Dissatisfactions with Job Satisfaction Measurement:

The Context-Dependency of Work Attitudes

Job satisfaction is the most extensively studied variable in organizational behavior research (Spector, 1997). According to Roznowski and Hulin (1992), an employee's job satisfaction is the single most important piece of information that managers can have in order to predict outcomes that matter to the organization, including turnover, absenteeism, and performance (Spector, 1997). Recently, Weiss (2002) criticized the job satisfaction literature for overlooking advances in social psychology about the nature and processes of judgments and attitudes. He proposed a reconceptualization of the construct of job satisfaction according to these advances, and defined job satisfaction as an "evaluative judgment… about one's job or job situation" (Weiss, 2002: 175).

We believe that advances in social psychology have important implications for the measurement, as well as conceptualization, of job satisfaction. We begin by summarizing a series of controversies and unresolved questions in job satisfaction research. Next, drawing on the social cognition, judgment, and life satisfaction literatures, we illustrate how satisfaction measures are heavily dependent on context. We discuss how the questions themselves can shape satisfaction judgments, and then examine how the larger context in which these questions are asked can shape satisfaction judgments. Throughout this discussion, we present data to illustrate these points. We conclude with an agenda for future research to both document and account for context effects on satisfaction.

Measurement Controversies in Job Satisfaction Research

Undoubtedly the most confusing set of findings in the literature is that all self-reported good things predict job satisfaction. Virtually any "positive" contextual,

dispositional, or interactional variable measured is shown to be related to higher job satisfaction. From a contextual perspective, researchers have shown that job satisfaction is predicted by job and task characteristics such as task significance, task identity, skill variety, autonomy, and interdependence (Hackham & Oldham, 1976), social factors such as social information (Salancik & Pfeffer, 1978) and interpersonal relationships (Gerstner & Day, 1997), and features of the organizational climate (Carr, Schmidt, Ford, & DeShon, 2003) and physical environment (Oldham, Kulik, & Stepina, 1991). From a dispositional perspective, job satisfaction is predicted by personality traits such as trait positive and negative affectivity, the Big Five, and core self-evaluations (Staw, Bell, & Clausen, 1986; Judge & Hulin, 1993; Judge, Bono, & Locke, 2000; Judge & Larsen, 2001; Ilies & Judge, 2003), as well as orientations toward work as a job, career, or calling (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997; Wrzesniewski & Dutton, 2001). From an interactionist perspective, fit between individual's interests, preferences, and values and the job, work, and tasks (Pervin, 1968, 1989; Edwards, 1991; Holland, 1996), the group (Kristof-Brown, Jansen, & Colbert, 2002), and the organization (Chatman, 1989; Schneider, Smith, & Goldstein, 2000) predicts job satisfaction.

The literature offers four explanations for this puzzling phenomenon. The first explanation is that good jobs come in bundles (Hackman & Oldham, 1976). Managers who know how to design one part of a job well are also likely to design other parts well, and are likely to work in organizations that treat employees well. The second explanation is that job satisfaction creates a halo effect. When employees are satisfied with their jobs, they are attitudinally biased to evaluate many aspects of their jobs favorably (Roach, 1958; James & Tetrick, 1986). The third explanation is common method bias. This

explanation has been largely refuted, as several studies have shown that common method variance does not lead to the overprediction of self-reports (Birnbaum, Farh, & Wong, 1986; Parker & Wall, 1998; Spector, 1987). The fourth explanation is common source bias. Some scholars have argued, and presented supporting evidence, that common source biases are responsible for inflated correlations between satisfaction and self-report variables (Spector & Jex, 1991).

We propose a different explanation for findings that all self-reported good things predict job satisfaction. Judgments of job satisfaction are contextually dependent, and can be shaped in important ways by the questions themselves, as well as the larger survey contexts in which these questions are asked. The social cognition, judgment, and life satisfaction literatures in social psychology offer substantial evidence in support of this notion (for reviews, see Schwarz, 1996, 1999). In the following sections, we summarize this evidence and its implications for job satisfaction research.

