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Examining Organizational Survey Response Through an Organizational Citizenship Framework

by

David Youssefnia

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Executive Officer

Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

Abstract

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David Youssefnia

Adviser: Professor Harold Goldstein

Given the growing importance and frequency of use of organizational surveys, and the subsequent importance placed on survey response rates, the role of organizational citizenship behavior (OCB) and attitudes related to OCB in explaining survey response behavior was examined across three studies to help understand how respondents and non-respondents differ. The results revealed that one dimension of OCB and several attitudes related to OCB are related to survey response behavior. Further, intent to respond to surveys is more strongly related to attitudes related to organizational surveys than those related to OCB. Implications for organizational researchers and survey practitioners will be discussed.

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CHAPTER 1

Introduction

Organizational surveys have grown both in importance and use (Kraut, 1996). These surveys have evolved from an assessment tool for measuring employee satisfaction, to being a tool used by for business leaders to help them set organizational priorities and objectives. One important aspect of the survey is the response rate. Without an adequate response rate, the credibility of the survey's results may be diminished.

A fair amount of research has been conducted on the response rates of opinion surveys. Opinion surveys include organizational surveys as well as public opinion polls and market research surveys. These studies have uncovered methods that are related to increasing survey response rates and how respondents differ from non-respondents. Researchers have demonstrated that the use of incentives (Church, 1993), length of survey (Yammarino, Skinner, and Childers, 1991), and others techniques and survey characteristics can lead to higher response rates. However, most, if not all of this research, has been conducted without regard to the type of survey, leading to the grouping of all surveys under one category. Further, most of this research has been atheoretical in nature.

Research on organizational citizenship behavior provides a theoretical framework for understanding why employees may respond to organizational surveys. Organizational citizenship behavior refers to activities that are not formally part of an employee's job description, but contribute to organizational effectiveness (Organ 1988a). The main thesis of this study is that the act of responding to an

organizational survey is an organizational citizenship behavior. If this thesis is supported, then such antecedents of OCB as job satisfaction should predict survey response.

Therefore, several hypotheses will be tested across three studies designed to examine the relationships among job attitudes, OCB, attitudes toward surveys and various measures of survey response. By using an OCB framework, this study will help explain how employees who respond to an organizational survey differ from those who do not respond. If the main thesis is supported, organizational researchers will be able to better understand the implications of surveys with varying response rates.

CHAPTER 2

Organizational Surveys

Before reviewing the literature in this area, a point should be made about the different types of surveys that exist. The most popular type is the public opinion survey. This type of survey is usually administered to samples of the public at large, and it attempts to measure public opinion on some current topic such as the popularity of a president or frequency of drug use. These surveys are called attitude surveys, opinion polls or belief surveys and they measure public opinion, attitudes and beliefs. The distinction among these is not the focus of this study. The main distinction here is between surveys that are administered to the general public (or a subset of), and those administered to members of an organization's community. The term "member" is used over employee because organizational surveys (also called employee attitude surveys) are sometimes administered to customers and suppliers as well as employees.

Opinion surveys have been used since the 1920s to assess public opinion on consumer products and political views (Rossi, Wright, and Anderson, 1983). Soon after, organizations began to use surveys to assess employees' opinions and attitudes on various work-related issues. According to Viteles (1953), employee opinion surveys serve such functions as helping organizations learn what is important to employees at work, assessing how happy employees are, identifying what makes employees happy, and expanding upon motivational theory.

Since then, many books and resources have been developed on the topic of surveys (see Kraut, 1996 for a review). According to Kraut (1996), the purpose of employee opinion surveys has evolved beyond just assessing employee attitudes.

These surveys are now used to pinpoint areas of concern, observe long-term trends, monitor program impact, provide input for future decisions, add a communication channel, perform organizational behavior research, assist in organizational change and improvement, and provide symbolic communication. Edwards, Thomas, Rosenfeld and Booth-Kewly (1997) state that organizational surveys can be used to gather information, improve communication and evaluate the effectiveness of organizational change. For example, they state that a well-conducted survey will enable an organization to collect accurate information on a wide array of issues in a flexible manner. Surveys can be constructed to measure various types of information, including employee needs, attitudes and morale. Further, using surveys can be an upward communication link (Edwards, et al.). Thus, organizational surveys play multiple roles, and they play an increasingly important role in a variety of organizational functions.

Another trend in organizational surveys is to link attitudinal measures with other organizational measures to identify high impact areas for action planning and organizational development. Known as linkage research, these studies demonstrate relationships between employee satisfaction and customer satisfaction, and between employee retention and customer satisfaction (see Wiley, 1996 for a review). The importance of adequate survey participation is enhanced when linkage studies are conducted. Low rates of participation among specific organizational subgroups can make analyses of this type difficult, since linkage research typically looks at relationships at the subgroup level. If there is low or no response from certain organizational groups, then linkage analysis may be difficult to conduct.

Survey Response Rates

One aspect of opinion surveys that has received attention from researchers is the response rate. Many studies have been conducted on this topic, including meta-analyses, which quantitatively summarize the results of these studies (e.g., Armstrong & Lusk, 1987; Church, 1993). Most of these studies have been conducted on public opinion or consumer surveys, and not employee attitude or organizational surveys. For example, among the studies used in the meta-analyses by Church (1993), Armstrong and Lusk (1987) and Yammarino, Skinner and Childers (1991), only a handful were organizational surveys. All of the other studies investigated either response rates of public opinion polls or consumer surveys.

The processes involved in responding to public opinion surveys are different from those involved in responding to organizational surveys. Employees have a closer connection to the survey sponsor than do members of the public at large (e.g., employer versus polling organization or consumer-goods manufacturer). Further, the results of organizational surveys are usually shared with participants, whereas survey results on consumer goods are not. Also, employees are informed of an organizational survey through announcement letters and past organizational surveys more often than respondents to mail surveys of consumer products. Lastly, organizational survey participants may benefit from sharing their opinions with management through follow-up interventions and organizational change initiatives.

Edwards et al. (1997) state that response rates can pose problems for organizational surveys that are distributed by mail. "Individuals who get a survey in

the company mail may add the survey to their 'to-do' lists and never get it done" (p.91). Luong and Rogelberg (1998) give several reasons why survey response rate is important. First, non-response can introduce bias into the results of a survey, especially when non-respondents differ from respondents in systematic and substantial ways (e.g., attitudinally or demographically). A second problem with non-response is the lack of sufficient data or sample size to conduct the appropriate analysis. This can be an especially important issue for linkage research. For example, when employee attitudes are linked to turnover data that already may be sparse, a low response rate will make further analysis difficult. Third, non-response can threaten or reduce the credibility of a survey's findings. Specifically, Luong and Rogelberg (1998) state that "managers and employees alike may not take our recommendations seriously if they are based on the opinions of only a handful of individuals, even if those individuals are representative of the population" (Luong and Rogelberg, 1998, p. 62).

Others have stated that a low response rate gives the survey an appearance of low quality and attacks confidence in the results of the survey (Mangione, 1995). Macey (1996) points out that often, survey sponsors use low response rates to discount results, especially when the results are unfavorable. He states that the importance of maximizing response rates stems from two issues: the generalizability (i.e., external validity) and the credibility of the findings. Kraut (1996) also states that low response rates threaten the credibility of survey results.

Empirical studies on survey response typically fall into two categories: The first attempts to uncover methods to improve or increase response rates and the

second attempts to compare how respondents and non-respondents differ.

Measuring Survey Response

Before discussing the research on survey response, it is appropriate to review various measures of survey response. There are at least four ways to measure survey response: actual response at the survey level, actual response at the item level, intent to respond and response to open-ended questions. Response rate at the survey level has typically been measured as a dichotomous variable – an individual either does or does not respond to a survey. The total number of employees who respond to the survey relative to the total number who were invited to respond is called the survey response rate. Response rate at the item level measures how many items an individual respondent completes. At the item level, response rates can be assessed by the number of non-valid missing responses. A non-valid missing response is a missing response to a survey question that the respondent could have answered, but chose not to. Further, item level response rate partially reflects the quality of an employee's responses to a survey.

Both of these measures of survey response are important. The quality of responses given by those who return a survey can be problematic if respondents only answer 5% of the questions (i.e., low item level response rate). Survey response at the survey administration/group level is important because managers may not act on the results of a survey with a low response rate.

Also important in understanding survey participation is a respondent's willingness to participate (i.e., intent to respond) which is conceptually related to OCB. The construct is in part a reflection of an individual's willingness to help the organization in ways that contribute to the maintenance and enhancement of social

and psychological context that supports task performance (the chapter on OCB will further elaborate on this construct). Rogelberg, Luong, Sederburg and Cristol (1999) reviewed the intention literature, which demonstrates that when intentions are specific and time-bound, they are strongly related to actual behaviors (Kim and Hunter, 1993).

Responses to open-ended questions is an additional measure of survey response, although it's not usually included as part of the response rate measure. Responding to this type of question can have strong conceptual links to certain aspects of OCB (e.g., civic virtue OCB), when the question asks for recommendations or suggestions for improving organizational effectiveness. These verbatim responses can also be helpful to organizations in that they collect data in a more qualitative fashion. Further, responding to an open-ended question takes more effort than responding to a rating question.

Increasing Response Rates

Empirical studies on response rates have examined the effects of various survey-related variables on response rates. For example, Yammarino, Skinner, and Childers (1991), using meta-analysis, examined the effects of preliminary notification, follow-ups/repeated contacts, sponsorship, appeals, reply/return envelope, return postage (stamped/metered, special delivery/airmail), personalization, monetary incentives ($\leq$ \$.50, > \$.50 and $\leq$ \$1.00, > \$1.00), non-monetary incentives, survey appearance, anonymity/no identification, survey length ($\leq$ 4 pages, > 4 pages), and deadlines.

Their results show that incentives led to an increase in response rates.

Specifically, incentives of $.50 or less and one dollar or more (respective r's = .184 and .122) were significantly related to response rates (incentives between $.50 and one dollar were not significantly related to response rates). Also, surveys longer than four pages were negatively related to response rate (r = -.078). Analysis on all other manipulations led to confidence intervals which crossed 0, indicating that there is a 95% chance that the relationship is not significant.

Krysan, Schuman, Scott and Beatty (1994) compared the response rates of surveys administered by mail with those administered face-to-face. Using response rates of mail surveys of the general public, they found no significant differences between mail and face-to-face surveys for white households, but did find significant differences between mail and face-to-face surveys for black participants, with face-to-face surveys receiving greater response rates.

Church (1993) conducted a meta-analysis on the effects of incentives on mail survey response rates, differentiating between incentives on two dimensions: type of reward (monetary versus non-monetary) and distribution of reward (included with survey versus contingent on return of survey). Using the results of 38 studies, 74 individual observations were included in the analysis. The following results emerged: initial inclusion of incentives had a significant increasing effect on response rate. Further, the effect was greater for monetary than non-monetary initial incentives. There were no significant effects for incentives of either type distributed after return of survey.

Additional studies have examined the effects of type of return postage on response rates (Armstrong & Lusk, 1987; Yammarino, et. al, 1991). Although these

studies used meta-analysis, the use of incentives or different postage has limited application in organizational settings. Most employee attitude surveys are returned to an internal processing unit, external vendor or consulting firm for data entry and processing at the organization's expense, making type of postage irrelevant to organizational surveys. Further, given the growing importance of surveys (e.g., Kraut, 1996), the use of incentives for increasing or response rates to employee attitude surveys is not without ethical implications. One function of the employee attitude survey is to give feedback to management, and if large or attractive incentives are used, responses may be biased. Another function of organizational surveys is to measure program evaluation. Offering incentives to increase responses that will be used for program evaluation may also bias the evaluation.

Differences Between Respondents and Non-Respondents

Research has also been conducted on how survey respondents differ from non-respondents. This section will review several studies that have been conducted on this topic.

Researchers have examined the characteristics of respondents and non-respondents (Dreher, 1977; Gannon, Northern, and Carroll, 1971; Pace, 1939; Schwirian & Blaine, 1966). Dreher (1977) sampled 1,400 employees of a national oil company by administering a survey on compensation issues. Comparing the demographic and work- related variables of respondents and non-respondents, the only statistically significant difference he found was that respondents had higher performance ratings than non-respondents. Gannon, Northern, and Carroll (1971)

also found that respondents were better performers in their study of 552 cashiers at a supermarket chain. They also found that respondents were more likely to be female, well educated and older than non-respondents. In a study of university alumni, Pace (1939) found no differences between early and late respondents on job satisfaction. Finally, Schwirian and Blaine (1966) found that respondents to the first administration of a survey of United Automobile Workers Union differed from those who responded to the second administration of the survey. Specifically, respondents to the first survey were more satisfied with their jobs and had more positive union attitudes than those who responded to the second administration of the survey. Also, these researchers assessed respondents' political activities and found that respondents to the first survey were more likely to have written a congressman and discussed politics with others. This is an important finding in that if survey response is an OCB, these types of behaviors are related to civic virtue OCB which will be discussed in a later chapter.

Although these studies do uncover some interesting differences between respondents and non-respondents, it is important to re-examine these differences with a contemporary sample of workers. Since they were conducted at least 20 years ago, organizational surveys may not have been as important. Further, the Pace and Schwirian studies technically were not organizational surveys, they were research surveys, and employees may have had different motivations for not responding. That is, employees may benefit from organizational surveys that lead to follow-up interventions and action planning, which result from survey findings. Despite these limitations, the studies did result in some important findings, including the fact that

respondents and non-respondents do differ in some attributes.

Rogelberg et al. (1999) conducted a recent study that examined the differences between respondents and non-respondents to an organizational survey. They examined the attitudinal differences between individuals who refused to respond to an organizational survey and those who agreed. Using a cross section of employees from various organizations, the researchers initially presented a survey kit to participants and then asked them if they would respond to the survey when at work. Subsequently, job attitudes were assessed using a post-research survey. The survey kit included a cover letter, the actual survey instrument and a return envelope. Those who agreed to respond to the survey were categorized as compliants, and those who refused were categorized as non-compliants (actual response was not measured). After being presented with the survey packet, employees were asked a series of attitudinal questions about job satisfaction, organizational commitment, intentions to quit and beliefs about organizational use of survey data.

