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THE EFFECTS OF THE SELF-CONCEPT ON THE PERFORMANCE APPRAISAL PROCESS

By

David Brent McKellin

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ABSTRACT

THE EFFECTS OF THE SELF-CONCEPT ON THE PERFORMANCE APPRAISAL PROCESS

By

David Brent McKellin

The relationship between one's self-concept, defined as a set of cognitive generalizations about the self, and the search for performance information about another person was examined. Using a computerized information display board to present information, 101 undergraduate psychology students, all former employees in a fast food restaurant, searched for information about an hypothetical subordinate. While only one marginally significant relationship was found between a rater's self-concept and his or her search for information, significant relationships were found among a rater's self-rated performance, experience performing the tasks being rated, and ratings of task's importance for successful job performance. Limitations of the study and suggestions for future research were discussed.

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At long last, it's finally done! Like any project worth doing, this thesis has required a great deal of blood, sweat, and tears, but it's all been worth it. Therefore, I want to take this opportunity to express my heartfelt thanks to all those friends who helped me survive this process.

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INTRODUCTION

The evaluation of employee performance is perhaps one of the most pervasive and important personnel issues that organizations confront. Defined as the process by which an observer, usually a supervisor, rates the job performance of an employee, performance appraisals are usually conducted annually or semiannually (DeNisi, Cafferty, & Meglino, 1984; Ilgen & Feldman, 1983). The information resulting from the appraisal may then be used for providing feedback to employees regarding the quality of their achievements, as well as for human resource decisions regarding promotion, compensation, training, and employee development.

Since performance appraisals are so pervasive, a great deal of research has been conducted on them. Landy and Farr (1980) reviewed and critiqued 30 years of research on performance measurement in industrial settings. While they found that an impressive number of studies used performance judgments as criteria, they also acknowledged the susceptibility of these ratings to both intentional and unintentional biases. Attempts to understand these biases often led to unsystematic and atheoretical inquiries regarding the effects on ratings of (a) the context in which the rating was completed (e.g., administrative purpose vs. research purpose; Heron, 1956), (b) rater and ratee personal characteristics (e.g. sex, race; Hamner, Kim, Baird, & Bigones, 1974), and most abundantly (c) rating scale format (e.g. Latham

& Wexley, 1977). Additional efforts to control biases in performance ratings concentrated on rating errors by focusing on training raters to recognize and avoid these errors. Observing that the direction performance appraisal research was proceeding appeared to be leading to diminishing returns, Landy and Farr (1980) suggested that the emphasis of performance rating research shift and concentrate instead on the rating process as a whole. In particular, they recommended that special emphasis be placed on the cognitive processes of the rater.

In response to the cognitive processing suggestion, several models of rater cognitive processes have appeared (e.g., DeNisi, Cafferty, & Meglino, 1984; Feldman, 1981; Ilgen & Feldman, 1983). Central to these models is the view that a rater's task consists of making a performance judgment by processing information about the ratee. More specifically, the judgment process is posited to proceed through four ordered cognitive processes: (a) attention to and observation of performance information, (b) encoding of this information and its storage in memory, (c) retrieval of such information from memory prior to evaluation, and finally, (d) integration of available information retrieved from memory in order to make a rating judgment. These four are often presented as four stages and labeled acquisition, storage, retrieval, and judgment.

Information Acquisition in Performance Evaluation

While rater cognitive processing has dominated the performance appraisal literature since 1980 (Ilgen, Barnes-Farrell, & McKellin, 1986), the four stages have not received equal attention. In particular, the information acquisition stage of the process has not received much study in the appraisal literature. This is unfortunate since job behaviors must first be noticed before they can be stored in memory for

later recall and evaluation. Thus, all later stages hinge on the adequacy of the initial phase.

Within the acquisition literature, the primary emphasis has been on characteristics of the rating setting, specifically on the rating purpose and its effects on how information is selected about others' performance. In studying how the purpose of the appraisal affected the extent to which subjects search for information about ratees, Matte (1982) argued that raters would consider using ratings for making promotions more important than using them to give ratees feedback. He then hypothesized that raters would search for more information about a ratee's performance when they believed the rating task was more important than when they believed it was less important. While Matte was unable to establish that raters actually believed one purpose was more important than the other, his results did indicate that raters searched for information more extensively when the appraisal was to be used for both a promotion decision and feedback than when it was for feedback only.

Schechtman (1987) also examined the effects of rating purpose on raters' information acquisition. In this study, raters were instructed to search for information about several employees for the purpose of either selecting an employee to promote (administrative purpose) or selecting an employee to receive remedial training (developmental purpose). She found that the purpose of the rating affected how much information raters searched for about ratee performance, but only in conjunction with the ratee's performance level. The highest level of search occurred for good performing employees under promotion conditions and poor performing ones when the purpose was to administer remedial training. She

interpreted the pattern of these results to indicate that rating purpose did influence raters' information acquisition strategies, but only when taking the ratee's performance level into account.

Finally, Williams, DeNisi, Blencoe, & Cafferty (1985) investigated how performance appraisal purpose and the type of decision to be made affected the types of information raters search for about ratees' performance. In this study, raters were instructed to search for performance information about four individuals' performance. The information which was available took three forms: (a) how well the ratee performs a given task on other occasions (consistency information), (b) how well the ratee performs on other tasks within his or her job scope (distinctiveness information), and (c) how well the other three workers perform on the same set of tasks (consensus information). The raters' task was to search for information about the ratees' performance for the purpose of determining salary increases, promotions, or remedial training needs. Using this information, raters were told to either determine how deserving the ratee was for a particular type of action (e.g. promotion or training), or to actually designate that the ratee should receive the specified outcome. Williams, et. al did not find relationships between either appraisal purpose or the type of outcome decision to be made and information search. They did, however, find a significant interaction between the rating purpose and the type of outcome (i.e., designation decision or deservedness rating) resulting from the rating. While similar information request patterns were found across all three rating purposes, subjects who rated how deserving the ratee was of a salary increase searched for distinctiveness information most, consistency second, and consensus least. Ratees who designated whether or not the ratee

should receive a salary increase, on the other hand, requested consensus information most, followed by distinctiveness and consistency information.

Research on the appraisal context, then, has found that rating purpose interacts with other contextual factors to affect how raters select information about others' performance. The specific nature of this effect, however, has not been thoroughly investigated, and therefore is not completely clear at this time.

The present study

The classic model for the perception of any stimuli is that perception is a function of characteristics of the environment or context and those of the person whose perceptions are of interest. While rating context has been found to affect raters' information acquisition patterns, no literature in the performance appraisal area has investigated how individual differences among raters affect the information acquisition process. However, there is literature in the area of social cognition that has examined individual differences in perceptions of others. One characteristic which has been found in that literature to affect attention to others is the observer's self-concept (e.g. Fong & Markus, 1982). The social cognition literature defines the self-concept as a set of cognitive generalizations containing information about the self (Markus, 1977). Specifically, social psychologists have found that people's self-concepts affect the traits to which they attend when describing others' personalities (e.g. Fong & Markus, 1982; Lewicki, 1983, 1984).

The present research explores the effects of the self-concept on the cues to which raters attend when doing a performance appraisal. However, for performance appraisal, the criteria have been ratee behaviors, not personality traits.

Although it will be argued that self-concept effects on attention to ratee behaviors

are likely to be similar to those observed for traits, it is not clear at this point that this generalization is to be expected. Because of differences in constructs and operational definitions between trait- and behaviorally-based research, it is necessary to conduct research with the explicit purpose of focusing on performance appraisals to judge whether such an effect is relevant to the appraisal setting (Ilgen, Barnes-Farrell, & McKellin, 1986; Ilgen & Favero, 1985). With this in mind, the present research investigated the possibility that a rater's self-concept, an individual difference variable, affects how he or she searches for information about others' performance.

Purpose and Overview

To understand how individual differences in raters' cognitive systems affect the information to which they attend concerning others' performance, this paper proceeds as follows. First, basic concepts from cognitive psychology which relate to individual differences in information storage will be discussed along with the effects of storage processes on the attention to performance cues. Next, the role that one specific individual difference variable, self-concept, plays in the perception of social cues about others will be discussed. Building on this background, it is then proposed that raters' self-concepts affect the set of cues to which they attend in judging the performance of others.

Cognitive Concepts Relevant to Performance Appraisal

To understand how a person's self-concept affects the processing of information about others, it is first necessary to review some basic concepts related to how information is stored in memory. The discussion that follows briefly describes two organizing systems, categories and schemas, which are thought to

affect how information is processed and stored in memory. Next, individual differences in how a specific category or schema is selected for processing information is examined. With an understanding of how these organizing systems are selected, it is then possible to see how this selection is thought to affect the cognitive performance appraisal process. Finally, how a person's self-concept can affect the process by which information about others' performance is selected from one's social environment is addressed.

Categories and Schema

Borrowing heavily from research in social cognition and cognitive psychology, current performance appraisal theory is based on the assumption that raters systematically encode ratees' routine behaviors in memory (Feldman, 1981; Ilgen & Feldman, 1983; Shiffrin & Schneider, 1977). The cognitive literatures assume that encoding is achieved by utilizing cognitive structures, typically labeled either categories or schemas. Categories and schemas function in memory to represent organized knowledge about a given stimulus (Bartlett, 1932; Lord & Foti, 1986). The term "category" is used most frequently to refer to a "fuzzy set" of behaviors which share similar features. The prominent features reflect typical category characteristics (Rosch, 1978). The term schema is used to generally refer to highly structured organizational systems of pre-existing information. Using these systems, incoming information is stored according to its serial order of occurrence, shared characteristics or elements, or relevance to a particular person (Ilgen & Feldman, 1983; Lord & Foti, 1986). In other words, a category is a presumed set or "bin" and the schema is the system that establishes that bin. In the literature, the two are often used as if synonymous. Functionally, both are believed to serve as guides for

the interpretation of incoming information and to assist in the subsequent generation of appropriate actions and expectations (Graesser, Woll, Kowalski, and Smith, 1980; Lord & Foti, 1986; Taylor and Crocker, 1981).

Individual Differences in Schema Usage and Perception

Previous research has shown that people differ in the number and the nature of their schemas and categories (Feldman, 1981; Markus, 1977; Sechrest, 1968). These differences may be due to cultural factors (Triandis, 1976), prejudice, cognitive complexity (Feldman & Hilterman, 1975), or expertise (Markus, Smith, & Moreland, 1985), to name a few possible influencing factors, and may affect the salience of different schemas for different people. There are also differences in the likelihood that an individual will use any particular schema to process information (Higgins, King, & Mavin, 1982; Tversky & Kahnemann, 1973, 1974; Srull & Wyer, 1979; Wyer & Srull, 1980). Specifically, one factor thought to influence the likelihood that a schema will be used in information processing is the accessibility of that schema for use in memory encoding (Higgins & King, 1981; Higgins, King, & Mavin, 1982; Wyer & Srull, 1980, 1981).

Two different approaches have been used to investigate the effects of heightened schema accessibility on information processing. The first of these approaches, which focuses on the effects of situational variables on accessibility, typically has involved "priming" the schema of interest. Concentrating on short-term accessibility, priming refers to the effect of presenting cues in one context on increasing a schema's accessibility in a subsequent context (Fiske & Taylor, 1984).

While priming studies have concentrated on situational effects on short-term accessibility, there may also be differences among individuals that cause schemas to

become accessible for longer periods of time (Wyer & Srull, 1980). In fact, if a schema continues to be used on a regular, frequent basis, it is said to become "chronically accessible," meaning that its availability and selection for use in information processing is unusually high when compared to other schemas that might be implemented (Higgins, Rholes, & Jones, 1977; Srull & Wyer, 1979, 1986; Wyer & Srull, 1980). Therefore, if a schema becomes chronically accessible it will be employed as though it is constantly primed, and it may become a stable characteristic of the individual's information processing system (Bargh & Thein, 1985; Higgins & King, 1981; Higgins, King, & Mavin, 1982).

The next section reviews a portion of the research which has studied the effects of chronic schema accessibility on memory encoding and its subsequent effects on the salience of environmental cues. This review provides the background for addressing how the concept of schema accessibility relates to the process of making performance judgments.

Differences in which schemas become accessible. Which schemas become chronically accessible varies across individuals. For example, Higgins, King, and Mavin (1982) studied the extent to which people differ in their accessible schemas in a two-part study. In the first part, subjects were asked to list the traits of (a) a type of person they liked, (b) a type of person that they disliked, (c) a type of person they sought out, (d) a type of person they avoided, and (e) a type of person they frequently encountered. Approximately one week after completing this task, subjects participated in a second, "unrelated" study in which each read an individually tailored essay containing 12 behavioral descriptions of a target person.

These descriptions had been constructed such that the 6 traits the subject had listed

first during Part One of the experiment ("accessible traits") were embedded in the essay the subject read, as were 6 traits included in lists compiled by other subjects, but which the subject had not included in his or her own lists ("inaccessible traits"). In order to assess the effects of trait accessibility on information processing, Higgins et al. administered a 10-minute nonverbal task immediately after subjects read their essays, and then asked subjects to exactly reproduce the essay from memory. In addition, subjects were also asked to describe the target person as fully as possible.

Results of this study demonstrated two important characteristics of chronic schema accessibility. First, Higgins et al. found that 50 of the 88 distinct traits determined to be accessible in the initial trait listing task (57%) were listed by only one subject. In addition, the trait found to be most accessible ("Humorous") was actually found to be accessible for only 38 percent of the subjects. These results led the authors to conclude that there appears to be relatively little overlap in people's accessible schemas. Second, when reproducing the essays, subjects recalled fewer aspects of the description associated with their inaccessible schemas than details associated with their accessible schemas. These findings suggest that schema accessibility, especially when a schema is chronically accessible, can be construed as an individual difference characteristic that varies widely across people.

Factors affecting schema accessibility. Current concerns. Schemas may become chronically accessible through a variety of means. First, an individual may be sensitized toward using a particular schema because of his or her "current concerns" (Klinger, 1975); that is, the interaction of a person's immediate needs and values with stimuli in his or her environment may affect which schema is accessed (Srull & Wyer, 1986). No known empirical studies have investigated the specific

effect that current concerns may have on a schema's accessibility for encoding social information. However, in studies such as that by Luria and Vinogradova (1959), subjects were found to experience increased physiological arousal (an increase in finger and scalp blood volume) when a word for which they were instructed to listen, or one of its synonyms, was presented in a list. This suggests that an individual's current concerns (listening for the target word) increase sensitivity to stimuli related to those concerns (Klinger, 1975). This type of effect might be typified in industrial and organizational psychology when people interview for jobs. Because job candidates are so concerned with making the best impression, they tend to think of every action or statement they make, or is made towards them, in terms of its impact on their prospects for receiving a job offer. Thus, interviewees' current concerns may affect the accessibility of their "good job candidate" schema.

Personal values. Personal values may also influence schema accessibility. In two studies by Bruner (1951, 1983), values were found to affect schema accessibility in the perception of both ambiguous and unambiguous stimuli. Bruner (1951) measured subjects' value orientations using the Allport-Vernon Study of Values test. Next, he used a tachistoscope to present a series of pictures, each corresponding to one of six values (religious, economic, theoretical, social, political, and aesthetic), and subjects were asked to describe what they saw. Each picture could be interpreted as depicting one of the listed values or as being truly ambiguous. For instance, one picture was of man bending over; it could be interpreted as a man working (economic value) or praying (religious value). Results confirmed the hypothesis that subjects' value orientations affected their interpretation of what they saw.

Similarly, the effects of personal values on schema accessibility were shown to be extremely persistent in a study by Erdelyi & Appelbaum (1983). Drawing a sample from members in a Jewish organization, Erdelyi & Appelbaum used a tachistoscope to present subjects with an array of stimuli consisting of eight neutral figures arranged in a circle. In the middle of this array, the authors introduced another symbol, which varied across conditions. The ninth symbol was either a swastika, a Star of David, or a window. Prior to viewing the array, subjects were instructed that they should concentrate on remembering what figures were shown, and their locations in the array. Next, subjects were shown the array, and were asked to report what figures they had perceived and their locations. Results demonstrated that the symbol presented in the middle of the array affected subjects' ability to recall the other symbols in the array. Subjects who viewed the array with the swastika correctly recalled significantly fewer symbols than those whose array included the Star of David, who recalled fewer symbols than those who were shown the window figure. This experiment suggests that long-term personal values can influence information processing by directing people's attention towards cues associated with their values, even when concentration on such value-laden interpretations is not completely appropriate. Overall, these studies demonstrate that personal values can affect schema accessibility, thereby biasing information processing in favor of schemas associated with one's strongly held values.

Personality traits. Finally, stable personality traits have also been shown to affect schema accessibility. Studies by Markus and others (e.g. Fong & Markus, 1982; Lewicki, 1983; Markus, 1977; Markus & Smith, & Moreland, 1985) have investigated the information processing characteristics of individuals who describe

themselves as being near the extreme end of a particular trait dimension (possess the trait or do not possess the trait) and who feel this domain is important for their view of themselves. Research into the cognitive performance of these "schematics" (Fong & Markus, 1982) has generally supported the hypotheses that they (a) process information that is interpretable in terms of that dimension more quickly and (b) remember it better (e.g. Bargh, 1982; Bargh & Pietromonaco, 1982; Markus, 1977; Markus, Crane, Bernstein, & Siladi, 1982).

