

# **Organizational Change and Proactive Personality: Effect on Job Performance and Job Satisfaction**

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*In today's borderless world characterized by acute competition, with change being the only constant, organizations need to work on building a workforce which can not only survive but also thrive in such a volatile environment. Proactive individuals actively create environmental change, while less proactive people take a more reactive approach toward their jobs. The present paper provides evidence for the significance of proactive personality (PAP) in the backdrop of an organizational change setting. We hypothesized a conceptual model and tested the effect of PAP on important job outcomes and found that it had a robust relationship with job performance and job satisfaction after controlling for affective commitment to change and intent to remain with the organization. Further, we tested the mechanism by which PAP was related to intent to remain and found that affective commitment to change and job satisfaction completely mediated the relationship between PAP/intent to remain with the organization.*

## **INTRODUCTION**

### **Overview of Proactive Personality and Organizational Change**

Organizational change has traditionally been viewed at the organizational level, which involves specific actions taken by the organization to transform internal structure or other characteristics/policies, apparently in response to environmental conditions and the need to survive and progress in a dynamic scenario (Armenakis & Bedeian, 1999; Johnson, 1996). There is, however, a burgeoning interest in how change surges down through the organization, ultimately to be experienced at the individual level (Judge, Thoresen, Pucik, & Welbourne, 1999). This implies that it is important to understand that a change at the organizational level (such as a restructuring) will often result in having considerably different repercussions at different levels of work groups and for individuals within these groups (Mohrman, Mohrman, & Ledford, 1990). Perception during change is important; therefore, one must be aware not only that implications vary at different levels but also that the same organizational change can be viewed quite differently at each of these levels. Top management may view it as a positive and required step towards the overall health and progress of the organization while lower level managers and employees may concern themselves with negative views ranging from threat to their job to minor disruptions of their day-to-day activities (Strebel, 1996).

Several researchers have called for a more person-focused approach to the study of organizational change (e.g., Aktouf, 1992; Bray, 1994), especially since we are witnessing immense changes in the world of work with jobs in the 21<sup>st</sup> century requiring greater initiative, courtesy of global competition (Cascio, 1995; Frese & Fay, 2001; Howard, 1995). Recent years have therefore seen an escalating interest

in studying the complexity of changes in the workplace, their causes, consequences, and strategies for change (for reviews, see Armenakis & Bedeian, 1999; Porras & Robertson, 1992). This is where the proactive stance plays an important role: as work becomes more dynamic and changeable, proactive personality and initiative become even more critical determinants of organizational success (Frese, Fay, Hilburger, Leng, & Tag, 1997). "Organizations increasingly expect employees to fix things that they see as wrong, act on the information they have, and react to unusual circumstances by demonstrating proactive behaviors," say Erdogan and Bauer, (2005, p. 859). The words of Crant (2000) are apt:

Proactive people identify opportunities and act on them, show initiative, take action, and persevere until meaningful change occurs. In contrast, people who are not proactive exhibit the opposite patterns: they fail to identify, let alone seize, opportunities to change things. Less proactive individuals are passive and reactive, preferring to adapt to circumstances rather than change them. (p. 439)

Proactive personality (PAP) is the degree to which individuals have an active role orientation. Rather than accepting their roles passively, proactive persons challenge the status quo and initiate change (Bateman & Crant, 1993). Thus, employees with proactive personalities use initiative, persevere, and attempt to shape their environment (Bateman & Crant, 1993) and tend to have a positive impact on job-related outcomes especially in changeable and more dynamic work environments.

Bateman and Crant (1993) defined the construct *proactive personality* "as a dispositional construct that identifies differences among people in the extent to which they take action to influence their environment" (p. 103). They further developed the Proactive Personality Scale (PPS) to measure this construct and provided evidence for the scale's convergent, discriminant, and predictive validity with results from three studies. Since then, a number of studies have consistently demonstrated the validity of the proactive personality construct, as assessed by the PPS (e.g., Becherer & Maurer, 1999; Bateman & Crant, 1999; Crant, 1995, 1996; Crant & Bateman, 2000; Kirkman & Rosen, 1999; Parker & Sprigg, 1999). Although proactive personality has been studied in various fields, surprisingly there is little research which has considered its role in the field of organizational change. The present research aims at filling this gap in the literature by empirically testing the role of proactive personality in an organizational change setting.

The purpose of the present study was two-fold. First, the study empirically examined a conceptual model of PAP which included extrinsic (job performance) and intrinsic (job satisfaction) job outcome. Secondly, given the importance of affective commitment to change in the field of organizational change the study tested the mechanism by which it affected the relationship between PAP and job outcomes. Specifically, it was hypothesized that in a change setting (1) PAP will increase extrinsic job outcomes such as job performance and intent to remain with the organization and intrinsic job-related outcomes such as job satisfaction; (2) affective commitment to change will mediate the relationship between PAP and job-related outcomes.

### **Model Development and Hypotheses**

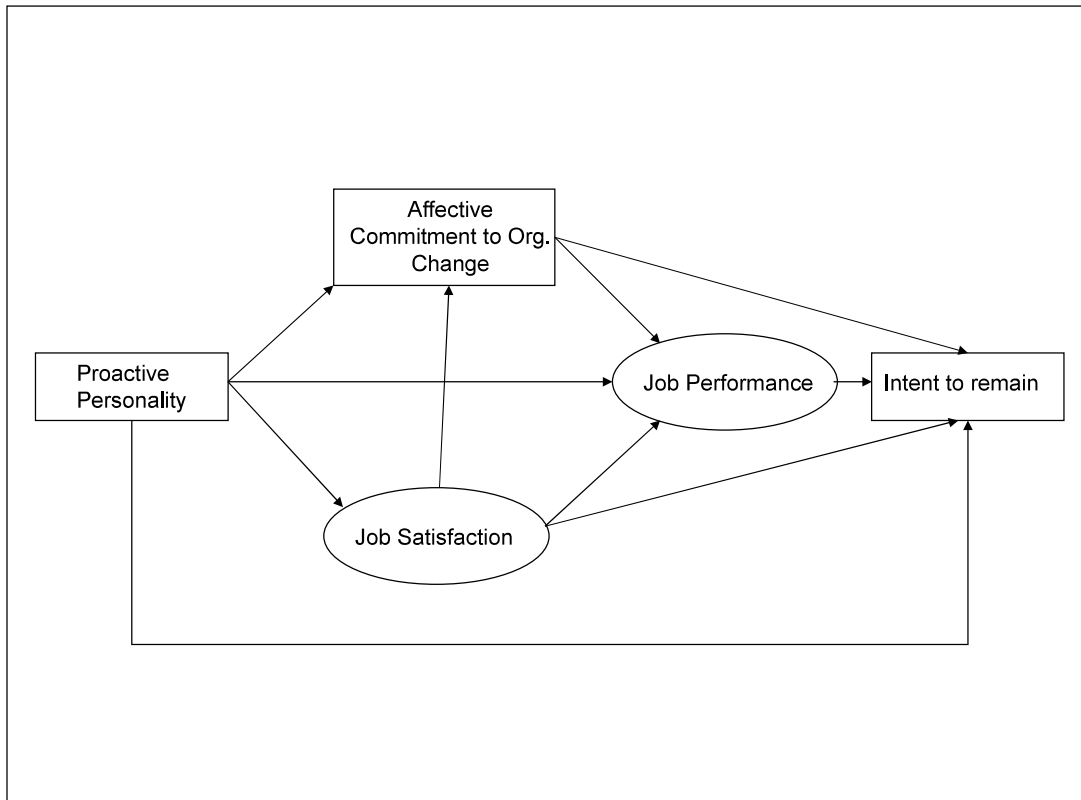
The German Action Theory (e.g. Hacker, Skell, & Straub, 1968) which is based on the ideology that work is action-oriented is substantiated by the premise that: "the human is seen as an active rather than a passive being who changes the world through work actions..." (Frese & Zapf, 1994; p. 86). People are not always passive recipients of environmental constraints on their behavior; rather, they can intentionally and directly change their current circumstances (e.g., Buss, 1987; Diener, Larsen, & Emmons, 1984). In dynamic circumstances which tend to be less well-defined, it is reasonable to assume that individuals might mold their work characteristics to fit their individual abilities or personalities. People with a proactive personality are relatively unconstrained by situational forces (Bateman & Crant, 1993). Readiness and determination to pursue a course of action are characteristic of proactive people which are also central to models of self-development (Antonacopoulou, 2000).

The words of Bateman and Crant (1999) capture the essence of proactive personality. Proaction involves creating change, not merely anticipating it. It does not just involve the important attributes of flexibility and adaptability toward an uncertain future. To be proactive is to take the initiative in

improving business. At the other extreme, behavior that is not proactive includes sitting back, letting others make things happen, and passively hoping that externally imposed change “works out okay.” (p. 63)

These attributes of proactive personality along with the characteristics of organizational change led to the development of the conceptual model that was tested in the present study. That model specifically examined the effect of proactive employees on job outcomes in a change setting. (See Figure 1)

**FIGURE 1**  
**CONCEPTUAL MODEL OF PROACTIVE PERSONALITY IN A CHANGE SETTING**



### **Proactive Personality (PAP) and Job-related Outcomes in a Change Setting**

The range of job-related outcomes usually considered in work design research has been criticized as being too limited. However, traditional outcomes such as job satisfaction (intrinsic) and job performance (extrinsic) will certainly remain central to the agenda; hence these two outcomes were chosen in this present study. Given that the main purpose of this research was to understand the role played by PAP in a change setting, one more job-related outcome variable was included in the study. That variable, intent to remain with the organization, was included because of its vital importance in organizational change studies.

PAP has been related to extrinsic job-related outcomes such as job performance (Crant, 1995; Thompson, 2005), extrinsic career success, or actual advancements in salary and position (Seibert, Crant, & Kraimer, 1999; Seibert, Kraimer, & Crant, 2001). In an attempt to examine the criterion validity of the Proactive Personality Scale, Crant (1995) found that proactive personality explained 8% of the variance in objective measures of job performance in the case of real estate agents. Additionally proactive personality has been associated with other objective measures such as salary and promotions (Seibert, Crant, & Kraimer, 1999). Proactive personality was also found to be significantly related to subjective evaluations

of performance by direct supervisors in diverse backgrounds (Thompson, 2005) as they tend to set high standards, and harness all available resources into achieving those standards (Crant, 1996).

