling Organizational Commitment in a Growing Organization

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## ABSTRACT

The current study adopts an innovative approach to the study of time and organizational commitment, examines commitment as a process that unfolds and changes over time, and illuminates how different components of organizational commitment operate both similarly and distinctly. Past research has found that, in a *downsizing* organization, employees will recall having experienced *greater* organizational commitment in the past than they had actually reported experiencing at the time (Kwong & Hamilton, 2004). In contrast, we examine employee recall of past organizational commitment in a *growing* organization. Further, we consider employee recall for three specific components of organizational commitment: affective, normative, and continuance. A randomly selected cohort of employees at a growing technology company reported their organizational commitment at Time 1. Then at Time 2, 36 months later, they recalled their past organizational commitment. Consistent with study hypotheses, at Time 2, employees recalled having had significantly *lower* overall organizational commitment than they reported at Time 1. Specifically, employees recalled significantly lower overall, affective, and normative organizational commitment. In contrast, and consistent with research findings in social cognition, participants accurately recalled their level of continuance commitment. Analyses of other variables supported the findings by indicating that continuance commitment was not the only aspect of work that could be accurately recalled, and by showing that other potential moderators, including participant age, sex, education, commitment to work and family life, and ability to balance commitments to work and family life, were not responsible for the results. Taken together, the robust findings suggest (1) that the growth trajectory of an organization (i.e., growing versus downsizing) may be a key moderator of employee recall of past organizational commitment and (2) recall of continuance commitment may act independently of recall of affective and normative commitment. Future directions and implications of the findings for organizational commitment theory and organizational attachment research more generally are discussed.

### Glancing Back: Recalling Organizational Commitment in a Growing Organization

During the fifty years in which scholars have been empirically and theoretically examining organizational commitment, one of the key developments has been the articulation of a more nuanced understanding of that phenomenon. Drawing on early works in the field (e.g. Becker, 1960; Mowday, Porter, & Steers, 1982; Wiener, 1982) and modifying their earlier two-component model (Meyer & Allen, 1984), Allen and Meyer (1990) proposed a three-component model of organizational commitment and developed a scale to measure them (Meyer & Allen, 1997). Those three components include: affective commitment, continuance commitment, and normative commitment. Affective commitment refers to employees' emotional attachment to, identification with, and involvement in the organization. Continuance commitment refers to commitment based on the costs that employees associate with leaving the organization, such as the loss of income. Finally, normative commitment refers to employees' feelings of obligation to remain with an organization. Employees can experience each of these types of commitment to organization to varying degrees. Past research on these components of commitment have revealed that at times the different components have unique antecedents and distinct implications for work-related behaviors (e.g., Allen & Meyer, 1990; Meyer & Allen, 1991), and meta analyses (Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) have supported the importance of examining commitment as both a general and a multi-component construct.

*Time and organizational commitment research*

Following changing commitment dynamics over time has been a focal point in the study of organizational commitment and its components. The most common method for assessing the effects of time in this research has been through longitudinal studies of the antecedents and outcomes of organizational commitment. For example, Meyer, Bobocel, and Allen (1991) used a longitudinal design to examine the development of organizational commitment, focusing on the effects of differing pre- and post-entry influences during the first year of employment. Others have examined the impact of organizational entry experiences (e.g., socialization experiences; Kammeyer-Mueller & Wanberg, 2003) on employee commitment. Still others have used organizational commitment as an outcome variable in tests of the “met-expectation hypothesis,” which posits that employees tend to withdraw at work if their initial expectations about the job are not met (for reviews, see Wanous, Poland, Premack & Davis, 1992; Irving & Meyer, 1994). In a longitudinal study in which organizational commitment was an outcome variable, Meyer, Irving, and Allen (1998) tested the hypothesis that the influence of early work experiences on organization commitment would be moderated by the value employees place on these experiences. To examine this, the researchers measured work values in two samples of recent university graduates prior to organizational entry, and obtained measures of commensurate work experiences and three forms of commitment on different occasions following entry. Their data revealed that values and experiences did interact in the prediction of affective commitment and normative commitment, but that the nature of the interaction was different for different work value and experience combinations.

Another strategy has been to use longitudinal methods to determine whether organizational commitment predicts outcome variables. For example, Keller (1997), examined whether commitment at one time predicts later performance. One of the most commonly studied outcomes of organizational commitment is its relationship to withdrawal from work (i.e., does organizational commitment predict organizational withdrawal intentions and behaviors; e.g., Tett & Meyer, 1993). Researchers often either measure current commitment and beliefs about “future” intent to remain at the same time, or they use organization commitment at Time 1 to predict employee retention at Time 2. In addition to the longitudinal studies, another way in which time is considered in organizational commitment research is when commitment dynamics are examined over the course of the employee life cycle. For example, Allen and Meyer (1993), found that affective, continuance, and normative commitment to the organization are influenced by three employee career stage variables – employee age, organizational tenure, and positional tenure. The researchers found that affective and normative commitment increased significantly with employee age, but increases in continuance commitment were more closely related to increases in organizational and positional tenure.

A third branch of organizational commitment research that has considered time has tracked employee reactions to downsizing (e.g., Brockner & Wiesenfeld, 1993; Brockner, Grover, Reed, DeWitt, & O’Malley, 1987). Employees are often asked to *recall* their pre-downsizing commitment and to contrast it with their post-downsizing commitment. This work assumes that employees can distinguish between current attitudes and those in the past, and can give accurate descriptions of past attachments. These assumptions, as will be demonstrated, warrant empirical investigation.

Research on escalation of commitment is a fourth branch of organizational commitment research that involves time. Such studies have found, counter intuitively, that involvement in a failing course of action often increases commitment. The explanation is often attributed to self-justification motives that presumably are evoked by personal responsibility for initiating the original action (e.g., Staw, 1976). In a recent development in this literature, Bobocel & Meyer (1994) pointed out that personal responsibility, exemplified by personal choice, has been confounded with public justification and associated self-presentation concerns. To illustrate, the authors conducted a laboratory experiment that showed that public justification of past choices may be necessary for escalating commitment.

Finally, time is considered in organizational commitment research to better understand the nature of the construct. Researchers have sought to determine whether organizational commitment is generally stable over time, or whether there is a high level of variability in these ratings. Thus, research has reported on the test- re-test reliability of organizational commitment measures and examined the stability of factor structure of commitment scales over time (e.g. Meyer, Allen, Gellatly, 1990).

#### *New directions for time and organizational commitment research*

As the review above illustrates, the construct of time has been profitably employed to enrich our understanding of organizational commitment. As Figure 1 illustrates, there are also other approaches to thinking about organizational commitment and time. These alternatives suggest important directions for future work on organizational commitment and time.

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Insert Figure 1 about here

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Figure 1 models the relationship between time and organizational commitment in a straightforward way, by considering two points in time: Time 1 and Time 2. To date, most research has explored the antecedents and consequences of organizational commitment. In such studies, organizational commitment is measured at a single point in time, reflected in Figure 1 by cells A and D. This research has further considered the relationships between cells A and D, which address whether commitment at one point in time correlates with commitment at a second point in time.

Scant research, however, has considered cells B and C, in which employees report on either the commitment they anticipate they will experience (i.e., Cell B), or the commitment they recall having felt (i.e., Cell C). It is even less common for employees' recalled commitment to be compared to commitment data collected earlier. Accordingly, Cell C, retrospective organizational commitment, is the focus of this longitudinal study.

How well do we recall our organizational commitment? Employee recall of past organizational commitment (i.e., retrospective organization commitment) is an intriguing direction for time-related commitment research because employee recall of past organizational commitment is likely to influence current dynamics in organizations. For instance, memories of previous levels of commitment to one's organization may influence present attitudes and expectations towards the organization. Peoples' present understanding of their life experiences are, in part, the result of drawing on narratives they have constructed about their past experiences (Baumeister & Newman, 1994).The



past may serve as an anchor against which present situations are judged. Biases in retrospection can influence current decisions (Pearson, Ross, & Dawes, 1992). Weick (1969, 1970) was one of the first to suggest that organizations are enmeshed in sensemaking. Present and past experience become integrated and influence the way in which an employee thinks about an organization and organizational phenomena.

Research on retrospective commitment ratings is also critical for a methodological reason. Because many commitment studies rely on employee recall of their past commitment, research that assesses the effects of memory distortions in such recall are important to gauge the validity of other organizational commitment research.

The retrospective approach makes important contributions to the future study of commitment, and attachment more generally. First, as will be discussed, it represents a new approach to the study of time and organizational attachment in general, and organizational commitment in particular. Second, studies of retrospective organizational commitment will help researchers to understand commitment as a process, rather than as a discreet experience. Third, because retrospective commitment research addresses different components of commitment (e.g., normative, continuance, and affective; Allen & Meyer, 1990), it can contribute to the theoretical and empirical understanding of the distinct ways these components are experienced. Thus, the study of retrospective commitment provides an innovative direction for commitment research.

While there is a substantial body of general research on organizational commitment, to our knowledge, there is only one empirical study that directly examines employees' retrospective recall of past organizational commitment. Indeed, as the authors of the exception, Kwong and Hamilton (2004, p. 670) noted, "little attention has focused

on the accuracy of the memories for emotions or attitudes.” In their study, the authors collected data in the Russian Army Office Corps after a downsizing. They studied the discrepancy between officers’ prospective and retrospective organizational commitments and found that the officers tended to retrospectively overestimate the magnitude of their prior commitment to the Army.

The fact that organizational commitment was not recalled accurately is not surprising. In fact, it is consistent with most social and cognitive psychology research, which has found that memory for the past cannot be retrieved directly, and that individual memory is modified by subsequent experiences and feelings (e.g. Bartlett, 1932; Buehler & Ross, 1993; Loftus, 1979; Ross, 1989; Ross & Buehler, 1994; Wells & Loftus, 1984). What is intriguing in their data however is not the ubiquitous lack of accuracy, but rather the statistically significant *patterns* in the recall – that is, the overestimation of their previous commitment. These provide evidence that memory is modified in ways that are neither random nor haphazard, but rather are systematic, and thus ripe for study.

Two features of the Kwong and Hamilton (2004) study merit caution in generalizing their findings. First, their research was conducted in a particular context, that of a downsizing organization . Second, their research was conducted using a measure of generalized organizational commitment, four items from the Organizational Commitment Scale (Mowday, Steers, & Porter, 1979). Their generalized approach to commitment did not enable their research to reveal differences that might exist across the different components of commitment. Accordingly, we address two questions to help clarify Kwong and Hamilton’s (2004) results: First, might retrospective recall of past organizational commitment be different in contexts in which an organization is

experiencing growth rather than downsizing? Second, might retrospective recall differ for the different components of organizational commitment?

*The present study*

The present study tested several hypotheses, outlined below, about patterns of employee retrospective commitment in a growing organization. By studying such an organization, it presents an inverse case to Kwong and Hamilton's (2004) work in the context of a downsizing organization. Because, as noted above, past research has revealed that at times the different components have unique antecedents and distinct implications for work-related behaviors (e.g., Allen & Meyer, 1990; Meyer & Allen, 1991), we also considered the three components of commitment independently.

The major question in this study is whether findings on employee recall of commitment reported for employees in a downsizing organization (Kwong and Hamilton, 2004) hold for employees in a growing organization. As researchers working in the Positive Organizational Scholarship tradition have noted, much organizational research is focused on negative states (Cameron, Dutton, & Quinn, 2003), such as downsizing and layoffs, suggesting that research in growing organizations is overdue.

We hypothesize that in a context in which an employee's organization is growing, retrospective accounts of past organizational commitment will be lower than were reported at an earlier point in time. However, in light of the component-related findings discussed earlier, we anticipate that the component of continuance commitment will not follow the general trend, for reasons to be discussed later.

Specifically, Hypothesis 1 is that at Time 2, participants will recall lower levels of affective commitment to their organization than they reported experiencing at Time 1.

Hypothesis 2 is that participants will recall lower levels of normative commitment to their organization than they reported experiencing at Time 1.

Unlike the first two hypotheses, Hypothesis 3 is that participants will accurately recall their past level of continuance commitment (e.g., their recall at Time 2 will be commensurate with their reports at Time 1). While we expect that for a thriving organization, commitment recall will generally conform to the inverse of the pattern found in a failing organization (Kwong & Hamilton, 2004), we anticipate that continuance commitment will be recalled accurately for three reasons: First, research evidence has found that information recall is better for a more consciously evaluated alternative than for a less or non-evaluated alternative (e.g. Loken & Hoverstad, 1985). Continuance commitment – commitment rooted in the recognition of costs associated with leaving the organization – is by definition a more deliberative process than are affective and normative commitment. Second, there is evidence that the recall of attitudes is more difficult than recall of facts (Janson, 1990). Continuance commitment is the most fact-based form of commitment in that it is focused on the presence or absence of actual work alternatives. Third, research has shown that people are better able to recall information when alternatives are assigned to it (Mather, Shafir, Johnson, 2003). This would suggest that measures of commitment that are rooted in the existence of alternatives (e.g., continuance commitment) should be more accurately recalled than other forms of commitment.

In addition to testing these hypotheses, we further examine whether several individual-level variables moderate the relationship between commitment recalled and commitment experienced in a growing organization.

In sum, at Time 1, we asked participants to report how much they were committed to their organization. Three years later, at Time 2, we asked them to recall the level of commitment they reported at Time 1. We examined three components of commitment, hypothesizing that in general, organizational commitment would be recalled as lower than it had been initially reported. Further, we predicted that this general trend would hold for both the normative and affective components of organizational commitment. However accurate recall was expected for continuance commitment, for the reasons discussed above.

## METHODS

### *Organizational site*

The research was conducted in a young Internet software and Internet-enabled services company. The company was three years old when the Time 1 data were collected, and showed many signs of growth. The anticipated growth occurred, and the organization quickly grew; in the course of the three years it became the leading company in its industry niche. This growth reflects the inverse of the downsizing case in the literature (Kwong & Hamilton, 2004).

At time 1, Spring 2000, the organization had 200 employees, and one office. In Fiscal Year (FY) 2000, the organization had approximately \$2 million in revenue. By the Spring of 2003, the organization had more than doubled its workforce to 450 employees,

and it had three full offices. In FY 2003, the organization had grown to approximately \$37 million in revenue. During those three years, the organization tightened its strategic and operational foci, became profitable, and established itself on a solid financial footing to spur further growth. Thus, the organizational site met the criterion of being a growing organization.

### *Sample and procedure*

The present study used a longitudinal research design in which data were collected in two waves separated by 36 months. Time 1 data were collected in the Spring of 2000. At Time 1, a survey was administered at the organizational site through a four-step process. First, a target sample of employees was randomly selected from the organization's telephone directory. Second, a general e-mail announcement was sent requesting survey participation. Third, midway through the survey period, target sample employees who had not yet completed the survey received a follow-up request to participate. Finally, on the last of the three days of data collection, a flyer requesting participation was left for target sample employees. Survey data were collected anonymously.

Fifty-four of the 100 targeted employees completed the Time 1 survey, for a response rate of 54%. The mean age of respondents was 31 years ( $SD = 7$ ). This initial sample was 59% male and 41% female. The distribution of the Time 1 survey sample resembled the distribution of the target population along key dimensions of gender, age, geography, and job function.

The Time 2 survey was administered 36 months later in the Spring of 2003. At Time 2, we contacted those employees who had participated at Time 1, and invited them to participate in a follow up survey. In exchange for participation at Time 2, participants were entered into a raffle for the chance to win a \$100 gift certificate.

Of the initial 54 employees who were approached to participate at Time 2, 28 completed the Time 2 survey, a response rate of 52%. The mean age of respondents was 32.13 years ( $SD = 7.12$ ). The time 2 sample was 61% male and 39% female. The Time 2 cohort resembled the Time 1 cohort on the key dimensions of gender, age, geography, and job function.

### *Measures*

#### Organizational Commitment

Affective, continuance, and normative commitment were measured using Meyer, Allen, and Smith's (1993) Affective, Continuance, and Normative Commitment Scales (ACNCS), one of the leading instruments for empirical research on organizational commitment. Respondents rate their level of agreement with the items using a 7-point Likert-type rating scale anchored by 1 = strongly disagree and 7 = strongly agree. The scale consists of 18 items, six per subscale, with three reverse-scored items. The scale has demonstrated good reliability as assessed in studies of its internal consistency and temporal stability, and has a robust factor structure (for a review see Meyer & Allen, 1997).

#### Individual difference variables

We collected data on several individual difference variables at Time 1 to explore their potential influences on patterns of recall. These included participants' age, sex, and education level; their self-reported level of commitment to work and family life; and their self-reported ability to balance their commitments to work and family life. Commitment to work versus family life was measured using the item "Do you "(did you) derive a greater personal satisfaction from life at work or life off the job or from both about equally?" Balance of work and family was measured using the item "I make the right decision about my work-family balance" measured on a 7-point Likert-type scale with anchors ranging from 1 (strongly disagree) to 7 (strongly agree).

As a general measure of recall, a benchmark against which to assess commitment, we examined how accurate employees were in recalling their effort during the Spring of 2000. We measured participants' recall for the number of hours a week they worked, using the item "How many hours total, at any location, do you (did you) work each week?" We also measured the number of days a week they reported working, with the question: "How many days a week, on average, did you do any work related to your job? Include both paid and unpaid time worked at any locations."

We selected the general construct of effort as a comparison variable because research on test anxiety (Devito & Kubis, 1983; Dewhurst & Marlborough, 2003) has shown that there are patterns of distortion in individual recall of past effort. The comparison variables enabled us to examine whether patterns in recalled commitment were simply indicative of a general phenomenon of memory distortion about past organizational experience, or were specific to organizational commitment and/or its components.



## RESULTS

Consistent with previous research using the ACNCS (Meyer et al., 1993), we found high levels of reliability among the items in each of its subscales. Reliability for normative commitment at Time 1 was  $\alpha = .72$  and Time 2  $\alpha = .65$ . For affective commitment, reliability at Time 1 was  $\alpha = .64$  and at Time 2 was  $\alpha = .52$ . Finally, for continuance commitment, reliability at Time 1 was  $\alpha = .64$  and at Time 2 was  $\alpha = .63$ .

We included several variables in the present study to provide a context of overall recall ability when interpreting employees' commitment memories. Participants were accurate in how hard they recalled working. Specifically, we found that at Time 2 participants recalled very accurately both the number of days per week, and the number of hours per week that they had reported working at Time 1 (Time 2  $\underline{M} = 59.6$ ; Time 1  $\underline{M} = 60.2$ ).

We began our testing of the study hypotheses by examining overall organizational commitment, averaging across all subscales. We conducted pairwise t-tests examining the difference in self-reported level of commitment at Time 1, and their recall of their commitment level at Time 2 (i.e., 36 months later). The results of these tests supported the general hypothesis and the three specific hypotheses, and are summarized in Table 1.

Specifically, a pairwise t-test between ACNCS scores at Time 1 and retrospective ACNCS scores at Time 2 revealed that recalled commitment level in 2003 was significantly lower than actual self-reported commitment in 2000,  $t(27) = 5.40$ ,  $p < .001$ ,  $r = .72$ . The mean commitment score recalled by participants at time 2 was  $\underline{M} = 3.55$ , while their self-reported commitment level at time 1 was actually  $\underline{M} = 4.27$ . The

significance and magnitude of this effect were very strong. We then examined employees' retrospective accounts of organizational commitment for each of the three components of commitment separately.

#### *Affective commitment*

The results supported Hypothesis 1. A pairwise t-test revealed a significant decrease in participants' recalled level of affective commitment,  $t(27) = 5.10$ ,  $p < .001$ ,  $r = .70$ . The mean affective commitment score recalled by participants at Time 2 for their level of affective commitment to the company at Time 1 was  $M = 3.86$ , while their self-reported commitment level was actually  $M = 5.17$ .

#### *Normative commitment*

The results also supported Hypothesis 2. There was a significant decrease in participants' recalled level of commitment for the normative subscale,  $t(27) = 5.14$ ,  $p < .001$ ,  $r = .70$ . The mean normative commitment score recalled by participants in 2003 for their level of normative commitment to the company during the Spring of 2000 was  $M = 3.57$ , while their self-reported commitment level in the year 2000 was actually  $M = 4.64$ . As with affective commitment, the effect of time on retrospective recall of past normative commitment was strong, and statistically significant.

#### *Continuance commitment*

Hypothesis 3 was also supported. Participants were very accurate in their recalled level of continuance commitment. There was no significant change in their recalled level of

continuance commitment and their experienced level of commitment reported at Time 1 ( $t < 1$ ). The mean continuance commitment score recalled by participants in 2003 for their level of continuance commitment to the company during the Spring of 2000 was  $M = 2.92$ , while their self-reported commitment level in the year 2000 was actually  $M = 3.12$ . There was no statistically significant difference between these means.

#### *Individual difference variables*

Because memory might be expected to differ among individuals, we examined several individual difference variables. We found no effect of age, sex, or education level on the pattern of results. We also found no effect of participants' self-reported level of commitment to work versus family life, nor an effect of self-reported ability to balance their commitments to work and family life on this pattern of results. Given the strong effect sizes and statistical significance of the observed differences, the pattern seems to be robust across individuals.

## DISCUSSION

The present study had two primary goals. First, we sought to introduce a new perspective to the study of time and organizational commitment: commitment recall. As noted, employee recall of their past organizational commitment, though not typically studied by attachment researchers, is a compelling direction for future work. Recall of past commitment may influence present and future states and feelings. Biases in retrospection can influence current decisions (Pearson, Ross, & Dawes, 1992). Interestingly, while some organizational scholars have suggested that the past and present

are intermingled in the employee's mind (Weick 1969, 1970), the past is often overlooked in organizational research. Yet other branches of research have demonstrated that people understand life experiences in part by drawing on narratives they have constructed about their past experiences (Baumeister & Newman, 1994).

The study of employee recall of their past commitment represents an innovative approach to the study of time and commitment. It helps advance the understanding of commitment as a process that unfolds and changes over time. The study of employees' differential ability to recall the various components of commitment further improves our understanding of how components of commitment may be similar and distinct. By measuring each of the components, we adopted a more nuanced approach than previous commitment recall work, and found that general patterns hold for two, but not all three of the forms of commitment.

The second goal of the study was to empirically test whether findings on employee commitment recall collected in a downsizing organization hold for employees in a growing organization. As noted, employee recall of past commitment had not yet been examined in a context in which the organization experienced growth in the intervening period. We found that when asked to recall their past organizational commitment, employees in a growing organization recalled lower levels of organizational commitment overall than they had actually reported experiencing three years earlier. This general trend held for both affective and normative commitment. Consistent with the study hypotheses, continuance commitment, however, was recalled very accurately by employees. The robust effect sizes for the study data indicate that while most types of commitment recall are not accurate, the inaccuracy of the recall is not haphazard.

Individuals tend to recall different components of past organizational commitment in particular ways.

Our study was designed to examine whether reported findings of commitment recall are in fact moderate by organizational growth or downsizing. For this reason, our data are sampled from a growing organization. When viewed in light of previously reported data in the literature (Kwong & Hamilton, 2004), it appears that growth that an organization experiences may exert significant influences on employee recall of past organizational commitment, reversing the direction of previously reported statistically significant trends.

Along with providing evidence of the moderating effects of organizational growth or decline, our data also rule out several potential individual-level moderators that might have been hypothesized to operate alongside organizational growth. Our set of potential individual difference moderators – participant age, sex, education level; self-reported level of commitment to work versus family life, as well as participant ability to balance their commitments to work and family life – had no effect on the results.

The fact that organizational growth moderate the direction of patterns in which employees recall past organizational commitment provides support for Positive Organizational Scholarship (Cameron, Dutton, & Quinn, 2003) in general, and positive organizational scholarship perspectives on organizational commitment in particular (e.g. Pittinsky & Shih, 2004) – highlighting the important of looking at thriving organizations, as well as declining ones.

There, are several limitations to the present work. These limitations form the bases for important future work on employee recall of past commitment.

In general, work on memory has found that memory can be biased in a positive, prestige-enhancing direction (e.g. Greenwald, 1980). Prestige-enhancing patterns in recall have been observed, for example, in students' recall of the anxiety they felt prior to a test (Dewhurst & Marlborough, 2003; Devito & Kubis, 1983). Our data do not allow us to determine the extent to which self and group enhancement mechanisms may be at play in the patterns observed. Enhancement dynamics should be examined directly in future work.

In addition, because our study was designed to test the extent to which organizational growth moderates patterns of employee recall, we do not know what effect, if any, another potential class of influences had on the data: present conditions. However, while exploring that variable may yield important insights, the robustness of our findings suggest that there was little variation in the direction and magnitude across the sample in how commitment was recalled, leaving little room for the present conditions to exert a significant influence.

Finally, our data do not allow us to examine another class of influences that may affect recall: conditions at the time of recall. Social cognition research has found interesting effects of present emotions and mood states on recall (e.g. Bower, 1981). For example, research has found that in some circumstances, recall of past emotions is influenced by current emotions (e.g., Keuler & Safer, 1998). For example, Levine (1997) found that memory for emotional responses to a political event – the withdrawal of Ross Perot from the 1992 U.S. presidential race – were influenced by participants' current appraisals of the event. The similarity between the mood states at the time of acquisition and the moment of recall might also influence recall.

An intriguing direction for future work is the examination of recall for other facets of past attachment, for example, studies of recall of past organizational *identification*. How is past identification recalled? How does recall of past identification interact with recall of past commitment? Research has demonstrated that organizational identification is distinguishable from related commitment concepts (Christ, Van Dick, Wagner, & Stellmacher, 2003; Gautam, Van Dick, & Wagner, 2004) and thus the study of each, and ideally both together, can further contribute insights to the study of employee recall of organizational attachment.

Another way to expand the scope of the type of attachment studied is to investigate recall for commitment to different foci such as commitment to career, or work group. As researchers have noted, organizational commitment is best conceptualized as a phenomenon with multiple foci and multiple components, forms, or bases (Becker, 1992; Meyer & Allen, 1997; Pittinsky 2001). Patterns observed for other foci of commitment may prove as interesting as the patterns we observed for the focal point of the organization. Indeed, important insights for the development of a theoretical and practical understanding of commitment have come from studies examining commitment dynamics among multiple commitments (e.g., Becker & Billings, 1993; Becker, Billings, Eveleth, & Gilbert, 1996; Pittinsky, 2000). In one study, commitment to supervisors was positively related to performance and was more strongly associated with performance than was commitment to organizations (Becker et al., 1996). Empirical evidence like this underscores the point that simultaneously investigating multiple commitments may have important explanatory power.

Overall, the present data point to continued exploration of an exciting frontier of research on attachment to organizations in general, and organizational commitment research in particular; the intersection of social cognition and commitment research. Rather than being solely concerned with whether individual self-reports are accurate or inaccurate, the ways in which personal narratives and biographies are constructed are, in and of themselves, interesting phenomena, as scholars in the field of interpersonal relationships have noted (Pereg & Mikulincer, 2004; Mikulincer & Orbach, 1995; Mikulincer & Arad, 1999). While traditional organizational commitment research focuses on current or past levels of commitment, the current study concerned current memories of past levels of commitments. The patterns that were observed suggest that investigating recall of organizational commitment, accounting for the independent components that comprise organizational commitment, and understanding the moderating role of organizational growth or decline on recall all provide important future directions for research that can shed light on the important ways that employees experience commitment to their organizations.



## References

- Allen, N. J., & Meyer, J. P. (1993). Organizational commitment: Evidence of career stage effects. *Journal of Business Research*, 29, 49-61.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. New York: Macmillan.
- Baumeister, R., & Newman, L. (1994). How stories make sense of personal experiences: Motives that shape autobiographical narratives. *Personality and Social Psychology Bulletin*, 20, 676-690.
- Becker, H. H. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66, 32-40.
- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35(1), 232-244.
- Becker, T. E., & Billings, R. S. (1993). Profiles of commitment: An empirical test. *Journal of Organizational Behavior*, 14, 177-190.
- Becker, T. E., Billings, R. S., Eveleth, D. M, Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, 39(2), 464-482.

Bobocel, D. R., & Meyer, J. P. (1994). Escalating commitment to a failing course of action: Separating the roles of choice and justification. *Journal of Applied Psychology*, 79(3), 360-363.

Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36, 129-148.

Brockner, J., & Wiesenfeld, B. (1993). Living on the edge (of social and organizational psychology): The effects of job layoffs on those who remain. In J. K. Murnighan (Ed.), *Social Psychology in Organizations: Advances in Theory and Research* (pp. 119-140). Englewood Cliffs, New Jersey: Prentice Hall.

Brockner, J., Grover, S. L., Reed, T. F., DeWitt, R. L., & O'Malley, M. N. (1987). Survivors' reactions to layoffs: We get by with a little help for our friends. *Administrative Science Quarterly*, 32, 526-541.

Buehler, R., & Ross, M. (1993). How do individuals remember their past statements? *Journal of Personality and Social Psychology*, 64(4), 538-551.

Cameron, K. S., Dutton, J. E., & Quinn, R. E. (Eds.). (2003). Positive organizational scholarship: Foundations of a new discipline. San Francisco: Berrett-Koeh.

Christ, O., Van Dick, R., Wagner, U., & Stellmacher, J. (2003). When teachers go the extra mile: Foci of organisational identification as determinants of different forms of organisational citizenship behaviour among schoolteachers. *British Journal of Educational Psychology*, 73(3), 329-341.

Dewhurst, S.A., & Marlborough, M. (2003). Memory bias in the recall of pre-exam anxiety: The influence of self-enhancement. *Applied Cognitive Psychology*, 17, 695-702.

Devito, A. J., & Kubis, J. F. (1983). Actual and recalled test anxiety and flexibility, rigidity, and self-control. *Journal of Clinical Psychology, 29*, 970-975.

Gautam, T., Van Dick, R., Wagner, U. (2004). Organizational identification and organizational commitment: Distinct aspects of two related concepts. *Asian Journal of Social Psychology, 7*(3), 301-315.

Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist, 35*, 603-618.

Irving, P. G., & Meyer, J. P. (1994). Reexamination of the met-expectations hypothesis: A longitudinal analysis. *Journal of Applied Psychology, 79*, 937-949.

Janson, C.G. (1990) Retrospective data: Undesirable behaviour and the longitudinal perspective. In D. Magnusson and L.R. Bagman (eds.), *Data Quality in Longitudinal Research*, Cambridge: Cambridge University Press.

Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology, 5*, 779-794

Keller, R. T. (1997). Job involvement and organizational commitment as longitudinal predictors of job performance: A study of scientists and engineers. *Journal of Applied Psychology, 82*(4), 539-545.

Keuler, D. J., & Safer, M. A. (1998). Memory bias in assessment and recall of pre-exam anxiety: How anxious was I? *Applied Cognitive Psychology, 12*, 127-137.

Kwong, J. Y. Y., & Hamilton, V. L. (2004). Retrospective reports of organizational commitment after Russian military downsizing. *Applied Cognitive Psychology, 18*, 669-681.

Levine, L. J. (1997). Reconstructing memory for emotions. *Journal of Experimental Psychology: General*, 126, 165–177.

Loken, B., & Hoverstad, R. (1985). Relationships between information recall and subsequent attitudes: Some exploratory findings. *Journal of Consumer Research*, 12(2), 155-168.

Loftus, E. F. (1979). *Eyewitness Testimony*. Cambridge, Massachusetts: Harvard University Press.

Mather, M., Shafir, E., & Johnson, M. K. (2003). Remembering chosen and assigned options. *Memory and Cognition*, 31, 422-433.

Mathieu, J. E. & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. *Psychological Bulletin*, 108, 171-194

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the Workplace: Theory, Research, and Application*. Thousand Oaks, California: Sage Publications.

Meyer, J. P., & Allen, N. J. (1991). A Three-Component Conceptualization of Organizational Commitment. *Human Resource Management Review*, 1, 1-89.

Meyer, J. P., & Allen, N. J. (1984). Testing the “side-bet theory” of organizational commitment: Some methodological consideration. *Journal of Applied Psychology*, 69, 372–378.

Meyer, J. P., Allen, N. J., & Gellatly, I. R. (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations. *Journal of Applied Psychology*, 75, 710-720.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*, 531-551.

Meyer, J. P., Bobocel, D.R., & Allen, N.J. (1991). Development of organizational commitment during the first year of employment: A longitudinal study of pre- and post-entry influences. *Journal of Management, 17*(4), 717-733.

Meyer, J. P., Irving, P. G., & Allen, N. J. (1998). Examination of the combined effects of work values and early work experiences on organizational commitment. *Journal of Organizational Behavior, 19*, 29-52.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A Meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior, 61*(1), 20-52.

Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness: The accessibility and architecture of affective memories. *Journal of Personality and Social Psychology, 68*, 917-925.

Mikulincer, M., & Arad, D. (1999). Attachment, working models, and cognitive openness in close relationships: A test of chronic and temporary accessibility effects. *Journal of Personality and Social Psychology, 77*, 710-725.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-Organization linkages: The Psychology of Commitment, Absenteeism and Turnover*. San Diego: Academic Press.

Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14*, 224-227.

Pearson, R. W., Ross, M., & Dawes, R. M. (1992). Personal recall and the limits of retrospective questions in surveys. In J. M. Tanur (Ed.). *Questions about Survey Questions: Meaning, Memory, Expression, and Social Interactions in Surveys*. New York: Russell Sage.

Pereg, D., & Mikulincer, M. (2004). Attachment style and the regulation of negative affect: Exploring individual differences in mood congruency effects on memory and judgment. *Personality and Social Psychology Bulletin, 30*, 67-80.

Pittinsky, T. L. (2001). Knowledge nomads: Commitment at work. Unpublished dissertation, Harvard University, Cambridge, MA.

Pittinsky, T. L., & Shih M. J. (2004). Knowledge nomads: Organizational commitment and worker mobility in positive perspective. *American Behavioral Scientist, 46*(6), 791-807.

Ross, M. (1989). Relation of implicit theories to the construction of personal histories. *Psychological Review, 96*(2), 341-357.

Ross, M., & Buehler, R. (1994). Creative remembering. In U. Neisser, & R. Fivush (Eds.). *The Remembering Self: Construction and Accuracy in the Self-Narrative*. Emory symposia in cognition, Vol. 6, 205-235. New York: Cambridge University Press.

Staw, B. M. (1976). Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Resources, 16*, 27-44.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*, 259-293.

Wanous, J. P., Poland, T. D., Premack, S. L., & Davis, K. S. (1992). The effects of met expectations on newcomer attitudes and behavior: A review and meta-analysis.

*Journal of Applied Psychology, 77*, 288-297.

Weick, K. E. (1970). The twiggling of overload. In Pepinsky, H. B., *People and Information*. New York: Pergamon.

Weick, K. E. (1969). *Social Psychology of Organizing*. Reading, Massachusetts: Addison Wesley.

Wells, G. L., & Loftus, E. F. (ed.) (1984). *Eyewitness Testimony: Psychological Perspectives*. Cambridge: Cambridge University Press.

Wiener, Y. (1982). Commitment in organizations. A normative view. *Academy of Management Review, 7*(3), 418-428.

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Figure 1. *Organizational Commitment and Time*

		Time of assessment	
		Time 1	Time 2
Time- frame assessed	Time 1	Cell A Current commitment	Cell C Commitment recall
	Time 2	Cell B Commitment prediction	Cell D Current commitment

Table 1. *Commitment Recall Scores*

	Normative	Affective	Continuance	Overall
Actual	<u>M</u> = 4.64 <u>SD</u> = 1.00	<u>M</u> = 5.17 <u>SD</u> = .99	<u>M</u> = 2.92 <u>SD</u> = .86	<u>M</u> = 4.27 <u>SE</u> = .69
Recalled	<u>M</u> = 3.57 <u>SD</u> = .74	<u>M</u> = 3.86 <u>SD</u> = .47	<u>M</u> = 3.12 <u>SD</u> = .91	<u>M</u> = 3.55 <u>SE</u> = .51