



Graduate Theses and Dissertations

Graduate School

2008

# A field quasi-experiment of the effects of employee input in the development of performance appraisal systems

Dan Ispas University of South Florida

Follow this and additional works at: http://scholarcommons.usf.edu/etd



Part of the American Studies Commons

## Scholar Commons Citation

Ispas, Dan, "A field quasi-experiment of the effects of employee input in the development of performance appraisal systems" (2008). Graduate Theses and Dissertations.

http://scholarcommons.usf.edu/etd/312

This Thesis is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.



# A Field Quasi-Experiment of the Effects of Employee Input in the Development of Performance Appraisal Systems

by

Dan Ispas

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts

Department of Psychology

College of Arts and Sciences

University of South Florida

Major Professor: Walter C. Borman, Ph.D. Paul E. Spector, Ph.D. Joseph A. Vandello, Ph.D.

> Date of Approval: November 13, 2008

Keywords: voice, fairness, satisfaction, citizenship performance, intervention

© Copyright 2008, Dan Ispas



## Dedication

I dedicate this thesis to my family and friends for their constant love and support. I couldn't have done this without you.



## Acknowledgements

I would like to acknowledge the members of my thesis committee, for their time, guidance, and encouragement. I would like to specially acknowledge my major professor and advisor, Dr. Walter Borman, and the management and employees of the organization where I collected the data. Special thanks to Alexandra Ilie and Dragos Iliescu for their assistance in conducting the study.



## **Table of Contents**

List of Tables	ii
List of Figures	iii
Abstract	iv
Chapter One – Introduction	1
Participation and Organizational Citizenship Behaviors	3
Participation and Perceived System Knowledge	5
Participation and Employee Reactions	6
Chapter Two – Method	9
Participants	9
Research Design	9
Intervention	10
Measures	12
Chapter Three – Results	13
Comparison between Groups	15
Attrition Bias	15
Manipulation Check and Sensitization Variables	15
Factor Analysis	16
Test of the Hypotheses	16
Chapter Four – Discussion	23
References	27
Appendices	34
Appendix A	35



# List of Tables

Table 1	Sample size and attrition information	9
Table 2	Timeline of the study	10
Table 3	Means and standard deviations	14
Table 4	Reliabilities and inter-correlations pre-test	14
Table 5	Reliabilities and inter-correlations post-test	15

# List of Figures

Figure 1	Plot of the time X group interaction for OCB	17
Figure 2	Plot of the time X group interaction for PSK	18
Figure 3	Plot of the time X group interaction for proc justice of the PAS	19
Figure 4	Plot of the time X group interaction for organizational fairness	20
Figure 5	Plot of the time X group interaction for satisfaction with the PAS	21
Figure 6	Plot of the time X group interaction for organizational satisfaction	22



A Field Quasi-Experiment of the Effects of Employee Input in the Development of Performance Appraisal Systems

## Dan Ispas

#### **ABSTRACT**

The purpose of this study was to investigate the effects of employee input in the development stage of a new performance appraisal system on their attitudes and work behaviors. A field quasi-experiment with pre-test and post-test measures was conducted in two plants of an organization. The results, consistent with the hypotheses, show that the employees in the experimental plant report higher proximal (satisfaction with the performance appraisal system, procedural justice of the performance appraisal system) and distal (organizational satisfaction, fairness of the organization and citizenship behaviors) outcomes. Also, the proximal outcomes were stronger than the distal ones. Implications for theory and practice are discussed.



### Chapter One- Introduction

Performance appraisal systems (PAS) are widely used in organizations for making important decisions about salaries, promotions, selection, training and development. Much of the early research on performance appraisals focused on psychometric criteria such as format effects on rating errors, followed later by studies of accuracy in performance evaluations (e.g., Borman, 1975; 1977) and research on performance appraisal information processing (Bretz et al., 1992; Cardy & Dobbins, 1994; Murphy & Cleveland, 1995). More recently, researchers have begun attending to the social context of PAS, particularly ratee reactions to the appraisal process (for a review see Levy & Williams, 2004). The employees' attitudes toward the PAS have been linked to positive attitudinal and behavioral organizational outcomes such as trust in supervisor, organizational commitment, and intentions to remain (Folger & Konovsky, 1989; Korsgaard & Roberson, 1995; Taylor, Tracy, Renard, Harrison, & Carroll, 1995).

Despite this shift in focus and the abundance of research, both academic and practitioner literature suggests that most employees are still dissatisfied with their current PAS (Elicker, Levy, & Hall, 2006; Milliman, Nason, Zhu, & De Cieri, 2002). The burden is now on researchers and practitioners to apply the knowledge to actual organizational interventions. Very few studies have been conducted in the field using strong (experimental and quasi-experimental) designs. Research has also shown that one way to increase employees' positive attitudes toward the PAS and the organization is through