Besides increasing sensitivity to environmental stimuli, chronically accessible personality schemas may also bias how some types of information are processed. In the first stage of a two-part study on the biasing effects of personal traits, Markus (1977) administered measures of the bipolar trait "Independence/ Dependence" to a class of introductory psychology students. These measures included subjects' selfratings of their own independence on the Gough-Heilbrun Adjective Check List (Gough & Heilbrun, 1965), and on semantic differential scales behaviorally describing the dimension Independent-Dependent. On the latter measure, subjects were also asked to rate the importance of each semantic dimension for describing themselves. From these measures, subjects who (a) rated themselves highly on at least two of the scales (8-11 on an 11-point scale), (b) rated these dimensions important (8-11 on an 11-point scale) and (c) checked themselves as "independent" on the adjective check list were termed "Independents." Similarly, subjects who (a) rated themselves at the low end of at least two of the three scales (1-4 on an 11point scale), (b) rated these dimensions as being important (8-11 on an 11-point scale), and (c) checked themselves as "dependent" on the adjective check list were identified as "Dependents." Finally, individuals who (a) rated themselves in the

middle range (5-7 on an 11-point scale) on at least two of the three scales, (b) fell in the lower portion of the distribution on the importance scale, and (c) did not check themselves as either "independent" or "dependent" on the adjective check list were termed "Aschematics." This meant that subjects in this category did not possess schemas relevant to the dimension Independent/Dependent. Using this information about subjects' schematic development regarding Independence/Dependence, 16 subjects from each category were selected to participate in the main phase of the study.

In the main study, Markus studied the effect that being schematic for Independence had on subjects' reactions to false feedback concerning their disposition on the similar trait "suggestibility." Measuring subjects' acceptance of this feedback, she found that schematics' were less likely than aschematics to accept incongruent or counterschematic information as self-diagnostic because it was inconsistent with, and therefore threatening to, their own self-images. Therefore, this study suggested that being schematic related to a particular trait dimension might bias one's processing of self-relevant information. Additional implications for being schematic in certain domains will be discussed later in this paper.

Summary. As evidenced by the preceding studies, it appears that schema accessibility biases attentional processes towards schema-relevant information (cf. Bargh & Pietromonaco, 1982; Geller & Shaver, 1976). Chronically accessible schemas, it is assumed, become highly accessible to an individual because of his or her (a) current concerns, (b) personal values, and/or (c) stable personality traits. In general, it appears that components of an individual's identity, of which current concerns, personal values, and personality traits are a part, help to explain

individual differences in which schemas become chronically accessible. With this in mind, it is argued that information related to one's self may affect the chronic accessibility of the schemas used to process information about others. Specifically, this research seeks to investigate if an individual's self-concept, construed as a collection of schemas which contain information about the self (Markus, 1977), resembles a chronically accessible schema in its effects on how information is selected about others whose performance is to be rated. In order to generalize this effect to the performance appraisal context, the following section will review research showing the effects of one's self-concept on the selection and processing of trait-related information about others.

The Effects of Self-Concept on the Perception of Others

Psychologists since Freud have recognized that, through the phenomenon of projection, one's own personality characteristics are often attributed to others (e.g., Freud 1924/1956; Holmes, 1978; Schiffenbauer, 1974). Even earlier theorists recognized that one's self-concept influences the perception of others (e.g., Hall, 1898; James, 1915). Mead (1934) Rogers (1951) and others (e.g. Sullivan, 1953) have reached similar conclusions. But how a monolithic, unitary entity (which the self-concept initially was perceived to be) was able to regulate cognitive processes in a wide variety of contexts with varied outcomes became problematic within established definitions of the self-concept. Therefore, it became clear to contemporary theorists that an alternative view of the self was necessary.

Current theory on the structure of the self-concept

One of the most important changes in the last decade of research on the selfconcept can be found in literature pertaining to its structure and content (Markus &

Wurf, 1987). A major impediment in linking the self-concept to the diversity of behavior with which it was supposedly related was the view that very complex global behavior was related to a stable, generalized, average view of the self, most closely approximated by self-confidence. A solution to this problem has been found by defining the self-concept as a set or collection of images, schemas, conceptions, prototypes or theories about the self (Carver & Scheier, 1981; Epstein, 1980; Greenwald, 1982; Kihlstrom & Cantor, 1984; Markus, 1983; Rogers, 1981; Schlenker, 1980). Embracing this multidimensional, active view, Markus (1977) defined the self-concept as a set of cognitive generalizations or representations about the self, called self-schemas, acquired by gathering large amounts of knowledge about the self in various areas through introspection. These generalizations about the self serve to organize and guide the processing of selfrelated information contained in the individual's social experience. Using these selfschemas, then, the self-concept aids the process of recognizing and interpreting selfrelevant stimuli in the various domains of an individual's social environment. Simply put, schemas correspond to how people perceive themselves.

Given the notion of the self-concept as a multidimensional construct, it was no longer feasible to refer to the self-concept (Markus & Wurf, 1987). Rather, because of limited cognitive capacity and the vast amount of information stored in a person's self-representations, the model of self-concept has come to describe the working, on-line, or accessible self-concept (Cantor & Kihlstrom, 1986; Markus & Nurius, 1986; Schlenker, 1985). This idea reflects the belief that not all self-schemas that are part of the complete self-concept are accessible at any one time. Rather, the set of schemas that is available at the moment is most frequently called the

"working" self-concept. The working self-concept is best viewed as a continually active, shifting array of a person's accessible self-knowledge.

Approaching the self-concept as a dynamic entity gains support on several grounds. First, this view is consistent with assumptions suggested by the symbolic interactionist perspective (Mead, 1934; Stryker, 1980) which contends that there is not a fixed or static self-concept, but only a current self-concept constructed from one's social experiences. Second, the multidimensional view allows for a selfconcept that can be both stable and malleable. Core elements of the self may remain relatively unchanged by variations in one's social environment and may remain chronically accessible to the working self-concept because of their extensive elaboration and central role in defining the self (Higgins, King, & Mavin, 1982). Nevertheless, changes in factors such as prevailing social contexts and individual motivation may vary the accessibility of more volatile self-representations. Finally, support for the dynamic view of the self-concept follows from the growing body of research reviewed earlier which suggests that individuals are heavily influenced in all aspects of judgment, memory, and overt behavior by their currently accessible pool of thoughts, attitudes, and beliefs about themselves (e.g. Higgins & King, 1981, Nisbett & Ross, 1980). Therefore, the notion of a dynamic self-concept helps explain both stable and variable aspects of an individual's self-concept.

The effects of the self-concept in person perception

A large body of literature has been generated in the social cognition area showing that the self-concept, through the use of self-schemas, is involved in person perception (e.g. Bargh, 1982; Fong & Markus, 1982; Kuiper, 1981; Lewicki, 1983, 1984; Markus & Smith, 1981; Markus, Smith, & Moreland, 1985). All of this

literature will not be review here because the primary interest in the current study is the self-concept's role in selecting information about others. With this in mind, only research on how the self-concept affects the selection of information is addressed.

Selection of information about others. A number of studies in social psychology have demonstrated that people tend to use traits which they use to define themselves when they search for information to describe others (e.g. Lewicki, 1983, 1984; Shrauger & Patterson, 1974). These studies, however, used methods which only inferred that a person's self-concept influenced this process. For example, Shrauger and Patterson (1974) asked subjects to write several descriptions of people they knew, and later to select 10 traits about which they were most satisfied with themselves and 10 traits about which they were least satisfied with themselves. Though they found that people tended to use dimensions which were highly self-descriptive when describing others, Shrauger and Patterson did not directly establish a causal relationship between one's self-concept and information attended to in others.

In another study, Fong and Markus (1982) sought to determine if a person's self-concept directly affects the characteristics to which he or she attends in another's personality. Specifically, Fong and Markus investigated the impact of one possible self-schema dimension, whether or not an observer had a self-schema for introversion or extroversion, on the types of information he or she requested in order to find out about others. In this study, subjects were identified as either introvert schematics (those having self-schemas for introversion), extrovert schematics (those having self-schemas for extroversion), or aschematic (those with self-schemas that were not easily identified as introverted or extroverted). Next,

subjects were instructed to select 12 of a possible 26 questions they would ask to get to know another person. This list included 11 questions judged to elicit information about extraversion, 10 about introversion, and 5 irrelevant to either introversion or extroversion. Results supported the hypothesis that people tend to seek information about others that is related to dimensions for which they have self-schemas; extrovert schematics selected more extrovert-related questions and introverts selected more introverted questions. This study, along with those which used less direct approaches (e.g. Lewicki, 1983, 1984; Shrauger & Patterson, 1974) provides evidence that an individual's self-schema related to a particular trait dimension affects his or her selection of information about that dimension when evaluating others.

Though the studies cited agree that people use self-relevant traits or dimensions to judge others, exactly how self-schemas actually affect this process is unclear. One perspective on how information is selected suggests that people are biased to protect their self-images when judging others (Lewicki, 1983, 1984).

Another point of view, suggested by Kuiper and her associates (Kuiper, 1981; Kuiper & Derry, 1981; Rogers, Kuiper, & Kirker, 1977), is that self-schemas affect the selection of dimensions to observe because they, the self-schemas, serve as anchors that observers find helpful in encoding their observations about other people. This position is elaborated upon by Markus and her colleagues (e.g. Fong & Markus, 1982; Markus, Smith, & Moreland, 1985) who suggest that people develop self-schemas in those areas of their own personalities with which they most strongly identify. These self-schemas, then, help people develop expertise related to these domains. The degree of expertise subsequently affects the salience of information

about others. Therefore, from this point of view, the self serves as a reference point which facilitates the development of expertise in various domains and in turn affects which information a person attends to when observing others. For purposes of discussion, I label the two perspectives just described as the "self-image bias" and the "expertise view" and will discuss each below.

<u>Self-image bias in person perception</u>. The self-image bias view of person perception, presented by Lewicki (1983, 1984), suggests that when selecting dimensions along which to evaluate others, an observer chooses those areas about which he or she feels most positively about himself or herself. This, in turn, enhances the probability that others will be seen as inferior if one assumes a relatively normal distribution of perceived preference. In a study which investigated subjects' self-ratings and ratings of others, Lewicki (1983) instructed subjects to rate themselves and 20 stimulus persons (who were known to them) along 25 trait dimensions. Using these ratings, the centrality of each dimension was determined by examining the amount of variance each rating dimension accounted for in all of the other dimensions (i.e., by adding the squared product-moment correlations between one dimension and each of the remaining 24 dimensions (Wishner, 1960)). Results of this study showed a linear relationship between the desirability of an individual's self-rating on a trait dimension and its centrality or importance in perceiving others. Lewicki hypothesized that this finding reflected a classic motivational defense mechanism that protects a high self-evaluation, and called this phenomenon the "self-image bias in person perception."

In a second study, Lewicki (1984) asked subjects to identify whether each of four stimulus persons possessed 15 trait attributes (yes-no responses). Using

subjects' response times as the dependent measure, Lewicki found that the desirability of a person's self-evaluation on a trait was linearly and inversely related to the time it took them to identify whether the stimulus person possessed that trait. This effect Lewicki attributed to the influence of self-schemas on the perceived desirability of these traits, with more desirable traits being identified more quickly than less desirable traits.

While these and other studies have demonstrated that the self-concept, as a set of self-schemas, affects what information is noticed or considered important in observing others in relation to trait dimensions, no literature has previously investigated the role of the self-concept as it pertains to behaviorally-based domains. By definition, the self-concept is a set of cognitive generalizations or schemas containing information about the self. Though no research has addressed the issue, this definition implies that the self-concept includes information about not only trait-based information, but information about one's own performance as well. The inclusion of both behaviors and traits is consistent with the current behavioral emphasis in the performance appraisal literature.

Accepting this more comprehensive construal of the self-concept construct suggests that the self-concept should impact the processing of behaviorally-based information in a way similar to the way it impacts the processing of trait-related information. Therefore, when applying this definition within the framework of the self-image bias perspective, one would expect that the favorability of a person's evaluation of his or her own performance on a behavioral dimension will be linearly related to how important he or she perceives this dimension. Generalizing such an effect to the performance rating context suggests that:

Hypothesis 1: When presented with a set of behaviorally-based job dimensions varying in perceived importance for successful job performance, raters' evaluations of those job dimensions' importance will be positively and linearly related to their evaluations of their own performance on those dimensions (See Figure 1).¹

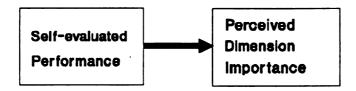


Figure 1. Relationship between Self-evaluated Performance and Perceived Dimension Importance.

The self-image bias perspective also suggests that observers attend more readily to those characteristics of other people on which they (observers) evaluate themselves most positively. If a similar effect were true in searching for performance-based information about others, observers should search for more information about others on those behavioral dimensions for which they evaluate themselves most positively. Therefore, in the context of collecting information for performance ratings, it is hypothesized that:

<u>Hypothesis 2</u>: When presented with a set of behaviorally-based job dimensions, raters will search for more information about others' performance on those behaviorally-based job dimensions for which they evaluate their own performance most favorably than on those for which they perceive their own performance to be least favorable (See Figure 2).

This figure and others that follow use directional arrows based upon the implications behind the development of the hypotheses. However, it is recognized that limitations in the methods used here cannot provide direct tests of causal effects. The wording of the hypotheses is consistent with the causal limits of the research.

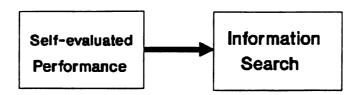


Figure 2. Relationship between Self-evaluated Performance and Information Search.

Hypothesis One addresses the effects of an individual's assessment of his or her own performance on perceived dimension importance, while Hypothesis Two deals with the effects of his or her self-evaluated performance on the search for information about others. It may be possible, however, to better explain the relationship between self-evaluation, perceived importance, and information search by considering all three factors simultaneously. Specifically, if both information search and perceived dimension importance are related to one's self-evaluation on that dimension, it could be expected that dimension importance mediates the relationship between one's self-evaluation and one's search for dimension-relevant information about others. For dimension importance to mediate the relationship between self-evaluation and information search implies two things: (1) there is a relationship between how important one perceives a dimension to be and how much information he or she searches for information about others' performance on that dimension; and (2) the strength of the relationship between self-evaluation and information search changes in accordance with changes in the strength of the relationship between dimension importance and information search. Such a mediated relationship would mean that the relationship between self-evaluation and

information search would be relatively stronger (higher correlation) when the relationship between importance and information search is stronger, and conversely would not be evident when the correlation between importance and information search is zero. With this relationship in mind, it is hypothesized that:

Hypothesis 3: When presented with a set of behaviorally-based job dimensions, the extent to which the favorability of raters' evaluations of their own performance on those job dimensions is related to the amount of information they search for about others' performance will be mediated by how important those dimensions are perceived to be for successful job performance (See Figure 3).



Figure 3. Perceived Dimension Importance as a Mediator Between Self-evaluated Performance and Information Search.

Effects of expertise on person perception. While Lewicki's viewpoint implies that a bias towards protecting one's self-image affects the selection of dimensions from which people gather information about others, Markus and her colleagues (Fong & Markus, 1982; Markus, 1977; Markus & Smith, 1981; Markus, Smith, & Moreland, 1985) hold the position that expertise is the key. This view suggests that as a person develops self-schemas for the various important aspects of the self he or she becomes particularly sensitive to stimuli related to these schemas. As time passes, increased sensitivity to these schemas leads to the acquisition of large knowledge bases in these areas, and the person develops expertise about them.

Markus and her colleagues have shown that, when dealing with information related

to domains for which an individual has developed self-schemas, he or she is able to process this information more efficiently. In a study by Markus, Smith, & Moreland (1985), subjects who had been classified as either schematic or aschematic on the trait "masculinity" viewed a videotape of a person performing both neutral and stereotypically masculine behaviors. They discovered that, when dealing with information related to masculinity, schematics were able to observe the actions of the person in the videotape and: (a) encode this information in memory using larger units, or "chunks", of information; (b) draw a greater number of very confident inferences from this information; and (c) respond more appropriately to the specific observational purposes of the situation (e.g. general description of an actor's behavior vs. recall of specific behaviors) than were people who lacked selfschemas in this domain. In addition, the sensitivity to schema-related information suggested by this expertise may help explain the results of the Fong and Markus (1982) study discussed previously in which people searched for more information about others in domains corresponding to their self-schemas. Therefore, this perspective asserts that people tend to concentrate on dimensions for which they have developed the most expertise when judging others because these domains provide them with more reference points for making decisions about others than does attending to domains in which they do not consider themselves experts.