The results of the study indicated that non-compliants were less satisfied, less committed to their organization and had greater intentions to quit than compliants. Further, non-compliants had less positive beliefs about the organization's use of survey results than compliants. This is an important study in that it examined job attitudes and response rates using actual employees, whereas previous research on survey response was based on public opinion and consumer surveys. Another important contribution is the theoretical framework the researchers give for the observed relationships. They state "taken together, it appears that completing an employee attitude survey can be thought of as an OCB if one believes that data

collected from the survey, in the aggregate, work to improve organizational functioning" (p. 5). As reviewed earlier, organizational surveys can lead to improvements in organizational functioning by pinpointing areas of concern, observing long-term trends, monitoring program impact, providing input for future decisions, adding a communication channel, performing organizational behavior research, assisting in organizational change and improvement, and providing symbolic communication (Kraut, 1996).

However, there are some limitations to this study. Employees were asked about their intention to respond, while actual response was not measured. The notion of using intention as the sole measure of survey response is a major limitation. The authors state "our study assumes that intentions can predict actual survey noncompliance. Unfortunately, the actual validity of a survey compliance intention is unknown" (p.11). The researchers do give a rationale for using intentions, as well as a framework for understanding how intentions are related to actual behavior. They cite a meta-analysis by Kim and Hunter (1993) that found when intentions were specific and based on a well-defined contextual and time framework, the relationship between behavior and intention was very strong ($r = .94$). In their study, they did provide a specific context by providing a sample survey and asking respondents whether they were able to imagine themselves at work when they were asked to respond to the survey.

Further, based on the survey research reviewed earlier, survey response is also related to a set of survey administration variables. That is, employees may or may not respond to a survey because of their attitudes as well as the characteristics of the

survey administration process (e.g., length of survey or incentive to participate). This warrants examining attitudes and survey related variables simultaneously.

Another limitation of this study is that they did not actually measure OCB which is necessary in order to establish survey response as an OCB. Further, as the chapter on OCB will reveal, the OCB construct is multidimensional. What is it exactly about the act of responding to a survey that qualifies this behavior as an OCB? Further, Rogelberg et al. state that by collecting survey intent and job satisfaction at the same time, the former might have biased respondents to the latter. That is, through cognitive rationalization, respondents may have rationalized their dislike for the organization by refusing to participate in the survey. This may have lead to an enhanced sense of dissatisfaction with the organization.

In their discussion section, the authors describe an unpublished follow-up study they conducted with students who were asked to respond to an organizational survey from the university. They found that compliants who intended to and did respond to the survey were most satisfied, and non-compliants that did not respond were most dissatisfied. However, these results are based on a very small sample size (n= 32), which limits the testing of statistical significance, and the use of students limits generalizability. Most students have predefined service terms with their "employing" organization. Further, the nature of the relationship between a university and its students is different from the one between an employee and employer. The employee-employer relationship can be characterized as transactional where employees offer their services in return for remuneration. The student-university relationship is also transactional; students pay (through tuition) for the services of the

university (education). Although they are both transactions, the student-university relationship is more similar to a customer who pays for goods or services than an employee who offers services for pay and benefits.

Summary of Literature on Survey Response

With the exception of a few studies (e.g., Rogelberg et. al, 1999), the virtual absence of organizational surveys in response rate studies is pervasive. That is, most survey response rate research has been conducted on public opinion or consumer surveys. For example, between two meta-analyses conducted by Church (1993) and Armstrong and Lusk (1987), only a handful of studies included in the meta-analysis were conducted using employee attitude surveys.

Most of these studies were conducted using the response rates of general public opinion surveys. For example, in an article on how to increase response rates to mail surveys, Luong and Rogelberg (1998) summarize the results of various response rate studies, some of which were reviewed earlier. These studies include both meta-analyses and individual studies. Again, most, if not all, of the studies were conducted on general opinion surveys, not organizational surveys.

Most of the research on response rates has been atheoretical (i.e., concerned with empirical relationships, and not the underlying rationale or theory for those relationships). The study by Rogelberg et al. highlights that survey response may be an OCB, however, this was not established by actually measuring OCB and survey response together. According to Luong and Rogelberg (1998) most of these studies appear to be a "tag-on" to some other research investigation, and response rate facilitation techniques are usually studied in isolation of other techniques. Therefore,

the combined effects of these techniques are not clear. Recent research on OCB may be helpful in understanding response rates to organizational surveys.

Therefore, establishing survey response as an OCB is warranted for three reasons: 1) organizational surveys have grown in importance 2) previous response rate research was conducted using non-organizational surveys (e.g., public opinion surveys) 3) most of this research has been atheoretical.

CHAPTER 3

Organizational Citizenship Behavior

As previously stated, the main thesis of this paper is that responding to an organizational survey is an OCB. This chapter will review the literature on OCB, including earlier and more recent definitions of the construct, various dimensions of OCB (including civic virtue OCB), and antecedents of both OCB and the constructs related to OCB.

Early Conceptualizations of OCB

Organizational citizenship behavior refers to activities that are not formally part of an employee's job description, but contribute to organizational effectiveness (Organ 1988a). Organ defines OCBs as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate, promotes the effective functioning of the organization" (1988a, p. 4). Bateman and Organ (1983) give such examples of OCBs as: helping coworkers with job-related problems, accepting orders without a fuss, tolerating temporary impositions without complaint, helping to keep the work area clean and uncluttered, making timely and constructive statements about the work unit or its head to outsiders, promoting a work climate that is tolerable and minimizes the distraction created by interpersonal conflict, and protecting and conserving organizational resources. They point out that OCBs are important because these behaviors "lubricate the social machinery of the organization but do not directly inhere in the usual notion of task performance" (p.588). This is so because when employees engage in OCBs, organizational resources are freed up, letting managers focus their efforts on issues

related to the technical core of the organization.

Smith, Organ and Near (1983) have demonstrated that at least two factors make up the OCB construct. Altruism refers to citizenship toward individuals, and compliance, the less personal factor, reflects citizenship behavior toward organizations. Examples of altruism include helping other employees and sharing information, whereas compliance behaviors include exemplary attendance and respect for company property (Organ and Ryan, 1995). Organ (1988) has also uncovered other domains of OCB such as courtesy (gestures taken to help prevent coworkers' problems) sportsmanship (demonstrating willingness to put up with minor inconveniences without complaining) and civic virtue (responsibly participating in the political aspects of the organization). This last domain of OCB has been developed mainly by Graham (Graham, 1991; Van Dyne, Graham, and Dienesch, 1994), whose discussion of OCB from a civic virtue/political perspective includes such behaviors as obedience, loyalty and participation. Responding to an organizational survey most typifies the civic virtue dimension of OCB.

Organ (1988a) states that civic virtue is arguably the most admirable form of OCB, because this behavior may not necessarily be appreciated by management immediately, and hence carries a potential personal cost.

Graham's (1991) civic citizenship includes both what may be considered in-role and extra-role behavior. It includes all positive community-relevant behaviors of individual citizens. She further argues that OCB is a global concept that includes all positive organizationally-relevant behaviors of individual organization members. Further, according to Graham (in press), OCB in the form of civic virtue or

organizational civic virtue includes both affiliative and challenging behaviors. Some examples she gives include:

> "keeping informed about issues relevant to the organization's ability to serve its stakeholders, and expressing sentiment about those issues, even if that means challenging the status quo, as long as it is done in a constructive way; coming to meetings, and asking hard questions or supporting an unpopular view; serving on committees, and challenging groupthink tendencies; encouraging others to be more politically active, and even to engage in principled dissent, when serving true justice requires it." (p.20 -21)

Graham (1991) applied political theory to the organizational citizenship construct and revealed that civic citizens have both rights and responsibilities. The former, rights, varies from time to time and place to place, as well as across groups of citizens. She cites Marshall (1965), who, after reviewing three centuries of English history, identified three categories of rights – civil, which includes such rights as legal protection of life, liberty and property, political, which includes participation in decision making and social, which includes adequate levels of socioeconomic benefits. Graham then extends Marshall's taxonomy of rights to organizational life:

> "Organizational civil rights would include fair treatment in routine personnel matters (hiring, assignment, evaluation, etc.), and also guarantees of due process when problems arise (e.g., grievance investigation and disciplinary proceedings). Political rights would include the ability to participate in decision making both about current operational matters, and about broader organizational policies, objectives, and spending plans. Social rights would include economic benefits (regular salary/wages, bonuses, insurance, pensions, etc.), social status symbols, and training/educational opportunities." (p.253-254).

The second aspect of civic behavior is responsibilities, and these are synonymous with citizenship behaviors (Graham, 1991). By reviewing classical philosophy and modern political theory literature, Graham uncovers three categories

of citizen responsibilities: obedience, loyalty, and participation. In the political realm, obedience refers to the responsibility for obeying laws that protect citizens, loyalty refers to the individual welfare functions that include the interests of others, the state as a whole, and the values it embodies, and participation refers to citizenship responsibilities that concern participation in government.

Graham then extends these categories to citizenship behaviors in organizations by paraphrasing Inkeles' (1969) summary descriptions of these three terms. Organizational obedience typifies such behaviors and characteristics as respect for rules and instructions, punctuality in attendance and task completion, and stewardship of organizational resources. Organizational loyalty is the identification with and allegiance to leadership and the organization. Some behaviors in this category include defending the organization against threats, contributing to its good reputation and cooperating with others to serve the interests of the whole. Organizational participation taps into interest in organizational affairs guided by ideal standards of virtue, which is validated by keeping informed and expressed through full and responsible involvement in organizational governance. Organizational participation behaviors include attending nonrequired meetings, sharing informed opinions and new ideas with others, and being willing to deliver bad news or support an unpopular view to combat groupthink. The participation dimension of citizenship behavior provides a strong conceptual framework for understanding how organizational survey response is an OCB.

In a recent study, Van Dyne, Graham and Dienesch (1994) tested the construct validity of the civic virtue OCB. They factor analyzed the responses of 538

employees to a 54 item OCB scale. This measure contained items purported to tap the three dimensions of civic virtue OCB – obedience, loyalty and participation. The factor analysis revealed five factors. The first two measured obedience and loyalty, and the last three represented three facets of participation – social participation, advocacy participation and functional participation.

Social participation refers to behaviors "that are noncontroversial and that involve interaction with other individuals" (p. 780). Examples of social participation include attending meetings, having positive communication with others and being involved in other affiliative group activities. The advocacy participation factor reflects behaviors that concern "innovation, maintaining high standards, challenging others, and making suggestions for change – behaviors targeted at other members of an organization and reflecting a willingness to be controversial" (p.780). The authors refer to employees who partake in advocacy participation as typical internal change agents. The final participation factor, functional participation, "describes a form of participatory contribution in which individuals focus on themselves rather than others in their organizations but yet contribute to organizational effectiveness." (p.781). Examples of this type of participation include performing additional work activities, self-development and volunteering for special assignments. Functional participation behaviors are typical of a committed individual, who adds values to organizational functioning through self-development and participation. These three facets of participation show links to the act of responding to a survey.

These factors were based on 37 of the 54 items. Seventeen items were dropped from the analysis because they did not clearly load on any particular factor.

The remaining 37 items were submitted to confirmatory factor analysis. A model with 34 of the 37 items indicated a good fit (goodness-of-fit index of .76, Joreskog and Sorbom, 1989) for a five factor model.

More Recent Interpretations/Conceptualizations of OCB

More recently, Organ (1997) reexamined the original definition of OCB in the context of today's world of work and some recent research findings. The article titled "Organizational citizenship behavior: It's construct clean-up time" clearly exemplifies his goal to do so. He revisits the definition of OCB by highlighting some definitional problems that emerge based on recent OCB research.

One definitional problem Organ (1997) brings up is the discretionary and extra-role, nature of OCB. The nature or concept of the job in today's changing workplace makes it difficult to pinpoint which behaviors are in-role and which are extra-role. For example, Organ says that "the job will be whatever is required in the person's workplace, contingent on the necessary training having been provided". Others have pointed this out as well. Cascio (1995) explains how work itself will be redefined, and there will be a growing disappearance of the job as a fixed bundle of tasks, and increased emphasis on constantly changing work in order to fulfill the ever-increasing demands of customers.

With the increased changes in the job itself, this distinction between extra-role and in-role behavior becomes cloudy. This distinction is one of the basic assumptions of OCB theory. Empirical evidence also supports the lack of a clear distinction of OCB behaviors as extra-role. Morrison (1994) conducted a study to test the boundary between OCB and in-role behavior. One major assumption of OCB researchers

Morrison discusses is that the boundary between in-role and extra-role behavior is agreed upon and clearly defined.

It is also assumed that OCB is the same for all employees. Morrison cites research on role making (Graen, 1976) that has found that roles in organizations are rarely fixed, and that role perceptions evolve as employees and supervisors negotiate the scope of work activities. Research on psychological contracts (Rousseau, 1989) suggests that most employees' understanding of their employment obligation differs from their employers' understanding of the same obligations. Social information processing theory has also proposed that jobs are cognitive constructions created by employees and employers to make sense of social and behavioral cues (Salanick & Pfeffer, 1978).

Citing these three research areas as rationales for examining whether employees view OCBs as in-role or extra-role, Morrison collected data from clerical workers in a medical center. She gave them a list of activities that were based on OCB measures used by previous OCB studies (Fahr, Posdakoff, and Organ, 1990; Moorman, 1991; Niehoff & Moorman, 1993; O'Reilly & Chatman, 1986; Posdakoff et al, 1990, Smith et al, 1983). These items reflected the five dimensions of OCB that Organ (1988) described – altruism, conscientiousness, civic virtue, sportsmanship and courtesy, and were rated on a dichotomous level such that study participants indicated whether they viewed the behavior as "expected as part of your job" or "as somewhat above and beyond what is expected for your job" (p.1549).

Of the twenty items rated, only two items were viewed as in-role by less than 50% of the respondents. That is, only two activities were viewed as extra-role more

than in-role. Nine of the twenty OCB items were viewed as in-role behavior by 70% or more of the respondents. Further, Morrison's study revealed that supervisors and subordinates had different views on whether these activities were in-role or extra-role. Almost all of the correlations between supervisor and subordinate ratings of the OCB items were weak, nonsignificant and negative. The only significant relationship was for one item on not spending time in nonwork-related conversation ($r = -.15$, given the .05 level of significance, and the number of correlations computed this finding can be attributed to chance). These results support the fact that supervisors and subordinates have different views on whether OCB behaviors are in-role or extra-role.