employee participation or input. According to Gilliland and Langdon (1998), there are three stages in the performance appraisal process: system development, appraisal processes, and feedback processes. System development refers to creation, modification and communication of the instruments and procedures used in PAS. Also, business objectives and goal-setting procedures are communicated to the employees. Appraisal processes are concerned with observing and collecting performance-relevant behaviors, completing the appraisal form and making decisions concerning the outcomes of PAS (e.g., promotions, decisions etc). Feedback processes involves the communication of performance and PAS outcomes. The employees can participate in various stages of the PAS (Anderson, 1993): they can provide input in the development stage, before, during or after the appraisal. In a meta-analytic review, Cawley, Keeping, and Levy (1998) found that the relationship  $(\rho)$  between participation and employee reactions (such as satisfaction and perception of fairness) was .61. More specifically, participation was related to session satisfaction (satisfaction with the appraisal interview) and system satisfaction (satisfaction with the overall PAS) with  $\rho$ = .64. Participation was also related to the fairness of the session/system ( $\rho$ = .59) and the perceived utility of the PAS ( $\rho$ =.55). Most of the research has focused on the input provided by employees in the appraisal stage. Very few studies examined the effects of participation in the system development stage, although Silverman and Wexley (1984) found that employee participation in the development of BARS (behaviorally anchored rating scales) for PAS increased employees' satisfaction with appraisal, motivation to improve and their perceptions of supportive appraisal behaviors and utility of the PAS. Cherry and Gilland (1999) found



that employee input in the development stage increased their perceptions of the procedural justice of the PAS, perceived system value, motivation to improve performance and trust in supervisor.

In this study, I will investigate the effect of participation (as employee input in the development stage of a new PAS) on their attitudes toward the new PAS, and their attitudes and behaviors toward the organization. This will build on previous research in at least four different ways: by using a strong research design (a field quasi-experiment with pre-test and post-test measures), by examining if employee input leads to more organizational citizenship behaviors toward the organization, by examining both proximal (i.e, attitudes towards the new PAS) and more distal outcomes (attitudes and behaviors toward the organization), and by investigating whether participation in the development stage leads to better knowledge about the new PAS. Next, I will present the theory and hypotheses of the current study.

Participation and Organizational Citizenship Behaviors

Organizational citizenship behavior (OCB) refers to behaviors that go beyond task performance and technical proficiency and "support the organizational, social, and psychological context that serves as the critical catalyst for tasks to be accomplished" (Borman, 2004, p.238). OCB has been linked to organizational effectiveness (Borman, 2004; Koys, 2001; Podsakoff et al., 2000). The literature provides theoretical perspectives that link participation to OCB. Social exchange theory (Blau, 1964) proposes that relationships are developed between the organization and employees through a series of mutual exchanges. If the organization acts in ways that benefit the



employee, an implicit expectation for reciprocity is created. As a result of the relationships developed through social exchange, employees can reciprocate by engaging in more citizenship behaviors (Konovsky & Pugh, 1994; Moorman, 1991). If employees are treated fairly by the organization by being provided with the opportunity to participate in decision making (developing the new PA system), it is likely that they will reciprocate by engaging in more organizational citizenship behaviors. A second theoretical perspective for the relationship between participation and OCB is the group engagement model (Tyler & Blader, 2003). According to this model, procedures shape the organization members' social identity within groups which in turns affects their attitudes, values, and behaviors. Social identity as proposed by the group engagement model has three aspects (Tyler & Blader, 2003): identification, pride and respect. By participating in the development of a new PA system, the employees' social identity will increase (they will identify more with the organization and feel more pride and respect), and they will be more likely to engage in group-engaging behaviors that benefit the organization (such as OCB). Correlational studies found support for a positive association between participation and OCB (e.g., VanYperen, van den Berg, & Willering, 1999). Olkkonen and Lipponen (2006) applied the group engagement model to the workplace and found empirical support. However, to the best of my knowledge there are no studies that have tested this association using experimental or quasi-experimental designs that involve an actual manipulation of participation. Thus, the following hypothesis is proposed:



4

H1: Allowing employees' input in the development stage of the new PAS will lead to higher levels of OCB.

Participation and Perceived System Knowledge

Perceived system knowledge (PSK) refers to the employees' understanding and knowledge of the performance appraisal system (Williams & Levy, 1992, 2000). Perceived system knowledge is based on a due process perspective proposed by Folger, Konovsky and Cropanzano (1992). A due process PAS has three characteristics: adequate notice, fair hearing, and judgment based on evidence. Taylor et al (1995) found that employees evaluated with a newly implemented PAS based on the due-process perspective reported more favorable reactions (perceived system fairness, appraisal accuracy, attitudes toward the PAS,, and intentions to remain with the organization) than those evaluated with the existing PAS. Perceived system knowledge was found to moderate the relationship between self and supervisor ratings of performance such that self ratings were more congruent with supervisor ratings for those employees that reported higher levels of perceived system knowledge (Williams & Levy, 1992). Recent research also found perceived system knowledge to be related to important organizational outcomes such as job satisfaction, affective commitment, procedural justice, and OCB (Levy & Williams, 1998; Haworth & Levy, 2001). I couldn't find any studies that attempted to investigate interventions to increase the employees' levels of perceived system knowledge. I propose that the participative intervention will increase employees' levels of perceived system knowledge. This is consistent with the cognitive theories of participation proposing that during participation, an information exchange occurs



between the organization and the employee (participation as information exchange – Locke et al., 1997).