In attempting to generalize the effects of expertise to the selection of performance information about others, it is necessary to determine what variables might be relevant to expertise. One relevant characteristic associated with expertise is experience in performing the task to be rated. It is expected that the more experience a person has in performing a given task or job dimension, the more

expert he or she will be on that task. This expertise may affect the selection of performance information about others in two ways. First, expertise may serve as a frame of reference which could be used when evaluating the performance of others. Across job dimensions, having a more developed frame of reference for some job dimensions than for others might suggest that raters will search for more information about a subordinate's performance on job dimensions in which raters have more experience than on those in which they have less experience.

A rater's frame-of-reference for a job dimension may not have a direct effect upon information search however. Rather, expertise concerning a job dimension can also be thought to affect how important a dimension is perceived to be. In addition to a more developed frame-of-reference, another outcome of expertise is the ability to shift one's focus from the details of actions to the "big picture" (Markus, Smith, & Moreland, 1985). Thus, more experience in performing a dimension should lead one to more fully understand how performing specific tasks is important in meeting the overall goals. Therefore, it would appear that a job dimension's perceived importance would affect the relationship between a rater's experience on that dimension and his or her search for information about another's performance. Specifically, it is expected that the relationship between one's experience in performing a job dimension and searching for information about another's performance on that dimension changes with corresponding changes in the perceived importance of that dimension. It is also expected that as the correlation between dimension importance and information search approaches zero the correlation between experience and information search will also approach zero,

indicating that dimension importance mediates the relationship between experience and information search.

Hypothesis 4: When presented with a set of behaviorally-based job dimensions, the extent to which raters' experience on a job dimension is related to their search for information about another's performance on that dimension will be mediated by how important they perceive the dimension to be for successful job performance (See Figure 4).



Figure 4. Perceived Dimension Importance as a Mediator between Experience and Information Search.

Finally, the self-image bias and expertise explanations of the self-concept's effects on person perception may not be incompatible. Rather, these interpretations of the self-concept's effects may simply emphasize different aspects of the same phenomenon. One similarity between the self-image bias and expertise perspectives is that each view implies a direct influence on the importance one places on any particular job dimension--self-image bias through self-evaluation and expertise through job experience. When considering self-evaluation and experience together, it becomes evident that one must first perform a task before evaluation on that task can take place. Therefore, the self-image bias and expertise perspectives of person perception may combine to explain perceived job dimension importance in that experience may affect perceived importance indirectly through its relationship with

self-evaluation, as well as directly through its hypothesized unmediated relationship.

To determine if this is the case, it is hypothesized that:

<u>Hypothesis 5</u>: When presented with a set of behaviorally-based job dimensions, raters' experience in performing specific job dimensions will be both directly related to their perceptions of a dimension's importance and indirectly related to importance through their evaluations of their own performance (See Figure 5).

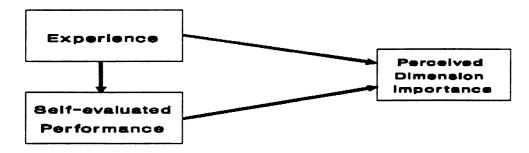


Figure 5. Relationships among Experience, Self-evaluated Performance, and Perceived Dimension Importance.

METHOD

Overview

The hypotheses were tested using a sample of raters varying in experience on a job identical to the one performed by the persons to be rated. This was necessary since raters' work experience was to be related to their behavior when searching for information about others' performance on tasks they themselves had performed. In addition to the search task, measures were collected regarding raters' evaluations of their own performance, of the importance of various job duties, and a number of demographic variables.

Sample

The number of subjects required for this investigation was determined through a power analysis (Cohen & Cohen, 1983). In the Fong and Markus (1982) study reviewed earlier, self-schemas were found to account for approximately 21 percent ($\underline{w}^2 = .21$) of the variance in predicting which questions an observer selects about another person. Desiring a power coefficient of at least .90, and taking into account that two independent variables would be included in the analyses for Hypotheses Three through Five (one variable without any prior variables, an "exogenous" variable, and one mediating variable for each hypothesis), it was determined that at least 52 subjects were required for this study. However, given the exploratory nature of the study and the uncertainty about the extent to which the

Fong and Markus (1982) results would generalize from traits to behaviors, a sample of 101 subjects was obtained (81 female, 20 male). All received course credit for their participation. To insure that subjects understood the duties involved in the job to be rated, participants were required to have experience working in one of three fast food restaurants. This type of employment was selected primarily because of the likelihood that members of the larger sample from which this sample was drawn would have had this experience. Specifically, the sample was limited to current or former employees of Burger King (n=25), McDonald's (n=61), and Wendy's (n=14) restaurants to control the types of tasks employees perform on the job. Participants had a mean age of 18.83 years (SD=1.35) and had worked in a fast food restaurant for an average of 11.24 months (SD=9.44). Eleven of the subjects were currently employed by their restaurant, while 90 were not. Subjects no longer employed by a restaurant terminated their employment an average of 19.56 months prior to participating in this study (SD=18.38).

Task

In order to record the amount of information for which subjects searched within each job dimension, a computerized information display board was used. Information display boards have previously been used to study information selection strategies in both consumer psychology and other types of decision making research (e.g. Doherty, 1987; Jacoby, Chestnut, Weigl, & Fischer, 1976; Payne, 1976). In performance appraisal research, information display boards have been used primarily to study the effects of various performance appraisal purposes on the search for information about ratees (Matte, 1982; Schechtman, 1987; Williams, DeNisi, Blencoe, & Cafferty, 1985).

The version of the information display board which was used in this study was an interactive computer program. This program displays a list of job dimensions and a list of behavioral alternatives from which subjects may select information (See Figure 6).

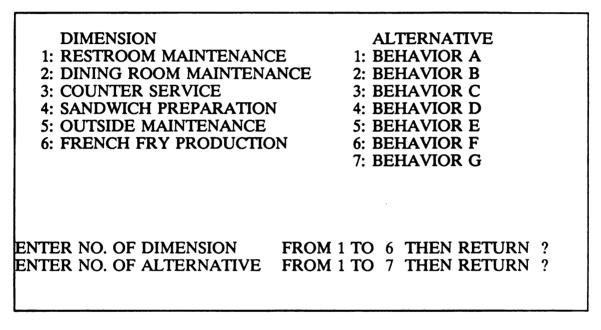


Figure 6. Job Dimension and Behavioral Alternative Selection Screen.

Subjects' task was to gather information about the performance of an hypothetical employee. To do this, subjects were presented with a number of discrete choices. First, subjects were asked to select which one of the possible six job dimensions on which they would like information. Seven behavioral descriptions about the employee's performance were described within each of the six job dimensions. After selecting a job dimension, subjects were next instructed to select which of these descriptions they wished to display on the computer's screen. Therefore, each time a subject wished to display a piece of information about his or her hypothetical

employee, he or she would first select the job dimension from which that information should come and then select which behavioral description within that dimension should be displayed.

Actually selecting information to be displayed on the computer's screen involved entering information on the computer's keyboard. To display an individual piece of information, subjects first typed the number corresponding to the job dimension about which they wanted information on the keyboard. Next, subjects typed the number corresponding to the behavioral description they wished displayed. Once both the dimension and alternative had been selected, the computer displayed information about the employee's performance corresponding to these values on its screen. For example, to select Behavioral Alternative C under the dimension French Fry Production, the subject would type the numeral 6, French Fry Production in the list of dimensions, followed by the numeral 3 for Behavior C in the list of alternatives. At this point, the computer would display the description of the employee's performance corresponding to Behavioral Alternative C on French Fry Production (see Figure 7).

At the bottom of screen displaying the performance description, subjects were asked whether they needed more information about the employee's performance. If they responded that they did, the program returned them to the information selection screen with the opportunity to conduct another search. If they responded that they were ready to rate the employee's performance, the computer program displayed a screen asking them to enter their ratings on a Likert-type scale. While not a focal variable in the present study, these ratings were collected primarily to maintain the face validity of this simulation.

Employee discards cooked fries held in the bagging station longer than 7 minutes

ENTER 1: IF YOU NEED MORE INFORMATION

2: IF YOU ARE READY TO MAKE THE FINAL RATINGS

Figure 7. Sample of Employee Performance Description.

Procedures

This study used two basic data collection methods--a self-report questionnaire and a computer task which automatically recorded subjects' responses.

Ouestionnaire completion. Subjects reported individually for this study.

After entering the experimental room, they were seated at a desk on which an IBM-compatible microcomputer was installed. Prior to beginning work on the computer task, subjects were briefed concerning the general purposes of the study, and were asked to sign a form indicating that they agreed to participate. (The consent form appears in Appendix A.) Next, one-half of the subjects were randomly selected to complete a questionnaire concerning their background as an employee in a fast food restaurant, which was followed by working on the computer task (see Appendix B).

The remaining half of the subjects worked first on the computer task, and then

completed the questionnaire. This was done to control for any possible order or cognitive priming effects associated with completing one of the tasks prior to the other.

Computerized information search task. Introduction and practice. At the beginning of the computerized information search task, subjects were presented with a message on the computer's screen instructing them that they were about to complete a simulation in which they were to play the role of a fast food restaurant manager who must evaluate the performance of one of his or her employees. A tutorial program, adapted from Schechtman (1987) assisted subjects in becoming acquainted with the procedure for accessing information from the computer about their subordinate's performance (see Appendix C for the introductory messages and tutorial on how to perform the computer task). Following this introduction, subjects were given the opportunity to practice the search procedure by evaluating the performance of an hypothetical college professor (see Appendix D for examples).

Four behavioral alternatives within each of four performance dimensions were available for subjects to search about this professor. These dimensions included Lecturing, Answering Questions, Advising, and Exam writing. All dimensions were constructed so that they depicted average performance for a college professor. Demographic characteristics of the professor were not provided. Subjects were instructed that they could look for as much information about the professor's performance as they desired. They were also be told that they would rate his or her performance after completing the information search portion of the task. When subjects completed this practice portion of the computer task, the task to evaluate the fast food employee began.

Introduction to the information search task. After familiarizing themselves with the task of selecting information from the computer, subjects were reintroduced to their task of searching for and evaluating the performance of a subordinate fast food employee. At this time, the computer displayed a list of the job dimensions among which subjects would search for performance information about their employee (see Appendix E). Subjects also were informed that they should carefully select the pieces of information they choose since they would only be allowed to access one-half of all possible information about their subordinate's performance. Previous research with this task has shown that restricting the search is necessary to prevent subjects from observing all possible information (M. L. Doherty, personal communication, March, 1988). Once subjects read these instructions, they were instructed to press the enter key on the computer's keyboard to begin the focal information search task.

Search task. In the computer search task, subjects were able to display information about their hypothetical subordinate's performance on six job dimensions with seven behavioral alternatives within each dimension. Subjects selected each piece of information they wanted displayed by entering one number corresponding to the job dimension, and another relating to the behavioral alternative. The order in which dimensions and behaviors were presented in each list were randomized for each subject by the computer program.

Performance stimuli. The job dimensions and behaviors used in this study were based on actual job descriptions and performance rating materials used by two major fast food restaurant chains, and on the author's interviews and on-sight observations at two local fast-food restaurants. The descriptions of the hypothetical

employee's behaviors were developed by selecting job dimensions and tasks which were implemented in similar ways by both of the corporations for which job descriptions were available. Six job dimensions, or "stations" were common across the restaurants. These were: Dining Room Maintenance, Counter Service, Sandwich Preparation, Outside Maintenance, French Fry Production, and Restroom Maintenance. Next, the individual tasks performed within each dimension were compared across restaurants. This examination revealed at least seven job tasks within each dimension that were equivalent across the fast food chains used in this study.

Once these 42 job tasks were identified (7 tasks within each of 6 job dimensions), a behavioral statement was written to represent an hypothetical employee's performance on each task. So that there was no systematic bias in how favorably any particular job dimension was depicted, behavioral statements were written such that half were randomly selected to be worded favorably (i.e. effective performance) and half to describe ineffective performance. Coincidentally, this random selection resulted in three dimensions containing four positively-worded descriptions and the other three dimensions containing four negatively-worded descriptions. Descriptions were also worded in such a way that they were neutral with respect to the sex of the hypothetical employee. These descriptions are presented in Appendix F. Finally, the order in which the behavioral incidents were entered into the initial list displayed by the computer was also determined randomly within each dimension, and the computer program itself re-sorted the order of the descriptions after each subject completed the search task. This system was designed

to avoid systematic effects due to the order in which the dimensions and behaviors are presented.

All subjects were instructed to search for as much or as little information as they felt necessary to make an accurate assessment of the hypothetical employee's performance within the constraints of the "one-half" search limit. Following the completion of the search task, a hard copy of each subject's search was created by the printer connected to the computer. This information was not available to the subject.

Ouestionnaire measures.

Self-rated performance. Subjects were presented with the same 42 tasks which were used to develop the descriptions of the hypothetical employee's behaviors, and were instructed to rate their own performance on each of these tasks. From these ratings, a score for a subject's self-rating on each dimension was computed using the mean of their ratings for each individual task within the dimension. The self-evaluation instrument is presented in Appendix G.

Dimension importance ratings. Importance ratings were obtained for each dimension by asking subjects to evaluate the importance or criticality of each of the 42 job behaviors mentioned above. An index of each dimension's importance was calculated using the mean of the individual task importance ratings for corresponding to each dimension. The instrument which was used to collect these ratings is presented in Appendix H.

Experience measures. In order to capture different possible aspects of work experience, three indices of a subject's experience working the various job dimensions to be rated were imbedded in the demographic questionnaire. The first

experience index was simply the subject's tenure as a fast food restaurant employee. A second index, corresponding to a subject's experience performing each of the 7 job dimensions was obtained through self-reports of the amount of experience the subject had had performing each dimension. This scale asked, "... please indicate how much experience you have had performing the duties associated with each of the stations listed." Responses on this item ranged from "no experience at all," to "one of the most experienced employees in the store." Finally, an index of the relative amount of experience a subject obtained across the job dimensions listed was a report of the approximate percentage of time per week, on average, he or she performed each job dimension when he or she terminated employment at the restaurant (or for employees currently working in the restaurant, the percentage he or she presently performed these tasks).

Demographic questionnaire. To identify any systematic differences in search, rating, importance, and experience variables related to subject demographic characteristics, questionnaire items asked for the name of the restaurant for which the subject worked, if he or she was currently employed in that position, how long it had been since he or she had terminated employment if no longer working for the restaurant, as well as subjects' ages and sex. In addition, the measure also included an exercise in which subjects sorted the 10 tasks they performed best while a fast food employee into the six job dimensions included in this study. This served to facilitate subjects' recall of their experience working in a fast food restaurant, and was not analyzed as part of this study (see Appendix B).

Other measures

Search: Amount. One index of a subject's information search strategy was the amount of information he or she searched about the hypothetical employee's performance within each job dimension. This variable was operationalized as the number of behavioral incidents a subject displayed about each job dimension. This information was obtained from the printed summary of each subject's search sequence.

Search: Content. A second index of subjects' information search strategy involved asking them which job dimension they would select information about their hypothetical employee's performance from under the most severe information search limits. Specifically, after subjects had completed the computerized search task, they were asked, "If you could only view one piece of information about your employee's performance, from which dimension would you select it?" Subjects' responses were recorded on a data summary sheet by the experimenter.

RESULTS

This section describes the analyses performed on the data collected in this study. These analyses include an examination of the psychometric properties of the self-rated performance and dimension importance scales, the effects of the control variables Where Employed and Presentation Order on the primary research factors, and finally the tests related to the proposed hypotheses.

Scale properties

Reliabilities for the self-rated performance and dimension importance scales used in subsequent analyses are presented in Table 1. All reliabilities were calculated using Cronbach's (1951) coefficient alpha of internal consistency. Among the scales, reliabilities for the self-rating scales ranged from an alpha of .76 for Outside Maintenance to .95 for Restroom Maintenance. For the dimension importance scales, reliabilities ranged from an alpha of .78 for Counter Service to an alpha of .92 for Restroom Maintenance. These reliabilities indicate that all scales had sufficient internal consistency for use in this research (alpha \geq .70; Nunnally, 1978).

Tables 2 and 3 show the correlations among the self-rated performance ("Self-rating") and dimension importance ("Importance") scales, respectively. It should be noted that the self-rated performance scales are moderately to highly intercorrelated, as are the dimension importance scales. This suggests that the

Table 1.

Internal Consistency Reliabilities (Coefficient alpha) for Self-rating and Dimension

Importance Scales.

		Measi	arement S	cale	
	Self-rati	ng	Dimens	ion In	portance
Job Dimension	Mean S.D	. alpha	Mean	S.D.	alpha
Restroom Maintenance	3.00 2.34	.95	3.71	1.12	.92
Dining Room Maintenance	1.58 1.70	.80	4.06	0.95	.85
Counter Service	5.49 1.79	.90	5.13	0.77	.78
Sandwich Preparation	4.65 2.33	3 .90	5.65	0.73	.82
Outside Maintenance	2.38 1.66	5 .76	3.50	1.11	.88
French Fry Production	4.74 1.96	5 .90	3.99	0.99	.85

Table 2.