Another area of criticism which Organ highlights concerns the reward aspect of the definition. OCB was originally conceptualized as behavior that is not explicitly recognized by the formal reward system. However, research by Orr, Sackett and Mercer (1989) demonstrates that managers do put a dollar value on some OCBs. Additional research by Posdakoff and Mackenzie (1994), Mackenzie, Posdakoff, and Fetter (1991) and Werner (1994) show that some OCBs are just as likely to be rewarded as other in-role behaviors.

Given some of the conceptual difficulties regarding OCB, perhaps as Organ recommends, it should be viewed along the lines of prosocial behavior or contextual performance. According to Borman and Motowidlo (1993), contextual performance is characterized by "behaviors that do not support the technical core itself so much as they support the broader organizational, social and psychological environment in which the technical core must function" (p. 73). By using this conceptualization of contextual performance, concerns over the unclear distinction between extra- and in-

role status or issues of reward contingency diminish. The only objection Organ has with contextual performance is that its name "simply strikes [him] as cold, gray, and bloodless" (p. 91). Although this last point may have been made light-heartedly, we should consider the implications a name has for both researchers and practitioners. Using the term organizational citizenship behavior to describe why people respond to a survey portrays a more powerful message and makes a clearer point than contextual performance. Thus, in the current study, I will use Organ's (1997) conceptualization of organizational citizenship behavior: contributions to the maintenance and enhancement of social and psychological context that supports task performance. As Organ (1997) points out, this notion of contextual performance is nothing new. If we look at some of the distinctions that group and organizational researchers have made over the years, similar dichotomies emerge such as Bales' lab studies of group behavior demonstrating two types of roles – task and maintenance (Bales and Slater, 1955). Fleishman studied leadership and showed that there are two factors to leadership behavior – initiating structure (task related) and consideration (contextual) (Fleishman, Harris, and Burtt, 1955). Katz and Kahn (1966) also made this distinction between production systems (task related) and maintenance, political and adaptive systems (contextual).

Antecedents of OCB

This section of the chapter will review the antecedents of OCB. The antecedents of OCB are important to examine because if responding to an organizational survey is an OCB, then some of these OCB antecedents will also predict survey response.

Antecedents of OCB include attitudinal variables (e.g., Bateman and Organ, 1983), personality variables (e.g., Smith, et. al, 1983 and Organ, 1994), and demographic variables (e.g., Smith, et. al, 1983). Attitudinal research has centered on such constructs as job satisfaction, organizational commitment and leader fairness. Personality studies include such traits as conscientiousness and agreeableness (Organ and Ryan, 1995). Demographic research includes such variables as age, education, urban/rural background, gender, tenure and birth order (Smith, et. al, 1983).

The relationships among survey response, job attitudes and OCB will be the main focus of this study and this next section will review the research on how attitudinal variables relate to OCB. Mainly, job satisfaction has emerged as a significant predictor of OCB. For example, Bateman and Organ (1983) report a correlation of .41 between job satisfaction (as measured by the JDI) and supervisor ratings of OCB using a sample of nonacademic university employees. When examining the relationship between specific types of OCB, we also see positive relationships between satisfaction and both altruism and compliance. Smith, Organ and Near (1983) found a correlation of .31 between altruism and satisfaction and a correlation of .21 between compliance and satisfaction. When examining the causal links among these and other variables, satisfaction linked with altruism but not compliance (using cross-lagged analysis).

Organ (1988b) gives a social exchange rationale (Blau, 1964) for the observed relationships between OCB and job satisfaction:

> Individuals will feel bound by the norm of reciprocity when given the resources, treatment and opportunities that induce satisfaction. Furthermore,

> given the constraints exerted by technology, work flow, and individual skills on productivity, they frequently will choose to reciprocate in the form of such citizenship behaviors as cooperating, supportiveness of the supervisor, helping behaviors, and gestures that enhance the reputation of the work unit internal and external to the organization (p. 548).

More recently, a meta-analysis by Organ and Ryan (1995) revealed that global job satisfaction, organizational commitment and perceptions of leader fairness are all related to both altruism and compliance measures of OCB.

Van Dyne, Graham, and Dienesch (1994) hypothesized that the antecedents of OCB were mediated through a covenantal relationship between the employee and the organization. They describe the covenantal relationship as being characterized by open-ended commitment, mutual trust and shared values. A covenantal relationship is one in which "partners do not automatically live happily ever after, but they are bound by covenant to struggle toward such an end" (Elazar, 1980, p.10 as cited by Van Dyne et al.). Accordingly, based on DePree (1989), covenants are relationships of mutual commitment in which specific behaviors that are required to maintain the relationship or pursue common ends are not specifiable in advance.

In this study, Van Dyne et al. hypothesized that the relationships between antecedents of OCB and OCB are mediated through a covenantal relationship. They administered measures of various OCB antecedents typical of those used by other OCB researchers. These antecedents can be grouped into three categories – personal factors, which include positive job attitudes and cynicism, perceived situational factors such as workplace values and job characteristics and positional factors like

tenure and job level.

To test the hypothesized nomological network, these researchers used meditated regression analysis (Baron and Kenny, 1986). The results of their analysis revealed that the covenantal relationship mediated the relationship between antecedents of citizenship behavior and four of the five citizenship behavior categories – loyalty, functional participation, social participation and advocacy participation.

Antecedents of Constructs Related to OCB

Constructs closely related to OCB also share similar antecedents. This section will review the literature on constructs related to OCB, with specific attention to their antecedents. Two constructs that share similarities with OCB are prosocial organizational behavior and voice behavior.

Prosocial Behavior and Voice

According to Brief and Motowidlo (1986), prosocial organizational behavior (POB) is "behavior which is a) performed by a member of an organization b) directed toward an individual, group, or organization with who he or she interacts with while carrying out his or her organizational role, and c) performed with the intention of promotion the welfare of the individual, group or organization toward which it is directed" (p.711).

Brief and Motowidlo (1986) give 13 categories of organizational activities as examples of POB. These categories are: assisting coworkers with job-related matters, assisting coworkers with personal matters, showing leniency in personnel decisions, providing services or products to consumers in organizationally consistent

ways, providing services or products to consumers in organizationally inconsistent ways, helping consumers with personal matters unrelated to organizational services or products, complying with organizational values, policies and regulations, suggesting procedural, administrative, or organizational improvements, objecting to improper directives, procedures, or policies, putting forth extra effort on the job, volunteering for additional assignments, staying with the organization despite temporary hardships and representing the organization favorably to outsiders.

Responding to an organizational survey can qualify for at least two of the thirteen categories of POB: suggesting procedural, administrative or organizational improvements, and volunteering for additional assignments.

Brief and Motowidlo also discuss the antecedents of POB. Some of these are similar to those established by OCB researchers. These authors make a distinction between antecedents that are individually-based (e.g., personal characteristics like job satisfaction and education level) and contextually-based antecedents (e.g., norms, group cohesiveness, leadership style and organizational climate). The latter would be helpful in explaining group differences in POB and OCB. That is, organizational subunits might differ on displaying an OCB or POB because of contextual factors, like an organizational climate for POB or a strong sense of group cohesiveness. According to Brief and Motowidlo, organizational climate is a broad and general concept that captures some of the other contextual antecedents of POB such as norms, cohesiveness, reinforcement and prosocial role models. Specifically, "an organizational climate characterized by warmth, friendliness, supportiveness, and cooperation is probably one in which there are norms of reciprocity, high levels of

group cohesiveness, formal and informal reinforcement contingencies, which reward prosocial acts, and role model behaving prosocially." These authors refer to Schneider's (1975) suggestion that an organization's climate affects the behavior of its members because they try to "adapt to achieve some kind of homeostatic balance with their psychological environment (1975, p. 453)." Therefore, it should follow that a warm, friendly, supportive and cooperative climate will probably induce some sort of prosocial behavior, such as responding to an organizational survey.

Puffer (1987) conducted a study on prosocial behavior, noncompliant behavior and work performance using commissioned salespeople as subjects. Her study tested three explanations for prosocial behavior and noncompliant behavior. The three antecedents were achievement and autonomy motives, personal security and reciprocity norms (measured through satisfaction with material rewards). The results of this study demonstrated slightly moderate relationships between need for achievement and prosocial behavior ($r=.13$, $p<.10$), a negative relationship between need for autonomy and prosocial behavior ($r= -.18$, $p<.05$), and a slightly stronger relationship between satisfaction with material rewards and POB ($r = .27$, $p<.05$).

Voice, another construct related to OCB, is anteceded by job satisfaction. Van Dyne and LePine (1998) define voice as "nonrequired behavior that emphasizes expression of constructive challenge with an intent to improve rather than merely criticize." (p. 109). This construct is related to OCB in that it emphasizes nonrequired behavior and an intention to help, rather than just criticize. Survey response may be considered "voice" behavior in that responding to an organizational survey is nonrequired behavior that may constructively challenge the way things are done, with

intent to improve. Open-ended questions asking respondents to give suggestions for improving an organization are especially related to, or they typify voice.

LePine and Van Dyne (1998) tested the antecedents of voice behavior and found that satisfaction with work group accounts for additional variability in voice behavior above and beyond demographic variables (i.e., gender, ethnicity, and education). Responding to an organizational survey can be viewed as a form of voice behavior – it is a nonrequired activity that can include expressions of constructive challenge (e.g., suggestions for change).

Survey Response is an OCB

The various definitions of OCB help us understand how responding to an organizational survey may be an OCB. The specific dimension of civic virtue OCB, and its subdimensions, also highlight how survey response may be an OCB. Further, more recent definitions of OCB (e.g., Organ, 1997) and the growing importance of organizational surveys in improving organizational effectiveness also highlight how survey response may be an OCB.

One example of OCB is voluntarily participating in an organizational survey. It is not part of an employee's formal job description (whatever that might be), but does contribute to organizational functioning. Further, given Graham's work on civic virtue OCB, we can see a clear link between the participation dimension of CVOCB and survey response. That is, responding to a survey exemplifies behaviors similar to participatory CVOCB. For example, one of the subdimensions of participatory OCB, advocacy participation, reflects behaviors that concern "innovation, maintaining high

standards, challenging others, and making suggestions for change- behaviors targeted at other members of an organization and reflecting a willingness to be controversial" (Van Dyne, Graham and Dienesch, 1994, p.780).

Given Organ's more recent conceptualization of the OCB construct, responding to an organizational survey may also contribute to the maintenance and enhancement of the social and psychological context that supports task performance. By responding to a survey and sharing opinions, employees are lubricating the social machinery of the organization. As Kraut (1996) points out, responses to a survey can be used to pinpoint areas of concern, observe long term trends, monitor program impact, provide input for future decisions, add a communication channel, perform organizational behavior research, assist in organizational change and improvement and provide symbolic communication. Also, according to Edwards, et al. (1997), survey results are used to gather information, improve communication and evaluate the effectiveness of organizational change.

These functions clearly contribute to the maintenance and enhancement of the social and psychological contexts that support task performance, as well as lubricate the social machinery of the organization. For example, by understanding how communication can be improved, management may be able to improve the social and psychological context by providing information to employees in an understandable manner.

One consistent predictor of OCB is job satisfaction (Bateman and Organ, 1983; Smith, et. al, 1983; Organ, 1994; Organ and Ryan, 1995). If responding to a survey is an OCB, then job satisfaction should predict survey response. Also,

applying the findings of prosocial organizational behavior and voice research to survey response provides a rationale for a relationship between job satisfaction and survey response.

When surveys have adequate response rates, organizations are better able to assess employee attitudes, react to them, and use the information to improve the organization. Further, response rates are an important credibility-building aspect of organizational surveys. As previously mentioned, Luong and Rogelberg (1998) and others have stated that nonresponse can threaten or reduce the credibility of a survey study's findings.

CHAPTER 4

Present Investigations

Given the growing importance of organizational surveys, the lack of a well-developed survey response rate research literature using organizational surveys and a need for theory driven research on response rates, a study of the drivers of responding to organizational surveys is warranted. Thus, a series of studies were conducted to examine survey response within an OCB framework. More specifically, these studies focused on whether survey response behavior is an OCB, and which, if any, OCB-related job attitudes are related to survey response behavior. In order to have the most representative measure of survey response, actual response behavior on actual organizational surveys were used for most of these studies.

Previous research has demonstrated a relationship between job attitudes and OCB. If survey response is an OCB, then relationships between job attitudes and survey response should emerge. Further, research has shown that survey response is a function of survey administration variables (e.g., Yammarino et al. 1991; Church, 1993). Therefore, it is important to evaluate the amount of variability accounted for by survey administration variables and job attitude variables with regard to survey response. Figure 1 depicts a conceptual model for the proposed research.

Study 1

The first study attempted to establish survey response as an OCB. That is, this study tested whether the construct of responding to an organizational survey was an OCB. Specifically, intent to respond to an organizational survey and past survey

response behavior were measured along with multiple measures of OCB, including civic virtue OCB (CVOCB), job attitudes and attitudes toward organizational surveys.

Hypotheses

Hypothesis 1: Employees with higher levels of OCB will be more likely to respond to a survey than employees with lower levels of OCB.

Hypothesis 2: Responding to a survey will be more strongly related to CVOCB than other dimensions of OCB.

Participants and Procedure

Two hundred and fourteen working graduate and undergraduate students were sampled for this study. Participants' tenure ranged from 1 month to 20 years, with an average tenure of 3.1 years (SD = 3.5). Seventy-eight percent worked full-time, 22% part-time; the average respondent was 28.5 years old (SD = 6.5), ranging from 19 to 49 years old; 60% of the respondents were female; and most respondents were either nonexempt administrative, clerical or technical (27%), or exempt, nonmanagement (38%). Eleven percent of the participants held second level management positions or higher, 14% were first line managers and 10% were nonexempt support, clerical or manufacturing positions.

In order to avoid biased responses due to collecting data at the same time (e.g., cognitive rationalization, Rogelberg et al., 1999), collecting data at two times was facilitated by using a student sample. Cognitive rationalization can impact this study's results if respondents were asked about their intention to respond and their job attitudes at the same time. Their awareness of their low OCB or negative job attitudes may have led respondents to cognitively rationalize their intention, or lack thereof, to

respond to the organizational survey, thus leading to spurious relationships. As Rogelberg et al. (1999) point out, their study asked questions about job satisfaction and survey intent at the same time, so the data may have been biased through cognitive rationalization. By using a student sample, which lends itself to multiple data collection occasions, cognitive rationalization was reduced since subjects were not asked about their intention to respond to the survey, their job attitudes and OCB at the same time.