H2: Allowing employees' input in the development stage of the new PAS will lead to higher levels of perceived system knowledge

Participation and Employee Reactions

In the current study, I will focus on two types of employee reactions: procedural justice and satisfaction. Procedural justice refers to the perceived fairness of the procedures used in decision making. A consistent finding in the procedural justice literature is that perceptions of procedural justice are enhanced by allowing those affected the opportunity to provide input in the decision making process. This effect has been labeled the voice effect (Folger, 1977) or the process control effect (Thibaut & Walker, 1975) with the former term used more frequently in organizational research (Earley & Lind, 1987). The voice effect has been replicated across a variety of organizational contexts and in response to a variety of events such as performance appraisals (Greenberg, 1986), pay cuts and freezes (Greenberg, 1990; Schaubroeck, May, Brown, 1994) and the introduction of a smoking ban (Greenberg, 1994). Two explanations have been advanced for the voice effect: a value expressive explanation and an instrumental explanation (Cawley, Keeping & Levy, 1998; Shapiro & Brett, 2005). The value expressive perspective explains the voice effect in terms of the symbolic and informational consequences of the procedures: the chance to provide input, regardless of the outcome or final decision, leads to procedural justice. The instrumental perspective refers to process and decision control, voice is seen as procedurally just because it



increases the likelihood of a favorable outcome. Cawley, Keeping and Levy (1998) found that both types of voice were related to fairness ( $\rho$  = .64 for value-expressive and  $\rho$  = .51 for instrumental participation). Consistent with the reasoning presented above and with prior empirical work (e.g., Cherry & Gilliland, 1999) I propose the following hypotheses:

H3: Allowing employees' input in the development stage of the new PAS will lead to higher levels of perceived procedural justice of the new PAS

H4: Allowing employees' input in the development stage of the new PAS will lead to higher levels of fairness of the organization.

Another type of employee reaction is satisfaction. Satisfaction with PA has been linked to increased productivity, motivation and commitment (Wexley & Klimoski, 1984). As employees usually prefer to have control over the decision process (Thibault & Walker, 1978), providing input into the development stage of the new PA system should also increase their satisfaction. The relationship between participation and satisfaction is also hypothesized in affective models of participation (for a review see Miller & Monge, 1986): participation will satisfy the employees' higher order needs, and as their needs are satisfied, employees will experience higher satisfaction. Cawley, Keeping and Levy (1998) found that both types of voice were related to satisfaction ( $\rho$  = .72 for value-expressive and  $\rho$  = .59 for instrumental participation). The following hypotheses are proposed:

H5: Allowing employees' input in the development stage of the new PAS will lead to higher levels of satisfaction with the new PAS.



H6: Allowing employees' input in the development stage of the new PAS will lead to higher levels of job satisfaction.

Although I expect that employees' reactions (satisfaction and justice) towards both the new PA system and the organization will increase, I also expect that there will be a stronger relationship between participation and attitudes towards the new PA system (a more proximal outcome) than between participation and attitudes towards the organization (a more distal outcome). This is consistent with work in the attitude-behavior relationship (Ajzen & Fishbein, 1977) which suggests that there will be a stronger relationship between attitudes and behaviors when there is a correspondence in terms of target and action. Since the participation will be focused on the new PAS, there will be a greater correspondence between participation and attitudes towards the new PAS.

H7: The relationship between participation and satisfaction with the new PAS will be stronger than the relationship between participation and job satisfaction

H8: The relationship between participation and procedural justice of the new PAS will be stronger than the relationship between participation and fairness of the organization.



## Chapter Two- Method

## **Participants**

The final sample consisted of 101 employees (91 co-worker reports) for the experimental plant and 106 for the control plant (93 co-worker reports), with complete data on all the variables at both times (pre-test and post-test). Details on the final sample size and attrition information are presented in Table 1.

Table 1 Sample size and attrition information

Plant	Time 1		Time 2		Final n	
	Self-	Peer-	Self-	Peer-	Self-	Peer-
	report	report	report	report	report	report
Experimental	123	101	119	104	101	91
Control	117	103	121	105	106	93

## Research design

Conceptually, using the Shadish, Cook and Campbell terminology the research design used is an untreated control group design with dependent pretest and posttest samples. Two plants of the same Romanian organization, from different geographic locations were used. In one of the plants, the PA system was changed and the employees were involved in the design stage of the new system. A timeline of the study is presented in Table 2. The difference between the Time 1 survey and the Time 2 survey was 28 weeks. Analytically, this is a 2x2 design with two groups and two measurements.



Table 2 *Timeline of the study* 

Event	Time period	Cumulative	
		time period	
Pulse survey, OCB scale			
Time 1 Survey	4 weeks later	4 weeks	
Intervention	6 weeks later	10 weeks	
First use of the new PAS	14 weeks later	24 weeks	
Time 2 Survey	8 weeks later	32 weeks	

#### Intervention

Wagner et al. (1997) recommended that researchers should provide more details on the participation interventions in their studies. The participation was formal (initiated by the management), short term, direct (immediate influence of the employees) and with a high degree of participant influence. The implementation was guided by the model proposed by Morgeson et al (1997). According to Morgeson et al. (1997) and their metaview of organizational development implementation theories, there are six stages in any organizational implementation. The stages are outlined below together with their application at the current study:

The discontent stage: This refers to identifying and recognizing that there is a problem. In this case, organizational surveys, grievances filed by the employees, as well as reports from managers and employees, showed growing dissatisfaction with the existent PAS.