Correlations among Self-rated Performance Scales.*

Scale Dimension	1	2	3	4	5	6
1. Dining Room Maintenance						
2. Counter Service	.49"					
3. Outside Maintenance	.47"	.14				
4. Sandwich Preparation	.23*	.11	.32"			
5. Restroom Maintenance	.64 **	.23*	.59"	.25"		
6. French Fry Production	.50"	.67**	.30**	.34"	.39"	

n = 101

[·]p < .05

[&]quot; p < .01

Table 3.

Correlations among Dimension Importance Rating Scales.*

Scale Dimension	1	2	3	4	5	6	
1. Dining Room Maintenance							
2. Counter Service	.44"						
3. Outside Maintenance	.53"	.17					
4. Sandwich Preparation	.24*	.13	.30"				
5. Restroom Maintenance	.67"	.20*	.62"	.26"			
6. French Fry Production	.49 **	.68"	.33"	.39"	.41"		

n = 101

p < .05

[&]quot;p < .01

discriminant validity within each set of scales is low despite the fact that all scales are internally consistent.

Control variables

A number of variables were inspected to see if they might cause spurious relationships among the primary variables under study. Specifically, subjects' age, sex, how long it had been (in months) since they terminated their employment in the restaurant, the restaurant in which they were employed ("Where Employed") and the order in which the job dimensions were displayed on the computer's information selection screen ("Presentation Order") were coded and their relationships with the principal research factors were examined. Presentation Order was represented using six variables, one corresponding to each job dimension. These variables were coded such that the variable listed first on the dimension selection screen for each trial was coded "1," the second dimension listed was coded "2," etc. Where Employed was coded using effects coding (Cohen & Cohen, 1983). Effects coding is a procedure by which group membership, such as in which restaurant a person worked, can be examined in a regression analysis. Two variables were required to represent where subjects worked. Subjects who worked for Burger King were coded "1" for the first variable and "0" for the second variable. For subjects with McDonalds experience, the first variable was coded "0", and the second "1." Finally, subjects who had worked for Wendy's received "-1" codes for both variables. This coding scheme allows the analysis of effects due to group membership in general, rather than the comparison of results between groups.

The overall relationships among the primary research variables and the variables representing the control factors were summarized using canonical

correlation analysis. The results of these analyses are summarized in Table 4. These analyses revealed several significant relationships. First, age was significantly related to the dimension which subjects reported they would select if they could only search for one piece of information about their subordinate's performance ("One Piece"). In particular, older employees were more likely to select one piece of information regarding Outside Maintenance than were younger workers. Next, significant relationships were discovered between subjects' sex (coded "1" for females and "2" for males) and several research variables. Specifically, it was found that females generally rated their own performance higher on Counter Service and French Fry Production than did males, who rated their performance more favorably on Outside Maintenance and Sandwich Preparation than did females. In addition, females tended to: (a) report being relatively more experienced than other employees, (b) spent a larger proportion of their time working, and (c) look for one piece of information regarding Counter Service more frequently than did males. Males, on the other hand: (a) reported being more experienced than other employees, (b) spent a larger proportion of their time, and (c) tended to select one piece of information regarding Outside Maintenance and Sandwich Preparation more frequently than females.

The third control variable, the amount of time since subjects' worked in a fast-food restaurant ("Lapsed") was found to be negatively correlated with Relative Experience and Tenure such that subjects who had worked longest in the restaurant and rated themselves as most experienced had terminated their employment most recently. Lapsed was also positively related to One Piece, with subjects who had not

Table 4.

Cano	Canonical Correlations Among Pri	Primary Research Factors	Resea	rch F	actor	•							1
F	Factor '	4	2	9	4	5	9	7	8	6	10	11	12
1.	Age	1											
2.	Sex	.19											
e e	Lapsed	.61	.24	1									
4	Where Employed	60.	.03	.11	!								
ີນ.	Presentation Order	. 22	.22	.12	.27	!							
•	Self-rated Performance	.18	99	.30	.44.	.32	1						
7.	Dimension Importance	.14	.27	.32	.30	.42	. 26	1					
œ	Relative Experience	.24	.72"	.41"	09	.34	88.	.41	}				
9	Percent Station Worked	.22	.73	.20	.33	.39	62.	.20.	.87	!			
10.	Tenure	.02	.03	.31.	.03	.22	.52.	.25	99	.30	1		
11.	Number Searched	.19	.16	.21	.23	.52.	.41	.38	.40	.53	.30	!	
12.	One Piece	.48	.40.	.49	.34	.35	.50	.45	.09.	.51	.30	.43	ł

n = 101

. p < .05 .. p < .01 ... p < .001

been employed in a restaurant for the longest time being most likely to select information about Outside Maintenance. Fourth, where subjects were employed (Where Employed) was associated with Self-rated Performance and Relative Experience. This suggests the possibility that subjects may have interpreted the rating scales used for these dimensions differently depending on the restaurant for which they worked. Finally, a significant relationship was found between Presentation Order and Number Searched, with subjects searching for more information within dimensions listed higher on the information selection screen than for those towards the bottom of the list (see Figure 6 for the selection screen). Therefore, because of their significant relationships with the primary research variables, Age, Sex, Lapsed, Where Employed, and Presentation Order were statistically controlled (partialled) in all subsequent analyses.

Descriptive data.

Table 5 presents the means, standard deviations, partial correlations, and percent of variance partialled for all variables used in this study. The zero-order correlation matrix is included in Appendix I. With respect to the number of pieces of information searched, it should be noted that 65 percent of the subjects ($\underline{n} = 66$) searched for the full amount of data allowed (21 pieces of information). On the average, subjects searched for 3.1 pieces of information per dimension (SD = 0.82), with the mean number of pieces searched per dimension ranging from .17 to 3.5 pieces.

Partial Correlations Among Primary Research Variables (Control Variables Partialled).

Table 5.

				X var.																1
	Measure	Mean	S.D.	partialled	-	2	8	7	2	9	7	8	٥	9	=	12	13	14	15	옏
÷	1. Tenure	11.25	77.6	.19	:															
Rel	Relative experience																			
2	Dining Room Maintenance	3.19	1.40	=	¥.	:														
ъ.	Counter Service	3.80	1.51	ş	.45	.28	:													
.,	Outside Maintenance	1.36	1.45	8.	52:	77.	ş	:					•							
.5	Sandwich Preparation	3.01	1.90	20.	.32	.18	10	.59	:											
•	Restroom Maintenance	2.25	1.60	.12	.35	19.	.19	67.	.32	:										70
7.	French Fry Production	3.46	1.52	88.	77.	52.	.33	.23	07.	.3	:									
Per	Percent worked																			
æj	Dining Room Maintenance	9.16	8.41	· 60·	27	.31	26	.02	24	ş.	30	:								
٠ <u>,</u>	Counter Service	52.21 30.17	30.17	.37	.26	90	.63	13	. 35	. 80.	01	87	:							
0	Outside Maintenance	2.59	4.83	07.	 8	8.	23	88	07	. 51.	05	.16	30	:						
Ξ.	Sandwich Preparation	20.64 22.61	22.61	.39	12	9.	55	કં	. 72.	. 10	- 11	.01	79	.0	:					
12.	Restroom Maintenance	3.63	4.52	.13	12	.10	 9.	.17	.03	- 07	01	. 23 .	.31	.33	03	:				
13.	French Fry Production	11.88	12.46	:	%:	04	19	.01	.05	02	77.	.18	. 50	8	. 10	50.	:			
Sel	Self-rated performance																			
14.	Dining Room Maintenance	4.58	1.70	.15	.28	.61	61.	.38 88	81.	.58	12.	. 02.	02	.17	. 13	.27	07	:		
15.	Counter Service	67.5	1.79	.28	67.	.32	29.	8.	8.	8 .	3.	23	.42	13	. 97.	02	8.	07.	:	
16.	Outside Maintenance	2.38	1.66	.17	.30	27.	7.	.56	.15	.54	61.	3.	8.	.22	2.	. 23.58	.32	;

Table 5 (cont'd).

				% var.																
	Measure	Mean	S.D.	partialled	-	7	~	7	~	9	~	80	٥	9	=	12	13	22	15	9
Selt	Self-rated performance (cont'd.)	d.)																		
17.	Sandwich Preparation	4.65 2.33	2.33	.17	.33	91.	8	62:	\$.30	97.	. 19	. 32	12	745	.05	.17	.27	92.	.22
8 5	Restroom Maintenance	3.00	2.3%	8.	.19	77.	.01	.43	.24	ъ.	.19	8	12	S	01	. 44.	.01	83.	.22	59:
.61	19. French Fry Production	4.74 1.96	1.96	.14	.39	.18	.33	.25	.27	.30	8	29	.12	. 60.	26	.12	.28	.45	.67	.37
	Dimension Importance																			
20.	Dining Room Maintenance	4.06 0.95	0.95	.11	.05	. 19	15	.33	.21	.23	.14	. 12	20	52:	8.	51.	8.	77.	.14	.32
21.	Counter Service	5.13 0.77	0.77	ş	.15	. 23	8	62.	.14	.22	.23	=	20	82	05	8.	.28	.41	.33	82.
22.	Outside Maintenance	3.50 1.11	1.11	8.	Ε.	. 72.	70	.25	.13	.24	.14	. 20	14	. 23.	05	91.	8.	77.	52.	30
23.	Sandwich Preparation	5.65	0.73	.07	.10	. 22	05	.13	.12	71.	.26	. 21.	19	. 41.	01	.03	.23	77.	8.	\$2:
24.	Restroom Maintenance	3.71	1.12	.12	50.	91.	04	97.	.20	92.	.1	. 13	15	.17	.03	.14	8.	77.	۶.	82.
52	French Fry Production	3.99	0.9	8.	.16	91.	.01	.35	.18	.22	.33	.00	22	٠ &	96.	.33	.29	27.	¥	.37
N CAL	Number Searched			·																
5 8.	Dining Room Maintenance	3.09 2.41	2.41	.19		70	. 31.		. 01	. 18		. 25	07	16	- 20.	÷.	.03	05	. 22	22
27.	Counter Service	4.21 2.23	2.23	.28	8	8.	.13	.17	. 60.	86	. 20.	21	. 72.	. 13	15	- 16	. 89.	. 11	2.	.03
28 .	Outside Maintenance	2.34 1.82	1.82	89.	.17	. 05	.01	%	8.		8	14	8.	. 41.	.05	- 01	9.	8.	٠ =:	03
&	Sandwich Preparation	3.60 2.16	2.16	.21	.15	91.	.14	.15	8.	8.	. 23	15	.os	8.	. 20.	19	.02	.02	-05	ક્
30.	Restroom Maintenance	2.64 1.96	1.%	.22	.10	.07	. 15	01		8	14	.39	22	8	7.	01	8.	ş.	. 11.	9.
31.	French Fry Production	2.67 1.73	1.73	.15	.13	5	19	8.	.05	8.	.03	.16	25	8.	.17	705	. 41.	. 03	03	8.

Table 5 (cont'd.).

				% var.																
	Measure	Mean	Mean S.D. part	partialled 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	-	2	3	4	2	9	~	8	٥	10	=	12	13	14	15	92
S E	Dimension selected for one piece of information	Jo est	informa																	
32.	32. Dining Room Maintenance	9.0	0.20	. 65	. 10	50	26	.00	13	.13	14	100526011314301215041905072408	.12	.15	ş	. 91	· .05	.07	77.	8
33.	Counter Service	57.0	0.45	.19	.15	.12	.25	02	91.	02	8	.15 .12 .2502 .10020405 .230111112202 .1308	. 23.	. 6.			.22	.03	£1.	8
ж ж	Outside Maintenance	0.01	0.10	.30	.30	.14	8.	80.	Ξ.	.15	71.	.30 .14 .09 .08 .11 .15 .140203120403 .1702 .08 .06	. 03	. 12	70.	.03	. 11.	02	8	8
35.	Sandwich Preparation	0.18	0.38	. 23.	. 22.	88	26	.00	8.	90	.13	220826 .01 .0006 .130332 .21 .22 .05 .26071001	.32	12.	.22	50:	. 92.	.07	9.	٠.0
%	Restroom Maintenance	0.03	0.17	71.	5	.15	.12	02	80	14	12	.0415 .120208141216 .2514190206 .02 .07 .11	23.	. 14	. 91.	. 02	8	70.	70.	Ε.
37.	37. French Fry Production	0.01	0.10	20.	.0	.00	Ξ.	02	07	.13	8.	.01 .01 .02 .00 .00 .00 .00 .01 .02 .04 .04 .09 .00 .09 .00	.01	. 20.	8	8	8.	8.	8	8

Table 5 (cont'd.).

	Measure	17	82	19	8	12	22	23	72	22	92	22	28	&	30	31
Self	Self-rated performance															
17.	Sandwich Preparation	:														
8.	Restroom Maintenance	92.	:													
19.	French Fry Production	7.	77.	:												
O in	Dimension importance															
8	20. Dining Room Maintenance	.24	.37	.27	:											
21.	Counter Service	.27	52.	.39	89.	;										
22.	Outside Maintenance	.21	38	82.	.85	69.	:									
23.	Sandwich Preparation	.23	.22	85.	19.	κ.	.62	:								
24.	Restroom Maintenance	.27	.36	92.	8.	.61	8.	.61	:							
3.	French Fry Production	.34	.36	.50	89.	κ.	22.	\$.65	:						
NCH	Number Searched															
2 8.	Dining Room Maintenance	01	19	۶۰.	8.	07	.03	8.	. 70.	16	:					
27.	Counter Service	8	80	89	. 10	. 11.	8	1.	8.	70	.18	:				
28.	Outside Maintenance	90	08	.13	04	.03	80	80.	88.	8	23	05	;			
%	Sandwich Preparation	.03	03	8.	8.	.01	14	.05	- 20.	07	20	92.	.15	:		
30.	Restroom Maintenance	. 8	07	13	50.	٠٥.	70.	8.	.02	05	.30	. 15	03	23	:	
31.	French Fry Production	.03	.03	02	.05	. 90.	05	8.	01	6.	80	30	.36	.o	.39	;

Table 5 (cont'd.)

	-	17 18	2	2	21	22	23	77	19 20 21 22 23 24 25 26 27 28 29 30 31	92	72	82	&	20	31
Dimension selected for one piece of informat	of inf		ē												
32. Dining Room Maintenance	20	_	13	.12	.02	.13	.03	.15	13 .12 .02 .13 .03 .1503 .28051620 .22	.28	05	16	20	.22	70.
33. Counter Service	.0405	05	8.	24	25	. 18	92	. 16	.00242518261612 .00	8.	.12	2 .09	Š	50.	
34. Outside Maintenance	Ε.	.05		04 .05 .02	-05	.05	01	02	.05010213 .26 .0410 .05	92.	\$	10	.05	٠٥.	02
35. Sandwich Preparation	0503	03	.09	.13	3 .27	ક	.30	.02	.30 .02 .182220 .01 .0708	22	20	٠٥.	20.		.12
36. Restroom Maintenance	70	.01	.03	.14	.1407 .0802 .12	80.	02	.12	90. 50 91. 11 50.	11	.19	03	8	16	04
37. French Fry Production	.0108	89.	05	8.	21. 61. 00. 20.		8.	.12	.06 .1203 .1409 .05 .0311	71.	8.	.05	.03		70.

Table 5 (cont'd.)

	Measure	32 33	33	34	34 35 36 37	%	37
Dime	Dimension selected for one piece of informa	of inf	ormati	tion			
32.	32. Dining Room Maintenance	:					
33.	33. Counter Service	39	:				
¥.	34. Outside Maintenance	07	13	:			
35.	35. Sandwich Preparation	60	۲	80	:		
%	36. Restroom Maintenance	w.	·.3	8	09	:	
37.	37. French Fry Production		18	0307		.03	:
							·

Hypothesis One

Hypothesis One stated that a positive linear relationship should exist between the favorability of one's self-rated performance on a job dimension ("Selfrating") and how important one perceived that dimension to be for successful overall job performance ("Importance"). A canonical correlation analysis was conducted to examine the relationship between Self-ratings and Importance at the global level (across all job dimensions). The results of this analysis, presented in Table 6, revealed a strong relationship between Self-ratings and Importance at the global level, $\underline{F}_{Pillain}$ (36,498) = 1.67, \underline{p} = .01. Next, redundancy analysis was performed to discover how much variance in Importance could be predicted from subjects' Selfratings. Unlike squared canonical correlation coefficients, which represent the total variance shared by two canonical sets, redundancy coefficients indicate what percent of variance in one canonical set can be predicted by the other (as does \mathbb{R}^2 in multiple regression). This procedure indicated that 24.2 percent of the variance in Importance could be predicted from subjects' Self-ratings, $\underline{F}_{inc}(6,80) = 4.25$, $\underline{p} \leq .01$; confidence interval .10 - .39, $p \le .05$. Finally, bivariate correlations were computed between Self-ratings and Importance for each dimension. These analyses revealed moderately strong bivariate correlations for four of the six job dimensions, with the correlations on all six job dimensions being significant.