Measures

Organizational Citizenship Behavior

Van Dyne's et al. (1994) civic virtue measure of OCB was used because conceptually, its participation components are the most related to the act of responding to an organizational survey (see Table 1). Van Dyne et al. (1994) validated this measure and reported internal consistency coefficients of .68 for social participation, .86 for advocacy participation and .75 for functional participation. Further, other measures of OCB were adopted from MacKenzie, Podsakoff, and Fetter, 1993 (Table 2). Based on the results of three studies, MacKenzie et al. reported coefficient alphas of .70 to .78 for civic virtue, .79 to .86 for sportsmanship, .71 to .88 for altruism and .60 to .80 for conscientiousness.

Job Attitudes

Such job attitudes as organizational commitment, job satisfaction and intent to leave were used. Allen and Meyer's (1990) affective commitment scale was used to measure organizational commitment (Table 3). Meyer, Smith and Allen (1993) report a coefficient alpha of .82. Job satisfaction was measured using two scales – Hackman

and Oldham (1975) and Warr, Cook and Wall (1979) (Tables 4 and 5). Hackman and Oldham (1975) report internal consistency reliability of .76 in an investigation of 658 employees across seven organizations. Warr, Cook and Wall, 1979 report coefficient alphas ranging from .85 to .88 across two samples of 200 and 390 subjects, as well as a test-retest correlation of .63 across six months for their job satisfaction measure. An intent to leave item was included in this measure as well (Table 6).

Demographic Variables

Demographic variables such as length of service, work status and age were also measured. A complete list of these variables is listed in Table 7.

Survey Response and Attitudes toward Organizational Surveys

Intent to respond and attitudes toward organizational surveys were measured with the items in Table 8. These items were crafted specifically for this study.

Administration

At time one, civic virtue OCB (CVOCB) was measured by asking employees to give self-ratings. Job satisfaction and other job attitudes were also measured at this time using the same method. At time two, participants were given a survey kit and were asked to imagine themselves at work, and then asked about their willingness to respond to this survey. An actual survey packet was given so that subjects were able to have something to refer to when they were asked about their willingness to respond. This also facilitated the salience of the situation for intention-behavior link. After they answered this question, they were asked about their attitudes toward organizational surveys and their past survey response behavior (Table 8). In order to reduce the potential for sequence effects, approximately half of the subjects received

the OCB and job attitudes condition first, and the other half received the survey kit and intent to respond/attitudes toward survey questions first.

Analysis

Several regression analyses were conducted. To test for convergent validity, regression analysis was conducted to predict survey response using OCB measures and job attitudes. Secondly, the same predictors were used to predict past survey behavior. One way to establish construct validity is through factor analysis (Anastasi, 1982). By observing patterns of factor loadings among different measures, whether or not survey response is an OCB can be established. According to Anastasi, construct validity is the extent to which a measure or instrument measures a theoretical construct or trait. In the case of Study 1, the measures in question are OCB, survey response, job attitudes and attitudes toward surveys. Exploratory factor analysis was conducted, and the factor loadings were examined to determine whether survey response is an OCB.

Results

Means, standard deviations and internal consistency estimates are presented in Table 9. Intercorrelations among variables are presented in Table 10. With the exception of social participation, all scales demonstrated adequate levels of reliability.

Hypothesis 1: To test Hypothesis 1, subjects with higher levels of OCB will be more likely to respond to a survey, several regression analyses were conducted. In the first analysis, the various measures of OCB and other job attitudes (job satisfaction and commitment) were entered as the independent variables, and intent to respond to an organizational survey was entered as the dependent variable. Using the backward

method of entering predictors, conscientiousness OCB and two dimensions of the participation dimension of civic virtue OCB (social participation and functional participation) emerged as significant predictors of intent to respond (Table 11 displays regression weights). However, the weight for social participation was in the opposite direction with a negative weight. This regression model accounted for 6% of the variance in intent to respond. These results support Hypothesis 1, subjects with higher rates of conscientiousness and functional participation OCB were more likely to respond to a survey. However, social participation was also related to survey response, but in the opposite direction.

To examine whether OCB predicts past survey behavior, a second regression analysis was conducted. The same predictors were entered using the backward method, and the number of past surveys in which subjects participated was used as the dependent variable. The results indicated that conscientiousness OCB was again a predictor of survey response, this time of past survey response (see Table 12). This regression model accounted for 3% of the variance in past survey participation behavior. This analysis further supports Hypothesis 1, subjects with higher rates of conscientiousness OCB responded to more surveys in the past.

To assess the role of attitudes toward organizational surveys in predicting survey response in conjunction with OCB measures, a third regression analysis was conducted. The three significant OCB measures – conscientiousness, social participation and functional participation, were entered as independent variables along with attitudes toward organizational surveys (see Table 8). The following survey-related attitudes were significantly related to intent to respond – others would respond

and surveys are a good idea. Only the conscientiousness dimension of OCB retained its significance in predicting survey response. This regression model accounted for 28% of intent to respond to a survey (see Table 13). This analysis partially supports Hypothesis 1 in that survey response was predicted by conscientiousness OCB as well as attitudes related to organizational surveys. On examining the regression weights, survey-related attitudes have the highest weights, specifically, the attitude that others would respond to the survey emerged with a standardized beta of .40 and surveys are a good idea had a standardized beta of .19. Conscientiousness OCB emerged with the lowest weight of .13. Given these regression weights and the greater amount of variance accounted for by these predictors, we see that survey response, although related to OCB, is more strongly related to attitudes related to organizational surveys.

To predict past survey response with conscientiousness and survey-related attitudes, a fourth regression analysis was conducted. Conscientiousness and the belief that organizations have a right to ask survey questions were significant predictors of past survey response. Unlike the previous regression model predicting intent to respond with OCB and survey related attitudes, these two variables accounted for just 4% of past survey response (see Table 14).

Altogether, these analyses partially support Hypothesis 1 in that intention to respond to a survey and past survey response are related to OCB measures, not job attitudes. However, once attitudes toward surveys are used as predictors, we see that these attitudes have greater predictive power (i.e., larger regression weights) than OCB predictors. The model predicting intent to respond with survey related attitudes and OCB also accounts for much more variance than all of the other models. This

demonstrates that survey response can be best explained by OCB and attitudes related to organizational surveys. Given that these attitudes relate to a general positive feeling about surveys (surveys are a good idea), and that this is probably impacted by what an organization does during and following a survey (i.e., acting on survey results and communicating follow-up actions), there are implications for practitioners, which will be discussed in Chapter 5.

Hypothesis 2: To test Hypothesis 2, survey response is an OCB, factor analysis was conducted. Measures of OCB, intent to respond to a survey, past survey response behavior and attitudes toward surveys were entered in an exploratory factor analysis. Three factors were extracted using the maximum likelihood method and an oblique rotation. Table 15 lists the factors and factor loadings for this analysis. Although the regression analysis revealed that OCB and survey response were related, the factor analysis revealed that intention to respond to an organizational survey and past survey response are not OCBs, but rather loaded on a factor related to responding to organizational surveys. Thus, Hypothesis 2 is not supported.

Although not part of the initial hypotheses, the correlations between intention to respond and attitudes related to organizational surveys provide some important findings. On examining the zero-order correlation matrix (Table 10), we see that several attitudes toward organizational surveys are related to intent to respond to surveys. Specifically, the following items were significantly related to intention to respond – importance of survey topics, others would respond to the survey, managers care about results, companies have a right to ask questions and surveys are good idea. Interestingly, items related to the use of survey results (i.e., company would share

results of survey, results used constructively and responses are confidential) were not related to intention to respond. This may point to the importance of developing surveys that include important topics, providing communication before the survey, especially regarding the importance of the survey, building a climate that supports participation, and engaging managers in the survey process so that they would care about survey results.

Study 2

In Study 2, relationships between job attitudes and various measures of survey response were examined. This study addressed the relationships between job attitudes and intent to respond, item level response rates and responding to open-ended questions.

Hypotheses

Hypothesis 3: Respondents with more favorable job attitudes will have higher item level response rates than those with less favorable job attitudes.

Hypothesis 4: Respondents with more favorable job attitudes will be more willing to participate in future organizational surveys than those with less favorable job attitudes.

Hypothesis 5: Respondents with more favorable job attitudes will be more likely to answer open-ended questions than respondents with less favorable job attitudes.

Hypothesis 6: Respondents with more favorable job attitudes will be more likely to give more suggestions for improvement through open-ended questions than respondents with less favorable job attitudes.

Method

Responses to an employee attitude survey were used to test the hypotheses in Study 2. Surveys were administered to employees while at work. Once completed, employees returned the surveys for processing. The job attitude variables used in this study were created using factor analysis. By using this technique, reliable measures of job attitudes were created.

Sample

The sample consisted of 2,753 employees of a professional services organization who responded to the organizational survey. Demographically, the sample was 56% female, worked for the company an average of 1 to 5 years and the average age was between 31 and 40 years old (exact averages for tenure and age are not available since demographic variables were measured using categorical response alternatives). Further, 95% of the respondents classified themselves as full-time employees, 4% said they were reduced work week employees with benefits and 1% said they were part-time employees working fewer than 20 hours a week. Employees were dispersed throughout the United States as the organization has offices throughout the country.

Measures

Independent variables

The employee attitude survey consisted of almost 260 items, most of which were appropriate for all respondents. There were also four open-ended write-in questions and a set of questions for supervisors. A subset of items was selected for

inclusion as predictors of survey response behavior that measured the fairness of exchange between employees and the organization. Specifically, questions related to job satisfaction, career development, compensation, work-personal life balance, supervisors and decision making were used. The rationale used to select these items was the same Organ (1988) gave for the expected relationship between job satisfaction and OCB. Specifically, the relationship between job attitudes and OCB emerges from a norm of reciprocity. Organ describes how individuals will give back to their organizations if they are treated well through helping behaviors. Further, all of the items were not used as potential predictors, because some of them pertained to business issues which had less or no relevance to employee-employer relationships, and had not been included in past OCB research. Based on these rationales, 42 items were selected for inclusion in the factor analysis (Table 16 lists these items). All items were rated on a five point Likert-type scale with such anchors as agree-disagree, satisfied-dissatisfied, or frequency of occurrence. In all of these scales, lower numbered responses (i.e., 1 and 2) reflected more favorable attitudes. These items, once factor analyzed, were combined into dimensions and used as predictors of survey response behavior.

Dependent Variables

Total Missing Response (TMR)

The dependent variable of quality of response was computed by totaling the number of non-valid missing responses per respondent (TMR). A non-valid missing response was one for which no response was recorded on the survey instrument. These responses are different from, and do not include, valid missing responses such

as "not applicable" and "I don't know."

Type of TMR

The types of questions not answered were also analyzed to examine whether less satisfied employees did not answer certain types of questions more so than others. For example, questions about the respondents background/work location, supervisor and other sensitive issues may have been more likely to have been left out by less satisfied employees, since responding to these types of questions may carry a perceived risk of being identified. Questions related to employees' intentions of staying with the company and ratings of their supervisors' performance, as well as demographic questions, may be perceived as high risk.

Willingness to respond

The dependent variable of willingness to respond to future surveys was measured with the following item " I would participate in an employee survey conducted on the company's intranet". This item was rated on a five point agree-disagree scale, with "1" representing strongly agree and "5" representing strongly disagree.

Verbatim Responses

Verbatim responses were coded to reflect whether a verbatim response was given (dichotomous) to each question, and then totaled for a score of the number of open-ended questions answered. The number of words per respondent across all four questions was also computed. Yost and Homer (1999) used this measure in their study of the differences between online and paper administration of surveys.

Analysis

Multiple regression analysis was used to test these hypotheses. For Hypothesis 3, TMR was used as the dependent variable, and the job attitudes listed in Table 16 were used as the independent variables. To test Hypothesis 4, willingness to participate in an intranet employee attitude survey was entered in the regression model as the dependent variable, and the same job attitudes were entered as the independent variables.

To test Hypothesis 5, regression analysis was used to predict the number of open-ended questions answered. For Hypothesis 6, regression was used to assess whether job attitudes were related to the number of words a respondent wrote.

Results

Descriptive Statistics

Means, standard deviations and reliability estimates for the measures are given in Table 16. Overall, the job attitudes used had acceptable levels of reliability with coefficient alphas ranging from .84 to .95. On average, respondents left out 22 questions (SD = 19.72, range = 1 to 228) which may be expected of a questionnaire of this length.

Factor Analysis

The exploratory factor analysis revealed six factors that measure the following constructs: supervisor consideration, job satisfaction, pay equity, work-personal life balance and decision making efficiency. All of these factors had eigen-values greater than 1. Further, on examining the scree plot, there seems to be a drop in the plot after

the 6th factor. Altogether the six factors account for 65% of the variability in the selected items. Table 17 lists each factor and the items that load on it as well as their respective factor loadings.

Regression Analysis

Hypothesis 3: In order to test Hypothesis 3, respondents with more favorable job attitudes will have higher item level response rates, the job attitudes were entered as predictors of TMR. The items that made up these job attitudes were rated on a 5-point scale with lower numbers representing more favorable responses. Further, TMR measured the total number of missing responses, and larger numbers represent lower quality or more missing responses. Therefore, positive regression weights would support this hypothesis.

Using the backward method, job satisfaction and work-personal life balance emerged with significant regression weights. Table 18 lists the regression weights for this analysis. However, the work-personal life balance weight was in the opposite direction, thus only partially supporting the notion that responding to a survey is an OCB. Respondents who were more satisfied with their job answered more questions on the survey (lower TMR scores). Respondents who were less satisfied with work-personal balance also answered more questions on the survey (lower TMR). Supervisor consideration and decision making efficiency did not emerge as significant predictors of TMR. None of the other job attitudes emerged as significant predictors of TMR, thus partially supporting this hypothesis. Respondents' views toward supervisors and decision making were not significantly related to TMR.

Job satisfaction and work-personal life balance accounted for approximately 3% of the variability in TMR (adjusted R square of .034). Although a lot of TMR still remains to be explained, this is a good beginning. Other possible predictors will be highlighted in the discussion section.