Although past research has found PAP to be related to these extrinsic job-related outcomes, its effect on these outcomes has rarely been empirically tested in a change setting. Hence, in the present study it was hypothesized that in a change setting PAP will have a positive impact on job performance. Additionally, it was anticipated that proactive individuals will intend to remain with the organization post-reorganization.

PAP has also been related to intrinsic career success, i.e. job and career satisfaction. Intrinsic success is also important because of its relation to life satisfaction (Lounsbury, Park, Sundstrom, Williamson, & Pemberton, 2004) and turnover intentions (Igbaria, 1991). Two measures of well-being—job satisfaction and turnover intentions—are examined in the present study. In the present study job satisfaction was defined as an individual's global feeling about his or her job (Spector, 1997). Instead of measuring turnover intentions a more positive variable was chosen i.e. intent to remain with the organization. The above discussion lead to the first hypothesis.

Hypothesis 1: In a change setting PAP will relate significantly and positively to (a) job performance (b) job satisfaction (c) affective commitment to change and (d) intent to remain with the organization.

### **PAP and Affective Commitment to Change**

Commitment, in a broad sense, can be defined as “a force [mind set] that binds an individual to a course of action of relevance to one or more targets” (Meyer & Herscovitch, 2001). Conner and Patterson (1982) noted that “the most prevalent factor contributing to failed change projects is a lack of commitment by the people” (p. 18). Thus commitment to organizational change is unquestionably one of the most imperative factors involved in employees' support for change projects (Armenakis, Harris, & Feild, 1999; Coetsee, 1999; Conner & Patterson, 1982; Klein & Sorra, 1996). Conner (1992) aptly described commitment to change as “the glue that provides the vital bond between people and change goals” (p. 147). Meyer and Allen (1991) argued that this force, or mind-set, can take different forms: desire (affective commitment), perceived cost (continuance commitment), or obligation (normative commitment). In the present study the affective form of commitment to change (desire to provide support for the change based on a belief in its inherent benefits) was used.

Bateman and Crant (1993) argued that proactive individuals actively create environmental change, while less proactive people take a more reactive approach toward their jobs. Thus, proactive personality refers to the general disposition to make active attempts to effect changes in one's environment and is crucial in modern organizations characterized by fast changes and reduced supervision. Proactive people identify opportunities and act on them, show initiative, take action, and persevere until meaningful change occurs (Crant, 1996). Given the definition of PAP and the importance of commitment to change, it was predicted that commitment to change will mediate the relationship between PAP and certain important job outcomes.

Hypothesis 2: Affective commitment to change will mediate the relationship between (a) PAP/Job performance and (b) PAP/Intent to remain with the organization.

### **PAP and Job Satisfaction**

Dispositional characteristics incline people to a certain level of satisfaction (see Bowling, Beehr, Wagner, & Libkuman, 2005). In fact, two important studies found that genetic factors, which apparently affect disposition, may account for as much as 30% of the variance in job satisfaction (Arvey, Bouchard, Segal, & Abraham, 1989; Arvey, McCall, Bouchard, Taubman, & Cavanaugh, 1994). Dispositions may have a direct effect on job satisfaction or may influence the way in which employees perceive their jobs, which, consequently affects job satisfaction (Bowling et al., 2005). Proactive personality will probably affect job satisfaction as “proactive individuals will be more satisfied with their jobs because they will remove obstacles preventing satisfaction” (Erdogan & Bauer, 2005, p. 861)

Research linking job performance with satisfaction and other attitudes has been studied since at least 1939, with the Hawthorne studies (Roethlisberger & Dickson, 1939). Organ (1988) found that the

relationship between job performance and job satisfaction follows the social exchange theory; employees' performance is giving back to the organization from which they get their satisfaction. Thus it seems to be a common assumption that employees who are happy with their job should also be more productive at work (Spector, 1997) and therefore should be less inclined to leave the organization.

Hence, it was anticipated that job satisfaction will mediate the relationship i.e. it will shed some light into the mechanism by which PAP is related to job outcomes.

Hypothesis 3: Job satisfaction will mediate the relationship between (a) PAP/affective commitment to change (b) PAP/job performance and (c) PAP/Intent to remain with the organization.

## **METHOD**

### **Research Setting and Participants**

Data for this study were collected from a non-profit organization located in the southeastern United States, having approximately 900 employees working in offices spread statewide. This organization was chosen because it had recently experienced a major restructuring.

Data were collected via a self-report online survey. The survey administration process began by sending an email to all the employees with the consent of management, inviting them to participate in the survey. The email clearly stated that participation in the survey was voluntary and that the survey responses would be completely anonymous and that no member of the management would have access to the data. One day prior to sending the email the on-line survey was posted on the company's intranet—thereby preventing the chance of a non-employee filling out the survey. At the organization's request several open-ended questions not included in this study were added with the sole aim of getting constructive feedback from its employees with respect to the restructuring.

After three weeks a reminder email was sent to the employees. The on-line survey resulted in 275 usable questionnaires, which gave a response rate of 31.3%. Almost half of the respondents (42.6%) used in this analyses were over 50 years old, and 60.6 % of the respondents were women. More than half (63.5%) were caucasian while 26.6% were African Americans. Table 2 provides a demographic profile of the respondents.

### **Measures**

#### *Proactive Personality*

PAP was measured by using the shortened version of Bateman and Crant's (1993) 17-item Proactive Personality Scale (PPS) created by Seibert, Crant, and Kraimer, (1999). The shortened version consists of ten items. These items were selected as they had the highest average factor loadings across the three studies reported by Bateman and Crant (1993). These three studies presented evidence for the scale's reliability (Cronbach's alpha across three samples ranged from .87 to .89, and the test-retest reliability coefficient was .72 over a three month period). The studies also provided convergent, discriminant, and criterion validity. Seibert et al. (1999) mentioned that the deletion of seven items did not result in a major effect on the reliability of the scale (17-item  $\alpha = .88$ ; 10-item  $\alpha = .86$ ). These items were summed to arrive at a proactive personality score. Responses were indicated on a seven-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"), with items such as "I excel at identifying opportunities" and "No matter what the odds, if I believe in something I will make it happen." (See Appendix B for all the items). Internal consistency (coefficient alpha) obtained in the current study was .89, in line with that reported by Bateman and Crant (1993).

#### *Job Performance*

Job performance was measured by using two self-report measures completed by the employees. The first self-report measure included 7 items which was a subset of the 20-item scale prepared by Williams and Anderson (1991). The Williams and Anderson (1991) scale was originally validated on 127 employees working in varied organizations. Factor analysis resulted in three distinct behavior factors—job performance being one of them. Example questions include "fulfills responsibilities specified in the

job description” and “meets formal performance requirements of the job.” Items were summed to yield a total performance score for each employee. Reliability of the scale was within the acceptable range, i.e. higher than .70 (Cronbach’s alpha = .77).

The second self-report scale consisted of two single items. The first item was coined by Ferris, Witt, and Hochwarter (2001) and measured the overall job performance of the employee aimed at serving as a self-appraisal. It read as follows: “Please circle the number besides the adjective which best describes your job performance in your opinion:

1 (weak or bottom 10%), 2 (fair or next 20%), 3 (good or next 40%), 4 (very good or next 20%), or 5 (best or top 10%).” Since a single-item measure cannot yield estimates of internal consistency reliability, nor can a single-item measure be used in structural equation models one more similar item was used which also measured the overall job performance. The item was based on a 6-point Likert scale in which employees rated themselves and were asked the following: “Please circle the number besides the adjective which best describes your job performance in your opinion: 1 = Unacceptable, 2 = Very poor, 3 = Poor, 4 = Good, 5 = Very Good, 6 = Outstanding.”

The likelihood that any particular cognition will be retrieved as an input to some decision or behavior decreases with an increase in the amount of time since its most recent activation (Wyer & Srull, 1986) and the amount of material in the same content domain encountered during that temporary period (Keller, 1987). This suggests that intervening items between two similar items will increase the likelihood of the respondent to either compute a new response or engage in an effortful search of long-term memory. Hence in the survey instrument the two overall job performance items were separated by several items as well as open ended questions. Reliability of this scale was within acceptable range (Cronbach’s alpha = .78).

#### *Job Satisfaction*

Job satisfaction was measured by using four sub-scales of the Job Satisfaction Survey (JSS; Spector, 1997). JSS measures “outcome” satisfaction facets such as pay, benefits, promotions, supervision, work itself, co-workers, and working conditions (Spector, 1997). Four sub-scales of the JSS (benefits, rewards, co-workers and work itself) were used in this study with each subscale consisting of four items. Respondents indicated the extent of their agreement with each item on a 7-point Likert-type scale (1 = *strongly agree*, 7 = *strongly disagree*). Cronbach’s alpha measured for the four sub-scales were benefit satisfaction ( $\alpha = .79$ ), reward satisfaction ( $\alpha = .84$ ), co-worker satisfaction ( $\alpha = .72$ ) and work itself satisfaction ( $\alpha = .83$ ).

#### *Intent to Remain*

Employee’s intent to remain with the organization was measured using a scale from Robinson (1996). This four-item scale asked employees to respond to three Likert-type questions about how long the employee intends to remain with the employer, the extent to which he/she would prefer to work for a different employer, the extent to which he/she has thought about changing companies, and one binary question (“If you had your way, would you be working for this employer three years from now?”). This scale had a modest reliability with Cronbach’s alpha measuring .68.

#### *Affective Commitment to Change*

This variable was measured using a sub-scale of the scale developed by Herscovitch and Meyer (2002) to measure commitment to change. The scale consisted of 22 items of which seven items assessed affective commitment (e.g., “I believe in the value of this change”) which was used in this study. Responses were made using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). This scale exhibited strong reliability with Cronbach’s alpha measuring .95.