Management recognized need for a change and contacted the consultants.

The diagnosis stage: This refers to collecting information about the issue. Data already collected through organizational surveys and employee complaints were used. Focus groups were conducted with both the employees and the managers. In addition, a pulse



survey (Colihan & Waclawski, 2006) was conducted among the employees in the experimental plant to find out whether the employees were interested in participating in developing a new performance appraisal system. The survey had a response rate of 89% and 83% of the respondents indicated that they were willing to participate in changing the performance appraisal system. The OCB scale was developed during this stage (see below)

The data feedback and goal establishment stage: Together with management, the key variables were selected and Time 1 data were collected. It was decided to collect variables related to both the PAS and the organization.

The planning and implementation stage: The employees participated in a variety of ways: through meetings within their workgroups, focus groups, individual and group interviews and non-interactive techniques such as the Nominal Group Technique and the Delphi Technique. Input was provided on the performance dimensions, their importance, the appraisal form and also other possible ways to improve the existing PA system.

The evaluation and feedback stage: Time 2 (posttest) data collection took place approximately 8 weeks after the new PAS was used for the first time. The results were summarized and presented to the management.

The stabilization stage: New PA system was in place and integrated with the human resource systems.



#### Measures

Unless otherwise noted, all the measures had a response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Manipulation check: As a manipulation check, participants completed a five item scale from Lam, Chen, and Schaubroeck (2002) that measured participative decision making opportunity. A sample item is "In this organization, I can participate in setting new company policies".

Sensitization variables: To examine whether respondents were sensitized to the study's hypotheses by answering to the time-1 survey, I included in the survey two variables that are not expected to change: training satisfaction and opportunity for training. A sample item is "My organization provides training that helps my employees do a better job". The items were adapted from Taylor et al. (1998). These were included on both the peer and self report surveys.

Organizational Citizenship Behaviors: Organ (1988; Organ, Podsakoff, & MacKenzie, 2006) recommend developing site specific measures of OCB. Following the procedures presented by Skarlicki and Latham (1996, 1997) behavioral observation scales were developed to measure OCB. Twelve managers from both plants were provided with a definition of OCB. The managers were asked to provide a maximum of four critical incidents that they observed in their workgroups in the past 6 months. This resulted into a total of 28 non-duplicate incidents. Another group of 15 managers (8 from the control plant and 7 from the experimental plant) was then asked to rate the incidents as to the degree that each item defined OCB in their workgroups using a 5-point Likert scale. The



top rated 7 items (highest mean and lowest standard deviation) were the same in both groups. The items are presented in the Appendix. Employees were then asked to identify a peer to rate their OCB using a 5 point frequency rating from "never demonstrates the behavior" to "almost always demonstrates the behavior". Peer ratings were chosen because previous research shows that supervisor ratings are susceptible to subordinate impression management tactics (Bolino et al., 2006).

Perceived System Knowledge: Perceived system knowledge was measured with 5 items from Williams and Levy (1991). A sample item is "I understand the performance appraisal system used in my organization". The 5 items selected had the highest loading in the Williams and Levy (1992) study.

Procedural Justice and Fairness: Procedural justice of the PA system and of the organization was measured using a 3-item scale adapted from Colquitt (2001). A sample item is "The PA is free of bias". Fairness was measure with a 3 item scale adapted from Greenberg (2003). A sample item is "I would characterize my organization as fair". Satisfaction: Satisfaction with the PA system and with the organization were measured with the 3 item scale from Camman et al. (1979). The scale was adapted for the PA system. A sample item is "All in all, I am satisfied with the PA system (organization)"



## Chapter Three- Results

Descriptive statistics for the study's variables are presented in Table 3. The internal consistency reliabilities and correlations for pre-test and post-test are shown in Tables 4-5.

Table 3.

Means and standard deviations

Variable	Pre-test		Post-test	
	M	SD	M	SD
PDM	13.07	3.52	14.38	3.41
PSK	13.32	3.43	14.08	3.37
PJUST	9.08	2.60	9.71	2.22
SATSYS	9.73	2.05	10.37	2.04
FAIR	8.96	2.61	9.87	1.85
ORGSATP	8.87	2.27	9.62	2.04
OCB	21.43	4.66	22.67	3.80

PDM = participation in decision making; PSK = perceived system knowledge; PJUST = procedural justice of the PAS; SATSYS = satisfaction with the PAS; FAIR = fairness of the organization; ORGSAT = satisfaction with the organization; OCB = organizational citizenship behaviors.