To further test the hypothesis, the number of missing responses to questions were organized by survey topic/section (e.g., about your job, company effectiveness, manager, etc.), and category missing response scores were calculated. The same job attitudes were then used to predict the number of missing responses by survey category. Not unlike the TMR analysis findings, some predictors had relationships in the expected direction, and others in the opposite direction. Specifically, respondents with more favorable job attitudes were more likely to answer more questions in the following sections: company effectiveness, work group effectiveness, decision making, management (senior management), obstacles to effectiveness, telecommunications and financial systems, and practices. Tables 19 through 27 list the regression weights for each of the job attitudes. The only job attitudes with significant regression weights for this analysis were job satisfaction, supervisor consideration, decision making efficiency, career development and work-personal life balance. The only job attitudes with relationships in a consistent direction across different sections of the survey were job satisfaction and work-personal life balance. Respondents with higher job satisfaction answered more questions than less satisfied respondents in each of the following sections: background information (demographic questions), management, decision making and obstacles to effectiveness. Conversely, respondents with less favorable job attitudes toward work-personal life balance

answered more questions about obstacles to effectiveness and telecommunications and financial systems. The relationships between the other job attitudes and section missing responses did not have consistent findings – some of the weights were in the expected direction and others were in the opposite direction. These findings are similar to those for the other analysis conducted in this study. However, the amount of variance accounted for by job satisfaction and work-personal life balance is minimal – from .4% to 5%. This demonstrates that at times, respondents with more favorable job attitudes were more likely to answer certain types of questions than respondents with less favorable job attitudes. However, this pattern was only consistent for job satisfaction. The lack of other consistent relationships for the other job attitudes demonstrates that these job attitudes may not be important in explaining survey response behavior to specific questions, or that the direction of the relationship is contingent on the content of the section.

Hypothesis 4: To test Hypothesis 4, respondents with more favorable job attitudes will be more willing to participate in future surveys, willingness to participate in a future employee survey on the intranet was used as the dependent variable, and the same independent variables were entered into the regression analysis. The only significant predictors that emerged were job satisfaction and decision making efficiency. This model accounted for a little more than 7% of the variability in the willingness to participate measure. Table 28 lists the regression weights for this table. Both of these weights were in the expected direction. These results support the hypothesis that respondents with more favorable job attitudes, specifically, job satisfaction and decision-making efficiency, were more likely to be

willing to participate in a future survey.

Hypothesis 5: To test Hypothesis 5, respondents with more favorable job attitudes will be more likely to respond to open-ended questions, another regression analysis was conducted using number of open-ended questions answered as the dependent variable, and the same job attitudes as the independent variables. This survey contained four open-ended questions, three that asked respondents for specific suggestions to improve the organization, and one question that asked for additional comments. Using the backward regression technique, the same job attitudes were entered into the regression analysis. The only job attitude that emerged as a significant predictor was work-personal life balance with an unstandardized weight of .08 ($p<.05$) and a standardized weight of .063. Given the large sample size and the small regression weights, we can conclude that the job attitude of work-personal life balance has a minimal, albeit statistically significant association with the number of open-ended questions answered. Similar to the results for Hypothesis 3, these findings are not in the expected direction. Respondents who had more favorable attitudes toward work-personal balance (lower scores) were less likely to answer open-ended questions. Further, this predictor accounts for only .003% of the variability in number of questions answered, which reflects the lack of practical significance.

Hypothesis 6: To test Hypothesis 6, respondents with more favorable job attitudes will give longer responses to open-ended questions, the same job attitudes were used

to predict the number of characters in each respondent's open ended comments. The variable total number of characters in open-ended responses was calculated by counting the total number of characters transcribed across all four open-ended questions. Multiple regression analysis was conducted with number of characters as the dependent variable, and job attitudes as the independent variables. Predictors were entered using the backward method. Job satisfaction and work-personal life balance emerged as significant predictors, with respective unstandardized coefficients of 43.77 ($p < .01$) for job satisfaction and 46.08 ($p < .01$) for work-personal life balance. Both of these regression weights were in the opposite direction from what was expected. The job attitudes were measured on a five-point scale, with lower numbers representing more favorable responses. The dependent variable was measured by the number of characters, with higher numbers representing more characters, and thus greater hypothesized OCB behavior. Given this coding, negative regression weights would support this hypothesis in that lower job attitude scores (more favorable) would be associated with a higher number of characters. However, the opposite emerged – the regression weights were positive. Respondents with less favorable job attitudes toward work-personal life balance and job satisfaction (higher scores) were more likely to give longer responses to open-ended questions. Given that the dependent variable was in units of characters, we can say that for every unit change in job satisfaction and work-personal life balance is associated with an increase of 44 characters and 46 characters respectively in open-ended comments. Although these results are in the opposite direction, these two predictors account for just 2% of the variability in number of characters, thus limiting the practical significance of their

findings.

Summary of Study 2

Altogether, the results of Study 2 demonstrated that OCB-related job attitudes were related to quality of survey response, as measured by TMR, intent to respond to future surveys, and number and length of responses to open-ended questions. The results also revealed that the relationships between job attitudes and various survey response measures were not always in the hypothesized direction. Specifically, job satisfaction was related to TMR, intent to respond to future surveys in the expected direction and length of open-ended response in the opposite direction. Work-personal life balance was related to TMR, number of open-ended questions answered and length of response to open-ended questions. All of these relationships were in the opposite direction. Decision making efficiency was related to intent to respond to future surveys, and this relationship was in the expected direction. Further, given that the strength of these relationships as measured by $\underline{R^2}$ was sometimes quite low, the practical significance of these findings is limited. Implications will be explored in the discussion section.

Study 3

One restriction of Study 2 was the confound of only collecting job attitudes and response behavior from employees who responded to the organizational survey. According to the main thesis of this study, more satisfied employees will be more likely to respond to an organizational survey than less satisfied employees. Solely relying on those who responded to an organizational survey is a limitation, since no data were collected from those who did not respond to the survey. If responding to a survey is an OCB, then those who do not respond may have less favorable job attitudes. Therefore it is important to measure job attitudes and survey response behavior from both respondents and non-respondents.

Hypothesis 7: More satisfied employees are more likely to respond to an organizational survey than less satisfied employees.

Method

To test Hypothesis 7, more satisfied employees will be more likely to respond to an organizational survey, employee job attitudes were measured at one time and actual survey response was measured at a second time. Job attitudes and survey response of a random sample of employees of a national convenience store and gas station chain were examined. Since the organization was interested in studying turnover, two identical surveys were administered three months apart. The job attitudes at time 1 were used to predict survey response at time 2. Also, these surveys were administered so that individual responses could be identified. Confidentially was maintained and the sponsoring organization only received group level results.

The survey contained questions related to employees' general work experience as well as other attitudinal questions. The questionnaire included items measuring overall job satisfaction. Survey response was recorded approximately three months after measuring job attitudes.

Sample

The sample consisted of 192 employees of a national convenience store and gas station chain. The average age was 38.5 years (SD = 12.6), and average tenure was 3.9 years (SD = 4.4). Thirty-two percent of the sample was male, and 35% were in supervisory positions. In terms of education, 19% had some high school education, 58% had a high school or equivalent degree, 19% had a vocational or associate's degree and 4% had a four-year college degree or more. Sixty-one percent classified themselves as a primary wage earner, and 31% were single, 47% married, and 21% were divorced or separated.

Analysis

Exploratory factor analysis was conducted on the responses to the first administration of the survey to establish reliable job attitude scales. To test the hypothesis that more satisfied employees will be more likely to respond to the survey, logistic regression was used. This analysis was used to predict the dichotomous variable of survey response to the second administration with job attitudes from the first administration.

Results

Exploratory factor analysis was conducted on the survey items. Table 29 lists

the factors and items that measure each factor. Based on the factor analysis, the following job attitudes emerged: pay and career fairness, commitment, supervisor consideration, work-personal life balance, job autonomy, intent to stay and job stress. These factors accounted for 64% of the variance among these items.

Descriptive statistics

Means, standard deviations and reliability measures of the job attitudes are listed in Table 30. Altogether, the job attitudes demonstrate adequate levels of reliability. Job stress had the lowest level of reliability with a coefficient alpha of .65.

Hypothesis 7: To test Hypothesis 7, more satisfied employees will be more likely to respond to a survey, logistic regression analysis was conducted on a dichotomous variable of survey response to the second administration of the survey (0 = no response,

1 = response). The following job attitudes were entered as covariates (predictors): pay and career fairness, commitment, supervisor, work-personal life balance, job autonomy, intent to stay and job stress.

The model chi-square emerged as significant ($\chi^2 = 15.70$, p. <.05). This statistic is a test of whether the predictors improve classification of the dichotomous dependent variable better than chance. On examination of the coefficients for each of the predictors, the only significant predictor was work-personal life balance ($\beta = .77$, < p. 001). This provides partial support for the hypothesis that employees who have more favorable attitudes are more likely to respond an organizational survey.

Translating the logistic regression equation for work-personal life balance

allows us to further understand the relationship between work-personal life balance and response to the second administration. According to Menard (1995), in order to interpret unstandardized logistic regression coefficients, we need to translate the logits into probabilities. The equation for the logistic regression analysis with survey response and work personal balance is given below in Equation 1:

Equation 1: $\text{logit}(\text{Survey Response}^{\text{Time 2}}) = .791(\text{Work-Personal Life Balance}) - .968$

Substituting the lowest and highest possible values for work-personal life balance (i.e., 1 and 5) leaves us with the following values in Equation 2 Equation and 3:

Equation 2: $.791(1) - .968 = .078$

Equation 3: $.791(5) - .968 = 2.99$

Translating these logit values into probabilities gives us the following probability values in Equation 4 and Equation 5:

Equation 4: $e^{-.177} / 1 + e^{-.177} = .46$

Equation 5: $e^{2.99} / 1 + e^{2.99} = .95$

This translation demonstrates that respondents who had the most unfavorable responses (i.e., value of 1) to work-personal life balance questions were 46% likely to

respond to the second survey, whereas respondents who had the most favorable responses (i.e., value of 5) to the same questions were 95% likely to respond to the second survey. Substituting the mean value of work-personal life balance gives us the following logits (Equation 6) and probabilities (Equation 7):

$$\text{Equation 6: } .791(3.74) - .968 = 1.99$$

$$\text{Equation 7: } e^{1.99} / 1 + e^{1.99} = .88$$

This means that respondents with a mean value on work-personal life balance have an 88% chance of responding to an organizational survey.

Summary of Study 3

The results of Study 3 demonstrated that employees' actual survey response can be predicted by certain job attitudes. Specifically, employees with greater work-personal life balance were more likely to respond to a survey than respondents with less balance. The design of this study eliminated the confound of collecting job attitudes and survey response behavior only from those who responded to the survey. Other job attitudes were not significantly related to actual survey response. Specifically, pay and career fairness, commitment, supervisor, job autonomy, intent to stay and job stress were not related to actual survey response.

Supplemental Analysis

The findings of Study 2 and Study 3 demonstrated that work-personal life balance is related to survey response behavior in both anticipated and unanticipated directions. To test whether gender plays a role in this relationship, separate analyses were conducted for males and females for these two studies.

Study 2

To predict TMR, regression analysis was conducted for each gender group. For males, job satisfaction, work-personal life balance and decision making efficiency emerged as significant predictors of TMR. Job satisfaction was in the hypothesized direction, and decision making efficiency and work-personal life balance were in the opposite direction (Table 31). For intent to respond, job satisfaction emerged as a significant predictor in the hypothesized direction (Table 32). For the open-ended questions, there were no significant job attitudes for predicting the number of characters written down. However, job satisfaction and work-personal life balance emerged as significant predictors of total number of open-ended questions answered. Job satisfaction was in the hypothesized direction and work-personal life balance in the opposite direction. (Table 33).

For females, job satisfaction and work-personal life balance were the significant predictors of TMR (Table 34). As for males, job satisfaction was in the expected direction and work-personal life balance was in the opposite direction. For intent to respond, job satisfaction and decision-making efficiency were significant predictors (Table 35), and both predictors were in the expected direction. The

number of open-ended questions answered by female respondents was predicted by job satisfaction, work-personal life balance, career development and decision making efficiency (Table 36). Job satisfaction was in the expected direction and the other job attitudes were in the opposite direction. For the number of characters written across all four questions, work-personal life balance was the only significant predictor for female respondents (Table 37). Females with less favorable attitudes toward work-personal life balance gave longer open-ended responses to open-ended questions.

Study 3

Logistic regression analysis was conducted for each gender group. For males, none of the predictors were significant. For females, work-personal life balance was the only variable significantly related to responding to the survey. Females with more favorable attitudes toward work-personal life balance were more likely to respond to a survey.

Summary of Supplemental Analysis

This analysis reveals that certain aspects of the relationship between OCB-related job attitudes and survey response behavior may be moderated by gender. For TMR, the only difference between male and female respondents was for decision making efficiency. Specifically, male respondents who had less favorable attitudes toward decision making efficiency answered more questions. Work-personal life balance and job satisfaction had the same relationship with TMR for males and females. For intent to respond, decision making efficiency was again the differentiator between males and females, but this time female respondents who were

more favorable toward decision making efficiency were more likely to be willing to respond to a future survey. The other predictor, work-personal life balance, was the same for males and females. Female respondents with less favorable attitudes toward work-personal life balance were more likely to give longer responses to open-ended questions, whereas for males, there were no significant predictors. Further, in addition to job satisfaction and work-personal life balance, female respondents with less favorable attitudes toward career development and decision making efficiency were more likely to answer more open-ended questions than males. As for Study 3, work-personal life balance was a predictor for female respondents, but not for male respondents.

Chapter 5

Discussion

The results of these studies demonstrate the importance of using theory to guide the study of organizational survey response behavior. Using an OCB framework helped support the general thesis which states that responding to organizational surveys is related to employees' willingness to help their employers by participating in organizational functions and sharing their opinions. Although not an OCB, responding to a survey is related to OCB. Further, job attitudes and attitudes toward surveys are related to survey response behavior.