The Nature and Processes of Satisfaction Judgments

When people attempt to make judgments about their life satisfaction, they form mental representations of their lives (Schwarz & Strack, 1991). They also form mental representations of a standard against which to evaluate their lives (Kahneman & Miller, 1986; Schwarz & Bless, 1992). People do not attempt to call to mind all components of and information about their lives and the relevant standard of evaluation. Instead, they stop searching as soon as they have sufficient information to make a judgment that feels fairly accurate and certain to them (Bodenhausen & Wyer, 1987; Higgins, 1996; Schwarz, 1995). As such, their judgments are shaped by the information about their lives,

and the standard for evaluating this information, that happens to be accessible at the moment. Social psychologists generally divide this information into two categories. Chronically accessible information is that which nearly always comes to mind when people think about the topic at hand. Temporarily accessible information is that which happens to come to mind at one time but may not come to mind when thinking about the same topic at another time.

Both chronically and temporarily accessible information influence people's judgments of life satisfaction. Chronically accessible information may bring about some degree of stability in a person's life satisfaction judgments (Schwarz, 1999). Temporarily accessible information, on the other hand, yields variability in a person's life satisfaction judgments (Schwarz, 1999). For example, evidence indicates that the mental representation of one's life formed in the moment influences a person's life satisfaction judgments: people asked to describe three recent positive events report higher levels of life satisfaction than people asked to describe three recent negative events (Strack, Schwarz, & Gschneidinger, 1985). The valence of temporarily accessible information about recent events in one's life shapes a momentary mental representation of one's life, and thereby influences life satisfaction judgments. Similarly, the standard of comparison called to mind in the moment for making life satisfaction judgments influences these judgments: people asked to describe three positive events that occurred at least five years ago report *lower* levels of life satisfaction than people asked to describe three negative events that occurred at least five years ago (Strack et al., 1985). The valence of temporarily accessible information about past events in one's life shapes a momentary

mental representation of a standard for evaluating one's life, and thereby influences life satisfaction judgments.

This evidence indicates that judgments of life satisfaction are context-dependent. We believe that the same logic applies to judgments of job satisfaction. In many ways, judgments of life and of jobs are quite similar. Both life and jobs are global, abstract concepts, aggregates of many different experiences and features of the physical and social worlds. Accordingly, the social cognitive processes that underlie job satisfaction judgments should be quite similar to those that underlie life satisfaction judgments. Contextual cues influence people's mental representations of their jobs, and of the standards of comparison for evaluating their jobs. In the following sections, we discuss two sources of context-dependency in judgments of job satisfaction: question context and survey context.

Question Context

Social psychological research indicates that the mere order of questions in surveys affects the temporary accessibility of both mental representations and standards of comparison in judgment processes. The most compelling example in the social cognition literature is provided by a study of marital satisfaction and life satisfaction (Schwarz, Strack, & Mai, 1991). When people were first asked how satisfied they were with their marriages and then asked about their satisfaction with their lives as a whole, the correlation between the two judgments was .67. However, when the order of the questions was inverted, so that people were first asked about life satisfaction and then about marital satisfaction, the correlation between the two judgments decreased to .32.

Asking first about marital satisfaction and then about life satisfaction made people's marriages temporarily accessible, and they drew heavily on information about their marriages in evaluating their satisfaction with their lives as a whole. Alternatively, when asked first about life satisfaction and then about marital satisfaction, people were less likely to draw on information about their marriages in evaluating their satisfaction with their lives as a whole. Support for this interpretation derives from evidence from participants in an additional condition: the correlation between life and marital satisfaction judgments decreased to .12 when the life satisfaction question was reworded to separate life and marital satisfaction as nonredundant judgments, "Aside from your marriage, which you already told us about, how satisfied are you with other aspects of your life?"

Further, the effects of question order on temporarily accessibility of marital information can also be observed in mean life satisfaction differences between individuals. Examining the third of the sample with the highest levels of marital satisfaction, those who were asked about marital satisfaction first reported significantly higher life satisfaction than those who were asked about life satisfaction first. The temporary accessibility of a happy marriage shifted life satisfaction judgments in a more positive direction. On the other hand, examining the third of the sample with the lowest levels of marital satisfaction, those who were asked about marital satisfaction first reported significantly *lower* life satisfaction than those who were asked about life satisfaction first. The temporary accessibility of an unhappy marriage shifted life satisfaction judgments in a more negative direction.

Together, these results suggest that the relationship between marital satisfaction and life satisfaction depends on the temporary accessibility of information called to mind in forming mental representations of marriage and life in order to make these judgments. The mere order of the questions asked shapes the answers given (Schwarz, 1996, 1999). In general, there is extensive evidence that question order affects attitudinal judgments (for additional reviews, see Feldman, 1992; Schwarz & Bless, 1992; Schwarz & Strack, 1991; Tourangeau, 1987, 1992).

These question order effects on temporarily accessibility have important implications for job satisfaction research. In organizational research on job satisfaction, researchers often do not counterbalance question order. Accordingly, it is possible that the "all self-reported good things predict job satisfaction" phenomenon observed earlier is in part an artifact of question order. If a predictor of job satisfaction is measured first, respondents are likely to take this predictor into account when forming their judgments of job satisfaction. For example, when asked about the degree to which their supervisors are supportive, respondents are likely to include supervisor support in their mental representations of their jobs. Further, they may include images of other supervisors in their mental representations of the standards of comparison for evaluating their own supervision. Their judgments of global job satisfaction will thus be significantly influenced by preceding questions about their supervisors.

To illustrate the applicability of these concepts to job satisfaction research, we collected data from a convenience sample of 179 University of Michigan and Harvard University undergraduates with jobs. We chose to examine the relationship between pay satisfaction and job satisfaction, given that pay satisfaction is perhaps the most studied of

job facet satisfactions, and evidence shows that pay satisfaction is strongly associated with job satisfaction (for reviews, see Rynes, Gerhart, & Minette, 2004; Rynes, Gerhart, & Parks, 2005). We divided the participants into three conditions. All participants were told that they would be asking questions about their current jobs. In one condition, participants were first asked "How satisfied are you with your pay?" and then asked "How satisfied are you with your job as a whole?" Both questions were on a seven-point Likert-type scale anchored at 1 = not at all and 7 = very much. In a second condition, we reversed the order of these questions, so that job satisfaction was asked first and pay satisfaction was asked second. In a third condition, we first asked participants an open-ended question, "What is your job," and then asked about their pay satisfaction and job satisfaction.

Consistent with findings in the life satisfaction literature, we predicted that the association between pay satisfaction and job satisfaction would be highest in the first condition, in which the pay satisfaction question primed individuals to include pay in their mental representations of their jobs. We predicted that this association would decrease in the second condition, when the question order was reversed, but that the association would still remain significant given that pay satisfaction has been robustly associated with job satisfaction in past research and would therefore be a relatively chronically accessible feature of jobs that people draw on in making their job satisfaction judgments. We further predicted that in the third condition, pay and job satisfaction would not be associated. We reasoned that when asked to describe their jobs, individuals would call to mind a broader range of features of their jobs, and the relative influence of pay on their judgments would be reduced, consistent with set size effects in the judgment

literature (e.g., Schwarz & Bless, 1992) and findings that attitude judgments are more reliable when based on concrete rather than abstract information (Weiss, 2002).

Our results generally supported our predictions. In the first condition, in which individuals first reported their pay satisfaction and then their job satisfaction, the correlation between the two satisfaction judgments was strong and significant, $r = .53$, $p < .001$. In the second condition, in which we reversed the order of these two questions, the correlation dropped, $r = .22$, $p = .08$. In the third condition, in which we first asked individuals to describe their jobs and then evaluate their pay and job satisfaction, the correlation dropped further, $r = .07$, $p = .75$. Fisher's r-to-z transformation shows that the first correlation is significantly greater than the second correlation ($p = .03$) and the third correlation ($p = .03$). Further, examining individuals in the bottom third of pay satisfaction ratings (those most dissatisfied with their jobs), those who were asked about pay satisfaction first reported lower job satisfaction ($\underline{M} = 3.59$, $\underline{SD} = 1.70$) than those who were asked about job satisfaction first ($\underline{M} = 4.74$, $\underline{SD} = 1.33$), $t\,(34) = 2.27$, $p = .03$.[1] It appears that merely asking a question about pay satisfaction led individuals who were dissatisfied with their pay to report being less satisfied with their jobs.