#### *Data Analyses*

Data for this study were collected anonymously. Anonymity provided benefits by potentially reducing the method bias (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Data were analyzed using

Structural Equation Modeling (SEM) implemented in AMOS (Arbuckle, 2006a; 2006b). First the model fit was tested using several confirmatory factor analyses and comparing the goodness of fit indices. SEM was used to validate the conceptual model and to test the hypotheses relating to direct effects (Hypotheses 1a-c) and the mediating effects (Hypotheses 2a & b, 3a-c).

**TABLE 1**  
**DEMOGRAPHIC PROFILE OF SURVEY RESPONDENTS**

<b>Variable</b>	<b>N</b>	<b>%</b>
<b>Gender</b>		
Males	104	37.8
Females	171	62.2
<b>Race</b>		
Caucasian	177	64.4
African American	75	27.3
Hispanic	1	.4
Native American	2	.7
Asian	1	.4
Other	4	1.5
<b>Age</b>		
20 – 29 years	13	4.7
30 – 39 years	38	13.8
40 – 49 years	100	36.4
> 50 years	118	42.9
<b>Tenure (Organization)</b>		
< 1 year		
1 – 5 years	11	4
6 – 10 years	47	17.1
11 – 20 years	53	19.3
> 20 years	88	32
	72	26.2
<b>Tenure (Job position)</b>		
< 1 year		
1 – 5 years	20	7.3
6 – 10 years	125	45.5
11 – 20 years	49	17.8
> 20 years	53	19.3
	20	7.3

*Note: N = 275*

#### *Tests for Model Fit*

The first step in the data analysis process involved running several confirmatory factor analyses and observing the fit of the data by checking whether all the goodness-of-fit indices met the respective criteria.

The goodness of fit of the models was evaluated by using absolute and relative indices. The absolute goodness-of-fit indices which were calculated are (cf. Jöreskog & Sörbom, 1993) (a) the chi-square goodness-of-fit statistic and (b) the root-mean-square error of approximation (RMSEA). Although the chi-square likelihood ratio is considered the most fundamental measure of absolute model fit, it is sensitive to sample size and thus, with larger sample sizes (more than 200), can result in significant values even when small differences exist between the model and the data (Anderson & Gerbing, 1988; Hair,

Anderson, Tatham, & Black, 1998). The ratio of chi-square to degrees of freedom ( $\chi^2/df$ ) has been suggested as an alternative, with values of 2.0 or less indicative of acceptable fit (Kline, 2005). The RMSEA is a measure of model discrepancy and takes into account the error of approximation in the population (Hu & Bentler, 1999). The relative goodness-of-fit indices which were computed are (cf. Marsh, Balla, & Hau, 1996) (a) the normed fit index (NFI) (b) the comparative fit index (CFI), and (c) the incremental fit index (IFI). The CFI is a measure of fit derived from the comparison of the hypothesized model to the independence model and adjusts for sample size. CFI values of 0.90 or greater are indicative of acceptable models (Hu & Bentler, 1999).

### **Hypothesis Testing: Direct and Mediating Effects**

Structural equation modeling (SEM) is a flexible multivariate analytic technique that allows researchers to test global hypotheses about competing theories as well as simultaneous testing multiple specific hypotheses such as those usually tested with ANOVA and regression. Two important strengths of SEM are that the effects of measurement error are disattenuated and it tests indirect and total effects in addition to simple direct effects. These strengths represent important advances over traditional general linear model approaches and have important implications in testing hypotheses involving mediation. Hence the data was analyzed by using SEM methods, implemented in AMOS 7 (Arbuckle, 2006a; 2006b). Maximum-likelihood estimation method was used, and for the input for each analysis the covariance matrix of the items was used.

#### *Direct Effects*

Hypotheses 1a-c, related to the direct effects of proactive personality on job-related outcomes, were tested by examining the significance of the path coefficients between the variables.

#### *Mediation Effects*

This study included only two latent variables—job performance and job satisfaction. Job performance had two indicators while job satisfaction was measured by four indicators. According to Baron and Kenny (1986) and Judd and Kenny (1981), when a mediational model involves latent constructs, SEM provides the basic data analyses strategy. Thus to analyze the mediational hypotheses 2a-b and 3a-c, related to the mediational role of affective commitment to change and job satisfaction respectively, the analyses were conducted using SEM in accordance to the procedure mentioned by Hoyle and Smith (1994). They suggested comparing the predictor to outcome path in models with and without the mediator. If the predictor to outcome path is zero with the mediator in the model, there is evidence of complete mediation, while if this path declines but remains significant or clearly non-zero, then the model purports partial mediation. However, it must be noted that in the model with the mediator variable, the mediator must have significant relationships with both the predictor and the outcome variable (Barron & Kenny, 1986).

## **RESULTS**

### **Descriptive Statistics**

After the data were collected, the first step was to evaluate the data according to the guidelines suggested by Tabachnick and Fidell (2001, pp. 56-110) as data cleaning is very important in multiple regression (Tabachnick & Fidell, 2001, p. 139). An examination of the data revealed that the data met the assumptions of normality, and there was no evidence of unacceptable levels of kurtosis or skewness or variables with substantial outliers.

Table 2 displays means, standard deviations and correlations among all the variables. Correlations among the independent and mediator variables had a median value of .07 and a maximum value of .47, with a maximum variance-inflation factor less than 2; hence, multicollinearity was not a severe problem (Neter, Wasserman, & Kutner, 1983).



**TABLE 2**  
**MEANS, STANDARD DEVIATIONS, AND INTER-CORRELATIONS**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
JS1	5.52	1.12	-									
JS2	4.82	1.2	.21**	-								
JS3	4.39	1.34	.44**	.45**	-							
JS4	5.93	.91	.38**	.32**	.40**	-						
Job Satisfaction	5	.87	.67**	.66**	.83**	.66**	-					
JP1	6.37	.57	.14*	.06	.07	.23**	.16**	-				
JP2	.01	.95	.05	.05	.06	.26**	.13*	.37**	-			
Job Performance	3.18	.65	.1	.07	.08	.30**	.17**	.72**	.87**	-		
Proactive Personality	5.48	.81	-.02	.08	.08	.22**	.14*	.30**	.32**	.37**	-	
Mean Intent to remain	5.39	1.25	.34**	.15*	.32**	.50**	.43**	.24**	.20**	.25**	.13*	-
Affective commitment to change	5.01	1.4	.17**	.27**	.37**	.31**	.46**	.07	.09	.08	.18**	.17**

Note. *N* = 275

\**p* < .05. \*\**p* < .01.

As seen from Table 2 PAP was significantly correlated with all the variables (job satisfaction *r* = .14; job performance *r* = .37; intent to remain *r* = .13; and affective commitment to change *r* = .18;). Given the proposed mediational framework, affective commitment was significantly correlated with intent to remain (*r* = .17). However it was not significantly correlated with job performance.

Also, in keeping with the mediation hypotheses, job satisfaction was significantly correlated with affective commitment to change (*r* = .46), job performance (*r* = .17) and intent to remain with the organization (*r* = .43)

#### *Tests for Measurement Invariance*

The test for measurement invariance involved conducting separate confirmatory factor analysis (CFA) (implemented in AMOS 7; Arbuckle, 2006a; 2006b) to assess the psychometric properties of the constructs and to establish a baseline model. The overall fit of the measurement model was assessed following the guideline suggested by Hair, Anderson, Tatham, and Black (1998, pp. 610-612). Prior to performing the analysis, all negatively worded items in the scales of all the variables were reverse scored. For all the scales in this study the loading of one indicator was set for each factor to a fixed value of 1.0.

#### *Model Fit*

The goodness of fit indices for the baseline model were very close to a poor fit. The chi-square test was statistically significant,  $\chi^2(20, N = 275) = 62.88, p < .001$ , the chi-square degrees of freedom ratio was barely favorable ( $\chi^2 / df = 3.14$ ). The other fit indices also gave evidence of a poor fit (RMSEA = .09; CFI = .90). On the basis of the modification indices, the fit of the model could be slightly improved by allowing three pairs of errors to correlate from the job satisfaction scale: the error terms of the manifest

variables co-worker satisfaction, work itself, and benefit satisfaction was correlated with reward satisfaction. MacCallum and Tucker (1991) noted that when using indicators related to an employee's work environment, it is not unreasonable to expect some same-source correlated measurement error.

**TABLE 3**  
**BASELINE MODEL COMPARISON SUMMARY**

<b>Model</b>	$\chi^2$	<b>df</b>	<b>p-value</b>	$\chi^2/\text{df}$	<b>RMSEA</b>	<b>CFI</b>	<b>TLI</b>	<b>NFI</b>
Model 1	62.88	20	.000	3.14	.09	.90	.82	.87
Model 2	29.11	17	.033	1.70	.05	.97	.94	.94

Note: Model 1 and Model 2 denote models without and with the correlation between the error terms.

The baseline model with the correlated error terms exhibited a good fit. Although the chi-square test was statistically significant,  $\chi^2(17, N = 275) = 29.11, p < .05$ , the chi-square degrees of freedom ratio was favorable ( $\chi^2 / \text{df} = 1.71$ ). RMSEA improved considerably with a value of .05 and the CFI = .97. The other fit indices gave further evidence of a good fit (NFI = .94; & TLI = .94). Refer to Table 6 for the goodness of fit statistics for the baseline model with and without the correlated error terms.

#### *Convergent Validity*

Convergent validity represents how well the items load on their respective constructs, thereby giving evidence for the construct validity. It is evaluated by examining the statistical significance as expressed by the t-value associated with each loading (Anderson & Gerbing, 1988). Table 7 provides the standardized loadings and t-values. The result indicate all items loaded reliably on their predicted factors with item to factor loadings ranging from .26 to .95, and t-values ranging from 3.80 to 30.21 ( $p < .001$ ), thus, providing support for convergent validity for the constructs.

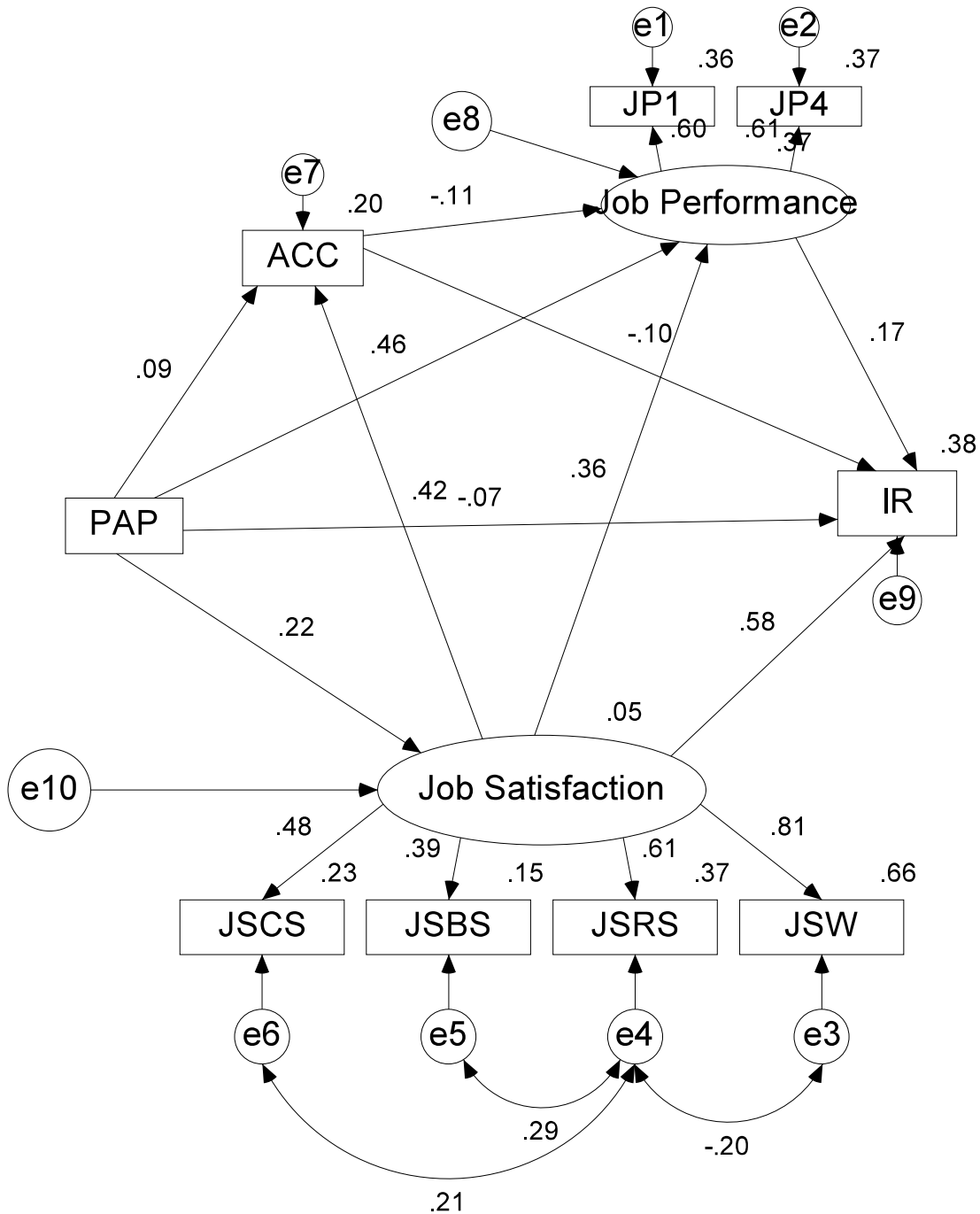
#### **Hypothesis Testing**

SEM, using AMOS 7 (Arbuckle, 2006a; 2006b) was employed to test the study hypotheses. The tests of overall model fit, shown in Table 3, indicated a very good fit. Although the chi-square test was statistically significant,  $\chi^2(17, N = 275) = 29.11, p < .05$ , the chi-square degrees of freedom ratio was favorable ( $\chi^2 / \text{df} = 1.71$ ). RMSEA improved considerably with a value of .05 and the CFI = .97. The other fit indices gave further evidence of a good fit (NFI = .94; TLI = .94).

*Hypotheses 1a to 1c.* The first set of hypotheses, 1a to 1c, related to the direct effects of proactive personality on job performance, job satisfaction, and intent to remain with the organization respectively. As expected proactive personality had a positive and significant effect on job performance ( $\beta = .46 p < .001$ ) and job satisfaction ( $\beta = .22 p < .01$ ). Although there was no significant relationship between proactive personality and intent to remain with the organization in the hypothesized model ( $\beta = -.07, ns$ ), the result of a simple regression showed that proactive personality had a significant and positive effect on intent to remain ( $\beta = .20 p < .05$ ) thereby giving partial support to hypothesis 1c.

*Hypotheses 2a & b and 3a-c.* These hypotheses were the mediational hypotheses. To analyze these mediational hypotheses the analyses were conducted in accordance with the procedure mentioned by Hoyle and Smith (1994). They suggested to compare the predictor—outcome path in models with and without the mediator. If the predictor—outcome path is zero with the mediator in the model, there is evidence of complete mediation, while if this path declines but remains significant or clearly non-zero, then the model purports partial mediation. However, it must be noted that in the model with the mediator variable, the mediator must have significant relationships with both the predictor and the outcome variable (Barron & Kenny, 1986). Finally the Sobel's test (Preacher & Leonardelli, 2001) was calculated. Formula for the test was drawn from MacKinnon, Warsi, and Dwyer (1995).

**FIGURE 2**  
**BASELINE MODEL WITH CORRELATED ERROR TERMS AND STANDARDIZED ESTIMATES**



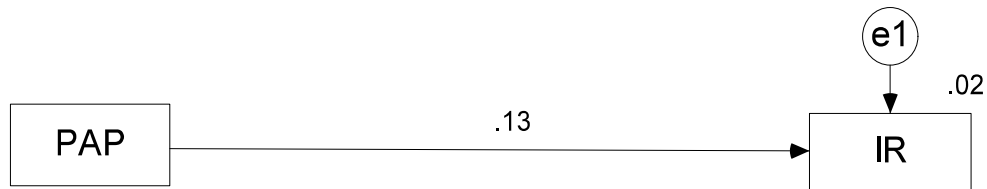
*Note:* ACC = Affective commitment to change; IR = Intent to remain; JSBS = Job Satisfaction Benefit Satisfaction; JSCS = Job Satisfaction Co-worker Satisfaction; JSRS = Job Satisfaction Reward Satisfaction; JSW = Job Satisfaction Work Itself; PAP = Proactive personality;

Hypothesis 2a which referred to the mediator variable affective commitment to change, with job performance as the outcome variable (PAP being the predictor variable) was not supported as there was

no significant relationship between affective commitment to change and job performance—a requirement for proving the mediational model (Barron & Kenny, 1986).

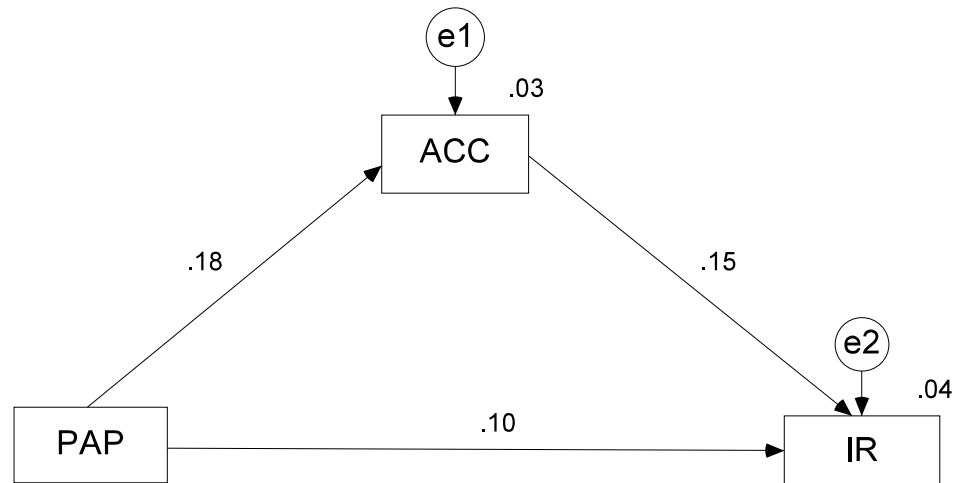
Hypothesis 2b predicted the mediating effect of affective commitment to change in the relationship between PAP/intent to remain. Figures 3a and 3b respectively show the model without and with the mediator variable—affective commitment to change.

**FIGURE 3A**  
**MODEL WITHOUT MEDIATING VARIABLE—AFFECTIVE COMMITMENT TO CHANGE**  
**IN THE RELATIONSHIP BETWEEN PAP/INTENT TO REMAIN WITH THE**  
**ORGANIZATION**



Note: IR = Intent to remain; PAP = Proactive personality.

**FIGURE 3B**  
**MODEL WITH MEDIATING VARIABLE—AFFECTIVE COMMITMENT TO CHANGE IN**  
**THE RELATIONSHIP BETWEEN PAP/INTENT TO REMAIN WITH THE ORGANIZATION**



Note: ACC = Affective commitment to change; IR = Intent to remain; PAP = Proactive personality.

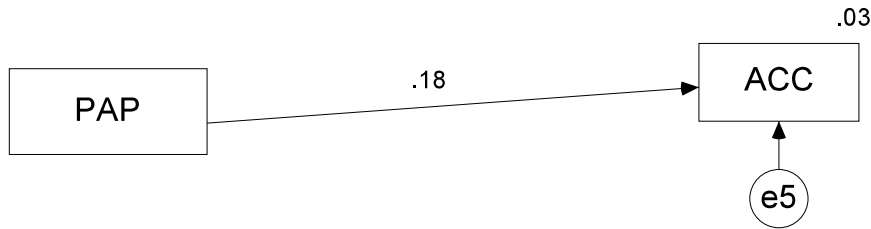
As seen in Figure 4a (without the mediator variable), proactive personality was significantly and positively related to intent to remain in the organization ( $\beta = .13, p < .05$ ) while it was insignificant in the model with the mediator variable ( $\beta = .10, ns$ ). This suggests that affective commitment to change completely mediates the relationship between proactive personality/intent to remain with the organization.