The hypothesized linearity of the relationship between Self-ratings and Importance was examined by squaring each of the dimensional self-ratings and adding these terms to the canonical analysis. If the relationship between these two factors was curvilinear, then the addition of the squared Self-rating terms to the predictor side of the canonical equation should have explained a significant amount

Table 6. Canonical and Bivariate Correlations and Redundancy Index Between Self-ratings and Task Importance.

Nature of Test	
Global:	
Re Self-rating.Importance	.60"
Rdy Importance.Self-rating	.24
Specific:	
I Self-rating restroom maintenance.Importance restroom maintenance I Self-rating dining room maintenance.Importance dining room maintenance I Self-rating counter service.Importance counter service I Self-rating sandwich preparation.Importance sandwich preparation I Self-rating outside maintenance.Importance outside maintenance I Self-rating french fry production.Importance french fry production	.36''' .44''' .33''' .23' .30'' .50'''

[.] p < .05 .. p < .01 ... p < .001

of additional variance in the Self-ratings - Importance relationship. Results of this procedure indicated only a 5.5 percent increase in variance explained, $\underline{F}_{max}(1,99) = 1.20$, n.s.; $\underline{F}_{inc}(6,83) = 0.96$, n.s.; confidence interval = .13 - .45². Therefore, no

The second test used was Cohen's General F test for an Increment (Cohen & Cohen, 1983). This consisted of solving the equation:

$$\underline{F}_{inc} = \frac{(R_{YAB}^2 - R_{YA}^2)/k_B}{(1 - R_{YAB}^2)/(n - k_A - k_B - 1)}$$

where \underline{n} corresponds to the number of subjects in the study, \underline{k}_A corresponds to the number of predictors currently in the equation, \underline{k}_B to the number of predictors being added to the equation, \underline{R}^2_{YA} to the variance in \underline{Y} explained by predictors already in the equation, and \underline{R}^2_{YAB} corresponds to the variance accounted for all predictors after the second set of predictors is added to the equation. The value of \underline{F} resulting from this equation was then compared to the critical value of the \underline{F} distribution at $(k_A, n - k_B - 1)$ degrees of freedom.

The final procedure used was to create 95% confidence intervals about the greater (second) of the obtained variances and to assess if the lesser variance was outside of this interval. (This procedure, recommended by Jacob Cohen in a class at New York University, was communicated to the author by J. Hollenbeck, November 10, 1988.) Confidence intervals were computed by approximating the variance of \mathbb{R}^2 using the formula:

$$\operatorname{var} \mathbf{R}^2 = 4[\mathbf{R}^2 (1 - \mathbf{R}^2)]^2 / \mathbf{n}$$

and then using this value to establish confidence intervals about the variance obtained in the second step using the formula:

$$R^2 - 1.96(\text{var } R^2) \le R^2 \le R^2 + 1.96(\text{var } R^2).$$

A significant difference was determined to exist between two steps if at least two of these analyses was significant, and the third approached significance in the same direction.

² Because no straightforward test currently exists to test for significant differences among variances (in this case redundancy indices; J. Hollenbeck, personal communication, November 10, 1988), three separate tests were performed in an attempt to converge on a conclusion. The first test implemented was the \underline{F}_{max} test, described by Winer (1971). This test consisted of computing the ratio of the variances obtained at each step (variance 2/variance 1), and then determining if this value was greater than the critical value of the \underline{F}_{max} distribution for (2,99) degrees of freedom.

significant curvilinear component was discovered in the relationship between Selfratings and Importance, and Hypothesis One was fully supported.

Hypothesis Two

Hypothesis Two stated that raters should search for more information about another's performance on job dimensions for which they evaluated their own performance most favorably than on those for which they perceived their own performance to be least favorable. Two canonical correlations were computed to test this hypothesis: one between Self-ratings and Number Searched, and one between Self-ratings and One Piece. As Table 7 demonstrates, neither of these canonical correlations were significant: F_{Pullis} (36,498) = 0.74, p = .86; and F_{Pullis} (36,498) = 0.99, p = .49, respectively. Examining the relationship between these two concepts within each dimension revealed no significant bivariate correlations among the 12 possible. These analyses demonstrate that Hypothesis Two was not supported by the data.

Hypothesis Three

Hypothesis Three examined the relationships among self-rated performance, dimension importance ratings, and information searched. Specifically, it was hypothesized that the relationship between one's self-rated performance on a job dimension and his or her subsequent search for information about another's performance on that dimension is completely mediated by the dimension's perceived importance for successful job performance. Complete mediation suggests that the relationship between an antecedent or "exogenous" variable (Self-rating) and a subsequent, "endogenous" variable (information search) is completely

Table 7.

Canonical and Bivariate Correlations Between Self-ratings and Information Search. Nature of Test Dependent variable = Number of pieces searched within dimension. Global: .41 Re Self-rating.Number Searched Specific: -.07 I Self-rating restroom maintenance. Number Searched restroom maintenance -.05 I Self-rating dining rm. maintenance. Number Searched dining rm. maintenance -.04 I Self-rating counter service. Number Searched counter service .03 I Self-rating sandwich preparation. Number Searched sandwich preparation -.03 I Self-rating outside maintenance. Number Searched outside maintenance -.02 I Self-rating french fry production. Number Searched french fry production Dependent variable = Dimension selected for one piece of information. Global: Rc Self-rating.One Piece .44 Specific: .00 I Self-rating restroom maintenance. One Piece restroom maintenance .07 Self-rating dining rm. maintenance. One Piece dining rm. maintenance .13 I Self-rating counter service. One Piece counter service -.05 I Self-rating sandwich preparation. One Piece sandwich preparation .06 I Self-rating outside maintenance. One Piece outside maintenance -.05 I Self-rating french fry production. One Piece french fry production

[.] p < .05

[&]quot; p < .01 " p < .001

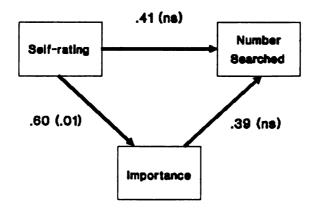
transmitted or conveyed through a third, "mediating" variable which intervenes between them (Importance).

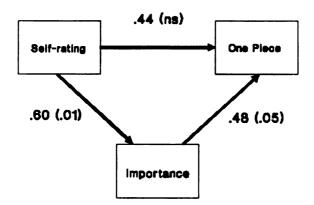
Assessing if the relationship between two factors is mediated by a third variable is a two-step process (cf. James & Brett, 1984). First, the significance of the relationships between the exogenous, endogenous, and mediating variables must be established. A significant correlation between the exogenous and endogenous variable indicates that there is some type of relationship between these two variables, while a significant relationship between each of these variables and the hypothesized mediator provides a channel through which this relationship might be transmitted. If each of the relationships between these three factors is statistically significant, then the second step of the analysis is to partial variance associated with the mediating variable from the relationship between the exogenous and endogenous variables. This is typically accomplished using multiple regression to regress the mediation variable on the endogenous variable, adding the exogenous variable to the regression equation, and analyzing the statistical significance of the change in total variance explained between the two equations ($\mathbb{R}^2_{\text{change}}$). Complete mediation exists if adding the exogenous variable does not significantly add to the amount of variance explained. Understanding that Hypothesis Two revealed no significant relationship between Self-ratings and information search, the following analyses were conducted primarily to examine the relationship between information search and Importance.

Figure 8 presents the canonical correlations among Self-ratings, Importance, and each of the information search variables (see Figure 8). As revealed by Hypotheses One and Two, the relationship between Self-ratings and Importance is

Figure 8.

Canonical Correlations Among Self-ratings, Importance, and Information Search.





significant, $\mathbf{F}_{\text{Pillais}}$ (36,498) = 1.67, \mathbf{p} = .01; while the relationship between Self-ratings and information search is not. The present analyses demonstrate that while the relationship between Importance and Number Searched was not significant, $\mathbf{F}_{\text{Pillais}}$ (36,498) = 0.73, \mathbf{p} = .88; the relationship between Importance and One Piece was significant, $\mathbf{F}_{\text{Pillais}}$ (36,498) = 1.54, \mathbf{p} = .03. However, since the relationships among all three variables under consideration were not significant (Self-ratings, Importance, and information search), Importance cannot be considered a mediator between Self-ratings and information search.

The nature of the relationships among Self-ratings, Importance, and information search were also examined to see if the hypothesized mediation relationship was dimension specific. These analyses revealed that, since the correlations among all three variables were not significant within any of the dimensions, no mediated relationships existed at the dimensional level. These results indicate unequivocally that Importance did not mediate Self-ratings and information search in this study.

Hypothesis Four

Hypothesis Four asserted that the relationship between experience performing the tasks associated with a job dimension and one's search for information about others' performance on that dimension is mediated by the dimension's perceived importance for successful job performance. This hypothesis was tested using three separate indices of experience. The first experience index consisted of subjects' ratings of how much experience they had performing a particular station's duties compared to other employees in their restaurant ("Relative Experience"). The second measure of experience was subjects' estimate

of the percentage of time per week, on average, they were assigned to each job station when they last worked at the restaurant ("Percent Worked"). The final index of experience was simply the length of time subjects had worked as a fast food restaurant employee ("Tenure").

To test the mediation hypothesis at the global level, it was first necessary to establish whether significant relationships existed among experience, dimension importance, and information search. Figure 9 displays the canonical correlations among each index of experience, Importance, and each measure of information search. The data summarized in this figure indicate that all three relationships are not significant in any of the six sets of variables. Strictly applying $\mathbf{p} = .05$ as the significance level, it is concluded that Importance does not serve as a mediator in any of these combinations of variables.

However, the canonical correlation between Relative Experience and One Piece is marginally significant, with p=.07. To investigate if the mediation hypothesis can be supported at any level, the possibility that this relationship might be mediated by Importance was tested using redundancy analysis. The results of this examination, shown in Table 8, indicated that the Relative Experience - One Piece relationship was no longer significant with the effects of Importance partialled, \underline{F}_{max} (1,99) = 2.01, p < .05; \underline{F}_{inc} (6,77) = 1.61, n.s.; confidence interval .07 - .33, n.s. This suggests that using the relaxed significance, Importance does mediate the relationship between Relative Experience and One Piece. Therefore, Hypothesis Four is conditionally supported at the global level.

Hypothesis Four was also explored by looking at the relationships among the experience, importance, and information search variables within each dimension.

Figure 9.

Canonical Correlations Among Experience, Importance, and Information Search.

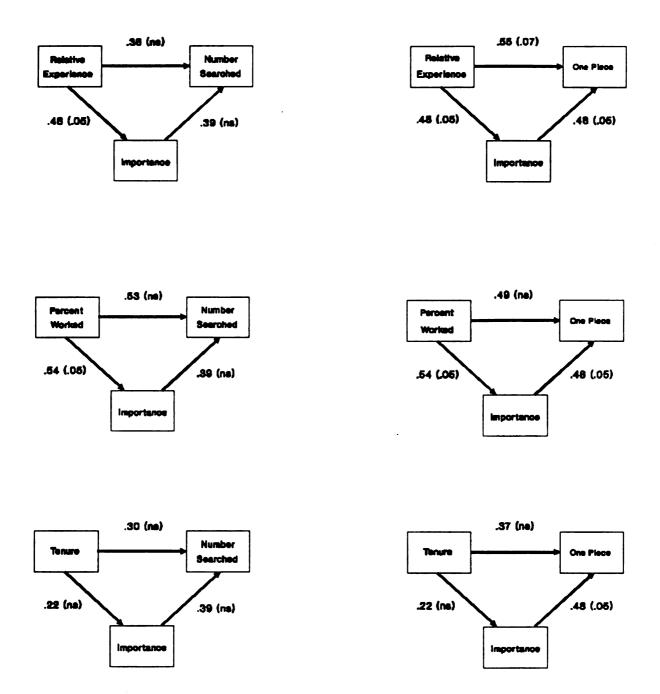


Table 8.

Relationship Between Relative Experience and One Piece Partialling Importance.

Relative Experience .20

Variance Relative Experience -> One Piece = $\frac{R_{\text{dy One Piece.Importance Relative Experience}}^{2}$ - $\frac{R_{\text{dy One Piece.Relative Experience}}^{2}$ = .10^a

 $\frac{1}{2} \frac{F_{\text{max}}}{F_{\text{max}}} (1,99) = 2.01, p \le .05; \quad \underline{F}_{\text{inc}}(6,77) = 1.61, p \ge .05; \text{ confid. int.} = .07 - .33, n.s.$

The partial correlations presented in Table 5 report that all three relationship between experience, information search, and Importance were significant only when considering Percent Worked, Importance, and One Piece for Counter Service. Partialling Importance from the relationship between Percent Worked and One Piece revealed a correlation between Percent Worked and One Piece that was still significant, $\mathbf{F}_{\text{change}}(1,86) = 4.20$, $\mathbf{p} = .04$. This indicated that Importance did not mediate the relationship between Percent Worked and One Piece, signifying that Hypothesis Four is not supported at the dimensional level.

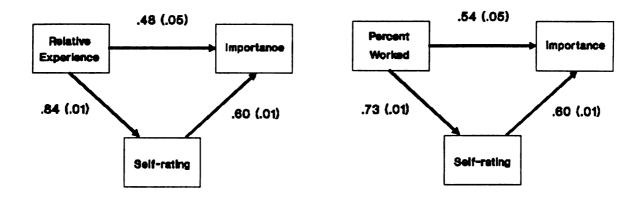
Hypothesis Five

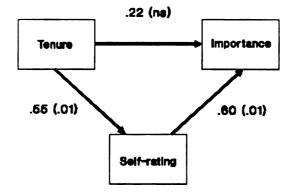
Hypothesis Five suggests that raters' experience in performing the tasks associated with a specific job dimension will affect their perceptions of that dimension's importance directly, as well as indirectly through their evaluations of their own performance. As with Hypotheses Three and Four, the relationships among all three factors must be significant for the hypothesis to be supported. Canonical correlations were computed among Importance, Self-ratings, and each of the three experience indices, and the results of these computations are presented in Figure 10. These figures show that all three relationships were significant when experience was represented by Relative Experience, as well as by Percent Worked.

Relative Experience. Since all relationships among Relative Experience,
Self-ratings, and Importance were significant, the next step was to decompose
Relative Experience into its direct and indirect effects on Importance (cf. Cohen &
Cohen, 1983). This procedure involves first partialling the variance associated with
Self-ratings from the Relative Experience - Importance relationship, and likewise
the effects of Relative Experience from the relationship between Importance and

Figure 10.

Canonical Correlations Among Experience, Self-ratings, and Importance.





Self-ratings. Since these relationships were analyzed at the global level, partialling was performed by computing canonical correlations in a hierarchical manner, as in multiple regression, and then examining the percent of variance explained in the criterion using redundancy analysis. For example, to partial the effects of Selfratings from the relationship between Percent Worked and Importance, a canonical correlation was computed between the set of variables representing Importance and the set representing the Self-ratings. The redundancy index represented the percent of variance that Percent Worked predicted in Importance. Next, the set of Relative Experience variables were added to the Self-ratings set on the "predictor" side of the equation, and the redundancy index represented the variance these two concepts predicted in Importance. The change in variance explained between the first and second equations represented the variance in Importance directly associated with Relative Experience. This change in variance was examined using the methods suggested by Hollenbeck in Hypothesis One to determine if Relative Experience predicted a significant amount of variance in Importance (J. Hollenbeck, personal communication, November 10, 1988). The results of these analyses, presented in Table 9, indicated that, when Self-rating was partialled from the Relative Experience - Importance relationship, this relationship was no longer significant: $\underline{F}_{max}(1,99) = 1.38, \underline{p} \le .05; \underline{F}_{inc}(6,77) = 1.76, \text{ n.s.}; \text{ confidence interval } .15 - .51, \text{ n.s.}$ This suggests that Self-ratings completely mediated the relationship between Relative Experience and Importance. Therefore, no test of the indirect relationship between Relative Experience and Importance was conducted on these data, and Hypothesis Five was not supported globally using Relative Experience as the index of experience.

Table 9.

Relationships Among Relative Experience, Self-ratings, and Importance.