Taken together, this evidence suggests that the question order effects observed in the life satisfaction literature also apply to job satisfaction. It is possible to increase the relationship between pay satisfaction and job satisfaction by first asking individuals about their pay satisfaction, and decrease this relationship by reversing the question order or by asking individuals to think of a broader set of features of their jobs. These findings provide a useful illustration of our assertion that the "all self-reported good things are

[1] The expected reverse pattern of results did not hold for the individuals in the top third of pay satisfaction ratings. Those asked about pay satisfaction first were no more satisfied ($\underline{M} = 5.59$, $\underline{SD} = 1.12$) than those asked about job satisfaction first ($\underline{M} = 5.37$, $\underline{SD} = 1.54$), $p = .63$.

associated with job satisfaction" phenomenon may in part be a function of question order effects. Given that job satisfaction judgments are influenced by temporarily accessible information cued by contexts, it is important to control for these effects in organizational research by counterbalancing questions or by including the dependent variables before the independent variables.

Survey Context

Question order effects are not the only contextual influences on satisfaction judgments. The larger contexts in which individuals are forming their judgments and completing surveys can also cause information to be temporarily accessible and thereby shape satisfaction judgments. The life satisfaction literature offers evidence in support of this notion. Schwarz and Clore (1983) found that people report lower levels of life satisfaction on rainy days than sunny days.

Along these lines, organizational and work contexts provide cues that may systematically bias individuals' judgments of job satisfaction. Aside from differences in weather, factors such as whether the survey is completed at work, home, or a neutral location, in the presence or absence of supervisors, in a safe or dangerous setting, or in professional or casual attire may shape the information that is temporarily available to individuals as they form their mental representations of their jobs and comparison standards. Further, the timing of the survey in the individual's life may alter job satisfaction judgments. George and Brief (1996) suggest that temporary moods influence how individuals evaluate their jobs. Consistent with this assertion, current research shows that recent affective experiences are significantly and reliably associated with judgments

of job satisfaction (Brief, Butcher, & Roberson, 1995; Judge & Ilies, 2004; Kraiger, Billings, & Isen, 1989; Weiss & Cropanzano, 1996; Weiss, Nicholas, & Daus, 1999). Alternatively, in some jobs, particular information may be chronically, not merely temporarily, accessible. For example, physical safety is likely to be a chronically accessible piece of information when a firefighter thinks about his job regardless of where or when he completes a survey, and social stigma is likely to be a chronically accessible piece of information when a telemarketer thinks about her job regardless of where or when she completes a survey.

Accordingly, the contexts in which individuals are completing their surveys may influence and bias their judgments of their jobs. Researchers should take into account whether information cued by survey contexts is temporarily or chronically accessible when examining job satisfaction judgments. It will be constructive for researchers to carry out surveys in different settings and at different times in order to control for survey context effects on job satisfaction.

Implications for Job Satisfaction Research

Taken together, past findings in the social psychology literature and the illustrative data we presented suggest a series of important directions for job satisfaction research. The first issue concerns whether the associations between many "self-reported good things" and job satisfaction are reliable or spurious artifacts of context effects. The ideal solution, of course, is to triangulate self-reports with observer measures, but such research often poses substantial practical difficulties. As such, studies are needed in which surveys are counterbalanced for question order and administered in multiple

contexts. Moreover, it is necessary for researchers to report question order and survey context in their methods sections so that readers will be able to determine whether context effects are likely to result in systematic biases in reported results. Such studies will enable researchers to ascertain which factors are associated with job satisfaction irrespective of temporary accessibility and which are only associated with job satisfaction when they happen to be called to mind in the moment. This is important not only for measurement reasons, but also for practical reasons: accurate knowledge about which factors increase job satisfaction is critical in enabling managers and employees to take steps toward enhancing the satisfaction of employees.