Hypothesis 3a referred to the mediator variable job satisfaction with affective commitment to change as the outcome variable. Figures 4a and 4b respectively show the model without and with the mediator variable—job satisfaction.

As seen in Figure 5a (without the mediator variable), proactive personality was significantly and positively related to affective commitment to change ( $\beta = .18, p < .01$ ) while it was insignificant in the

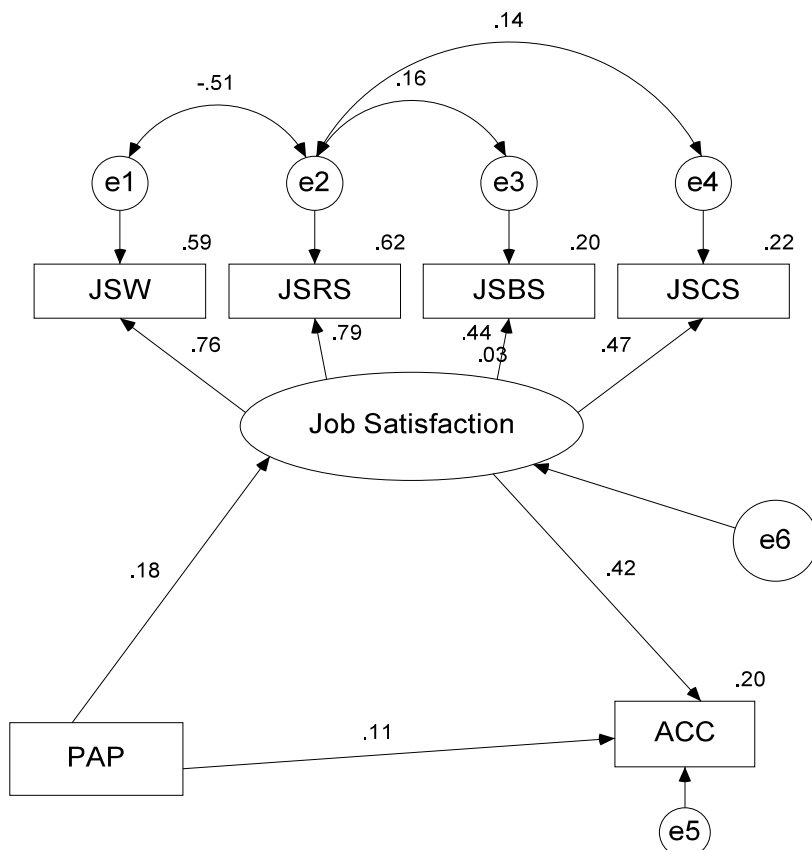
model with the mediator variable job satisfaction ( $\beta = .11, ns$ ). This suggests that job satisfaction completely mediates the relationship between proactive personality and affective commitment to change.

**FIGURE 4A**  
**MODEL WITHOUT MEDIATING VARIABLE—JOB SATISFACTION IN THE**  
**RELATIONSHIP BETWEEN PAP/ AFFECTIVE COMMITMENT TO CHANGE**



*Note:* ACC = Affective commitment to change; PAP = Proactive personality.

**FIGURE 4B**  
**MODEL WITH MEDIATING VARIABLE—JOB SATISFACTION IN THE RELATIONSHIP**  
**BETWEEN PAP/ AFFECTIVE COMMITMENT TO CHANGE**

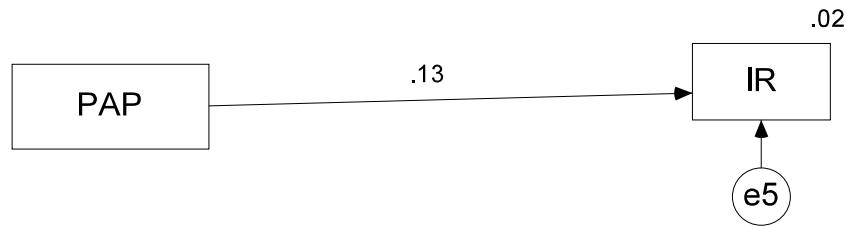


*Note:* ACC = Affective commitment to change; JSBS = Job Satisfaction Benefit Satisfaction; JSCS = Job Satisfaction Co-worker Satisfaction; JSRS = Job Satisfaction Reward Satisfaction; JSW = Job Satisfaction Work Itself; PAP = Proactive personality.

Hypothesis 3b referred to the mediator variable job satisfaction with job performance as the outcome variable. Proactive personality was significantly and positively related to job performance without ( $\beta = .52, p < .001$ ) and with ( $\beta = .45, p < .001$ ) the mediator variable job satisfaction. This suggests that job satisfaction does not mediate the relationship between proactive personality and job performance.

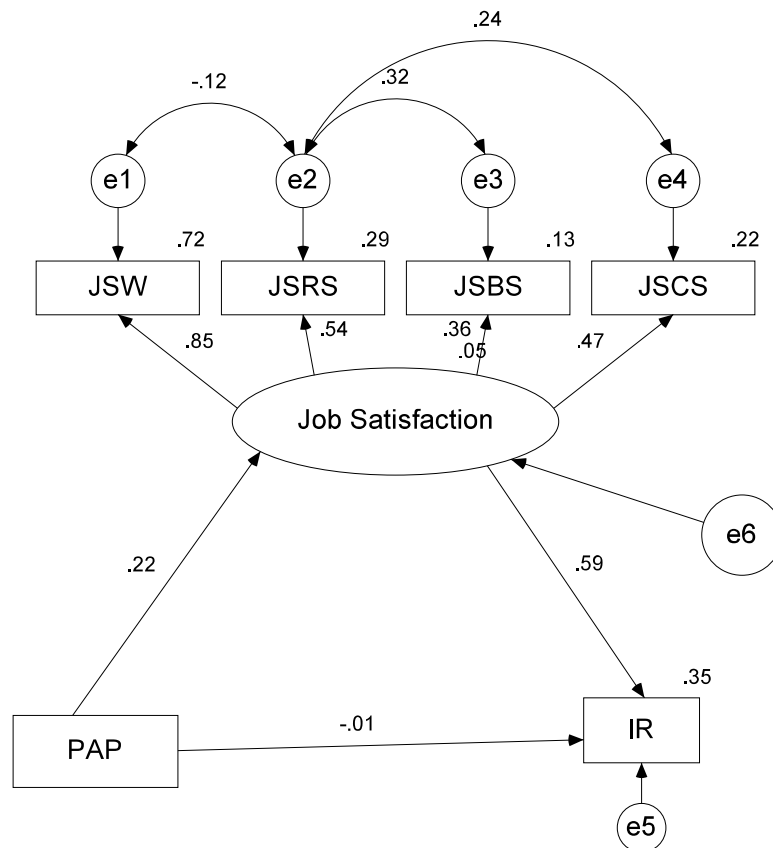
Hypothesis 3c referred to the mediator variable job satisfaction with intent to remain with the organization as the outcome variable. Figures 5a and 5b respectively show the model without and with the mediator variable—job satisfaction.

**FIGURE 5A**  
**MODEL WITHOUT MEDIATING VARIABLE—JOB SATISFACTION IN THE**  
**RELATIONSHIP BETWEEN PAP/INTENT TO REMAIN WITH THE ORGANIZATION**



Note: IR = Intent to remain; PAP = Proactive personality.

**FIGURE 5B**  
**MODEL WITH MEDIATING VARIABLE—JOB SATISFACTION IN THE RELATIONSHIP**  
**BETWEEN PAP/INTENT TO REMAIN WITH THE ORGANIZATION**



Note: IR = Intent to remain; JSBS = Job Satisfaction Benefit Satisfaction; JSCS = Job Satisfaction Co-worker Satisfaction; JSRS = Job Satisfaction Reward Satisfaction; JSW = Job Satisfaction Work Itself; PAP = Proactive personality.

As seen in Figure 5a (without the mediator variable), proactive personality was significantly and positively related to intent to remain with the organization ( $\beta = .13, p < .05$ ) while it was insignificant in the model with the mediator variable job satisfaction ( $\beta = -.18, ns$ ). This suggests that job satisfaction completely mediates the relationship between proactive personality and intent to remain with the organization. A summary of all the study hypotheses can be found in Table 4

**TABLE 4**  
**SUMMARY OF STUDY HYPOTHESIS**

<b>Hypotheses</b>	<b>Results</b>
<i>Hypothesis 1a:</i> In a change setting PAP will relate significantly and positively with job performance.	Supported
<i>Hypothesis 1b:</i> In a change setting PAP will relate significantly and positively with job satisfaction.	Supported
<i>Hypothesis 1c:</i> In a change setting PAP will relate significantly and positively with intent to remain with the organization.	Partially Supported
<i>Hypothesis 2a:</i> Affective commitment to organizational change will mediate the relationship between PAP and job performance.	Not Supported
<i>Hypothesis 2b:</i> Affective commitment to organizational change will mediate the relationship between PAP and intent to remain with the organization.	Supported
<i>Hypothesis 3a:</i> Job satisfaction will mediate the relationship between PAP and affective commitment to the organization.	Supported
<i>Hypothesis 3b:</i> Job satisfaction will mediate the relationship between PAP and job performance.	Not Supported
<i>Hypothesis 3c:</i> Job satisfaction will mediate the relationship between PAP and intent to remain with the organization.	Supported

## DISCUSSION

The present study examined the effect of PAP on job related outcomes in a change setting. The study contributes to both proactive personality and change literature in several ways. First, the study was an initial attempt to empirically test the conceptual model of PAP in a change setting. Second, the potential mediating role of affective commitment to change and job satisfaction was empirically tested.