Table 4. Reliabilities and inter-correlations pre-test

	PDM	PSK	PJUST	SATSYS	FAIR	ORGSAT	OCB
PDM	.89	.34**	.41**	.32**	.29**	.35**	.22**
PSK		.83	.34**	.26**	.31**	.33**	.25**
PJUST			.81	.34**	.42**	.45**	.24**
SATSYS				.80	.36**	.29**	.20**
FAIR					.83	.39**	.22**
ORGSATP						.86	.32**
OCB							.81

<sup>\*\*</sup> p <.01



Table 5. *Reliabilities and inter-correlations post-test* 

	PDM	PSK	PJUST	SATSYS	FAIR	ORGSAT	OCB
PDM	.92	.34**	.44**	.29**	.31**	.32**	.22**
PSK		.86	.28**	.29**	.27**	.28**	.22**
PJUST			.83	.47**	.32**	.35**	.28**
SATSYS				.80	.30**	.25**	.17*
FAIR					.74	.34**	.18*
ORGSAT						.86	.28**
OCBP							.80

<sup>\*</sup> *p* < .05, \*\* *p* < .01

## Comparison between Groups

No statistically significant differences were observed between the two plants prior to the intervention on any of the study's variables.

#### Attrition Bias

With every longitudinal study, there is a possibility for subject attrition. T-tests were conducted between stayers and leavers using time 1 data. No differences were observed between stayers and leavers on any of the study variables indicating that attrition bias was not likely.

## Manipulation Check and Sensitization Variables

There were no changes between the pre-test and post-test on the sensitization variables for neither the self or the peer reports. A 2x2 repeated measures ANOVA was used to check the experimental manipulation. The results show that there was both a main effect for time, F(1, 205) = 30.25, p < .001 and a significant group x time interaction, F(1, 205) = 33.76, p < .001 indicating a successful manipulation.



## Factor Analysis

Factor analyses were conducted on all the attitudinal variables collected both pretest and post-test. As expected, both pre-test and post-test, a six factor solution (participation in decision making, perceived system knowledge, satisfaction with the PAS, organizational satisfaction, procedural justice of the PAS and fairness of the organization) resulted with all the items loading on their intended factors.

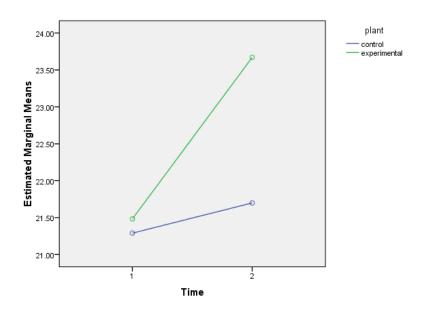
## *Test of the Hypotheses*

Hypotheses 1-6 were tested using 2x2 ANOVAs with time and group as the two factors. If a significant interaction was found, the results were plotted to examine the form of the interaction. The results of the significance tests and the corresponding effect sizes are presented below.

Recall that H1 predicted that the intervention will increase the OCB levels. The group X time interaction was significant: F(1, 182) = 9.43, p < .01, partial  $\eta^2 = .05$ . Figure 1 shows a plot of the interaction. The nature of the interaction offers support for H1.

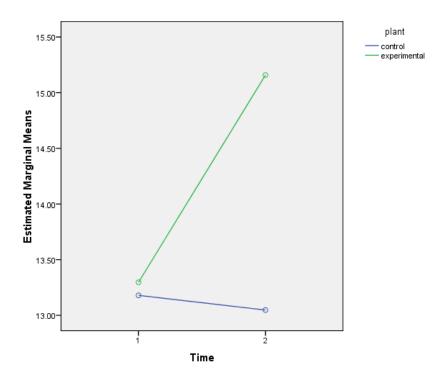


Figure 1. Plot of the time X group interaction for OCB



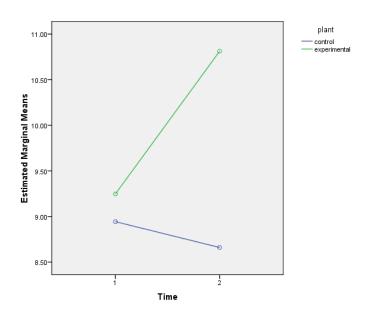
H2 predicted that the intervention will increase the PSK levels. The group X time interaction was significant: F(1, 205) = 26.73, p < .001, partial  $\eta^2 = .11$ . Figure 2 shows a plot of the interaction. As it can be seen, the nature of the interaction offers support for the hypothesis.

Figure 2. Plot of the time X group interaction for PSK



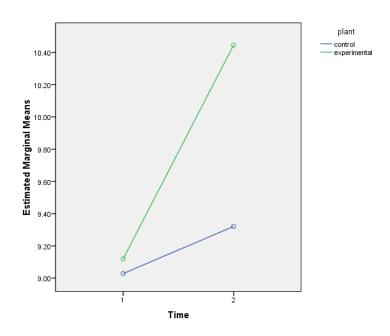
H3 predicted that the intervention will increase the employees' levels of the procedural justice of the PAS. The group X time interaction was significant and thus H3 was supported: F(1, 205) = 43.89, p < .001, partial  $\eta^2 = .17$ . Figure 3 shows a plot of the interaction. The nature of the interaction offers support for H3.

Figure 3. Plot of the time X group interaction for procedural justice of the PAS



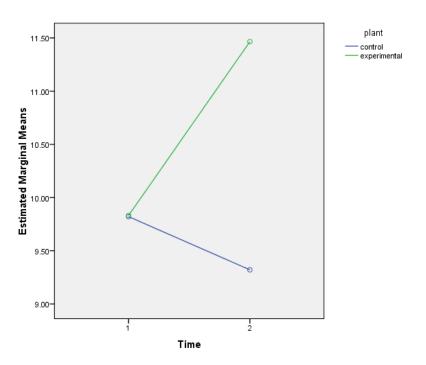
H4 predicted that the intervention will increase the employees' perceptions of the fairness of the organization. The group X time interaction was significant and thus H4 was supported: F(1, 205) = 11.27, p < .01, partial  $\eta^2 = .05$ . Figure 4 shows a plot of the interaction. The nature of the interaction offers support for H4.

Figure 4. Plot of the time X group interaction for organizational fairness



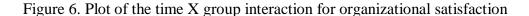
H5 predicted that the intervention will increase the employees' satisfaction with the PAS. The group X time interaction was significant and thus H5 was supported: F(1, 205) = 54.73, p < .001, partial  $\eta^2 = .21$ . Figure 5 shows a plot of the interaction. The nature of the interaction offers support for H5.

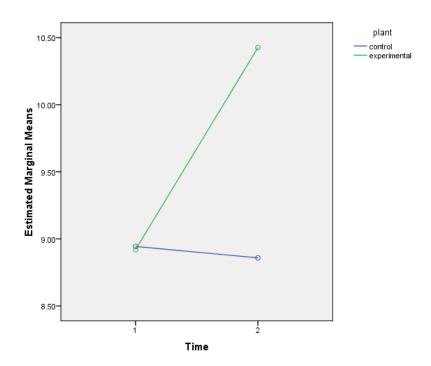
Figure 5. Plot of the time X group interaction for satisfaction with the PAS



H6 predicted that the intervention will increase the employees' overall satisfaction with the organization. The group X time interaction was significant and thus H6 was supported: F(1, 205) = 29.02, p < .001, partial  $\eta^2 = .12$ . Figure 6 shows a plot of the interaction. The nature of the interaction offers support for H6.







Hypotheses 7 and 8 were tested using the Hotelling-Williams t-test for dependent correlations (Williams, 1959). Both hypotheses were supported as the relationship between participation and satisfaction with the PAS (proc just of the PAS) was stronger than the relationship between participation and organizational satisfaction (fairness of the organization): t = 1.97, p = .05; t = 2.54, p < .05.

### Chapter Four- Discussion

The purpose of this study was to examine the effects of employee input in the development stage of a new PAS. Consistent with theoretical expectations, providing the employees with the opportunity to participate (voice) led to positive outcomes. The employees in the experimental plant reported increased proximal (satisfaction with the PAS, procedural justice of the PAS and perceived system knowledge) and distal (satisfaction with the organization, fairness of the organization) outcomes. OCB levels (measured by co-worker reports) also increased in the experimental plant. The effects were stronger for more proximal outcomes (e.g., satisfaction with the PAS) than for more distal ones (e.g., overall satisfaction with the organization).

The current study makes at least four contributions to the literature: by using a strong research design (a field quasi-experiment with pre-test and post-test measures – a rare design in organizational studies, see Grant & Wall, 2008), by linking employee input to increased organizational citizenship behaviors toward the organization, by examining both proximal (i.e., attitudes towards the new PAS) and more distal outcomes (both attitudinal and behavioral outcomes), and by linking participation in the development stage leads to increased knowledge about the new PAS. The major implication for organizations is that involving the employees in decision making leads to positive outcomes for both the individuals and the organizations. Given the high rates of employee dissatisfaction with performance appraisal systems, organizations should try to

implement interventions to improve PAS and increase their acceptance. The participation intervention presented here is relatively easy to implement and in addition to increasing the positive reactions towards the PAS it can also lead to more distal positive outcomes (increased levels of employees' OCB).

The current intervention can be considered an organizational justice intervention. Previous studies have shown the benefits of organizational justice training interventions for both the organizations (Skarlicki & Latham, 1996; 1997) and the employees (Greenberg, 2006). This study extends the training interventions to an organization wide intervention. The few organizational justice training interventions found in the literature were focused on the managers, the intervention presented here is focused on the employees. The results are consistent with previous research showing an association between organizational justice and positive organizational outcomes (Cohen-Charash & Spector, 2001).

The new PAS based on extensive employee input shares some of features outlined in the due-process perspective (Folger et al., 1992): adequate notice, fair hearing, and judgment based on evidence. The findings of the current study build on previous field tests of the due-process metaphor (Taylor et al., 1995). It is also noteworthy that the due process features emerged from the employee input and were not necessarily intended by the management of the organization and the consultants involved.

There are also implications for the literature on participation in decision-making. Most of the research on participation focused on increasing employee performance and job satisfaction (Miller & Monge, 1986) with what some consider disappointing results



(Wagner et al., 1997). The present results should encourage researchers to examine the effects of other participatory interventions and other types of dependent variables such as OCB which are also very important to organizational effectiveness (Borman, 2004).

There are also several limitations of the current study. For practical reasons, this was a quasi-experiment not a true experiment. Any future study should use a true experiment with random assignment. However, there were no pre-intervention differences between the two plants on any of the variables measured and thus I feel more confident in talking about a causal link between participation and positive outcomes.

Also, at the company's request, I could not investigate any individual differences. Previous research suggests that individual differences such as self-esteem moderate the relationship between participation and positive outcomes (Brockner et al., 1998). Another limitation is the multivariate nature of the intervention. The goal of the current intervention was to receive input from as many employees as possible. Therfore, it was necessary to use multiple techniques to increase employee participation. However, I can't know for sure which aspect of the intervention led to positive outcomes and this opens up possibilities for future research. Since the current study was conducted in a Romanian manufacturing organization, the generalizability of the results needs to be studied in other settings. Future research should also investigate possible mediators of the relationship between employee input and attitudinal and behavioral outcomes. Most of the data was collected using self-reports, however I used co-worker reports for OCB. Even though I used social exchange theory and the group engagement model as a theoretical framework, the meditational mechanisms were not explicitly assessed (I did not measure social



exchange with the organization or any of the social identity mediators proposed by the group-engagement model).

The current study adds to the very limited literature on interventions designed to increase OCB in organizations. OCB are considered important for organizational functioning and although we know a lot about the dispositional and situational antecedents of OCB (Borman, 2004; Organ et al., 2006) so far the only interventions published in the literature were training programs in organizational justice (Skarlicki & Latham, 1996, 1997). The intervention implemented increased the employees' levels of OCB. In addition to the statistically significant results reported here, another positive outcome not reported in the current paper was a reduction in the number of grievances filed following performance appraisals in the experimental plant. Overall, my results suggest that allowing the employees to have input in developing a new PAS appears to be an effective intervention. The focus in the current study was on input in the development stage, and as noted by Cherry and Gilliland (1999) future research should examine the benefit of providing continuous input in refining the PAS.

Perceptions of fairness are important for both the employees and the organization. Following the numerous theoretical developments in the area of organizational justice, the present study examined in a field setting, and using a strong research design the effects of employee input in the development stage of a new PAS. The positive results obtained in the current study should encourage further theoretically-based organizational change interventions.



#### References

- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Blau, P. (1964). Exchange and power in social life. New York: Wiley.
- Borman, W.C. (1975). Effects of instruction to avoid halo error on reliability and validity of performance evaluation ratings. *Journal of Applied Psychology*, *60*, 556-560.
- Borman, W.C. (1977). Consistency of rating accuracy and rating error in the judgment of human performance. *Organizational Behavior and Human Performance*, 20, 238-252.
- Borman, W. C. (2004). The concept of organizational citizenship. *Current Directions in Psychological Science*, 13, 238-241.
- Bretz, R. D., Jr., Milkovich, G. T., & Read, W. (1992). The Current State of Performance Appraisal Research and Practice: Concerns, Directions, and Implications. *Journal of Management*, 18, 321-352.
- Brockner, J., Heuer, L., Siegel, P. A., Wiesenfeld, B., Martin, C., Grover, S., Reed, T., & Bjorgvinsson, S. (1998). The moderating effect of self-esteem in reaction to voice: converging evidence from five studies. *Journal of Personality and Social Psychology*, 75, 394–407.
- Cammann, C., Fichman, M, Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. Unpublished manuscript, University of Michigan, Ann Arbor.



- Cardy, R. L., & Dobbins, G. H. (1994). *Performance appraisal: Alternative perspectives*. Cincinnati: South-Western Publishing.
- Cawley, B. D., Keeping, L. M., & Levy, P. E. (1998). Participation in the performance appraisal process and employee reactions: A Meta-analytic review of field investigations. *Journal of Applied Psychology*, 83, 615-633.
- Cherry, B., & Gilliland, S. (1999). *Employee input in the development of performance appraisal systems*. Paper presented at the Academy of Management Annual Meeting, Chicago.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A metaanalysis. *Organizational Behavior and Human Decision Processes*, 86, 278-321.
- Colihan, J., & Waclawski, J. (2006). Pulse surveys: a limited approach with some unique advantages. In A. I. Kraut (Ed.), *Getting action from organizational surveys: New concepts, technologies, and applications,* (pp. 264-293). San Francisco: Jossey-Bass.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400.
- Earley, P. C., & Lind, E. A. (1987). Procedural justice and participation in task selection:

  The role of control in mediating justice judgments. *Journal of Personality and Social Psychology*, 52, 1148–1160.
- Elicker, J.D., Levy, P.E., & Hall, R.J. (2006). The role of leader-member exchange in the performance appraisal process. *Journal of Management*, 32, 531-551.



- Folger, R. (1977). Distributive and procedural justice: Combined impact of "voice" and improvement on experienced inequity. *Journal of Personality and Social Psychology*, *35*, 108-119.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115-130.
- Folger, R., Konovsky, M., & Cropanzano, R. (1992). A due process model of performance appraisal. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 14, pp. 129-177). Greenwich, CT: JAI Press.
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*, 22, 627-652.
- Grant, A. M., & Wall, T. D. (2008). The neglected science and art of quasiexperimentation: Why-to, when-to, and how-to advice for organizational researchers. Forthcoming in *Organizational Research Methods*
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluation, *Journal of Applied Psychology*, 71, 340-342.
- Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: the hidden cost of pay cuts. *Journal of Applied Psychology*, 75, 561-568.
- Greenberg, J. (1994). Using socially fair treatment to promote acceptance of a work site smoking ban. *Journal of Applied Psychology*, 79, 288-297.
- Greenberg, J., (2003). Creating unfairness by mandating fair procedures: the hidden hazards of a pay-for-performance plan. *Human Resource Management Review*, 13, 41-57



- Greenberg, J. (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, *91*, 58-69.
- Haworth, C.L. & Levy, P.E. (2001). The importance of instrumentality beliefs in the prediction
- of organizational citizenship behaviors. Journal of Vocational Behavior, 59, 64-75.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange.

  \*Academy of Management Journal, 37, 656-669.
- Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation:

  The role of instrumental and non-instrumental voice in performance appraisal discussions. *Journal of Management*, 21, 657-669.
- Lam, S.S.K., Chen, X, P., & Schaubroeck, J. (2002). Participative Decision Making and Employee Performance in Different Cultures: The Moderating Effects of Allocentrism-Idiocentrism and Efficacy. Academy of Management Journal, 45, 905-914
- Levy, P. E., & Williams, J. R. (1998). The role of perceived system knowledge in predicting appraisal reactions, job satisfaction, and organizational commitment.

  \*Journal of Organizational Behavior, 19, 53–65.
- Levy, P. E., & Williams, J. R. (2004). The social context of performance appraisal: A review and framework for the future. *Journal of Management*, *30*, 881–905.
- Locke, E. A., Alavi, M., & Wagner, J. (1997). Participation in decision-making: An information exchange perspective. In G. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 15, pp. 293-331). Greenwich, CT: JAI Press.



- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29, 727–753.
- Milliman, J., Nason, S., Zhu, C., & DeCieri, H. (2002). An exploratory assessment of the purposes of performance appraisals in North and Central America and the Pacific Rim. *Human Resource Management*, 41, 87-99.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship?

  \*\*Journal of Applied Psychology, 76, 845–855.\*\*
- Morgeson, F. P., Aiman-Smith, L. D., & Campion, M. A. (1997). Implementing work teams: Recommendations from organizational behavior and development theories. In M. Beyerlein, D. Johnson, & S. Beyerlein (Eds.), *Advances in interdisciplinary studies of work teams: Issues in the implementation of work teams* (Vol. 4, pp. 1-44). Greenwich, CT: JAI Press.
- Murphy, K. R., & Cleveland, J. N. (1995). *Understanding performance appraisal: Social, organizational, and goal-based perspectives*. Thousand Oaks, CA: Sage.
- Organ, D.W. (1988). Organizational citizenship behavior: the good soldier syndrome.

  Lexington, MA: Lexington Books.
- Organ, D.W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage Publications.
- Schaubroeck, J., May, D.R., & Brown, F.W. (1994). Procedural justice explanations and employee reactions to economic hardship: A field experiment. *Journal of Applied Psychology*, 79, 455-460.



- Shapiro, D. & Brett, J. M. (2004). What is the Role of Control in Organizational Justice? In J.
- Greenberg & J. Colquitt (Eds.), Handbook of Organizational Justice.
- Skarlicki, D. P., & Latham, G. P. (1996). Increasing citizenship behavior within a labor union: A test of organizational justice theory. *Journal of Applied Psychology*, 81, 161–169.
- Skarlicki, D. P., & Latham, G. P. (1997). Leadership training in organizational justice to increase citizenship behavior within a labor union: A replication. *Personnel Psychology*, *50*, 617–633.
- Taylor, M. S., Masterson, S. S., Renard, M. K., & Tracy, K. B. (1998). Managers' reactions to procedurally just performance management systems. *Academy of Management Journal*, 41, 568-579.
- 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, 495-523.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity and cooperative behavior. *Personality and Social Psychology*\*Review, 7, 349-361.
- VanYperen, N. W., Van den Berg, A. E., & Willering, M. C. (1999). Towards a better understanding of the link between participation in decision-making and



- organizational citizenship behaviour: A multi level analysis. *Journal of Occupational and Organizational Psychology*, 72, 377–392.
- Wagner, J. A., Leana, C. R., Locke, E. A., & Schweiger, D. M. (1997). Cognitive and motivational frameworks in U.S. research on participation: A meta-analysis of primary effects. *Journal of Organizational Behavior*, 18, 49-65.
- Wexley, K. N., & Klimoski, R. J. (1984). Performance appraisal: an update. In G. Ferris & K.M. Rowland (Eds.), *Research in personnel and human resources*management (Vol. 2, pp. 35-79). Greenwich, CT: JAI Press.
- Williams, E. J. (1959). The comparison of regression variables. *Journal of the Royal Statistical Society (Series B)*, 21, 396–399.
- Williams, J. R., & Levy, P. E. (1992). The effects of perceived system knowledge on the agreement between self-ratings and supervisory ratings. *Personnel Psychology*, 45, 835–847.
- Williams, J. R., & Levy, P. E. (2000). Investigating some neglected criteria: The influence of organizational level and perceived system knowledge on appraisal reactions. *Journal of Business and Psychology*, 14, 501–513.



Appendices



# Appendix A

## Items for the OCB scale:

- 1. Only has good things to say about the organization to others
- 2. Helps other employees with their duties
- 3. Volunteers for extra-work
- 4. Makes suggestions to improve the functioning of the organization
- 5. Takes an active role within the organization
- 6. Is supportive of organizational policies
- 7. Follows informal rules within the organization