The results of Study 1 indicate that survey response is related to OCB as well as to attitudes toward organizational surveys. Specifically, subjects who have higher rates of OCB, as measured by conscientiousness, are more likely to intend to respond to a survey, and more likely to have participated in past surveys. Further, subjects who report that others they work with would respond, and who believed that surveys are a good idea, are also more likely to intend to respond to a survey. Although not fully supporting the hypotheses, the results of Study 1 support the position that survey response and OCB are related. Moreover, Study 2 reveals that job attitudes are related to survey response behavior as measured by intent to respond to surveys, quality of survey response and response to open-ended questions. Specifically, job satisfaction and attitudes about decision making are related to intent to respond, and job satisfaction and work-personal life balance are related to quality of response (TMR). Study 3 reveals that work-personal life balance predicts actual survey response. The following is a discussion of the findings for each study, followed by

implications for the science and practice of our field, as well as limitations and directions for future research.

Interpreting the findings of Study 1, we can say that survey response is related to OCB. The results demonstrate that the conscientiousness dimension of OCB is related to both past survey participation and intent to respond to organizational surveys. Further, attitudes toward surveys are also related to survey response. Specifically, the views that others would respond, surveys are a good idea and companies have a right to ask these questions are predictive of survey response. These results indicate that the participation subdimension of CVOCB may not be the underlying driver of survey response. Instead, participating in a survey may stem from a norm of following organizational rules and procedures, since conscientiousness OCB includes such behaviors as following rules and regulations. This reflects that survey response is related to both conscientiousness OCB, which entails following rules and regulations and complying with organizational requests, and attitudes related to organizational surveys.

Even though OCB and survey response are related, we find that the regression analysis that included OCB and organizational survey attitudes accounts for the most variance in intent to respond (28%). This points to the importance of building a positive experience around the survey, so employees will feel that surveys are a good idea and that others would respond to such surveys.

In Study 1, several results were not in the expected direction. Survey response did not load on the OCB factor, but rather a factor related to surveys. Also, survey response is not related to the expected dimensions of OCB. With the exception of

social participation, survey response is not related to any of the participation dimensions of civic virtue OCB. Rather, survey response is related to conscientiousness OCB.

Given the results of study two, we can see that OCB-related job attitudes do play a role in predicting the following: employees' intention to respond to surveys, quality of response, and response level to open-ended questions (both number of questions answered and length of response). The consistent finding that job satisfaction predicts these response behaviors supports the general hypothesis which states that more satisfied employees are more likely to respond to surveys than less satisfied employees. Specifically, the findings demonstrate that employees who are more satisfied give back to the organization by responding to more items on the survey, expressing greater willingness to participate in future surveys and answering more demographic questions. The nonsignificant findings for other job attitudes may be due to a preselection effect, in that those with more favorable attitudes responded to the survey. When the factor means are examined, it is apparent that the average rating is favorable. They all fall below the midpoint of the scale in a favorable direction. This can result in range restriction, hence deterring the ability to detect significant relationships.

Conversely, the results also indicate that work-personal life balance plays a role in response behavior, in that employees with less work-personal life balance are more likely to answer more rating and open-ended questions. This finding is counter to Organ's (1988) rationale for the relationship between satisfaction and OCB (through the norm of reciprocity). That is, representatives of the organization provide

employees with resources and opportunities that are satisfying, and in return, employees reciprocate with OCB. Employees who receive the flexibility to meet both work and personal needs are good candidates for this norm of reciprocity. However, the results demonstrate otherwise. Those who feel they have the flexibility may not be satisfied, since they still have to balance both work and personal needs. The results reveal that those who feel more conflict between work and personal needs are more likely to give more responses to the survey (e.g., lower TMR). An alternate rationale for this finding is that those who have less work-personal life balance are probably using the survey to voice their opinion to their employer, and they do so by answering more questions and giving longer responses to open-ended questions. To further explore this finding, supplemental analysis was conducted by creating two groups of low (bottom quartile) and high (top quartile) work-personal life balance. The mean scores on the other job attitudes were then compared for these two groups. Consistently, respondents with less favorable responses toward work-personal life balance had significantly less favorable responses on the other job attitudes. This demonstrates that respondents with less favorable job attitudes toward work-personal life balance are not only responding to more questions, but are responding with less favorable responses to other questions than respondents with more favorable work-personal life balance. Table 38 lists the results of this analysis.

The results of the analysis of TMR by section of the survey also reveal that respondents who are more satisfied with their jobs are more likely to answer more demographic questions than less satisfied respondents. This finding supports the position that responding to a survey is a helping behavior. By answering these types

of questions, respondents are further helping the organization by enabling them to use the survey results to identify specific employee segments with areas of concern (e.g., job level or tenure). If these questions were not answered, an organization may not be able to effectively pinpoint specific areas of concern. Since the demographic section of the survey was at the end of the questionnaire, participants were probably not answering the rating questions more favorably because they were concerned with identifying themselves.

The supplemental analysis of the results by gender for Study 2 reveals that men and women's response behavior is predicted by different job attitudes. Specifically, for men, job satisfaction is positively related to intent to respond, and decision making efficiency and work-personal life balance are negatively related to intent to respond. For women, job satisfaction and work-personal life balance are positively related to intent to respond. The consistent finding for job satisfaction supports the hypothesis that more satisfied employees are more likely to respond to the survey. However, the conflicting findings for work-personal life balance demonstrates that among males, work-personal life balance is not related to number of open-ended questions answered, and among females, less work-personal life balance is related to answering more open-ended questions. This may be due to the confound of job level and gender. When the distribution of respondents job level is examined by gender, it is apparent that there are fewer females in higher level positions than males. Table 39 displays the descriptive statistics for this analysis.

Examining the role of gender and the relationship between job attitudes and length of response to open-ended questions also uncovers some valuable findings,

even though the direction of the relationships was in the opposite direction than hypothesized. We see that for males there is no relationship between job attitudes and length of response and for females there are several relationships. While work-personal life balance is something all employees strive for, it is quite feasible that this balance may be especially important for women. Therefore, this is why we see the negative relationship between work-life balance and length of response to open-ended questions. Females with less balance gave longer responses to these questions. This may reflect the greater importance of work-personal life balance to females. Further, since these females had less work-personal life balance, and these questions asked for improvements, they may have had more suggestions for improvement and thus gave longer responses to open-ended questions.

For Study 2, there were several findings that did not emerge. For example, all of the job attitudes were not related to survey response behavior. Specifically, supervisory consideration, career development and pay are not significantly related to survey response behavior. There are two possible explanations for this. First, based on the OCB literature, job satisfaction is the consistent predictor of OCB. The other job attitudes may not be related to the norm of reciprocity as originally posited. Second, given the findings of Study 1, survey response is also related to attitudes toward surveys. The analysis in that study demonstrates that among job attitudes and OCB, survey response is related to OCB, and among OCB and survey related attitudes, survey response is predicted mainly by survey response attitudes more so than OCB. This can help explain why the other job attitudes are not significantly

related to OCB.

The results of Study 3 suggest that job attitudes do play a role in predicting employees' actual survey response behavior. Only one of the six job attitudes, work-personal life balance, is a significant predictor of survey response. Two possible explanations exist. The first explanation is that employees who have more favorable experiences with work-personal life balance may want to give back to the organization by complying with organizational requests, like participating in an organizational survey. Alternatively, given the nature of this job attitude, it may be because respondents with less favorable experiences with work-personal balance have less time to participate in an organizational survey.

Further, the supplemental analysis by gender for Study 3 demonstrates that work-personal life balance is only predictive for female respondents. This may be due to several reasons, firstly, this may be attributed to the low number of male respondents. There were 46 male respondents in this study and 98 females. The lower number of respondents may impact the statistical power in detecting significant relationships. An additional reason may be the nature of the measure of survey response.

The difference between Study 2 and 3 in terms of the direction of the relationship between work-personal life balance and survey response deserves further attention. Specifically, in Study 2 work-personal life balance is negatively related to the length of response to open-ended questions and in Study 3, work-personal life balance is positively related to actual survey response. The supplemental analysis revealed that gender moderates the relationship between work-personal life balance

and survey response behavior in both studies. This does not reconcile the difference in the direction of the relationships. This difference may be due to the different measures of survey response behavior. In Study 2 it was measured by length of response to open-ended questions and TMR and in Study 3 in was measured by actual response to a survey. When survey response is measured by length of response to open-ended questions and these questions ask for improvements to the organization, it can be expected that respondents with less favorable responses to open-ended questions may give longer responses to these questions. On the other hand, in Study 3, since survey response was measured using actual response to a survey, respondents with less work-personal life balance may have had less time to respond to the survey.

The lack of support for other job attitudes in Study 3, especially commitment and intent to leave (both of which have been linked to OCB), may be due to the identified nature of the survey. Further, since the survey was part of a research engagement, and employees were not promised any feedback or action planning. This in turn may have limited participation from employees, since they may not have perceived the survey as important and its importance was not communicated.

Implications for Science and Practice of I/O Psychology

Science of I/O psychology: Given that organizational survey response is related to OCB, it can be included in the nomological network of OCB. This may enhance OCB research by including a new variable that, although collected through self-report measures, is not measured in the same fashion as other OCB measures. That is, survey response, as a correlate of OCB, can be used as a proxy for other OCB measures that are traditionally measured through self- or other-report questionnaires.

There are implications for any organizational researcher who uses a survey technique, especially if he or she conducts the study in an organizational setting and uses variables related to OCB, like job satisfaction. If employees are more likely to respond to a survey if they are more satisfied, and if a researcher uses a survey to collect data for a study involving satisfaction and receives a low response rate, then what would happen to the results if the response rate was higher? In the presence of range restriction, significant relationships that emerge may underestimate the actual relationship. And nonsignificant relationships may have emerged as significant under less range-restricting conditions.

Practice of I/O Psychology: To begin with, if a survey has a low response rate, those who did not respond to the survey may have less favorable job attitudes than those who did. Thus, the survey results may underestimate the actual favorability of employee attitudes. Rogelberg et al. (1999) suggest correcting or adjusting satisfaction results based on the response rate. Although intuitively appealing, an extensive database will be necessary to do this accurately. Further, across the three studies, different attitudes have different relationships with survey response behavior, and this would further complicate Rogelberg's proposed approach. Moreover, given that certain job attitudes may be related to conscientiousness, a survey with a lower response rate that measures such attitudes may not be generalizable to an organization's entire employee population. For example, a low response rate survey that measures job satisfaction may in fact be an under-estimate of the level of dissatisfaction if high OCB employees are more likely to respond to the survey. If a survey has an adequate or high response rate, then all of these issues become less of a

concern

Attitudes toward surveys account for more variability in response behavior than OCB. Therefore, even though a low survey response rate may reflect low levels of OCB, survey practitioners may be able to enhance survey response rates by creating a positive survey experience for employees. Organizations can do this by following up on issues raised from the survey and holding managers accountable for acting on the survey results, as well as communicating to employees about the survey's results and actions taken. Further, practitioners who want to enhance survey participation can work with management to set a norm for participating in and complying with organizational requests. This can be accomplished through having managers serve as role models to their employees by letting them know they completed their own survey, or by mentioning the importance of participating in the survey during group meetings.

Expanding on the contributions to the science of the field, survey response rate may be a proxy of OCB across subunits of an organization, as well as a proxy for the consequences of OCB. That is, if a certain division has a low response rate, it may serve as a red flag to the organization in that there may be other issues with which the organization must contend. Further, if a division exhibits a low response rate, and the division is involved with key functions for the organization, then interventions should be planned to reduce the chance of such negative consequences of OCB as turnover. In the case of conscientiousness, not following rules and procedures may have dire consequences depending on the work activity (e.g., nuclear plant workers). Likewise, since the analyses in Study 2 revealed that less satisfied employees answered fewer

demographic questions, organizations should also examine response rates of demographic groups to identify groups that may have low response rates, and subsequently less favorable attitudes. Of course the actual survey results for these groups can be examined, however, if a group has a low response rate, then their results may actually be an underestimate of the populations results.

There are also implications for interpreting the findings of organizational surveys with varying response rates, especially when the survey results are used to evaluate the effectiveness of organizational initiatives. That is, surveys with lower response rates may not accurately reflect how all employees feel about initiatives. Given the changing nature of work and employment relationships, many organizations have taken on work-personal life balance as a major organizational initiative, and are likely to assess employee perceptions of and experiences with this important issue via an organizational survey. If a survey with a low response rate measures work-personal life balance, then the results may overestimate the actual level of work-personal life balance, because those with less favorable attitudes may not respond.

Some of the techniques used in Study 2 can be applied to survey analysis. For example, if a survey contains an item on intent to respond to future surveys or a question on past survey participation, then similar regression analyses can be conducted to examine whether any of the job attitudes may relate to survey response. Likewise, TMR can be calculated for any survey and used as a dependent variable for low response rate surveys.

A distinction between job satisfaction and other survey results should be

made. That is, employees may be satisfied with their jobs and respond to an organizational survey, however, this does not mean that all the responses to an organizational survey will be favorable. Highly satisfied employees may hold unfavorable views about such areas as senior management or communication. Also, an employee may be satisfied with his or her work, but hold unfavorable views about a certain program or initiative which is being evaluated by the survey.

Limitations and Directions for Future Research

Most of the measures in all three studies were self-report, with the exception of TMR in Study 2. In Study 1 OCB was measured using self-report ratings. This differs from past OCB research, which measures OCB using other-reports, specifically supervisory ratings. Since data collection for Study 4 failed, we do not know the role of survey administration variables in the presence of OCB or job attitudes. These survey variables have been shown to relate to response rates (e.g., incentives and communication). This can be investigated by conducting experimental studies where the characteristics of the survey are manipulated (e.g., incentive, survey length etc.), while OCB, job attitudes and response behavior are measured. Another limitation of this study is that it was cross-sectional in design. Further research should address how changes in job attitudes within individuals relate to survey response rates. A study can be conducted that investigates changes in job attitudes and OCB within individuals and their survey response behavior over time.

Additional limitations include the specific nature of the dependent variable in Study 2. Intent to respond was measured by the following question: "I would

participate in an employee survey conducted on the company's intranet." This question makes reference to a web-based survey hosted on the company's intranet, and it can be viewed as a threat to confidentiality. Some respondents may disagree to this question, not because they do not want to help, but rather because the technology used may potentially threaten the perceived confidentiality of their responses. This can also be an area of future research as more and more organizations conduct their surveys using web-based technologies.

Further research would be necessary to examine the possible relationships between survey response rate and other organizational variables, like turnover. Research has shown relationships between OCB and turnover (Chen et al.) and between prosocial behavior and sales performance (George and Bettenhausen, 1990).

All three studies were conducted using responses from organizational surveys, which was the focus of the investigation. However, these findings may not be generalizable to other surveys, such as consumer survey and public opinion polls. As previously mentioned, these types of surveys serve a different purpose than organizational surveys. Specifically, consumer and public opinion polls are not designed to collect feedback that will ultimately have a direct impact on the respondents' day-to-day work activities.

Table 1
Civic Virtue OCB Scale for Study 1

Item	CVOCB Dimension [a]
I represent organization favorably to outsiders.	Loyalty
I do not go out of my way to defend the organization against outsiders' threats. [b]	Loyalty
I do not tell outsiders this is a good place to work. [b]	Loyalty
I do not defend the organization when employees criticize it. [b]	Loyalty
I actively promote organization's products and services.	Loyalty
I would accept a job at competing organization for more money. [B]	Loyalty
I would not urge coworkers to invest money in organizations. [b]	Loyalty
I rarely waste time while at work.	Obedience
I produce as much as capable of at all times.	Obedience
I always come to work on time.	Obedience
Regardless of circumstances, I produce the highest quality of work.	Obedience
I do not meet all deadlines set by my organization. [b]	Obedience
I am mentally alert and ready to work when I arrive at work.	Obedience
I follow work rules and instructions with extreme care.	Obedience
I sometimes waste organizational resources. [b]	Obedience
I keep my work area clean and neat.	Obedience
I sometimes miss work for no good reason.	Obedience
I only attend work-related meetings if required by the job. [b]	Social Participation
I share ideas for new projects or improvement widely.	Social Participation
I keep informed about products and services and tell others.	Social Participation
I work so personal appearance is attractive appropriate.	Social Participation
I am not involved with outside groups for the benefits of the organization. [B]	Social Participation
I frequently make creative suggestions to coworkers.	Advocacy Participation
I use professional judgement to assess right/wrong for the organization.	Advocacy Participation
I encourage management to keep knowledge and skills current.	Advocacy Participation
I encourage others to speak up at meetings.	Advocacy Participation
I help coworkers think for themselves.	Advocacy Participation

I keep well-informed where opinion might benefits organizations.	Advocacy Participation
I do not push superiors to perform to higher standards. [b]	Advocacy Participation
I do not pursue additional training to improve performance. [b]	Functional Participation
I avoid extra duties and responsibilities at work. [b]	Functional Participation
I do not work beyond what is required. [b]	Functional Participation
I volunteer for overtime work when needed.	Functional Participation
I have difficulty cooperating with others on projects. [b]	Functional Participation

a Based on Van Dyne et al (1994) exploratory and confirmatory factor analysis b Reverse scored/coded

Table 2

MacKenzie, Podsakoff, and Fetter, (1993) OCB Items for Study 1

OCB
Consume a lot of time complaining about trivial manners.
Tend to make mountains out of mole hills (make problems bigger than they are).
Always focus on what's wrong with the situation, rather than the positive side of it.
"Keep up" with developments in the company.
Attend functions that are not required, but that help the company image.
Risk disapproval in order to express my beliefs about what's best for the company.
Conscientiously follow company regulations and procedures.
Turn in work product earlier than is required.
Return phone calls and respond to other messages and requests for information promptly.
Help orient new employees even though it is not required.
Always ready to help or lend a helping hand to those around me.
Willingly give of my time to others.

Table 3

Allen and Meyer (1990) Affective Commitment Scale [a] for Study 1

Item
I would be very happy to spend the rest of my career with this organization.
I enjoy discussing my organization with people outside it.
I really feel as if this organization's problems are my own.
I think that I could easily become as attached to another organization as I am to this one.
I do not feel like 'part of the family' at my organization. [B]
I do not feel 'emotionally attached' to this organization. [B]
This organization has a great deal of personal meaning for me.
I do not feel a strong sense of belonging to my organization.

a 5 point Agree-Disagree scale

b Reverse coded

Table 4

Hackman and Oldham's Job Satisfaction Scale for Study 1

Generally speaking, I am very satisfied with my job.
I frequently think of quitting this job.
I am generally satisfied with the kind of work I do in this job.
Most people on this job are very satisfied with their job.

People on this job often think about quitting.

Table 5

Warr, Cook and Wall's (1979) Job Satisfaction Scale for Study 1

Item
How satisfied are you with the following aspects of your work?
The physical working conditions.
The freedom to choose your own method of working.
Your fellow workers
The recognition you get for good work
Your immediate boss
The amount of responsibility you are given
Your rate of pay
Relations between management and workers in your firm
Your chance of promotion
The way your firm is managed
The attention paid to suggestions you make
Your hours of work
The amount of variety in you job
Your job security

Table 6

Intent to Leave for Study 1

How likely is it that you will leave your current employer for another job within the next twelve months.

Table 7

Demographic Questions for Study 1

Tenure- open-ended
Work status
Age
Gender
Current job role
Current employer

Table 8

Intent to Respond and Attitudes Toward Surveys for Study 1

Item
Imagine yourself at work, how likely is it that you would respond to the survey you just read through?
How important do you think the topics of this survey were?
Other employees I work with would respond to this survey.
Managers in my organization would care about the results of a survey like this.
Companies have a right to ask the type of questions that are in this survey.
Surveys like the one I reviewed are a good idea.
My company would share feedback to employees.
I feel the results of the survey I read in section 1 will be used constructively in my company.
My responses to a survey like the one I reviewed will remain anonymous and confidential.
How many surveys have you responded to with your current employers?
How often would you like to have the opportunity to participate in an employee survey such as the one you read in section 1?
About every 6 months, Once a year, Every 18 months, Every 2 years, Every 3 years, Don't want to participate.

Table 9

Means and Standard Deviations for Study 1 Variables

	Mean	Std. Deviation	Coefficient Alpha	N
1. Social Participation	3.52	0.53	.34	214
2. Advocacy Participation	3.69	0.55	.72	214
3. Functional Participation	3.99	0.70	.70	214
4. Sportsmanship	3.95	0.75	.72	214
5. Civic Virtue	3.31	0.80	.59	214
6. Conscientiousness	3.96	0.74	.62	214
7. Altruism	4.23	0.78	.83	213
8. Commitment	3.02	0.74	.82	214
9. Job Satisfaction 1	3.13	0.78	.76	213
10. Job Satisfaction 2	3.37	0.68	.87	212
11. Intent To Leave r	2.80	1.57	NA	205
12. Likelihood of Response	3.50	1.35	NA	211
13. Survey topics important	2.09	0.80	NA	211
14. Others would respond	3.52	1.02	NA	214
15. Manager would care about results	3.48	1.07	NA	212
16. Co.'s have a right to ask questions	3.79	0.95	NA	212
17. Surveys are a good idea	3.86	0.93	NA	211
18. Co. would share results	3.22	1.61	NA	210
19. Results used constructively	3.13	1.02	NA	211
20. Responses confidential	3.66	1.03	NA	212
21. Number past surveys	0.77	1.58	NA	204
22. Preferred frequency of participation	2.36	1.42	NA	210

Table 10

Intercorrelations of Variables in Study 1

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Social Participation	--	46**	38**	15*	39**	26**	19**	34**	30**	29**	18**
2. Advocacy Participation		--	33**	21**	50**	37**	32**	27**	30**	30**	18**
3. Functional Participation			--	19**	35**	41**	40**	23**	24**	31**	26**
4. Sportsmanship				--	14*	38**	16*	13	18*	13	14*
5. Civic Virtue					--	42**	38**	35**	28**	31**	18*
6. Conscientiousness						--	41**	19**	26**	34**	08
7. Altruism							--	25**	16*	24**	17*
8. Commitment								--	58**	56**	43**
9. Job Satisfaction 1									--	68**	47**
10. Job Satisfaction 2										--	40**
11. Intent To Leave r											--

Note: decimal points omitted, * ps<.05 **ps< .01.

Table 10 continued

Intercorrelations of variables in Study 1

Variable	12	13	14	15	16	17	18	19	20	21	22
1. Social Participation	-04	-07	-03	04	07	-01	06	11	15*	02	-05
2. Advocacy Participation	09	-03	16*	07	07	-03	05	06	08	-004	-02
3. Functional Participation	18**	-08	11	-02	04	06	-01	-03	19**	13	-05
4. Sportsmanship	09	-16*	04	13	06	13	-07	06	05	02	-04
5. Civic Virtue	10	-15*	12	05	12	10	01	09	14*	-01	-08
6. Conscientiousness	21**	-26**	12	08	08	15*	-09	02	13	18**	-12
7. Altruism	08	-17*	10	16*	11	19**	09	07	17*	05	-10
8. Commitment	-04	-05	03	25**	13	-02	19**	25**	12	-01	05
9. Job Satisfaction 1	08	07	13	33**	14*	07	15*	36**	23**	06	-02
10. Job Satisfaction 2	03	-05	10	35**	14*	03	13	32**	31**	11	01
11. Intent To Leave r	-001	04	07	24**	01	-08	15*	20**	07	-003	09
12. Likelihood of Response	--	-29**	49**	15*	21**	36**	04	10	012	06	-26**
13. Survey topics important		--	-34**	-23**	39**	-55**	-08	-24**	-16*	-04	34**
14. Others would respond			--	25**	28**	38**	013	14*	18*	02	-26**
15. Mgr care about results				--	24**	24**	28**	49**	26**	08	-15*
16. Co.'s have a right to ask questions					--	58**	17*	27**	38**	15*	-38**
17. Surveys are a good idea						--	12	34**	21**	01	-59**
18. Co. would share results							--	36**	17*	08	02
19. Results used constructively								--	27**	09	-22**
20. Responses confidential									--	06	-1
21. Number past surveys										--	-05
22. Preferred frequency of participation											--

Note: decimal points omitted, * ps<.05 **ps < .01.

Table 11

Results of the Regression Analysis – OCB and Intent to Respond, Study 1

Variable	B	SE B	β
Conscientiousness	.32	.14	.18
Civic Virtue - Social Participation	-.37	.19	-.15
Civic Virtue – Functional Participation	.31	.15	.16

Note. Adjusted R^2 = .06 ps <.05.

Table 12

Results of the Regression analysis – OCB and Past Survey Participation for Study 1

Variable	B	SE B	β
Conscientiousness	.39	.15	.18

Note. Adjusted R^2 = .03 p <.05.

Table 13

Results of the Regression analysis – OCB, Survey-Related Attitudes and Intent to Respond for Study 1

Variable	B	SE B	β
Conscientiousness	.24	.11	.13
Surveys are a good idea	.27	.09	.19
Others would respond	.53	.09	.40

Note. Adjusted R^2 = .28 p <.05.

Table 14

Results of the Regression analysis – OCB, Survey-Related Attitudes and Past Survey Participation for Study 1

Variable	B	SE B	β
Conscientiousness	.37	.15	.17
Companies have a right to ask survey questions	.23	.12	.14

Note. Adjusted $R^2 = .04$ $p < .05$.

Table 15
Factor Analysis for Study 1

Variable	OCB1	OCB2	Survey Attitudes	Survey Response	Survey Use
Conscientiousness	-.73				
Sportsmanship	-.31				
Advocacy Participation		.74			
Social Participation		.67			
Civic Virtue		.65			
Functional Participation		.51			
Altruism		.40			
Surveys like the one I reviewed are a good idea.			.96		
Companies have a right to ask the type of questions that are in this survey.			.54		
How important do you think the topics of this survey were?			-.48		
Other employees I work with would respond to this survey.				-.98	
I would respond to this survey				-.45	
I feel the results of the survey I read in section 1 will be used constructively in my company.					.68
Managers in my organization would care about the results of a survey like this.					.61

table continues

Variable	OCB1	OCB2	Survey Attitudes	Survey Response	Survey Use
My company would share feedback to employees.					.49
My responses to a survey like the one I reviewed will remain anonymous and confidential.					.32

Table 16

Means, Standard Deviations, and Reliability Estimates of Measures for Study 2

	Mean	Std. Deviation	Coefficient Alpha
Career Development	2.89	0.93	.88
Decision Making Efficiency	2.73	0.73	.86
Job Satisfaction	2.34	0.73	.93
Pay Equity	2.95	0.85	.90
Supervisor Consideration	2.28	0.90	.95
Work Family Balance	2.87	0.98	.84
Total Missing Responses (TMR)	22.44	19.72	NA
Future Participation	2.29	1.11	NA

Table 17

Survey Items, Factors and Factor Loadings for Study 2

Survey Item	Supervisor Consideration	Compensation	Job Satisfaction	Work-Personal Balance	Career Development	Decision Making
My supervisor provides positive leadership to my work group	0.87					
Overall, how would you rate the job being done by your supervisor	0.84					
My supervisor coaches me to help me improve my performance and develop my capabilities	0.83					
My supervisor really listens when I speak to him or her	0.8					
My supervisor supports me when things get tough	0.79					
My supervisor provides performance feedback that is specific, relevant and timely	0.79					
My supervisor keeps us informed about things that are important	0.79					
My supervisor understands the problems involved in my job	0.74					
My supervisor strives to balance the workload among members of our work	0.71					

table continues

Survey Item	Super-visor Consider-ation	Compen-sation	Job Satisfac-tion	Work-Personal Balance	Career Develop-ment	Decision Making
group						
My supervisor sets high standards of performance	0.64					
I feel fairly paid when I compare my pay to what I could get for a similar job in other companies		0.91				
When I compare my total compensation to my performance and contribution, I feel fairly compensated		0.88				
I feel fairly paid when I compare my pay to similar jobs in this Company		0.84				
I feel fairly paid when I compare my pay to that of new hires doing similar work in this Company		0.8				
How would you rate your total compensation and benefits company at this Company compared to other firms?		0.67				
Outstanding performance is rewarded at this Company		0.58				
Compared to your needs, how would you rate the coverage provided by your total benefits program		0.41				
My job gives me a feeling of personal			0.93			

table continues

Survey Item	Super-visor Consider-ation	Compen-sation	Job Satisfac-tion	Work-Personal Balance	Career Develop-ment	Decision Making
accomplishment?						
Considering everything, how satisfied are you with your job - the kind of work you do?			0.87			
My job makes good use of my skills and abilities			0.83			
How often do you feel excited and enthusiastic about your job			0.68			
My job enables me to contribute to the success of my clients/customers			0.62			
Considering everything, how satisfied are you in this Company at the present time			0.6			
How satisfied are you with your opportunity for growth and development in this Company?			0.6			
Overall, I am confident that I will be able to achieve my career objectives in this Company			0.59			
My work is important to the success of this Company			0.57			
How likely is it that you will leave this company for another job within the next 12 months (1 = Very unlikely)			0.56			

table continues

Survey Item	Super-visor Consider-ation	Compen-sation	Job Satisfac-tion	Work-Personal Balance	Career Develop-ment	Decision Making
I feel a strong sense of commitment to this Company			0.56			
I am personally motivated to achieve this Company's goal of becoming a preeminent global consulting firm			0.5			
I am given good opportunities to develop my knowledge and improve my skills in this Company			0.45			
My job leaves me with sufficient time for my personal and family life				0.92		
How often, if ever, do you feel a major conflict between the demands of your work responsibilities and your personal/family responsibilities (1 = Never)				0.76		
This company provides employees the flexibility to meet work and personal/family life responsibilities				0.71		
My last career discussion was helpful in identifying career options and opportunities within this company					-0.88	
My last career					-0.87	

table continues

Survey Item	Super-visor Consider-ation	Compen-sation	Job Satisfac-tion	Work-Personal Balance	Career Develop-ment	Decision Making
discussion was helpful in identifying actions I can take to develop my career						
The time and effort I put into preparing for my career discussion was well worth it					-0.74	
My last performance review was helpful in identifying actions I can take to improve my performance					-0.47	
Once decisions are made, they are implemented in a timely manner						0.85
Decisions are made in a timely manner						0.79
Once decisions are made, they are actively supported, even by those who may personally disagree						0.74
If employee opinions or ideas can't be used, we're told why						0.62
Decisions are made at the lowest appropriate level						0.56

Table 18

Job Attitudes Predicting TMR for Study 2

Variable	B	SE B	β
Job satisfaction	4.0	.74	.15
Work-personal life balance	-3.3	.45	-.17

Note. Adjusted R^2 = .03 p <.05.

Table 19

Job Attitudes Predicting Missing Responses to Management Questions for Study 2

Variable	B	SE B	β
Decision making efficiency	.46	.11	.11
Job satisfaction	.36	.11	.09
Supervisor consideration	.26	.09	.08

Note. Adjusted R^2 = .05 p <.05.

Table 20

Job Attitudes Predicting Missing Responses to Decision Making Questions for Study 2

Variable	B	SE B	β
Job satisfaction	-.72	.30	-.24
Decision making efficiency	.68	.30	.22

Note. Adjusted R^2 = .04 p <.05.

Table 21

Job Attitudes Predicting Missing Responses to Background Information Questions for Study 2

Variable	B	SE B	β
Job satisfaction	.12	.03	.07

Note. Adjusted R^2 = .01 p <.05.

Table 22

Job Attitudes Predicting Missing Responses to Obstacles to Effectiveness Questions for Study 2

Variable	B	SE B	β
Work-personal life balance	-.08	.04	-.05
Decision making efficiency	-.11	.04	-.05
Job satisfaction	.16	.05	.07

Note. Adjusted R^2 = .004 p <.05.

Table 23

Job Attitudes Predicting Missing Responses to Job Questions for Study 2

Variable	B	SE B	β
Supervisor consideration	-.65	.33	-.17

Note. Adjusted R^2 = .02 p <.05.

Table 24

Job Attitudes Predicting Missing Responses to Telecommunications and Financial Systems Questions for Study 2

Variable	B	SE B	β
Work-personal life balance	-.61	.2	-.2

Note. Adjusted R^2 = .03 p <.05.

Table 25

Job Attitudes Predicting Missing Responses to Company Effectiveness Questions for Study 2

Variable	B	SE B	β
Supervisor consideration	-.43	.15	-.26

Note. Adjusted R^2 = .04 p <.05.

Table 26

Job Attitudes Predicting Missing Responses to Work Group Effectiveness Questions for Study 2

Variable	B	SE B	β
Career development	.60	.26	.19

Note. Adjusted R^2 = .02 p <.05.

Table 27

Job Attitudes Predicting Missing Responses to Business Practices (Lines of business) for Study 2

Variable	B	SE B	β
Career development	-.54	.22	-.1
Decision making efficiency	.64	.28	.09

Note. Adjusted R^2 = .01 p <.05.

Table 28

Job Attitudes Predicting Willingness to Respond for Study 2

Variable	B	SE B	β
Job satisfaction	.34	.04	.22
Decision making efficiency	.12	.04	.08

Note. Adjusted R^2 = .07 p <.05.

Table 29

Survey Items for Study 3

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
There is a fair and logical career advancement program at this company	.75						
I am paid fairly at this company	.72						
This company provides a number of special amenities and services that improve employees ' quality of life	.69						
This company offers a competitive wage compared to other employers	.69						

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
I have a good opportunity to earn extra money if I perform well	.67						
If I do a good job at this company, my pay will increase	.65						
This company is good to its employees	.62						
Working at this Company makes me feel good about myself		.76					
I am proud to belong to this company		.73					
I am committed to this company		.72					

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
I like telling others that I work for this company		.69					
My interests and values are consistent with those of this company		.65					
I look forward to going to work each day		.60					
When I make a decision at work, I consider the interests of this company as a whole		.58					
This company makes me feel like I am part of something special		.57					

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
I would like the rest of my career to be at this company		.53					
This company makes me feel like I really belong		.51					
This is a very exciting place to work		.47					
I wear clothing with the company name on it when I am not at work		.42					
My job is satisfying to me		.42					
My immediate supervisor is fair and honest			.88				
I trust my immediate supervisor			.85				

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
I feel supported by my immediate supervisor			.75				
My immediate supervisor sets high standards of excellence for customer service and quality			.64				
Information is openly shared at this company			.49				
From what I can see, managers give employees honest feedback on how they are doing			.46				
My manager pitches in when I need help			.46				

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
My manager has favorites who are treated better than others (reverse coded)			-.54				
My job leaves me with time for my personal and family life				.83			
This company provides employees the flexibility to meet both work and personal/family life responsibilities				.79			

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
The amount of overtime I am asked to work does not interfere with my personal/family life responsibilities				.48			
I provide a valuable service to this company					.38		
From what I can see, managers give employees honest feedback on how they are doing					.38		
This company is a very exciting place to work					.38		
I am seldom bored on my job					.44		

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
I feel I have the authority to do whatever is best for the customer					.58		
I am properly trained to solve most customer problems					.62		
Do you plan to be working at this company 12 months from now?						.61	
It would be very hard for me, emotionally, to leave this company						.47	
I would like the rest of my career to be at this company						.62	
My job is very stressful							-.77

table continues

Survey Item	Pay and Career Fairness	Commit-ment	Super-visor	Work Personal Balance	Job Auto-nomy	Intent to Stay	Job Stress
My job tires me out							-.70

Table 30

Means, Standard Deviations, and Reliability Estimates of Measures for Study 3

Factor	Mean	Standard Deviation	Coefficient Alpha
Commitment	3.57	.85	.94
Commitment	3.57	.85	.94
Supervisor	3.7	.98	.91
Supervisor	3.7	.98	.91
Work-personal life balance	3.7	1.04	.80
Work-personal life balance	3.7	1.04	.80
Job autonomy	3.84	.76	.78
Job autonomy	3.84	.76	.78
Intent to stay	3.48	1.09	.82
Intent to stay	3.48	1.09	.82
Job stress	3.04	1.11	.65
Job stress	3.04	1.11	.65
Pay and career fairness	3.21	1.02	.91
Pay and career fairness	3.21	1.02	.91

Table 31

Study 2 Results of Regression Analysis for Males, Job Attitudes Predicting TMR

Variable	B	SE B	β
Job satisfaction	2.5	.81	.12
Work-personal life balance	-1.6	.54	-.11
Decision making efficiency	-2.5	.82	-.12

Note. Adjusted R^2 = .02 p <.05.

Table 32

Study 2 Results of Regression Analysis for Males, Job Attitudes Predicting Intent to

Respond

Variable	B	SE B	β
Job satisfaction	.35	.05	.23

Note. Adjusted $R^2 = .05$ $p < .05$.

Table 33

Study 2 Results of Regression Analysis for Males, Job Attitudes Predicting Number of Open-ended Questions Answered

Variable	B	SE B	β
Job satisfaction	-.37	.11	-.15
Work-personal life balance	.27	.06	.14

Note. Adjusted $R^2 = .03$ $p < .05$.

Table 34

Study 2 Results of Regression Analysis for Females, Job Attitudes Predicting TMR

Variable	B	SE B	β
Job satisfaction	2.3	.67	.1
Work-personal life balance	-3.4	.48	-.21

Note. Adjusted $R^2 = .04$ $p < .05$.

Table 35

Study 2 Results of Regression Analysis for Females, Job Attitudes Predicting Intent to Respond

Variable	B	SE B	β
Job satisfaction	.31	.05	.21
Decision-making efficiency	.16	.05	.11

Note. Adjusted $R^2 = .08$ $p < .05$.

Table 36

Study 2 Results of Regression Analysis for Females, Job Attitudes Predicting Number of Open-ended Questions Answered

Variable	B	SE B	β
Job satisfaction	-.24	.09	-.11
Work-personal life balance	.31	.05	.19
Career development	.14	.07	.08
Decision making efficiency	.23	.08	.10

Note. Adjusted $R^2 = .04$ $p < .05$.

Table 37

Study 2 Results of Regression Analysis for Females, Job Attitudes Predicting Number of Characters in Open-ended Questions

Variable	B	SE B	β
Work-personal life balance	51.4	18.0	.11

Note. Adjusted $R^2 = .01$ $p < .05$.

Table 38

T-Tests from Discussion

Job Attitude	Work Family Balance	N	Mean	SD
Career Development	High	549	2.66	0.95
	Low	938	3.03	0.93
Pay	High	729	2.64	0.84
	Low	1034	3.20	0.83
Decision Making	High	726	2.48	0.73
	Low	1023	2.90	0.72
Supervisor Consideration	High	725	2.02	0.83
	Low	1018	2.47	0.93
Job Satisfaction	High	737	2.15	0.71
	Low	1036	2.52	0.75

Note: Means represent mean rating on a 5-point scale, 5 = unfavorable. All differences are significant at .05.

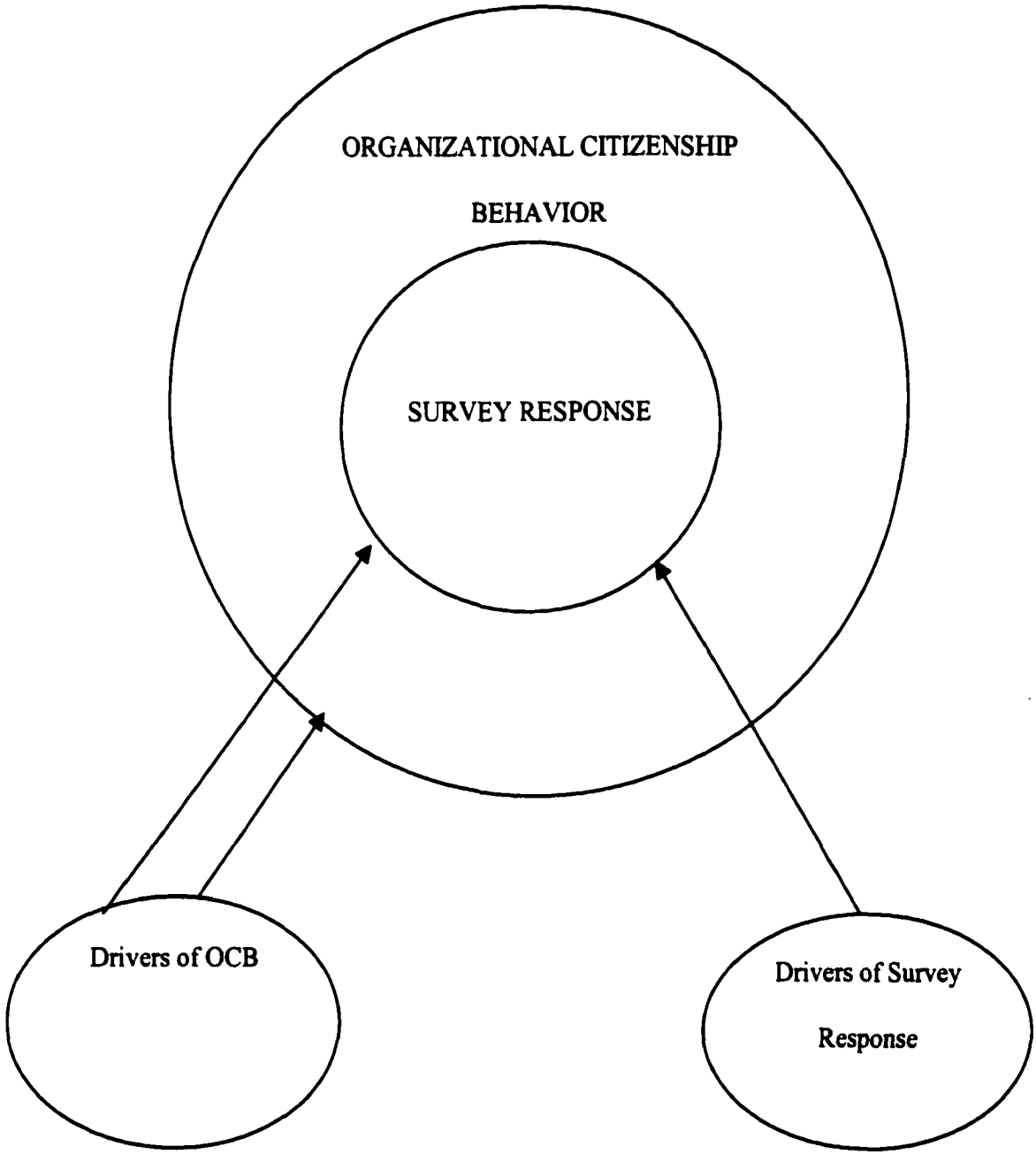
Table 39

Distribution of Gender and Job Level for Study 2

Job Level	Males	Females
Level A	11.8%	2.0%
Level B	26.3%	13.1%
Level C	20.2%	16.8%
Level D	17.3%	19.1%
Level E	12.2%	19.8%
Level F	10.5%	22.6%
Level G	1.7%	6.6%

Note: Job level A is the highest job level

Figure 1. Conceptual Model



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