As predicted in the conceptual model, PAP exhibited a robust relationship with job performance, and job satisfaction. The study found that PAP has a positive and robust relationship with job performance even after controlling for affective commitment to change, job satisfaction and intent to remain with the organization. Together with affective commitment to change and job satisfaction, PAP accounted for 37.3% of the variance in job performance.

Research has shown that dispositions influence the way in which employees perceive their jobs, which consequently affects their job satisfaction (Bowling, Beehr, Wagner, & Libkuman, 2005). The results in this study supported this reasoning as it was found that PAP has a positive and significant relationship with job satisfaction and accounted for 4.7% of the variance. Additionally, the model revealed that in a change setting proactive personality and job satisfaction accounted for 20.2% of the variance in affective commitment to change.

Although a simple regression revealed that PAP had a significant and positive relationship with intent to remain with the organization, it is important to note that contrary to the prediction made in this study,

PAP was not related with intent to remain. After controlling for affective commitment to change, job performance, and job satisfaction, PAP did not predict intent to remain with the organization. This may be due to the fact that this model was tested in a change setting. As rightly pointed out by Allen, Weeks, and Moffitt (2005), numerous factors affect the turnover decision such as "...risk (e.g., uncertainty about alternative opportunities), financial costs (e.g., unvested pensions), transaction costs (e.g., moving), and psychological costs (e.g. loss of valued work relationships)." (p. 980). In a change setting, additional factors such as uncertainty, fear of the unknown, and job insecurity impact the turnover decision.

This result adds further importance to the fact that indeed there is a need to gain insight on the mechanism by which PAP relates to the job outcomes. More investigation is necessary regarding "how," "why" (mediating effect), PAP leads to positive outcomes (Crant, 2000; Erdogan & Bauer, 2005). In this study, no support was found for the direct relationship in the conceptual model between PAP and intent to remain, but support was found for an indirect relationship i.e. for the mediational role of affective commitment to change.

Additionally, in line with past research this study found that in an organization characterized by change, job satisfaction was positively and significantly related with intent to remain even after controlling for proactive personality, affective commitment to change, and job performance. Also, the results showed that of the four proposed predictors in the model of intent to remain, only job satisfaction had a significant relationship, thereby, giving further evidence for the robustness of the relationship. In light of this result, it is especially imperative for managers to realize how valuable it is to have satisfied employees as such employees would intend to remain with organization even in a change environment.

The study also found that affective commitment to change completely mediated the relationship between PAP/intent to remain. This finding explained *why* PAP is related with intent to remain. Thus, it can be suggested that affective commitment to change represents an individual difference variable that can explain why proactive employees intend to remain with the organization. This result is particularly important as there was a *complete* mediation thereby suggesting that in the absence of affective commitment, PAP may not be related with intent to remain.

This study also found support for the mediating effect of job satisfaction. It completely mediated the relationship between PAP/affective commitment to change thereby explaining why PAP is related with affective commitment to change. As it was a *complete* mediational model it suggested that proactive employees who are not satisfied with their job may not exhibit affective commitment to change. Additionally, the study found that job satisfaction *completely* mediated the relationship between PAP/intent to remain with the organization. This suggested that not only will dissatisfied proactive employees exhibit no affective commitment, but they also may not have intentions to remain in the organization.

Results relating to job satisfaction were valuable from a practical point of view. PAP employees are initiators and are open to change as compared to the non-proactive employees. Hence, they will not only be an asset for the organization but their support for change will be essential for the organization. In light of these results managers must concentrate on whether their employees are satisfied with their jobs especially before implementing a change or they risk not only losing the commitment of these employees to change but also may end up losing this valuable set of employees.

### **Practical Implications**

The results of this study provide evidence for the importance of proactive employees in a change setting. As demonstrated in support of the main hypotheses, PAP clearly exhibits a robust relationship with important job-related outcomes such as job performance, job satisfaction, affective commitment to change and intent to remain with the organization. These results have verified the fact that proactive individuals are indeed an asset to the company.

The above findings have several practical implications especially from an applied perspective. This type of research is important as it gives more insight on how organizations can recognize and leverage those employees exhibiting proactive personality. For instance, even in the backdrop of an organizational



change, proactive employees will tend to be satisfied and perform well on their respective jobs. However, those predisposed to be less proactive may need more organizational support and encouragement.

The findings in this study suggest that although proactive personality has a robust relationship with job performance and job satisfaction, it is not very strongly related with intent to remain with the organization. There is hardly any doubt in the fact that proactive people are an asset to the company. However, it is up to the company to make sure that they do not lose such an asset. If proactive employees are satisfied with their job they would still want to remain with the company. Satisfied employees would also be more affectively committed to the organizational change which consequently will make them remain in the company.

Thus it is of vital importance that employers should make sure that their proactive employees are satisfied with their job and are assured that they will progress in their career within the organization.

## LIMITATIONS OF THE STUDY

One limitation of this study is the potential for common method variance since the data were collected from a single source. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) mentioned that one of the most common variables assumed to cause common method variance is the tendency for participants to respond in a socially desirable manner (see Paulhus, 1984; 1988). Podsakoff et al. argue that when anonymity is assured, respondents may have less evaluation apprehension and therefore are less likely to edit their responses to be more socially desirable. In the present study the responses were completely anonymous, thereby, protecting the respondent's identity. Although this does not completely eradicate the problem of common method bias, it does alleviate it.

Anonymity was a particularly important aspect in the present study as organizational change is often characterized by high levels of distrust and uncertainty. This may lead to biased responses if participants believe their identity could be revealed to management. Because the present study is related to organizational change, issues of distrust and uncertainty were concerns in designing the study. Green and Feild (1976) pointed out that even with assurances of complete confidentiality, participants may perceive a personal threat due to their responses to the survey questions. Thus if participants believe that their identity *could* be revealed to management they may respond in a desirable fashion which would consequently result in a loss of internal validity (Campbell & Stanley, 1966).

Podsakoff, MacKenzie, Lee, and Podsakoff (2003) suggested using "*Temporal, proximal, psychological, or methodological separation of measurement*" (p. 887) as one of the techniques for controlling common method biases. As mentioned earlier the survey instrument for the present study had several close- and open-ended questions not used in this study. These questions were interspersed among the items used for the study which served as intervening items thereby aiming at achieving some *proximal or methodological separation*. Also, Wyer and Srull (1986) theorized that in making a judgment, respondents first search their working memory—the capacity of which is limited and hence if respondents find a sufficient basis for making the judgment, the search terminates. With respect to intervening items, Feldman and Lynch (1988) pointed out that they "... make it less likely that one's answer to Question i will be in working memory when Question i + n is encountered. Thus, subjects must either compute a new response or engage in effortful search of long-term memory (Feldman & Lynch, 1988, p. 427).

Data for this study were collected via self-report measures to assess both the predictors and outcome variables thereby raising concerns about common method variance (Spector, 2006).

Further, the measure of intent to remain with the organization had disappointingly low reliability ( $\alpha = .68$ ) in this study, suggesting that an alternative measure should be used in future research. Finally, the data were collected for a non-profit organization and hence generalizability to for-profit and other organizations may be an issue.

## **FUTURE RESEARCH**

Following are some ideas for future research. There is considerable agreement in the organizational change literature that people are concerned with the amount of impact change will have on themselves, their job, and their work colleagues (e.g., Herscovitch & Meyer, 2002; Lau & Woodman, 1995; Weber & Manning, 2001). When discussing the impact of change in the workplace, authors have drawn a fundamental distinction between incremental or first-order change and transformational or second-order change (e.g., Bartunek & Moch, 1987; Levy, 1986). As seen from the results PAP has a robust relationship with job outcomes. Proactive personality is indeed a blessing for both transformational and incremental changes. Although the present paper concentrates on transformational change it would be interesting to replicate this study in an organizational setting characterized by incremental change. Also, authors in the field of organizational change have argued that individuals are concerned with the timing of change in the workplace, and whether change occurs very frequently or infrequently (Glick, Huber, Miller, Doty, & Sutcliffe, 1990; Monge, 1995). Future study can observe a proactive employee's reaction to both frequent and infrequent changes as Glick et al. argued that changes which occur infrequently will help employees to identify a clear beginning and end point of change. On the contrary, when changes are frequent, organizational members will find the change highly unpredictable.

The present paper shed light into the mechanism by which PAP affects intent to remain, and it is also evident from the literature on turnover that intentions are one of best predictors of turnover behavior (Armitage & Conner, 2001). However, research has found that intentions do not always result in turnover behavior (Allen, Weeks, & Moffitt, 2005). Hence it would be interesting to replicate this study using turnover behavior as the outcome variable. The effect of organizational change is better captured by longitudinal data. It would be interesting to observe if the present results would differ in a longitudinal study.

This study could also be replicated by comparing data across cultures, for example U. S. and Japan as Japanese employees exhibit higher work centrality and give greater importance to job security and stability than do employees in the U.S. (England & Misumi 1986; Lundberg & Peterson 1994).

Further it would be interesting to observe how the results of this study vary across demographic variables, especially age. Age plays an important role as seen in the organizational change literature with older workers being more resistant to job changes since they are worried that they may have to start afresh. This is especially so if there is no significant value for their job experience of past working skills (Campbell & Cellini, 1981; Hansson, DeKoekoek, Neece & Patterson, 1997). Another important demographic variable is workforce diversity as careers have changed with increased workforce diversity (England & Farkas 1986; England, Reid, & Kilbourne 1996; Johnston & Packer 1987); this variable (workforce diversity) should be considered in future research on PAP and change.

Finally, a natural extension of this study would be to expand the model and include other dispositions and determine whether they add incremental variance beyond those included in the present study. Future studies could also include intrinsic factors in the model such as motivation and self-efficacy.

## **CONCLUDING THOUGHTS**

Proactive behavior is becoming a topic of ever-increasing interest to researchers and managers. Crant (2000) aptly states the importance of PAP which can be rightly applied to organizational change: "As work becomes more dynamic and decentralized, proactive behavior and initiative become even more critical determinants of organizational success" (p. 435). Unfortunately most organizational changes have a common storyline "First there were losses, then there was a plan of change, and then there was an implementation, which led to unexpected results" (Czarniawska & Joerges, 1996, 20). The present study was designed to give organizational change a "happy ending," although in a small but important way. This study provides an initial attempt to delineate the process/mechanism through which proactive personality affects certain job-related outcomes in the backdrop of a change setting. The "bottom line" is to prevent organizations from losing one of their most important assets—its proactive employees.

## REFERENCES

- Aktouf, O. (1992). Management and theories of organizations in the 1990s: Toward a critical radical humanism? *Academy of Management Review*, 17, 407-431.
- Allen, M.W. (1996). The relationship between communication, affect, job alternatives and voluntary turnover intentions. *The Southern Communication Journal*, 61, 198-209.
- Allen, D. G., Weeks, K. P., & Moffitt, K. R. (2005). Turnover intentions and voluntary turnover: The moderating roles of self-monitoring, locus of control, proactive personality, and risk aversion. *Journal of Applied Psychology*, 90(5), 980-990.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Antonacopoulou, E. (2000). Employee development through self-development in three retail banks. *Personnel Review*, 29(4), 491-508.
- Arbuckle, J. L. (2006a). *Amos (Version 7.0)* [Computer Program]. Chicago: SPSS.
- Arbuckle, J. L. (2006b). *Amos 7.0 User's Guide*. Chicago: SPSS.
- Arthur, M. B., Hall, D. T., & Lawrence, B. S. (1989). *Handbook of career theory*. New York: Cambridge University Press.
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25, 293-315.
- Armenakis, A. A., & Harris, S. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, 15(2), 169-183.
- Armenakis, A. A., Harris, S., & Feild, H. (1999). Making change permanent: A model for institutionalizing change interventions. In W. Passmore & R. Woodman (Eds.), *Research in organizational change and development* Vol. 12). Greenwich, CT: JAI Press.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Arvey, R. D., Bouchard, T. J., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology*, 74, 187-192.
- Arvey, R.D., McCall, B.P., Bouchard, T.J., Jr., Taubman, P., & Cavanaugh, M.A. (1994). Genetic influences on job satisfaction and work values. *Personality and Individual Differences*, 17, 21-33.
- Ashford, S. J., & Cummings, L. L. (1985). Proactive feedback seeking: The instrumental use of the information environment. *Journal of Occupational Psychology*, 58, 67-79.
- Ashford, S.J., & Northcraft, G.B. (1992). Conveying more (or less) than we realize: The role of impression management in feedback-seeking. *Organizational Behavior and Human Decision Processes*, 53, 310-334.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bartunek, J. M., & Moch, M. K. (1987). First-order, second-order, and third-order change and organization development interventions: A cognitive approach. *Journal of Applied Behavioral Science*, 23, 483-500.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior. *Journal of Organizational Behavior*, 14(2), 103-118.
- Bateman, T. S., & Crant, J. M. (1999). Proactive behavior: Meanings, impact, and recommendations. *Business Horizons*, 42 (3), 63-70.
- Becherer, R.C., & Maurer, J.G. (1999). The proactive personality disposition and entrepreneurial behavior among small company presidents. *Journal of Small Business Management*, 38 (1), 28-36.
- Bell, N.E., & Staw, B.M. (1989). People as sculptors versus sculpture: The roles of personality and personal control in organizations. In M.B. Arthur, D.T. Hall, & B.S., Lawrence, (Eds.), *The handbook of career theory* (pp. 232-251). Cambridge, England: Cambridge University Press.

- Bowling, N. A., Beehr, T. A., Wagner, S. H., & Libkuman, T. M. (2005). Adaptation-level theory, opponent process theory and dispositions: An integrated approach to the stability of job satisfaction. *Journal of Applied Psychology, 90*, 1044-1053.
- Blau, P.M. (1964). *Exchange and power in social life*. New York: Wiley.
- Bray, D. W. (1994). In A. Howard, (Ed.), *Personnel-centered organizational diagnosis* (pp. 152-171). New York: Guilford Press.
- Brown, D. J., Cober, R. T., Kane, K., Levy, P. E., & Shalhoop, J. (2006). Proactive personality and the successful job search: A field investigation with college graduates. *Journal of Applied Psychology, 91*(3), 717-726.
- Buono, & Bowditch, J. (1989). *The human side of mergers*. San Francisco: Jossey-Bass Inc.
- Buss, D. M. (1987). Selection, evocation and manipulation. *Journal of Personality and Social Psychology, 53*, 1214-1221.
- Cappelli, P. (1999). *The new deal at work: Managing the market-driven workforce*. Boston, MA: Harvard Business School Press.
- Campbell, D.J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Executive, 14*(3), 52-66.
- Campbell, D. T., & Stanley J. C. (1966). *Experimental and quasi-experimental designs for research*. Chicago: Rand McNally.
- Campbell, R. E., & Cellini, J. V. (1981). A diagnostic taxonomy of adult career problems. *Journal of Vocational Behavior, 19*, 175-190.
- Cascio, W. F. (1995). Whither industrial and organizational psychology in a changing world of work? *American Psychologist, 50*, 928-939.
- Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology, 91*(2), 475-481.
- Chan, D., & Schmitt, N. (2000). Interindividual differences in intraindividual changes in proactivity during organizational entry: A latent growth modeling approach to understanding newcomer adaptation. *Journal of Applied Psychology, 85*, 190-210.
- Claes, R., & Ruiz-Quintanilla, S.A. (1998). Influences of early career experiences, occupational group, and national culture on proactive career behavior. *Journal of Vocational Behavior, 52*, 357-378.
- Clampitt, P., & Downs, C. (2004). Downs-Hazen communication satisfaction questionnaire. In C. Downs & A. Adrian (Eds.), *Assessing organizational communication*. New York: The Guilford Press.
- Coetsee, L. (1999). From resistance to commitment. *Public Administration Quarterly, 23*, 204-222.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Erlbaum.
- Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. (3<sup>rd</sup> ed.). Mahwah, NJ: Erlbaum.
- Conner, D. R. (1992). *Managing at the speed of change: How resilient managers succeed and prosper where others fail*. New York: Villard Books.
- Conner, D. R., & Patterson, R. W. (1982). Building commitment to organizational change. *Training and Development Journal, 36*, 18-30.
- Cook, J. D., Hepworth, S. J., Wall, T. D., & Warr, P. B. (1981). *The experience of work: A compendium of 249 measures and their use*. London: Academic Press. Items were taken from 42-45.
- Coovert, M.D. (1995). Technological changes in office jobs. In A. Howard (Ed.) *Changing Nature of Work*, (pp. 173-208). San Francisco: Jossey-Bass.
- Covey, S. R. (2004). *The 7 habits of highly effective people*. Englewood Cliffs, NJ: Prentice-Hall.
- Crant, M. J. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology, 80*, 532-537.
- Crant, M. J. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management, 34*, 42-49.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*, 435-462.

- Crant, M. J., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior*, 21, 63-75.
- Crino, M. D., & White, M. (1981). Satisfaction in communication: An examination of the Downs-Hazen measure. *Psychological Reports*, 49, 831-838.
- Czarniawska, B., & Joerges, B. (1996). Travels of ideas. In B. Czarniawska & G. Sevon (Eds.) *Translating organizational change* (pp. 13-48). New York: Walter de Gruyter.
- Deluga, R. (1998). American presidential proactivity, charismatic leadership and rated performance. *Leadership Quarterly*, 9, 265-291.
- Diener, E., Larsen, R.J., & Emmons, R.A. (1984). Person  $\times$  situation interactions: Choice of situations and congruence response models. *Journal of Personality and Social Psychology*, 47, 580-592.
- Downs, C. W., & Hazen, M. (1977). A factor analysis of communication satisfaction. *Journal of Business Communication*, 14, 63-74.
- Dunham, R. B., & Smith, F. J. (1979). *Organizational surveys*. Glenview, IL: Scott, Foresman.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- England, P., & G. Farkas. (1986). *Households, employment and gender*. New York: Aldine Publishing Co.
- England, P., & Misumi, J. (1986). Work centrality in Japan and the United States. *Journal of Cross-Cultural Psychology*, 17, 399-416.
- England, P., Reid, L. L., & Kilbourne, B. S. (1996). The effect of the sex composition of jobs on starting wages in an organization: Findings of the NLSY. *Demography* 33(4), 511-521.
- Erdogan, B., & Bauer, T. N. (2005). Enhancing career benefits of employee proactive personality: The role of fit with jobs and organizations. *Personnel Psychology*, 58, 859-891.
- Etzioni, A. (1961). *A comparative analysis of complex organizations*. New York: Free Press.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36, 305-323.
- Feldman, J. M., & Lynch, J. G., Jr. (1988). Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. *Journal of Applied Psychology*, 73, 421-435.
- Ferris, G. R., Witt, L. A., & Hochwater, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology*, 86, 1075-1082.
- Frazier, P. A., Tix, A.P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology. *Journal of Counseling Psychology*. 51(1), 115-134
- Freeman, C., Soete, L., & Efendioglu, U. (1995). Diffusion and the employment effects of information and communication technology. *International Labour Review* 134(4/5), 587-603.
- Frese, M., & Fay D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, 23, 133-187.
- Frese, M., Fay, D., Hilburger, T., Leng, T., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity of two German samples. *Journal of Occupational and Organizational Psychology*, 70, 139-161.
- Frese, M., Kring, W., Soose, A. & Zempel, J. (1996). Personal initiative at work: Differences between East and West Germany. *Academy of Management Journal*, 39, 37-63.
- Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. In H. C. Triandis, M. D. Dunnette, & J. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 4, 2nd ed., pp. 271-340). Palo Alto, CA: Consulting Psychologists Press.
- Glick, W. H., Huber, G. P., Miller, C. C., Doty, D. H., & Sutcliffe, K.M. (1990). Studying changes in organizational design and effectiveness. *Organization Science*, 1, 293-312
- Gould, S. (1979). An equity-exchange model of organizational involvement. *Academy of Management Review*, 4, 53-62.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.

- Gray, J., & Laidlaw, H (2004). Improving the measurement of communication satisfaction. *Management Communication Quarterly*, 17(3), 425-448.
- Green, S, & Feild, H. (1976). Assessing group change under conditions of anonymity: A problem in personal research. *Journal of Occupational Psychology*, 49, 155-159.
- Hacker, W., Skell, W., & Straub, W. (1968). *Arbeitspsychologie und wissenschaftlich-technische revolution* [Work psychology and scientific-technologic revolution]. Berlin, Germany: Deutscher Verlag der Wissenschaften.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hall, D. (1996a). *The career is dead, long live the career*. San Francisco: Jossey-Bass.
- Hall, D. (1996b). Protean careers of the 21st century. *Academy of Management Executive*, 10, 8–16.
- Hansson, R. O., DeKoekkoek, P. D., Neece, W. M., & Patterson, D. W. (1997). Successful aging at work: The older worker and transitions to retirement. *Journal of Vocational Behavior*, 51, 202–233.
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474-487.
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, 65, 599-610.
- Hoyle, R. H., & Smith, G. T. (1994). Formulating clinical research hypotheses as structural equation models: A conceptual overview. *Journal of Consulting and Clinical Psychology*, 62, 429-440.
- Howard, A. (Ed.) (1995). *The changing nature of work*. San Francisco: Jossey-Bass.
- Hu. L. T., & Bentler, P. (1999). Cutoff criteria for indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 10, 128-141.
- Igbaria M. (1991). Job performance of MIS professionals: An examination of the antecedents and consequences. *Journal of Engineering and Technology Management*, 8, 141–171.
- Jackson, C. (1996). Managing and developing a boundaryless career: Lessons from dance and drama. In P. Herriot and R. Strickland (Eds.). *The management of careers [Special issue]*. *European Journal of Work and Organizational Psychology*, 5(4), 617–628.
- Johnson, R. A. (1996). Antecedents and outcomes of corporate refocusing. *Journal of Management*, 22, 439-483.
- Johnston, W., & A. E. Packer. (1987). *Work force 2000: Work and workers for the 21st century*. Indianapolis, IN: The Hudson Institute.
- Jöreskog, K. G., & Sörbom, D. (1993). *Lisrel 8: Structural equations modeling with the SIMPLIS command language*. Chicago: Scientific Software International.
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review*, 5, 602-619.
- Judge, T. A., & Bretz, R. D. (1994). Political influence behavior and career success. *Journal of Management*, 20, 43-66.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84, 107-122.
- Keller, K. L. (1987). Memory in advertising: The effect of advertising memory cues on brand evaluations. *Journal of Consumer Research*, 14, 316–333.
- Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of Management Review*, 21, 1055-1080.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2<sup>nd</sup> ed.). New York: The Guilford Press.
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior*, 65, 112-133.
- Kirkman, B.L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal* 42, 58–74.

- Lau, C., & Woodman, R. W. (1995). Understanding organizational change: A schematic perspective. *Academy of Management Journal*, 38, 537–554.
- Lee, T.W., & Johnson, D. R. (1991). The effects of work schedule and employment status on the organizational commitment and job satisfaction of full versus part time employees. *Journal of Vocational Behavior*, 38, 208-224.
- Levinson, H. (1965). Reciprocity: The relationship between man and organization. *Administrative Science Quarterly*, 9, 370-390.
- Levy, A. (1986). Second-order planned change: Definition and conceptualization. *Organizational Dynamics*, 15, 5–20.
- Lewis, L. (1999). Disseminating information and soliciting input during planned organizational change: Implementers' targets, sources, and channels for communication. *Management Communication Quarterly*, 13(1), 43-77.
- Lounsbury J. W., Park, S. H., Sundstrom, E, Williamson, J. M, & Pemberton, A. E. (2004). Personality, career satisfaction, and life satisfaction: Test of a directional model. *Journal of Career Assessment*, 12, 395–406.
- Lundberg, C. D., & Peterson, M. F. (1994). The meaning of working in the U.S. and Japanese local governments at three different hierarchical levels. *Human Relations*, 47(12), 1459-1487.
- MacCallum, R. C., & Tucker, L. R (1991). Representing sources of error in the common factor model: Implications for theory and practice. *Psychological Bulletin*, 109, 502-511.
- MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioral Research*, 30(1), 41-62.
- March, J. G., & Simon, H.A. (1958). *Organizations*. New York: Wiley.
- Marsh, H. W., Balla, J. R., & Hau, K. T. (1996). An evaluation of incremental fit indexes: A clarification of mathematical and empirical properties. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling techniques* (pp.315-353). Mahwah, NJ: Lawrence Erlbaum.
- Maurer, T. J., & Tarulli, B. A. (1994). Investigation of perceived environment, perceived outcome, and person variables in relationship to voluntary development activity by employees. *Journal of Applied Psychology*, 79, 3–14.
- McLain, D.L. (1995), Response to health and safety risk in the work environment. *Academy of Management Journal*, 38(6), 1726-1746.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61-89.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11, 299-326.
- Mohrman, S. A., Mohrman, A. M, Jr., & Ledford, G. E. (1990). Interventions that change organizations. In A. M. Mohrman, Jr., S. A. Mohrman, G. E. Ledford, Jr., T.G. Cummings, E. E. Lawler, III, & Associates (Eds.), *Large-scale organizational change* (pp. 145-153). San Francisco, CA: Jossey-Bass.
- Monge, P. (1995). Theoretical and analytical issues in studying organizational processes. In G. Huber, & A. Van de Ven (Eds.), *Longitudinal field research methods: Studying processes of organization change* (pp. 267-298). London: Sage.
- Morrison, E.W. (1993a). Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal* 36, 557–589.
- Morrison, E.W. (1993b). Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology* 78, 173–183.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42, 403-419.
- Mowday, R.T., Porter, L.W., & Steers, R.M. (1982). *Employee-organization linkages*. New York: Academic Press.

- Neter, J., Wasserman, W., & Kutner, M. H. (1983). *Applied linear regression models*. Homewood, IL: Irwin.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Organ, D. W. (1988). A restatement of the satisfaction-performance hypothesis. *Journal of Management*, *14*, 547-557.
- Parker, S. K. (2000). From passive to proactive motivation: The importance of flexible role orientations and role breadth self-efficacy. *Applied Psychology: An International Review*, *49*, 447-469.
- Parker, S. K., & Sprigg, C. A. (1999). Minimizing strain and maximizing learning: The role of job demands, job control, and proactive personality. *Journal of Applied Psychology*, *84*, 925-939.
- Parker, S. K., Wall, T. D., & Jackson, P. R. (1997). "That's not my job": Developing flexible employee work orientations. *Academy of Management Journal*, *40*, 899-929.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, *46*, 598-609.
- Paulhus, D. L. (1988). *Assessing self-deception and impression management in self-reports: The balanced inventory of desirable responding*. Unpublished manual. Vancouver: University of British Columbia.
- Pincus, J. D. (1986). Communication satisfaction, job satisfaction, and job performance. *Human Communications Research*, *12*(3), 395-419.
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.
- Porras, J. I., & Robertson, P. J. (1992). Organization development: Theory, practice, and research. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 3, pp. 719-822). Palo Alto, CA: Consulting Psychologists Press.
- Preacher, K. J., & Leonardelli, G. J. (2001). Calculation for the sobel test: An interactive calculation tool for mediation tests. From <http://www.unc.edu/~preacher/sobel/sobel.htm>
- Randall, M. L., Cropanzano, R., Bormann, C. A., & Birjulin, A. (1999). Organizational politics and organizational support as predictors of work attitudes, job performance, and organizational citizenship behavior. *Journal of Organizational Behavior*, *20*, 159-174.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, *41*, 574-599.
- Roethlisberger, F. J., & Dickson, W. J. (1939). *Management and the worker*. Cambridge, MA: Harvard University Press.
- Rosenthal, N.H. (1995). The nature of occupational employment growth: 1983-93. *Monthly Labor Review* *118*(6), 45-54.
- Schmitt, N. (1994). Method bias: The importance of theory and measurement. *Journal of Organizational Behavior*, *15*, 393-398.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, *84*, 416-427.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, *54*, 845-874.
- Shore, L.M., & Wayne, S.J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, *78*, 774-780.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications, Inc.
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban Legend? *Organizational Research Methods* *2006*; *9*; 221
- Strelbel, P. (1996). Why do employees resist change? *Harvard Business Review*, *74*, 86-92.
- Sullivan, S. E., Carden, W. A., & Martin, D. F. (1998). Careers in the next millennium: Directions for future research. *Human Resource Management Review*. *8*(2).



- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn and Bacon.
- Taylor, M.S., Tracy, K.B., Renard, M.K., Harrison, J.K., & Carroll, S.J. (1995). Due process in performance appraisal: A quasi-experiment in procedural justice. *Administrative Science Quarterly*, 40(3), 495-523.
- Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology*, 88(5), 879-903.
- Tyler, T. R. (1999). Why people cooperate with organizations: An identity-based perspective. In R. I. Sutton & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 201-247). Greenwich, CT: JAI Press.
- Van der Spiegel, J. (1995). New information technologies and changes in work. In A. Howard (Ed.), *Changing Nature of Work* (pp. 97-111). San Francisco: Jossey-Bass.
- Van Maanen, J. (1977). Introduction: The promise of career studies. In J. Van Maanen (ed.), *Organizational careers: Some new perspectives* (pp. 1-12). New York: Wiley.
- VandeWalle, D., & Cummings, L.L. (1997). A test of the influence of goal orientation on the feedback-seeking process. *Journal of Applied Psychology*, 82, 390-400.
- Weber, P. S., & Manning, M. R. (2001). Cause maps, sensemaking, and planned organizational change. *The Journal of Applied Behavioral Science*, 37, 227-251.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601-617.
- Wyer, R. S., Jr., & Srull, T. K. (1986). Human cognition in its social context. *Psychological Review*, 93, 322-359.