Second, our discussion of context effects provides a potential solution to problems encountered in the literature on job facets. Lofquist and Dawis (1969) proposed that job satisfaction is a function of employees' evaluations of different facets of work (e.g., tasks, pay, supervisors, coworkers, organizational climate, career opportunities). However, more recent research has revealed that facet satisfactions cannot simply be combined to predict overall satisfaction (Scarpello & Campbell, 1983; Highhouse & Becker, 1993). Weiss (2002) suggests three solutions to the facet problem. His first solution, in the interest of understanding job satisfaction, is to focus on facets that are most salient in employees' minds, both in terms of frequency and importance (see also Locke, 1976), and to consider the abstractness versus concreteness of different facets. His second solution, in the interest of generalizability, is to focus on facets that are common across different jobs. His third solution, in the interest of understanding behavior, is to focus on facets for which attitudes have implications for behavior; hence, it is important

to distinguish between affect-driven behaviors and judgment-driven behaviors (see also Weiss & Cropanzano, 1996).

Accounting for context effects both complicates and simplifies the facet problem. It is likely that asking about job facets in a particular order shapes the mental representations of jobs and of comparison standards that come to job incumbents' minds, in turn skewing their judgments. Further, asking about job facets in particular contexts that accentuate some facets and mask others may also skew job incumbents' judgments. Accordingly, if researchers are to follow Weiss's recommendations for improving facet research, they must complicate the designs of their studies by controlling for question and survey context effects. However, although designs will become more complex, results will become simpler. Accounting for question and survey context effects will enable researchers to understand how particular job facets are made chronically accessible in some organizational and work settings but not in others. For example, physical safety is likely to be a chronically accessible job facet for police officers, ambulance drivers, and soldiers who perform physically dangerous work, but not for secretaries, librarians, and telemarketers, who are likely more concerned with hours and supervisor relationships. Armed with an understanding of how organizational and work settings can be characterizing as making salient particular job facets, researchers can focus in on context-specific studies of facets. Experience-sampling studies (e.g., Weiss et al., 1999; Ilies & Judge, 2002; Judge & Ilies, 2004) may be helpful in enabling researchers to understand which facets are relevant to which organizational and work settings. However, more constructive will be open elicitation formats (e.g., Grant, Little, & Phillips, in press;

Taber & Alliger, 1995) in which employees are asked to list the relevant facets of their jobs, and then assess evaluations.

Third, researchers should examine the relevance of context effects to ongoing controversies about the stability of job satisfaction over time (for reviews, see Davis-Blake & Pfeffer, 1989; House, Shane, & Herold, 1996; Gerhart, 2005; Staw & Cohen-Charash, 2005). At the heart of the debate is a question about whether relatively stable dispositional characteristics of individuals yield consistency in their judgments of job satisfaction over time and across different jobs. We believe it is likely that context effects on measurement are in part relevant to the case made by researchers on both sides of the debate. On one hand, context effects may be artificially inflating the observed stability of job satisfaction over time. For example, merely completing job satisfaction surveys in the workplace may bring to mind not features of the specific job, but rather relatively stable schemas and beliefs associated with the domain of work (e.g., Sanchez-Burks, 2005; Wrzesniewski et al., 1997). On the other hand, context effects may be artificially decreasing the observed stability of job satisfaction over time. For example, using different questions before global job satisfaction questions may render different job features temporarily accessible, and therefore cause individuals to base their job satisfaction judgments on different mental representations of jobs and standards. As such, it is important for researchers to assess and account for context effects in studying the stability of job satisfaction.

Finally, researchers should move beyond question and survey contexts to explore additional context effects on job satisfaction judgments. Social cognition and judgment research shows how difficulties in question comprehension and differences in response

alternatives can shape judgments in unanticipated ways (e.g., Schwarz, 1996, 1999; Tourangeau, 1984, 1987). Organizational researchers should consider this growing body of knowledge about social cognition and judgment in constructing their research instruments.

In summary, job satisfaction research has been plagued by findings that many positive self-reported variables emerge as associated with job satisfaction. Advances in the social cognition, judgment, and life satisfaction literatures suggested that these findings may in part be artifacts of context effects. The order of questions and the contexts in which surveys are completed call to mind particular mental representations of jobs and comparison standards for evaluation, which shape the judgments that individuals make of their jobs. By documenting and accounting for these context effects, organizational researchers can improve the quality and coherence of job satisfaction research. This, in turn, has the potential to increase the efficacy of interventions designed to increase the job satisfaction of employees.

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