Canonical Correlations	
R _{c Importance.Relative} Experience.	= .482
Rc Importance.Self-rating	= .596
Rc Relative Experience.Self-rating	= .844
Redundancy Indices	
Roy Importance Relative Experience	= .139
Rdy Importance Self-rating	= .239
Rdy Importance Self-rating Relative Experience	= .454
TT' 1' 1 A 1 '	

Hierarchical Analysis

- Direct relationship between Relative Experience and Importance partialling Self-rating

Variance REL -> IMP =
$$\frac{R_{dy \text{ Importance. Self-rating Relative Experience}}}{R_{dy \text{ Importance. Self-rating}}}$$
 = .331 - .239 = .092
$$\frac{F_{max}}{R_{dy \text{ Importance. Self-rating Relative Experience}}}$$
 Confid. Interval R_c^2 = .15 -.51

p < .05 p < .01

Percent Worked. The direct and indirect effects of experience on Importance using Percent Worked as the index of work experience were examined using the same procedures as for Relative Experience. These analyses, detailed in Table 10, revealed that the amount of variance Percent Worked predicted in Importance was not significant when variance associated with Self-ratings was partialled from the relationship: $F_{max}(1,99) = 1.43$, p < .05; $F_{inc}(6,77) = 2.04$, n.s.; confidence interval 16 - 52, n.s. Consequently, Self-ratings also completely mediated the relationship between Percent Worked and Importance, making it unnecessary to evaluate the hypothesized indirect relationship between these variables. Therefore, Hypothesis Five was also not supported at the global level with Percent Worked as the index of experience.

Dimensional Analyses. Hypothesis Five was also tested at the dimensional level. In examining the bivariate correlations among the three experience measures, Self-ratings, and Importance within each of the six job dimensions, all three correlations were significant for seven sets of variables: Dining Room Maintenance, Outside Maintenance, Restroom Maintenance, and French Fry Production using Relative Experience as the experience index; and Counter Service, Outside Maintenance and French Fry Production using Percent Worked as the index of experience. Since all three variables were significantly correlated in each of these set, the next step was to partial Self-rating from the relationship between Importance and experience. In all but one case, this step resulted in non-significant relationships between experience and Importance (see Figure 11), indicating that the relationship between experience and Importance was mediated by Self-rating in

Table 10.

Relationships Among Percent Worked, Self-ratings, and Importance.

Rc Importance.Percent Worked = .536 Rc Importance.Self-rating = .596 Rc Percent Worked.Self-rating = .731 Redundancy Indices Rdy Importance. Percent Worked = .122

$\frac{\mathbf{R}_{oly}^2}{\text{Importance. Self-rating}} = .239$

Hierarchical Analysis

Canonical Correlations

- Direct relationship between Percent Worked and Importance partialling Self-Rating

Variance PER -> IMP =
$$\frac{R_{dy \text{ Importance. Self-rating Percent Worked}}^{2}$$
 - $\frac{R_{dy \text{ Importance. Self-rating}}^{2}$ = (.344 - .239)

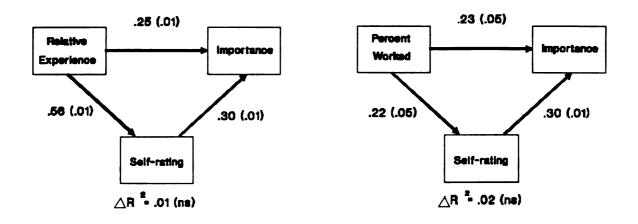
$$\underline{F}_{max} = 1.43$$
 Confid. Interval $R_c^2 = .16 - .52$

p < .05 p < .01

Figure 11.

Dimensional Relationships Among Experience, Self-Ratings and Importance.

Outside Management



French Fry Production

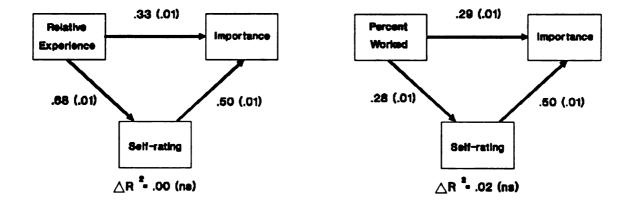
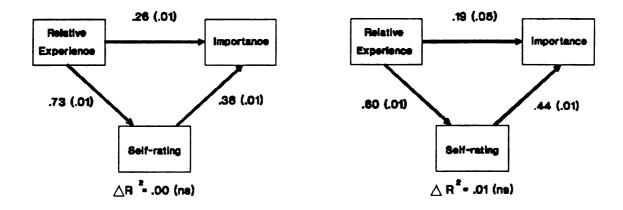


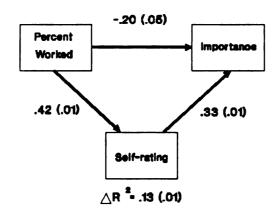
Figure 11 (cont'd.)

Restroom Maintenance

Dining Room Maintenance



Counter Service



all three sets. Therefore, no test of the indirect effects of experience through Selfrating was made for these sets.

Looking at the relationship between Percent Worked and Importance with Self-rating partialled for Counter Service, however, revealed that Self-rating did not completely mediate the relationship between Percent Worked and Importance.

Therefore, the direct and indirect effects of Percent Worked on Importance were examined. The direct effect of Percent Worked on Importance was found by using multiple regression to partial Self-rating from the Percent Worked - Importance relationship. This revealed that Percent Worked directly accounted for 13.5 percent of the variance in Importance, and therefore a direct effect of .367.

To determine the indirect effect of Percent Worked on Importance, it was also necessary to obtain the direct effect of Self-rating on Importance. Partialling Percent Worked from the Self-rating - Importance relationship using multiple regression revealed a direct effect of .438 between Self-rating and Importance. The indirect effect of Percent Worked on Importance was then calculated by multiplying the direct effect of Percent Worked on Self-rating by the direct effect of Self-rating on Importance. This resulted in a significant indirect effect of .184, $E_{max}(1,99) = 1.25$, p < .05; $E_{inc}(1,85) = 3.48$, p < .01; confidence interval .05 - .28. However, despite finding that the hypothesized relationships existed in this case, a complete mediation model better describes the general relationships among experience, Self-ratings and Importance. Therefore, only minimal support for Hypothesis Five was found at the dimensional level.

Post Hoc Analysis

Analyses using Number Searched and One Piece as the search indices indicated that information search was not related to raters' self-concepts. It is possible, however, that another aspect of information search, the dimension from which raters <u>first</u> chose to display information about their subordinate's performance, might be related to raters' self-concepts. This possibility was tested by computing canonical correlations between a set of dummy-coded variables representing the dimension raters first displayed and the primary exogenous variables of interest in this study (Self-rating, experience, Importance). Results of these analyses revealed that the relationship between the dimension first selected and Self-rating was marginally significant, $\underline{R}_c = .50$, $\underline{p} = .08$. No other relationships with the dimension first selected were significant.

DISCUSSION

This study investigated the relationship between raters' self-concepts and their search for information about others' performance on a job which they themselves have performed. Representing those parts of their self-concepts which relate to job performance, raters were asked to judge their own performance along a number of behavioral dimensions, report how important they felt the tasks comprising those dimensions were to successful job performance, and to indicate how much experience they had performing the tasks under investigation. It was hypothesized that there would be significant relationships among these various aspects of raters' self-concepts, and that certain of these features would influence what information raters' selected to view about an hypothetical other's performance. Specifically, it was hypothesized that raters' ratings of their own performance on a given job dimension would be significantly related to both how important they felt that dimension was to successful job performance and to how much information they would search for about another's performance on that dimension. It was further hypothesized that the perceived importance of a job dimension for successful overall performance would mediate the relationship between raters' information search and both their self-ratings and their work experience. Finally, it was hypothesized that raters' own reported performance level would partially mediate

the relationship between their experience and how important they felt a job dimension was for successful overall performance.

Summary of Results

Hypothesis One predicted that raters' ratings of their own performance on the tasks associated with a particular job dimension would be significantly related to their ratings of that dimension's importance. This relationship was strongly supported in these data both at the global and dimension-specific level. Self-ratings predicted 24% of the variance in importance ratings at the global level, and up to 25% within any one dimension. This finding is congruent with previous research in the social cognition literature regarding self-image bias, which suggests that the more desirable one's self-ratings on a dimension, the more central or important that dimension is perceived to be (e.g. Lewicki, 1983).

The second hypothesis investigated the proposition that raters would search for more information about their subordinate's performance within dimensions on which they rated their own performance most favorably. This hypothesis was not supported, whether raters were allowed to search for several pieces of information about their employee's performance or only selected one piece of information. However, the post-hoc analysis revealing a marginally significant relationship between raters' self-rated performance and the dimension which they selected to view first on the search task suggests that one's self-concept may, in fact, influence attention to behavioral information. If this is indeed the case it would be congruent with the self-image bias perspective of person perception, which implies that such an effect should exist.

The third and fourth hypotheses each predicted that a job dimension's perceived importance would mediate the relationship between one's search for information about another's performance and a central feature of the rater's self-concept-either the rater's own performance (Hypothesis Three), or his or her experience on the dimensions being rated (Hypothesis Four). Neither of these hypotheses were supported in this study using conventional standards of significance, primarily because no significant relationship was found between self-rated performance and information search in these data. However, there was support for the mediated relationship between raters experience on a dimension relative to other employees in their restaurants and which dimension they selected for one piece of information using $\mathbf{p} \leq .10$. One possible source contributing for the lack of additional significant findings related to information search is the search methodology used in this study. More will be said about this issue later in this discussion.

Finally, Hypothesis Five sought to determine if a direct relationship existed between one's experience working a job station and its perceived importance to overall job success, and if one's evaluation of his or her own performance partially affected this relationship. It was discovered that the relationship between one's perceptions of a dimension's importance and the percentage of time spent working a station, as well as one's level of experience compared to one's peers, was completely mediated by one's self-evaluated performance. Since the hypothesized relationships among these variables indicated only partial mediation, Hypothesis Five was not supported by these data.

Overall, this study provides partial support for the application of both the self-image bias and expertise perspectives of perception to the realm of perceptions about behavioral information. The self-image bias perspective correctly predicted a significant relationship between ratings of one's own performance and ratings of what was considered important to overall job success. The expertise perspective, on the other hand, accurately anticipated that the greater one's experience performing a task dimension relative to other dimensions, the greater will be that dimension's perceived importance.

Limitations of the study

The primary focus of the present research was that of predicting rater's search for information about their subordinate's performance. Unfortunately, little of statistical significance was found regarding this variable. There are several possible reasons for the lack of significant relationships. One conclusion may be that no relationship exists between raters' self-concepts and what they attend in others with regard to behavioral information. Both the self-image bias (Lewicki, 1983; 1984) and expertise perspectives (e.g. Fong & Markus, 1982) described earlier present evidence that people will attend to trait information about others which corresponds with their own self-concepts. It may be, however, that this effect does not generalize to one's perceptions of behaviors. Behaviors are discrete acts, occurring within a specified time and place. Trait descriptions, on the other hand, depict general behavioral tendencies across various contexts and are therefore better elaborated in memory. Because more information is represented by a trait description, it is more likely that environmental stimuli will match one's accessible trait schemas and will therefore be attended to more readily. Memories of one's

own behaviors, on the other hand, are less likely to correspond to other incidents in one's environment, and therefore are less likely to affect information acquisition.

These differences between traits and behaviors may explain the lack of any statistically significant relationships between one's self-concept and information acquisition in this study.

A second possible explanation for the lack of significant relationships with information search is that the method used to collect these data made it difficult to detect systematic relationships between subjects' self-concepts and the job dimensions they chose. This problem appears to be centered around using the version of the computerized information display board employed in this study. Specifically, it appears that subjects selected information about their hypothetical employee's performance with the purpose of displaying an equal amount of information about each job dimension. As reported earlier, sixty-six percent of the subjects in this sample searched for the full amount of information allowed (21 pieces), searching for an average of 3.09 pieces of information per dimension (S.D. = .82). The average number of pieces of information accessed per dimension, however, ranged from 2.34 to 4.21, both of which are within two standard deviations of the mean. This data suggests that there was insufficient variance in the number of pieces of information searched across dimensions to detect systematic relationships between information search and the self-concept variables.

It is also questionable whether working as an employee in a fast food restaurant constituted a significant portion of these subjects' self-concepts when this research was conducted. First, working in a fast food restaurant may be such a simple job that minimal experience and effort are required. This might make it less

likely that fast food employees will significantly incorporate their jobs into their self-concepts. Secondly, though subjects had worked in a restaurant for an average of 11.25 months, only 11% of the sample was currently employed in a fast food restaurant, and it had been an average of 17.5 months since the rest of this sample had terminated their employment. Therefore, even though subjects may have incorporated their jobs as fast food employees into their self-concepts while employed, their identification with that job may have dissipated over time. Partial support for this view may be found in the relationship between the length of time since subjects' worked in a fast food restaurant and their ratings of their Relative Experience. This relationship indicated that subjects rated the amount of experience they had relative to other employees lower the longer it had been since they had worked in a fast food restaurant. At very least, the task importance ratings and the ratings of one's own performance would have been more salient in such a sample.

Several less-crucial limitations of this study exist as well. First, more significant relationships may have been found with the dimension subjects selected for one piece of information about their subordinate's performance ("One Piece") had there been more variance within each dimension. Except for Counter Service and Sandwich Preparation, the standard deviations for the One Piece variables were less than .20, with these variables ranging from 0.0 to 1.0. Another possible limitation in this study involves the dimension importance ratings. In asking subjects to rate how important each task was to successful job performance, questions were worded such that subjects could have responded either how important they (the subjects) thought the various tasks were, or how important the restaurants they

worked for considered these tasks. A case in point is that, while a significant relationship was found between Importance and One Piece ($\mathbb{R}_c = .45$, $\mathbb{p} = .05$), the correlation between One Piece and subjects ratings of the importance of Counter Service, the dimension selected for one piece of information by 73% of the subjects, was -.25, $\mathbb{p} = .01$. Third, the population from which participants in this research were drawn imposes another set of possible limitations on this research. All subjects were given course credit to encourage participation in this study. Since simply "participating" was necessary to receive this credit, subjects may have simply "gone through the motions" rather than putting forth their best effort when completing the required tasks. This may explain why 7 percent of the subjects ($\mathbb{p} = .01$) searched for less than 6 pieces of information total about their subordinate's performance--less than an average of one piece per dimension.

Implications of the current study

The ramifications of the current study are limited regarding the process of attending to and selecting information about the performance of others. The existence of a marginally significant relationship between self-rated performance and which dimension subjects selected for their first piece of information provides limited evidence of the self-concept's relationship to information search, and therefore its implications for research and practice are currently minimal. On the other hand, the relationship discovered between one's perceptions of what job dimensions are important and his or her own performance may prove important for future research in which subjects are required to either rate their own performance, or to rate the importance of job tasks which they perform. As demonstrated in the current study, self-rated performance and perceived dimension importance are

highly related to a person's experience performing the job being related, as well as to each other. Therefore, any ratings of a task's importance may be biased by how well the person providing the rating performs on that task. Such a relationship should be kept in mind when, for example, interviewing subject matter experts for a job analysis. It is possible that the importance of each job duty will vary based on how well each expert performs that duty. This highlights the importance of collecting data from a number of experts before a final determination of a task's importance is made.

Directions for future research

This study provides an initial exploration of how one individual difference variable, a rater's self-concept, might affect how he or she perceives the performance rating context, and specifically how one's self-concept might influence what is perceived about other's performance. Future research could continue this line of inquiry in a number of ways. First, the nature of the relationship between one's self-concept and attention to others' performance needs to be better understood. The data collected in this study, especially the relationship between Importance and One Piece and the marginally significant relationship observed between Self-ratings and the dimension from which subjects' selected their first piece of information, provide initial evidence that the self-concept is associated with attention to performance information about others. Further evidence is necessary, however, to corroborate these findings and to explore other ways in which the self-concept might affect behaviorally-based person perception.

Secondly, future research should attempt to establish a causal, rather than simply a correlational, relationship between the self-concept and attention to

performance information. Though an expensive proposition, such research could involve hiring subjects to perform a job over an extended time period. This would make it possible to collect measures assessing how job-related self-concepts change over time, are affected by positive or negative feedback and alterations in task difficulty or criticality to overall job performance, and how these changes affect one's information search process.

Another area in which subsequent research could improve upon the current study relates to the methodology used. First, subsequent studies should focus on developing alternative methods for measuring rater's information search process. While the computerized information display board is convenient in terms of data storage and retrieval, it presents subjects with a highly artificial situation. Using this system, raters read about, rather than actually observe, vignettes of ratee performance. Actually observing real people perform the tasks to be rated would allow raters to draw their own conclusions about ratees' performance levels. This may also make it more difficult for raters to decide if they have enough appropriate information about their subordinate's performance to make a judgment. If this method does increase the amount of information needed to make a rating, selfconcept related effects may be more prominent in an expanded search for more information. This video approach to information display might involve using a computerized interactive videodisc system in which subjects would select which behavior to view using the computer's keyboard and then watch the corresponding behavior on an attached video monitor.

If future research continues to use the current application of the information display board, however, several changes should be made. First, the computer

program which controls this simulation should be modified to present subjects with a list of dimensions and alternatives which are randomly ordered each time a piece of information is displayed. This would help reduce the effects of presentation listing order on how subjects choose to display information. Secondly, some measure should be obtained to evaluate subjects' use or "fear" of computers. Currently, the effect of subjects' affective reactions to working on a computer are not regularly assessed. Therefore, it is impossible to judge whether interest or experience with computers is affecting subjects' information search processes. Finally, subsequent research should not limit the amount of information subjects can access about their employee's performance. Not only does a search limit restrict potential variance in the number of pieces of information subjects can search overall, it also appears to encourage subjects to access the same number of items within each dimension, also restricting variance. Since recent research has found an increase in variance when subjects are presented with a very large number of alternatives and dimensions (J. K. Ford and S. Kozlowski, personal communication, March 30, 1989), future studies should attempt to "overload" subjects with information, thus enhancing the possibility of variance in search across dimensions.

A final area in which future work-related self-concept research could improve relates to the selection of a sample. As mentioned earlier, the lack of significant findings associated with information search in this study may be due in part to the length of time since these subjects worked in a fast food restaurant. The association between self-rated performance and the amount of time since working in a fast food restaurant, for example, suggests that if subjects ever identified strongly with their roles as fast food employees, then the intensity of this identification has

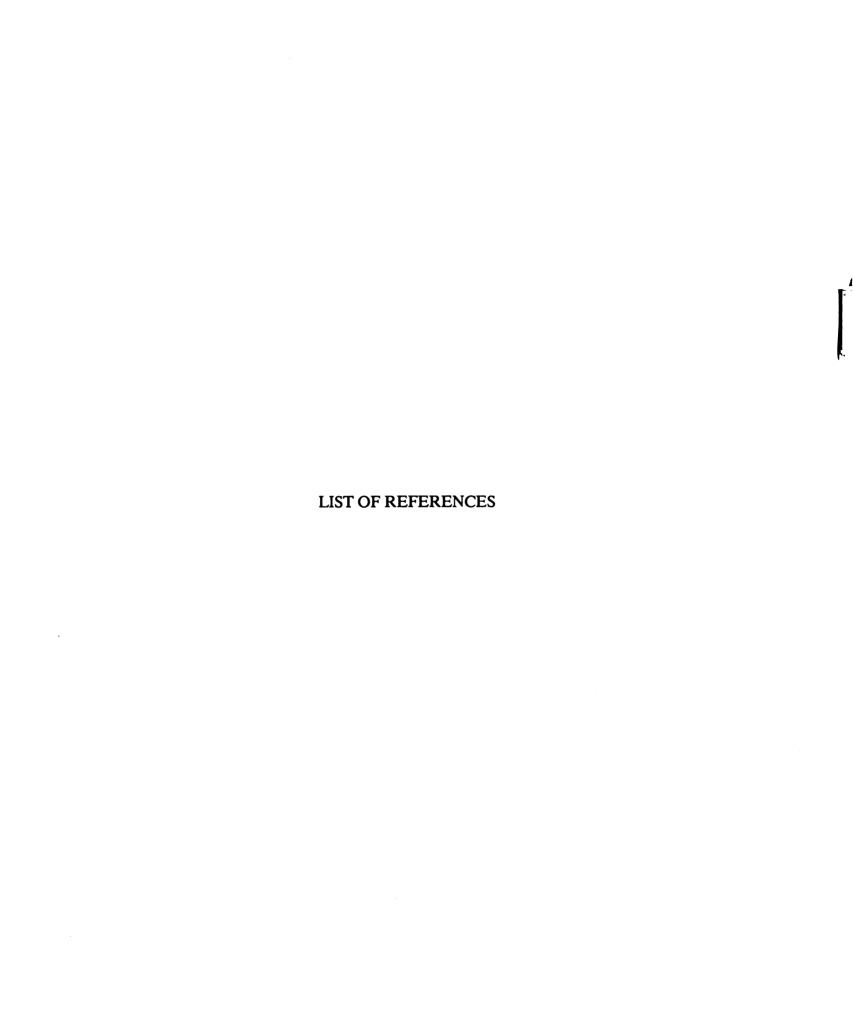
dissipated with time. This effect could be avoided in the future by recruiting subjects who are incumbents in the jobs being evaluated. Secondly, the type of job examined in this study may too simple to produce the expected results. That is, casual observation as a customer in one of these restaurants may be sufficient exposure to: (a) develop a working knowledge of what is important for job performance, (b) assess how much experience one already possesses performing tasks similar to those necessary for working in the restaurant, and (c) identify approximately how well one can perform the tasks that employees do. Therefore, future research on work-relevant self-concept issues would benefit from soliciting subjects who are incumbents in meaningful, complex jobs.

Conclusion

The current study was an attempt to demonstrate the effects that a rater's self-concept has on the selection of information about another's performance in a work context. Though this effort was generally unsuccessful, some evidence was found which suggests that one's self-concept does affect attention to certain aspects of performance-related behavior. Specifically, a significant relationship was found between a rater's evaluation of his or her own performance and what he or she considered important for successful job performance. Significant relationships were also found among a rater's experience performing the tasks related to a particular job dimension, his or her self-evaluated performance on those tasks, and how important he or she perceives those tasks to be. Finally, limited evidence was found linking information search to a rater's self-concept. The absence of stronger evidence supporting a relationship between one's self-concept and information search is hypothesized to be a result of inadequate methods used to assess the

information search process and the use of a less than optimal subject sample.

Additional experimental research which further explores the relationship between the rater's self-concept and his or her information search and which improves on the sampling and data collection methods employed in this study is suggested. Though the hypothesized relationships between self-concept and information search were not found, this study provides a foundation upon which later examinations of individual differences in rater attentional processes may build.



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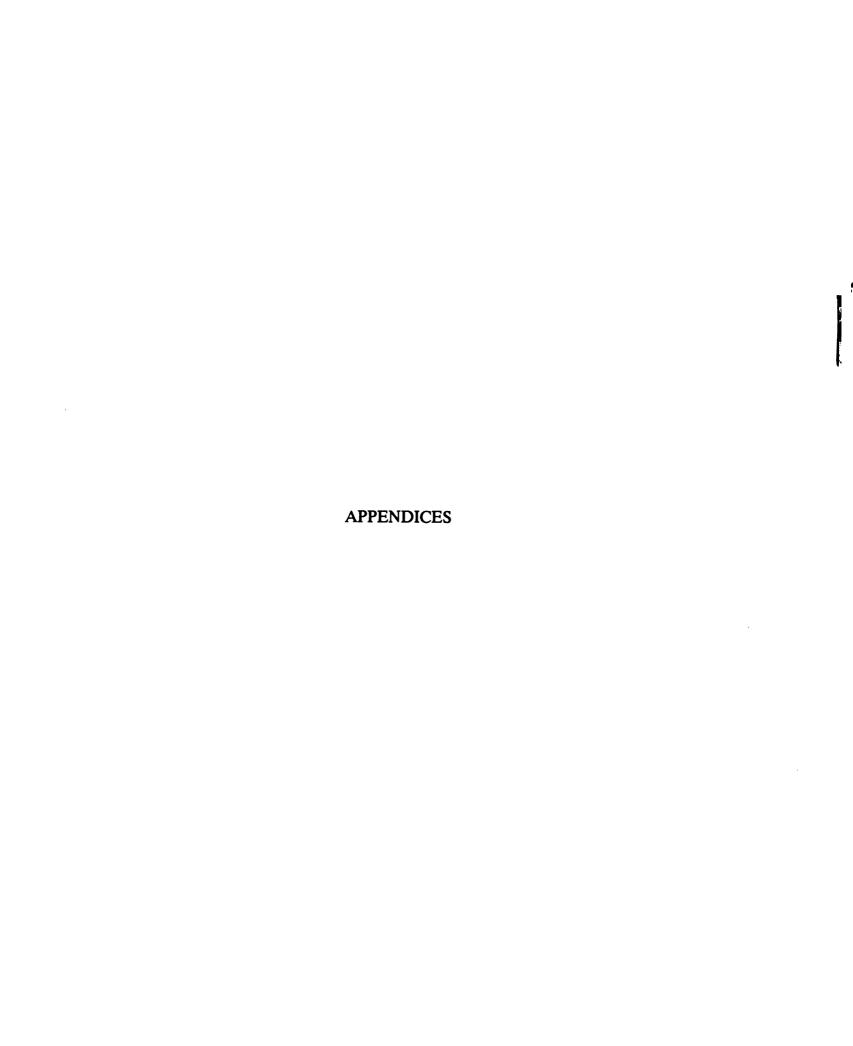
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APPENDIX A

Consent Form

Performance Rating Study

This study is designed to assess how people like yourself rate other people who are performing a job that you know something about. In this study, you will be asked to do a number of things. First, you will be asked a few questions about yourself, including some basic information about your experience as an employee for a fast food restaurant. Second, you will be asked to describe those areas of your job as a fast food employee in which you feel or felt most competent. Third, you will be asked to rate your actual performance on a number of tasks that you may have performed while a fast food restaurant employee. Finally, you will be requested to work on a computer simulation task in which you take on the role of a restaurant manager who needs to make a performance rating about one of your employees. In order to make this rating, you will search for the information you need about this employee's performance using the computer.

Your participation in this research is completely voluntary. Therefore, you may discontinue your participation at any time; there will be no penalty or recrimination. In addition, all information you provide will be kept in the strictest confidence. Your answers will be kept anonymous, and will be accessible only to the experimenter, David McKellin. Finally, while your data may be combined with that of others in a summary report, your data will not be distributed in any way in which it can be identified individually as yours.

Please acknowledge that you understand and agree to the terms of this research by reading the statement below and then complete the blanks at the bottom of the page.

Subject's statement

I agree to participate in this Performance Rating Study. I understand that I will be asked to fill out several questionnaires regarding myself, including questionnaires about my background and to evaluate my own performance as an employee in a fast food restaurant. Furthermore, I understand that my participation is voluntary, that I may discontinue my participation at any time without recrimination, that my answers will be kept confidential, and that my responses will not be distributed in any way in which they can be identified as mine.

Signature	Date
Print name	

APPENDIX B

Background Questionnaire

Pai	t 1. Background Information
1.	How old are you?
	years
2.	What is your gender?
	Female Male
3.	For which fast-food restaurant do/did you work?
	Burger King McDonaldsWendys
4.	How many months have you/did you work for this company?
	Months
5.	Are you currently working for this company?
	Yes No
6.	How many months has it been since you worked for this company? (If you are currently working as an employee in a fast food restaurant, please enter 0.)
	Months

Part II. Specific Fast Food Experience.

100% = Total

The remainder of this questionnaire asks questions about particular duties or tasks in Fast Food Restaurants. We call these stations. Please answer each question about the various stations in these restaurants.

7. Using the following scale, please indicate how much experience you have had performing the duties associated with each of stations listed.
 0 = No experience at all. 1 = Have performed some of the duties, but still one of the least experienced employees in the store. 2 = More experience than some, but less experienced than most other employees. 3 = A moderate or average amount of experience 4 = More experienced than most, but not as experienced as some other employees. 5 = One of the most experienced employees in the store.
Dining room maintenance
Counter service
Outdoor maintenance
Sandwich preparation
Restroom maintenance
French fry production
8. What percentage of your time per week, on average, did you spend working at each station listed below when you terminated your employment at the restaurant? (If you are presently working at the restaurant, what percentage, on average, do you currently spend working at each station?) On each line record a numeral between zero and 100 to indicate the percent of time spent working at each station. The sum of all stations should equal 100%.
Dining room maintenance
Counter service
Outdoor maintenance
Sandwich preparation
Restroom maintenance
French fry production

9. Listed below are six job stations. Restricting yourself to the six stations listed, think of the TEN TASKS YOU FEEL YOU PERFORMED BEST while working in the restaurant (e.g. filling customer's orders accurately, dressing sandwiches correctly). Then, please list each of these ten tasks under their corresponding station. That is, list where you did these tasks. When you complete this measure some dimensions may have nothing listed and some may have more than one task listed. It is important, however, to list 10 AND ONLY 10 TOTAL on this page.

Dining room maintenance

Counter service

Outdoor maintenance

Sandwich preparation

Restroom maintenance

French fry production

APPENDIX C

Computer Task Tutorial

WELCOME

This exercise is a simulation of a particular type of decision faced by supervisory personnel in most organizations. Today, you will be taking the role of a manager in a fast food restaurant and will be required to make a series of rating decisions regarding the evaluation of one of your subordinate hourly employees.

Organizations utilize performance evaluation information for a variety of different purposes. One use of performance ratings is to make decisions regarding pay increases and promotion. Another is to provide feedback to an employee about how well he or she is performing his or her job.

Today, you will be required to evaluate the performance of one of your part-time hourly employees. It is important to be very careful in making accurate ratings about your employee's performance. Bad performance rating decisions reflect poorly on the manager who is making the rating.

PLEASE PRESS THE RETURN BUTTON FOR FURTHER EXPLANATION

When a supervisor looks to rate the performance of his or her employees, he or she usually doesn't evaluate the employee's overall performance in general, but rather makes judgments about the quality of the worker's accomplishments along each of a number of different job dimensions. As a restaurant manager, your task will be to find out about your employee's performance along each of six job dimensions, and then to rate the quality of that performance within each dimension.

If you have any questions, please ask the experimenter for assistance. If you do not have any questions, press the RETURN button and you will receive more specific instructions about your task.

To aid you in searching for information about your employee's performance, you will be presented with two lists. The first list contains six job dimensions along which you will be rating your employee, and is labelled DIMENSIONS. The second list, which contains descriptions of your employee's job behaviors on various tasks within a job dimension is labelled ALTERNATIVES. For example, if you were rating the performance of a secretary, you might see a screen such as:

DIMENSIONS	ALTERNATIVES		
1=TYPING	1-BEHAVIOR A		
2=PHONE MANNERS	2=BEHAVIOR B		
3=FILING	3=BEHAVIOR C		
4=SCHEDULING	4=BEHAVIOR D		

As you can see, each alternative and each dimension are identified by a number. To begin searching for information, you will be asked two questions: (1) the dimension number about which you would like information and (2) the alternative number about which you would like to receive information. Using the number keys on the row above the typewriter keypad, simply type the number corresponding to the dimension you would like and then type the number corresponding to the alternative you would like.

CONFUSED? Let's go through the evaluation process in detail.

DIMENSIONS	ALTERNATIVES	
1=TYPING	1=BEHAVIOR A	
2=PHONE MANNERS	2=BEHAVIOR B	
3=FILING	3=BEHAVIOR C	
4=SCHEDULING	4=BEHAVIOR D	

To begin the search process, you will choose one dimension and one alternative of information describing that dimension. You will continue this procedure until you have enough information to evaluate each employee's performance, or until you have viewed two-thirds of the possible information. At that time, you will be provided with a rating scale, ranging from 1 to 9 (1 = exceptionally poor performer; 9 = exceptionally good performer). Using this scale, you will be asked to provide a rating for each individual on each dimension.

To see how this procedure works, let's begin with the following lists:

ATTEDNATIVES

DIMENSIONS	ALIERNATIVES
1=TYPING	1=BEHAVIOR A
2=PHONE MANNERS	2=BEHAVIOR B
3=FILING	3=BEHAVIOR C
4=SCHEDULING	4=BEHAVIOR D

DIMENSIONS

The following message will appear below the dimensions and alternatives:

ENTER THE NO. OF THE DIMENSION AND HIT RETURN

ENTER THE NO. OF THE ALTERNATIVE AND HIT RETURN

Let's assume that you are interested in TYPING BEHAVIOR C. You would press -1- for TYPING, the RETURN button, and then -3- for BEHAVIOR C and the RETURN button. The present screen will disappear and the requested information will be shown on the next screen as follows:

Employee misspells every fourth word in a report which goes to the company president.

At this point, the computer will display the following message:

ENTER 1: IF YOU NEED MORE INFORMATION

2: IF YOU ARE READY TO MAKE THE FINAL RATINGS

Let's assume that you are not ready to make a the final ratings and would like more information. You would press -1- and the RETURN button. The computer will then print the original menu on the next screen.

DIMENSIONS ALTERNATIVES

1=TYPING 1=BEHAVIOR A
2=PHONE MANNERS 2=BEHAVIOR B
3=FILING 3=BEHAVIOR C
4=SCHEDULING 4=BEHAVIOR D

ENTER THE NO. OF THE ALTERNATIVE AND HIT RETURN ?

ENTER THE NO. OF THE DIMENSION AND HIT RETURN ?

Now let's suppose you want to know about the PHONE MANNERS used in BEHAVIOR D. You would type in a -2- for PHONE MANNERS and a -4- for BEHAVIOR D.

Now the computer displays the following message:

The employee answered the phone with the department's name and gave his name.

At this point, the computer will display the following message:

ENTER 1: IF YOU NEED MORE INFORMATION

2: IF YOU ARE READY TO MAKE THE FINAL RATINGS

Again, let's assume that you are not ready to make the final promotion ratings. After pressing -1- for more information, the computer will return to the original menu on the next screen.

DIMENSIONS ALTERNATIVES

1=TYPING 1=BEHAVIOR A
2=PHONE MANNERS 2=BEHAVIOR B
3=FILING 3=BEHAVIOR C
4=SCHEDULING 4=BEHAVIOR D

ENTER THE NO. OF THE DIMENSION AND HIT RETURN ?

ENTER THE NO. OF THE ALTERNATIVE AND HIT RETURN ?

Now let's assume that you want to see SCHEDULING performance on BEHAVIOR C.

You would type a -4- for SCHEDULING and a -3- for BEHAVIOR C.

Employee schedules two meetings in the same conference room at the same time.

Again, the computer will display the following message at this time:

ENTER 1: IF YOU NEED MORE INFORMATION

2: IF YOU ARE READY TO MAKE THE FINAL RATINGS

At this point, let's assume that you have searched a sufficient number of different dimensions of performance for each employee and are ready to make a rating. You would type a -2- and the RETURN button.

The computer will now display the following message:

ENTER <N> IF YOU ARE NOT READY TO COMPLETE THE RATINGS

ENTER <Y> IF YOU ARE READY TO COMPLETE THE RATINGS

Since you are ready to complete the ratings, you would press the -Y- key and the RETURN button. The present screen will disappear and a 9-point scale for making the ratings will appear on the next screen.

The computer will now display the following message:

On the following 9-point scale, please rate the employee's performance on each job dimension by entering the appropriate number from 1 to 9 after the colon. NOTE: Once ratings are entered, they cannot be changed.

II	I	I	I	I	I	I	I
1 2	3	4	5	6	7	8	9
EXCEPTIONALLY POOR PERFORMER	NEITHER GOOD NOR POOR PERFORMER				EXCEPTIONALLY GOOD PERFORMER		
	TYPI		PPC	:			
	PHONE MANNERS FILING SCHEDULING		iks	: :			

Following the cursor's prompt (e.g., the colon), you would rate the employee's performance by entering the appropriate number along the 9-point scale after the colon.

At this point, the computer will summarize the results of your ratings as follows:

DIMENSION	RATING
TYPING	:2
PHONE MANNERS	:7
FILING	: 5
SCHEDULING	:3

Are you ready to continue and make your own responses? If you are ready, press the RETURN button to continue. If you are not ready, ask the experimenter to clarify an questions you may have. GOOD LUCK!

APPENDIX D

Computer Search Practice Task

Now that you are familiar with the search procedure, you will be given an opportunity to practice your new skills prior to conducting the actual performance evaluation. For this practice task, you will evaluating the performance of a university professor. This professor's performance will be described along 4 performance dimensions. You can search for as little or as much information as necessary in making your evaluation. The dimensions and alternatives are as follows:

DIMENSIONS	ALTERNATIVES		
1=LECTURING	1=BEHAVIOR A		
2=ANSWERING QUESTIONS	2=BEHAVIOR B		
3=ADVISING	3=BEHAVIOR C		
4=EXAM WRITING	4=BEHAVIOR D		

Remember to choose one dimension and one alternative at a time. Type in the number corresponding the desired dimension, hit RETURN, and then type the number corresponding to the desired alternative and hit RETURN. Continue this procedure until you are ready to make the performance ratings for the professor's performance.

DIMENSION

1: LECTURING

2: ANSWERING QUESTIONS

3: OFFICE HOURS

4: EXAMINATIONS

ALTERNATIVE

BEHAVIOR A

2: BEHAVIOR B

3: BEHAVIOR C

4: EXAMINATIONS

ENTER NO. OF DIMENSION FROM 1 TO 4 THEN RETURN ? ENTER NO. OF ALTERNATIVE FROM 1 TO 4 THEN RETURN

Professor explains a complex concept so that class understands it

ENTER 1: IF YOU NEED MORE INFORMATION
2: IF YOU ARE READY TO MAKE THE FINAL RATINGS
?

On the following 9-point scale, please rate the employee's performance on each job dimension by entering the appropriate number from 1 to 9 after the colon. NOTE: Once ratings are entered, they cannot be changed.

1-----I-----I
1 2 3 4 5 6 7 8 9

EXCEPTIONALLY POOR PERFORMER

NEITHER GOOD NOR POOR PERFORMER EXCEPTIONALLY GOOD PERFORMER

TYPING
PHONE MANNERS
FILING
SCHEDULING

APPENDIX E

Computer Task Introduction Screen

Now that you have done an example, you should be ready to begin the experiment. You will be presented with a list of six job dimensions (DIMENSIONS) related to the work of hourly employee in a fast food restaurant along which you are to rate your subordinate. You also will be presented with list of seven job behaviors (ALTERNATIVES). Your task is to examine as little or as much information as necessary to provide an accurate rating of your employee's performance on each job dimension. You will be able to search for 21 PIECES of information about your employees performance. This should allow you to collect plenty of information about your employee's performance, but IT IS IMPORTANT THAT YOU CHOOSE INFORMATION CAREFULLY, so that you can make the best ratings possible. The dimensions along which you will be evaluating your employee are:

- 1. French Fry Production
- 2. Restroom Maintenance
- 3. Dining Room Maintenance
- 4. Counter Service
- 5. Sandwich Preparation
- 6. Outside Maintenance

If you have any questions, please ask the experimenter at this time. Otherwise, press the RETURN BUTTON to begin the experiment.

APPENDIX F

Computer Task Behavioral Descriptions

Job Dimension - French fry production

Alt. Job Behavior

- 1 Employee shakes fry basket after 1 minute of cooking (-)
- Employee holds only the fry bag currently being filled, even during rush periods (-)
- Employee discards cooked fries held in the bagging station longer than 7 minutes (+)
- Employee fills bags or cartons of fries so that they are just full (+)
- 5 Employee salts fries using front-to-back motion (+)
- 6 Employee rotates fries first in first out in bagging station (+)
- 7 Employee does not drain shortening from basket before dumping fries (-)

Job Dimension - Dining room maintenance

Alt. Job Behavior

- 1 Employee cleans ash trays and replaces as necessary (+)
- 2 Employee misses trash on some tables (-)
- Employee assists customers by helping them to carry a large order to their table and by getting them a high chair (+)
- Employee leaves a small spill alone, intending to mop it up later (-)
- 5 Employee forgets to check for smudges on doors and windows (-)
- 6 Employee cleans table tops and sides, high chairs, and door handles using cloth and sanitizer solution (+)
- 7 Employee spot sweeps only area directly in front of counter (-)

Job Dimension - Restroom maintenance

Alt. Job Behavior

- 1 Employee notices paper products are low, but determines that they can wait until the next shift comes on (-)
- 2 Employee checks and refills soap supplies (+)
- Employee leaves streaks on mirror and wash basin after cleaning (-)
- 4 Employee checks washroom only when there is nothing else to do (-)
- 5 Employee keeps walls and partitions clean and free from smudges and graffiti (+)
- 6 Employee forgets to check toilets to see if they are clean (-)
- 7 Employee empties waste baskets and makes sure they are clean (+)

Job Dimension - Outside maintenance

Alt. Job Behavior

- 1 Employee misses dirt on outside of windows (-)
- 2 Employee pushes down trash in compactor (+)
- 3 Employee forgets to empty and clean several outside trash bins
 (-)
- 4 Employee cleans drive-thru sign and equipment and checks to see if it is functioning properly (+)
- 5 Employee closes the gate to the trash corral (+)
- 6 Employee picks up all trash on the sidewalks, grass, and street gutters (+)
- 7 Employee does not notice gum left on sidewalks (-)

Job Dimension - Sandwich preparation

Alt. Job Behavior

- 1 Employee assembles sandwiches correctly (+)
- 2 Employee forgets to put two condiments on sandwich (-)
- 3 Employee makes sure that cooking area is clean and sanitized (+)
- 4 Employee cooks meat correctly (+)
- 5 Employee insures that sandwich buns are toasted correctly (+)
- 6 Employee runs out of raw products (meat, dressings, etc.) (-)
- 7 Employee forgets to cleans hands before taking over cooking duties (-)

Job Dimension - Counter service

Alt. Job Behavior

- 1 Employee takes customer's order, suggesting any items which may be missing (+)
- 2 Employee gives customer too much change (-)
- Employee gives customer correct number of condiment packets for order (+)
- 4 Employee is slow in assembling order (-)
- 5 Employee greets customer, saying "Hi, how are you doing?" (-)
- 6 Employee forgets to check the quality of products before giving them to the customer (-)
- 7 Employee delivers the correct products to the customer (+)

APPENDIX G

Self-rated Performance Questionnaire

Part III. Self-evaluation of performance

Below are a list of activities that are often described as part of the job duties of persons working in various positions in fast food restaurants. Using the scale below, rate your honest opinion about the frequency with which you met the restaurant's standards for good performance of the activity that is described. If you never worked the station responsible for the particular activity listed, please enter 0 on the blank.

RATING SCALE

- 1 = Regularly performed below the standard.
- 2 = Occasionally performed below standard and performed at the standard the rest of the time.
- 3 = Performed at the standard.
- 4 = Occasionally exceeded the standard but usually performed at the standard.
- 5 = Performed above the standard about half the time and at the standard the rest of the time.
- 6 = Frequently performed above the standard and at the standard the rest of the time.
- 7 = Almost always exceeded the standard.
- 8 = So consistently exceeded the standard that I stood out to both supervisors and peers as an exceptionally good performer of this task.

1.	Suggesting additional items when taking customers'	
	orders	
2.	Shaking fry baskets after the fries had been cooking for 30 seconds	
3.	Cleaning and replacing ash trays when necessary	
4.	Keeping restroom paper products fully stocked	-
5.	Checking and cleaning the outside of windows	
6.	Assembling sandwiches correctly	
7.	Making appropriate change for customers	
8.	Holding the correct number of fry bags when bagging french fries	
9.	Clearing trash from unoccupied tables in the dining room	
10.	Checking restroom soap supplies, and refilling them when necessary	,

- 1 = Regularly performed below the standard.
- 2 = Occasionally performed below standard and performed at the standard the rest of the time.
- 3 = Performed at the standard.
- 4 = Occasionally exceeded the standard but usually performed at the standard.
- 5 = Performed above the standard about half the time and at the standard the rest of the time.
- 6 = Frequently performed above the standard and at the standard the rest of the time.
- 7 = Almost always exceeded the standard.
- 8 = So consistently exceeded the standard that I stood out to both supervisors and peers as an exceptionally good performer of this task.

11.	Making sure that trash in the trash compactor was crushed	
12.	Applying correct condiments to sandwiches	
13.	Giving customers the appropriate number of condiment packets for their orders	
14.	Discarding cooked fries held in the bagging station longer than 7 minutes	
15.	Helping customers find high chairs when they need them	
16.	Cleaning restroom mirrors and wash basins	
17.	Emptying and cleaning all outside trash bins	
18.	Keeping the cooking area clean and sanitized	
19.	Assembling customers' orders quickly	
20.	Filling fry bags or cartons so they are just full	
21.	Mopping up spills in the dining room promptly	
22.	Checking restrooms at the required time intervals	
23.	Cleaning and checking the operation of the drive-thru equipment	
24.	Cooking meat correctly	
25.	Welcoming customers using the appropriate greeting	

- 1 = Regularly performed below the standard.
 2 = Occasionally performed below standard and performed at the standard the rest of the time.
- 3 = Performed at the standard.
- 4 = Occasionally exceeded the standard but usually performed at the standard.
- 5 = Performed above the standard about half the time and at the standard the rest of the time.
- 6 = Frequently performed above the standard and at the standard the rest of the time.
- 7 = Almost always exceeded the standard.
- 8 = So consistently exceeded the standard that I stood out to both supervisors and peers as an exceptionally good performer of this task.

26.	Salting fries using a front-to-back motion	
27.	Removing all spots and smudges from doors and windows	
28.	Keeping restroom walls and partitions clean and free from smudges and graffiti	
29.	Keeping the gates to the trash corral/area closed	
30.	Toasting sandwich buns correctly	
31.	Checking the quality of products before giving them to customers	
32.	Rotating packaged fries first in - first out in the bagging station	
33.	Cleaning table tops and sides, high chairs, and door handles using cloth and soapy water or sanitizer solution	
34.	Checking to make sure toilets are clean	
35.	Picking up all trash on sidewalks, grass, and street gutters	
36.	Making sure that sufficient supplies of raw products are maintained	
37.	Delivering the correct products to customers	
38.	Draining shortening from fry baskets before dumping fries into the bagging area	

- 1 = Regularly performed below the standard.
 2 = Occasionally performed below standard and performed at the standard the rest of the time.
- 3 = Performed at the standard.
- 4 = Occasionally exceeded the standard but usually performed at the standard.
- 5 = Performed above the standard about half the time and at the standard the rest of the time.
- 6 = Frequently performed above the standard and at the standard the rest of the time.
- 7 = Almost always exceeded the standard.
- 8 = So consistently exceeded the standard that I stood out to both supervisors and peers as an exceptionally good performer of this task.

39.	Spot sweeping the dining room floor	
40.	Emptying restroom waste baskets and making sure they are clean	
41.	Removing gum from the sidewalks around the building	
42.	Washing my hands before taking over cooking responsibilities	

APPENDIX H

Dimension Importance Rating Questionnaire

Part IV. Task Importance Ratings

In this part of the study, please use the scale below to indicate how critical each task is for the successful job performance of fast food employees. Please rate the importance of these tasks even if you never worked the station responsible for the particular activity listed or never worked for a fast food restaurant. NOTICE THAT THESE RATINGS USE A 7-POINT, INSTEAD OF AN 8-POINT, RATING SCALE. Rate each item by placing the numeral int the blank that best describes your beliefs.

- 1 = Task is not critical at all to performing successfully as a fast food employee.
- 2 = Task is remotely critical to performing successfully as a fast food employee, but can be considered one of the best employees even if performance on this task is substandard.
- 3 = Task is somewhat critical to performing successfully as a fast food employee, but can be considered a good employee even if performance is substandard.
- 4 = Task is important in performing successfully as a fast food employee; an employee who did not perform this task successfully would only be considered an average employee.
- 5 = Task is very important in performing successfully as a fast food employee; an employee who did not perform this task successfully would keep others from getting their work done properly.
- 6 = Task is crucial in performing successfully as a fast food employee; an employee who failed to perform this task successfully would be reprimanded, or possibly put on probation.
- 7 = This task is so critical that an employee who failed to perform it successfully would probably be dismissed.

1.	Suggesting additional items when taking customers' orders	
2.	Shaking fry baskets after the fries had been cooking for 30 seconds	
з.	Cleaning and replacing ash trays when necessary	
4.	Keeping restroom paper products fully stocked	****
5.	Checking and cleaning the outside of windows	
6.	Assembling sandwiches correctly	
7.	Making appropriate change for customers	
8.	Holding the correct number of fry bags when bagging french fries	
9.	Clearing trash from unoccupied tables in the dining room	

- 1 = Task is not critical at all to performing successfully as a fast food employee.
- 2 = Task is remotely critical to performing successfully as a fast food employee, but can be considered one of the best employees even if performance on this task is substandard.
- 3 = Task is somewhat critical to performing successfully as a fast food employee, but can be considered a good employee even if performance is substandard.
- 4 = Task is important in performing successfully as a fast food employee; an employee who did not perform this task successfully would only be considered an average employee.
- would only be considered an average employee.

 5 = Task is very important in performing successfully as a fast food employee; an employee who did not perform this task successfully would keep others from getting their work done properly.
- 6 = Task is crucial in performing successfully as a fast food employee; an employee who failed to perform this task successfully would be reprimanded, or possibly put on probation.
- reprimanded, or possibly put on probation.

 7 = This task is so critical that an employee who failed to perform it successfully would probably be dismissed.

10.	Checking restroom soap supplies, and refilling them when necessary	
11.	Making sure that trash in the trash compactor was crushed	
12.	Applying correct condiments to sandwiches	
13.	Giving customers the appropriate number of condiment packets for their orders	
14.	Discarding cooked fries held in the bagging station longer than 7 minutes	
15.	Helping customers find high chairs when they need them	
16.	Cleaning restroom mirrors and wash basins	
17.	Emptying and cleaning all outside trash bins	
18.	Keeping the cooking area clean and sanitized	
19.	Assembling customers' orders quickly	
20.	Filling fry bags or cartons so they are just full	

21. Mopping up spills in the dining room promptly22. Checking restrooms at the required time intervals

- 1 = Task is not critical at all to performing successfully as a fast food employee.
- 2 = Task is remotely critical to performing successfully as a fast food employee, but can be considered one of the best employees even if performance on this task is substandard.
- 3 = Task is somewhat critical to performing successfully as a fast food employee, but can be considered a good employee even if performance is substandard.

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- 4 = Task is important in performing successfully as a fast food employee; an employee who did not perform this task successfully would only be considered an average employee.
- 5 = Task is very important in performing successfully as a fast food employee; an employee who did not perform this task successfully would keep others from getting their work done properly.
- 6 = Task is crucial in performing successfully as a fast food employee; an employee who failed to perform this task successfully would be reprimanded, or possibly put on probation.
- 7 = This task is so critical that an employee who failed to perform it successfully would probably be dismissed.
- 23. Cleaning and checking the operation of the drive-thru equipment

 24. Cooking meat correctly

 25. Welcoming customers using the appropriate greeting

 26. Salting fries using a front-to-back motion

 27. Removing all spots and smudges from doors and windows

 28. