

# Effects of Change and Change Management on Employee Responses: An Overview of Results from Multiple Studies

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## Abstract

Like many other industries, organizations in the paper industry are struggling with how to effectively implement the myriad changes necessary to remain competitive. The purpose of this paper is to provide an overview of the findings from the early stages of a stream of research on managing organizational change. At the present time, results are available from three different studies which have encompassed 92 different change initiatives in many different organizations representing twenty-one different industries including banking, engineering, health care, manufacturing, technology services, and utilities. Study 1 looked at how organizational change affects employees' fit with their own jobs and with their organization. Study 2 investigated how organizational change creates strain (the experience of stress) for employees. Study 3 tested the impact of organizational change on employees' commitment to the change as well as how the change altered their commitment to their organization. A summary of each study's findings are provided and then conclusions and implications are drawn based on all three of them.

## Introduction

Frequent and often pervasive change is becoming a fact of life as organizations face increasing challenges in ever-more competitive environments. This is particularly true for companies in the paper industry as they work to adjust to a rapidly changing business environment (Ault, Walton, & Childers, 1998). For example, as noted in the 1999 Pulp & Paper Fact Book (North America), there were 212 major acquisitions involving U.S. pulp and paper mill assets in that year alone. This trend is not expected to abate anytime soon in that it has been forecasted that "The estimated 3000 pulp and paper companies around the world in 1997, ..., are expected to shrink to 50 giant companies by the early 21<sup>st</sup> century" (Leffler, 1997). Such realignments are going to result in a great deal of upheaval within the affected organizations, i.e., most or all companies in the industry. Unfortunately, as in most industries, it appears that companies in the paper industry are also struggling with how best to implement the myriad of changes necessitated by these adjustments so as to minimize employee resistance and gain their buy-in and support. Without this acceptance, it can be extremely difficult to fully realize the potential gains inherent in any major change effort.

The bulk of the research on organizational change takes an organizational (macro) rather than an individual perspective. Such research tends to either examine organizations' strategic adaptation to environmental changes (strategic management literature - Kotter & Schlesinger, 1979; Romanelli & Tushman, 1994), or processes and procedures used for implementing single changes in organizations (organizational development literature - Quirke, 1996; Schweiger & DeNisi, 1991; Miller et al., 1994). Yet, ultimately, the key elements in determining the success of organizational changes are the attitudes and behaviors of the individuals charged with implementation (Herold, Fedor, & Caldwell, 2002). Thus, we have a reasonable understanding of how organizations deal with their environments, how specific contextual variables affect the success of specific change efforts, and how change management practices/processes can affect the consequences of specific changes, such as layoffs (e.g., Brockner, Konovsky, Cooper-Schneider, Folger, Martin & Bies, 1994). In contrast, much less is known about how individuals perceive organizational changes, how such perceptions are affected by the specifics of the change itself as well as by other changes occurring in the environment, and the factors that determine their ultimate responses to the change.

Armenakis and Bedeian (1999), in their review of organizational change theory and research developments in the 1990's, divided these developments into four categories or themes: *content* issues focusing on the substance of the change (e.g., reorganizations), *context* issues focusing on forces internal and external to the organization, *process* issues focusing on how the change was implemented, and *criterion* issues focusing on outcomes commonly

assessed. The fact that ten years of change-oriented research can fit these categories, without requiring a category addressing the individuals affected by the changes, is further evidence of a crucial missing link in our understanding.

If change implementation ultimately depends on the attitudes and behaviors of organizational members, then we need to broaden our models for studying change. At a very general level, it seems reasonable to hypothesize that the nature of the change ("What"), the totality of other changes ("What else"), the process by which change is managed ("How"), and the predispositions of the individual experiencing the change ("Who") will all play roles in determining individual responses. Unfortunately, there is surprisingly little research or theory to guide us in developing such a framework.

Of the four categories of variables ("What," "What else," "How," and "Who"), the organizational development and organizational behavior literatures have probably provided the greatest insight into the "How" variables through research on change practices and the importance of such factors as procedural justice (Beer, 1980; Brockner et al., 1994; Lind & Tyler, 1988). At the "What" level, we don't have much to go on. When studies have focused on particular changes, e.g., layoffs (Brockner et al., 1994), reorganizations (Ashford, 1988), organizational transformation (Mossholder, Settoon, Armendakis, & Harris, 2000), or simply important policy changes (Lau & Woodman, 1995), they have typically used one particular change as a vehicle for studying some process or outcome variable of interest (procedural justice, coping, attitudes about the change). As a result, this has limited our understanding of the broad array of possible organizational changes. Furthermore, we currently lack a typology of changes that would help in dimensionalizing the domain in terms of what it is about different changes that influences individuals' responses.

At the "Who" level, the state of research is reflective of the general neglect of individual differences or personality characteristics research in organizational studies (Caldwell, Fedor, & Herold, 2002). Only recently, researchers such as Judge et. al. (1999) have begun to study person variables (personality, self-esteem, locus of control, etc.) as determinants of how people cope with change. As a result, we have not been able to determine the impact of individual differences within the more realistic context of what has changed and how that change has been managed.

Similarly, at the "What else" level, we have little to go on because change research has almost always focused on a particular "change event," rather than on capturing the broader change environment. As such, there is an entire context to any change that has, to date, been completely ignored by researchers in this area.

### **Change in the Paper Industry**

The need for a more comprehensive approach is highlighted by some preliminary data we have collected as part of cross-organizational studies of change. Fortuitously, there were four paper-related companies that participated in this research. Below, we summarize comparisons between these paper companies (broken down into plant, sales, and administrative employees) and all other organizations in this sample. We then discuss three studies that have investigated specific aspects of the proposed framework.

In Figure A, we see that respondents working for paper companies were less likely to believe that the goals of a given change effort had been met, and were more likely to report increased levels of withdrawal and decreased satisfaction as a result of the changes being experienced. This suggests a possible industry pattern of reduced efficacy and increased possibilities of negative consequences when changes are introduced. The results are particularly evident in the plant operations and sales departments of the paper companies studied.

In Figure B, we see some possible explanations for the above results. When respondents rated the managerial and organizational support shown for a given change and the quality of the planning that went into the change, the paper company employees again had more negative impressions of how the change was handled than employees of all other companies. Those involved in the sales functions at the paper companies showed an interesting pattern of responses suggesting reasonable planning, but poor support from the organization for the changes. From these initial results, the question arises as to whether paper companies are more apt to plan changes adequately, but less likely to provide the training and other resources needed for successful change.

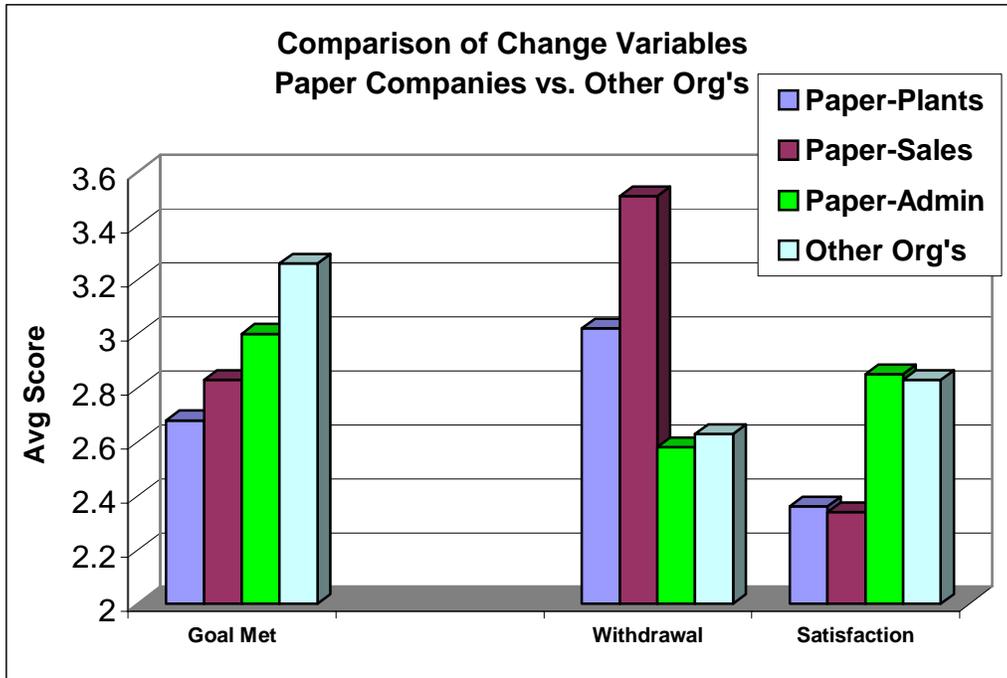


Figure A

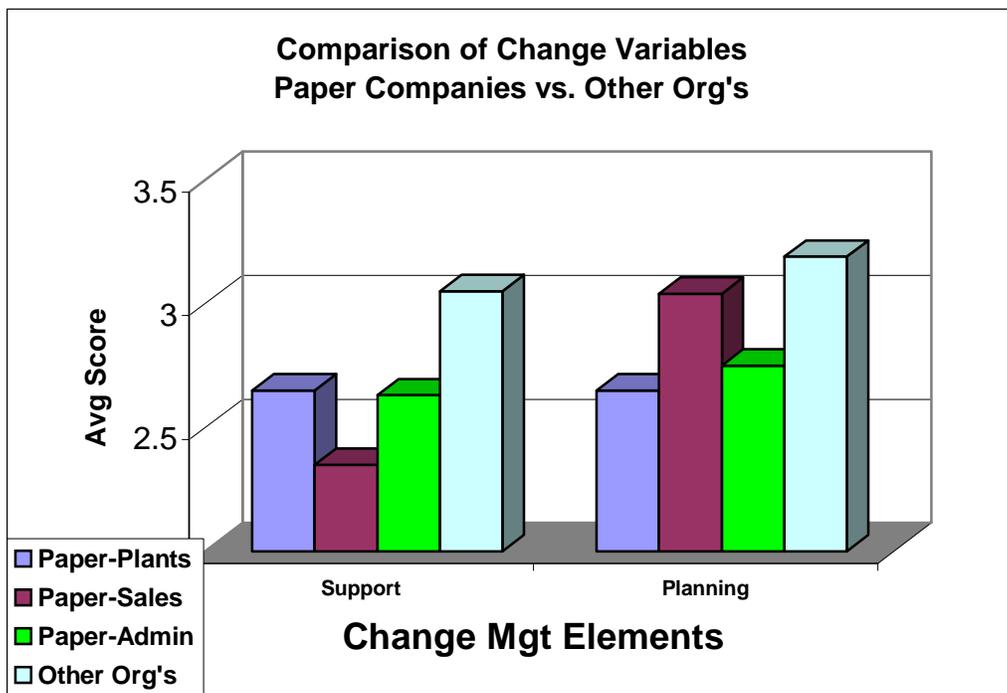


Figure B

These preliminary data suggest that the paper industry has much to gain from a deeper understanding of the factors associated with successful management of change. The purpose of this paper is to provide an overview of the findings from the early stages of a stream of research on change management. At the present time, results are available from three different studies which have encompassed 92 different change initiatives in many different organizations, spanning a broad cross section of industries includes financial services, manufacturing, and government (the entire list of industries is available from the first author). Therefore, these results are expected to be valid for many different types of organizations. As this paper is being written, a research project is being launched with a large, multi-national paper company. If available, initial results from this project will also be presented at the conference.

## **Method Overview**

The three studies highlighted below share a common methodology. Data were collected on 34 (Study 1), 27 (Study 2), and 31 (Study 3) different changes occurring in separate organizations in the Southeastern U.S. Within these three separate studies, one manager in each organization was asked to identify a specific change in his/her work unit that was very nearly or recently completed and to survey affected individuals about that particular change. To reduce response bias, respondents in each organization randomly received one of two surveys. One survey was designed to capture data on the specific change and the organization's change management practices (Organizational Change Survey), while the other survey focused on individual differences and reactions to the change (Personal Change Survey). The specific change being studied was identified at the beginning of each survey so that all respondents in a given organization were referencing the same change. The targeted changes reflected a wide variety of change initiatives including major reorganizations, reengineering or work process changes, structural changes, technology changes, and changes in strategy or corporate direction. The number of respondents for any one organization averaged 23. Finally, for each of the three studies, similarities in the demographics of the two survey samples (i.e., those responding to the Organizational Change Survey and the Personal Change Survey) indicated equivalent groups of respondents in each organization.

### **Study 1**

In this study, we investigated the effects of the extent or amount of change, how the change was managed (fairness of the change procedures) and employee age on perceived employee fit with their organizations [called Person-Organization (P-O) fit] following a particular, significant change initiative. It was expected that the amount of change taking place in one's work unit and one's age would be associated with a deterioration in P-O fit following a change initiative, while the fairness of the change process would be associated with enhancements in P-O fit. When we investigated how these predictors work together to affect changes in P-O fit, a few unexpected results occurred. First, as can be seen in Figure 1A, reported P-O fit deteriorated when change fairness was low (not surprising) and change levels were also low (very surprising!). We had anticipated that the greatest drop in P-O fit would be for the low fairness/high change situation.

This finding suggests that high levels of change in work unit procedures and processes may communicate positive attributes about the organization and its intentions to improve and remain competitive, perhaps conveying a sense of urgency. Another possible explanation for this result is that low fairness and low levels of change taken together may suggest to the individual that the organization is not doing enough to keep pace with the changing environment, thus reducing the probability for long term success, as well as being insensitive to how it manages the changes it does initiate. This combination of futility and insensitivity may negatively impact individuals' respect for the organization.

Further, the results indicated that the favorable consequences of good change practices were limited to younger workers, with older workers actually showing declines in P-O fit under favorable change process conditions (Figure 1B). These results raise some challenging questions about change and an aging workforce, such as whether older employees' motivational processes result in less adaptive effort during change. For instance, the results reinforce questions raised in Kanfer and Ackerman (in press) about motivation and aging that deal with the need for organizations to find interventions during change that are different from conventional wisdom (e.g., extrinsic rewards and training), and that would motivate older workers to adapt to the changing workplace. Maybe older employees need forms of support that are different from process fairness and management commitment to the change. To better understand the effects of organizational change on older individuals, we may need to expand our

consideration of change management practices to include additional support constructs, such as Perceived Organizational Support (POS), that engender fit because individuals feel that they are valued and cared for by the organization (c.f., Rhodes & Eisenberger, 2002).

Figure 1A – Perceived changes in P-O (values congruence) fit as a function of the interaction between Change Fairness and Extent of Change

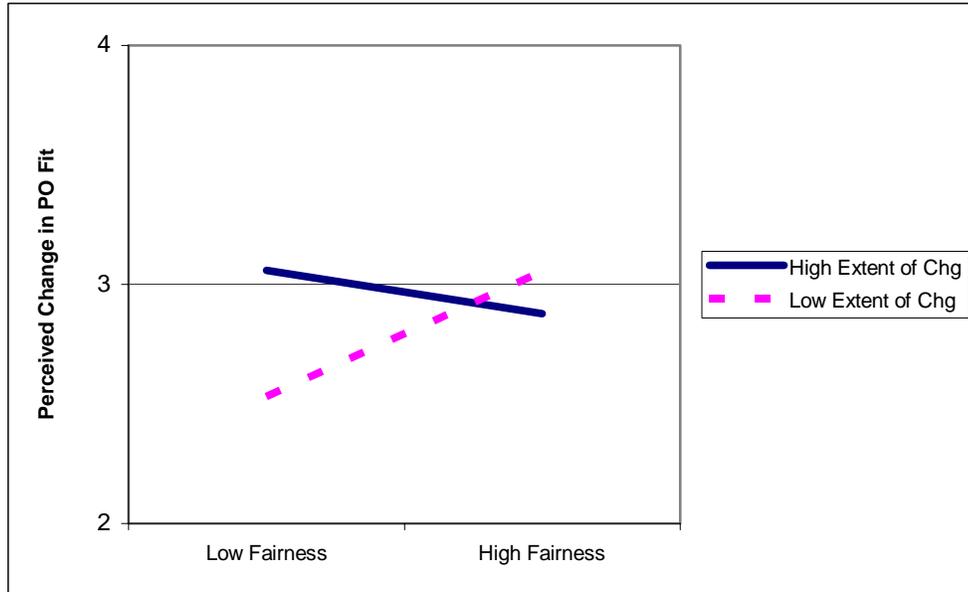
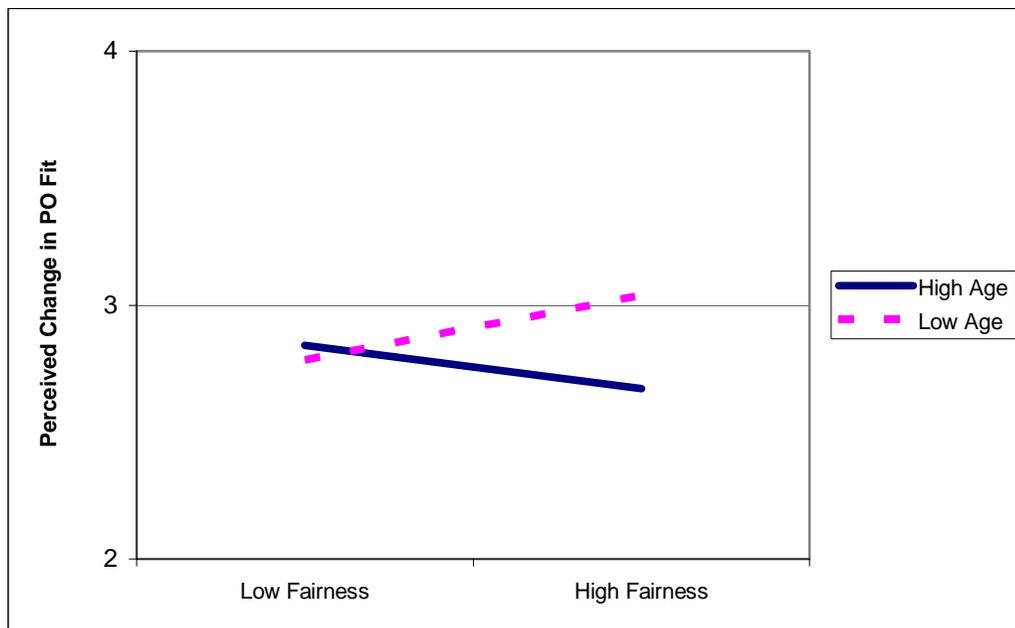


Figure 1B – Perceived changes in PO (values congruence) fit as a function of the interaction between Change Fairness and age



## Study 2

In this study, we investigated the combined effects of change at two levels (change in the individual's job and change occurring in the work unit) and how the change was managed (fairness) on employees' experience of strain due to a particular, significant change initiative. The results indicate changes that generate high levels of personal job demands are associated with higher mean levels of strain somewhat independently of work unit changes or procedural justice. This suggests that personal adaptation requirements, either because of the threat or uncertainty they create, or because of the emotional, physical or psychological resources they consume, are associated with experienced strain. On the other hand, work unit changes accompanied by low levels of justice are associated with high levels of strain more or less independently of job-level changes. That is, low levels of personal demands are not enough to off-set the strain associated with high levels of work unit change and low justice (see Figure 2).

Thus, although good change management mitigates the effects of increasing amounts of work unit change, it is certainly not a "cure-all," seemingly not being able to address the consequences of increased job demands on the individuals themselves. These findings are consistent with other studies of procedural justice (e.g., Brockner, 2002), but go a step further in suggesting that we need to refine our conceptualizations of when and why good change practices ameliorate individuals' negative reactions to change. Since most studies of procedural justice assess changes at the work-unit level or higher (e.g., layoffs), and tend to assess affective reactions to the change, we might conclude that contextual changes, if properly managed, may be associated with reasonably positive consequences, both cognitive and affective. However, when considering the consequences of change at a more personal level, i.e., as the impact of broader workplace changes on the person are assessed, the load placed on the individual is more directly related to strain responses, and seems not to be readily ameliorated by change processes.

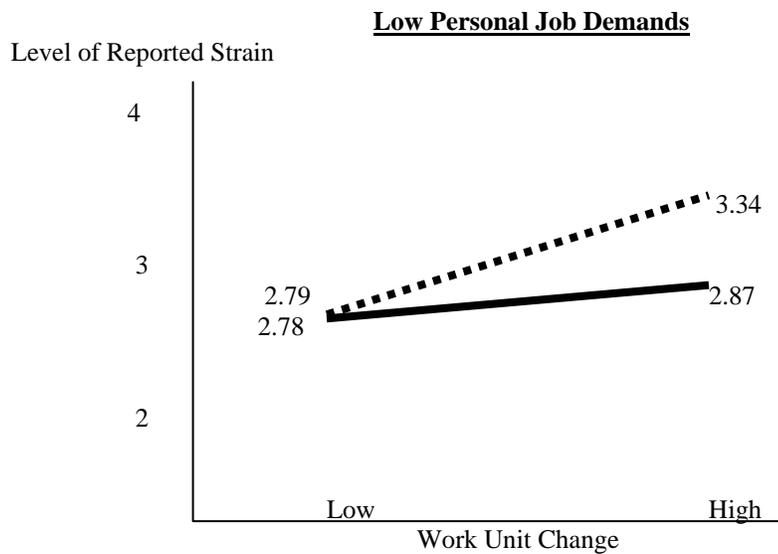
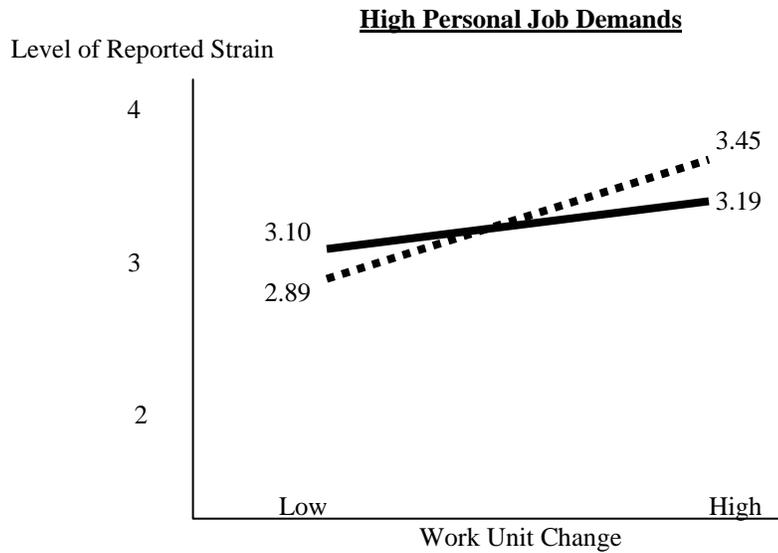
From a practical perspective, this suggests that the emphasis on improving our management of change processes advocated by the organizational development literature and change management consultants may operate more to ameliorate reactions to work unit changes than to reduce the negative consequences of job level changes. Future research needs to better explore the potentially negative impact of high levels of job level changes on individuals, and the differential and relative effects of different change management practices or other moderators (e.g., perceived organizational support) on such changes.

## Study 3

This final study to be reviewed here tested the effects of change occurring at the job and unit levels (the same levels studied in Study 2) on two commitment-related outcomes. These outcomes are commitment to the particular change and changes in organizational commitment. In addition, we investigated the moderating role of change favorableness (i.e., whether the change had a positive or negative impact on the work unit).

Our most important findings are that (1) commitment to the change and the organization are not isomorphic, and (2) focusing on *either* the change at the individual job level or the work unit level alone would provide an incomplete picture of the impact of organizational change on individuals' levels of commitment. However, while both levels of change need to be considered together, their joint effects on commitment are not straight-forward. Apparently, individuals seem to interpret change situations as consisting of what's happening to them personally in relationship to what's happening to their work unit, but then they factor in other considerations (e.g., the impact of the change) in arriving at a response. These findings point to the rather complex nature of organizational change and the effects such change on individuals' reactions.

Figure 2. The Effects on Strain of the Interaction Between Work Unit Change, Personal Job Demands, and Procedural Justice



High Procedural Justice      **—————**  
 Low Procedural Justice      **.....**

Specifically, we found that individuals are more likely to embrace the change being implemented while, at the same time, becoming less committed to the organization. The Change Commitment mean of 4.01 (out of 5) suggests that respondents intended to act in support of the change. This level of commitment to the change was reported even in light of a slightly below neutral rating for how favorable the change was for the work unit (mean = 2.93 on a 5-point scale). In contrast, the mean for Organizational Commitment (2.66) suggests that change has a negative effect on commitment to the organization. Although some have studied the influence of absolute levels of commitment on individuals' reaction to organizational change (Lau & Woodman, 1995), this may be the first study to investigate changes in commitment as a result of change. Taken together, these findings are consistent with Piderit's (2000) argument that dimensions of individuals' responses to change are often not consistent, such that less observable reactions (e.g., affect toward the organization) are typically more negative than more observable reactions (e.g., intentions to support the change).

Moreover, in to the case of commitment to the change, this response was based on three interacting influences (see Figure 3A). Specifically, the highest level of commitment to the change occurred when the change was judged to be good for the work unit, there was a lot of change occurring at this level, but there was a low amount of change occurring in the individual's job. That is, individuals tend to commit to a change when there's lot of favorable change going on around them, but the change is not particularly demanding on them personally.

As with commitment to the change, there was a significant three-way interaction between the outcome of the change, the extent of work unit change, and the extent of job level change influencing organizational commitment responses (see Figure 3B). However, the form of that relationship was different from change commitment. First of all, individuals' commitment to the organization improved when the change was favorable for the work unit and there was a high level of change at the work unit level, regardless of the level of impact on one's job. However, the most interesting finding was the conditions under which the greatest deterioration in commitment was reported. This involved a change seen as favorable for the unit, low amounts of work unit change, and high amounts of individual job level change. This may represent a "picked on" sentiment, reflecting a distributive justice judgment on the part of individuals that they got a "raw deal" from the organizational change (a disproportionate amount of the impact from the change fell on them).

Overall, this study provides evidence that we need to consider change at different levels. In addition, whether the change has positive or negative impact on members of the work group plays a major role. Thus, these findings provide evidence that the "win-win" objective of change initiatives (e.g., Kotter, 1996) does have merit. That is, when the change did not improve the work life of those affected by the change, the extent of change at both the work unit and job level had little influence. In contrast, when the change was seen as favorable, the two levels of change came into play. For commitment to the change, individuals were supportive when they were surrounded by lots of change, but were relative unaffected themselves. As for organizational commitment, individuals were fine when the level of change they were experiencing was consistent with what was happening to their work unit.

Figure 3A – Effects of Three-way interaction Between Change Outcome, Work Unit Change and Job Level Change on Change Commitment

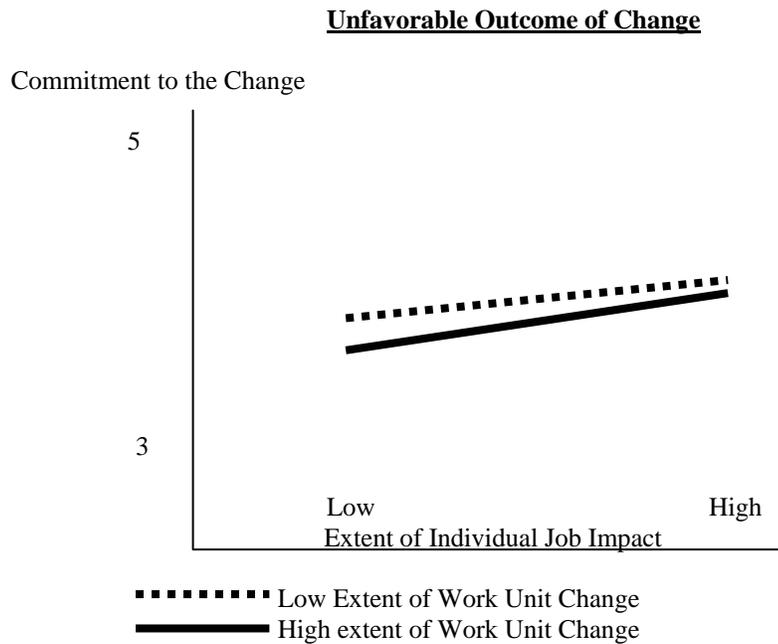
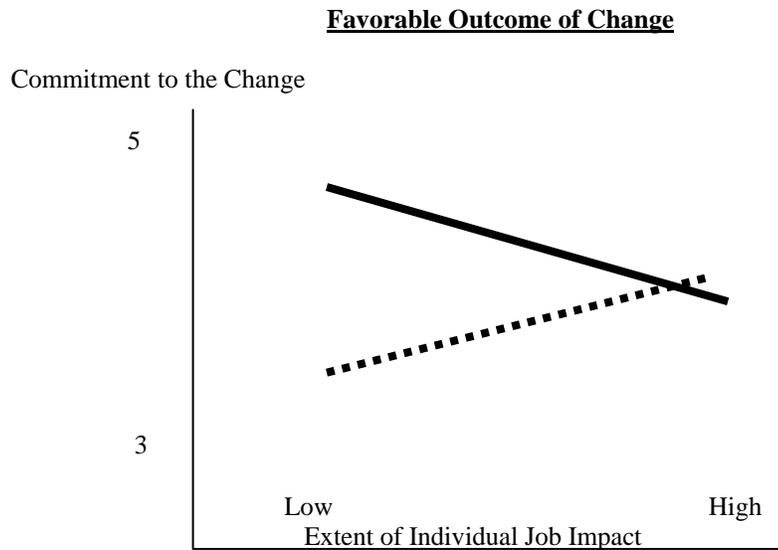
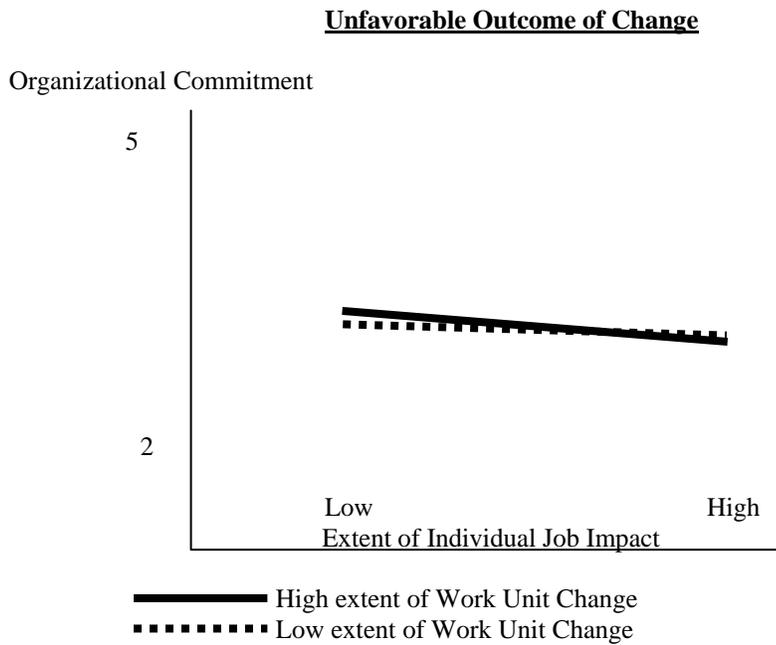
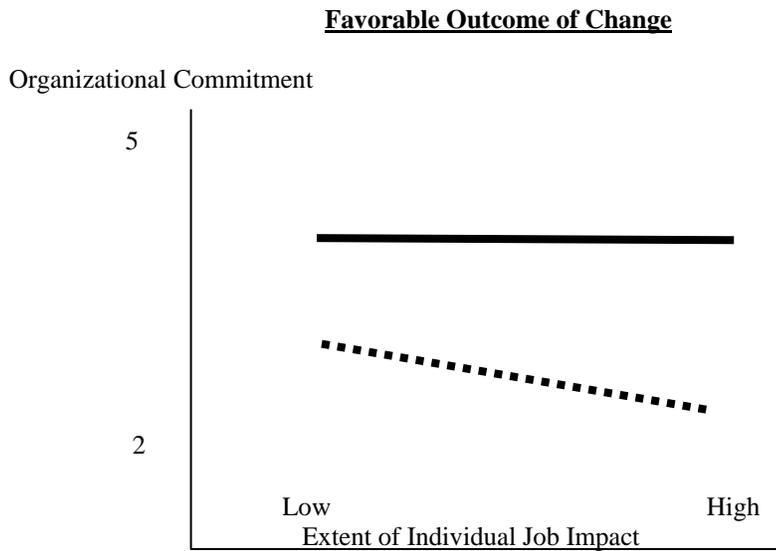


Figure 3 B – Effects of Three-way Interaction Between Change Favorability, Work Unit Change and Job Level Change on Organizational Commitment



## Summary and Implications

The picture that begins to unfold from these three studies is quite interesting. Study 1 points to the fact that even relatively minor changes need to be properly managed, while more major changes might be given more latitude possibly because the reason(s) for them are more obvious. In addition, this study found that age was negatively related to change acceptance (not totally surprising) and that this effect was not ameliorated by managing the change fairly. In contrast, good change management worked well for younger employees. This raises a concern about how to get older workers “on board” when it comes to change initiatives.

Study 2 found that organizations create change-related strain for their employees in two ways. First, the level of strain depends on the impact the change has on the individual’s own job. In other words, high personal demands tend to translate into high strain. Second, if a change has a significant impact on the work unit and that change is not managed well, in terms of fairness, this also tends to lead to experiences of personal strain.

In the final study, we found further evidence of the need to consider the change occurring at both the work unit and individual job level in relation to two forms of commitment (i.e., to the change and to the organization), and the importance of including the impact that the change had on the work unit. Somewhat ironically, while the participating employees reported reasonable acceptance of the change being implemented, they also seemed to become less committed to the organization. Moreover, the highest commitment occurred when the change was seen as good for the work unit, there as a lot of change at the work unit level, but little direct job impact. Ergo, employees like lots of beneficial change that also leaves them relatively untouched. In contrast, the greatest decrease in organizational commitment was reported when a somewhat minor change was seen as good for the work unit, but the personal job impact was high.

Taken all together, these studies point to the need to include multiple levels of change, how the change was managed, the impact of the change, and individual differences into our models of how individual employees (i.e., the change implementers) respond to change. Although these findings are very revealing, they appear to only begin to unravel the complex nature of organizational change.

These studies have several practical implications for organizations facing change. First, they point to a need to improve our understanding of the effects that multiple levels of change have on individuals, since most organizational changes have, at minimum, personal and work-unit implications. Second, the findings point to the more complex role played by change management practices, and alerts us to when such processes may or may not ameliorate the negative consequences of change. Third, our findings point to the need to consider individual differences (in this case, employee age) and how they affect responses to change. Although many organizations “tip their hat” to the notion that the consideration of employees is essential to effective change management, most do not seriously follow through to make sure such considerations guide their change practices. Even in those instances where the change tends to have negative outcomes (e.g., downsizing), management should be vigilant about finding ways to ameliorate any negative consequences for individual employees. As such, our findings suggest that organizations can actually benefit, in terms of better P-O fit, less strain, and higher commitment, in the face of difficult changes.

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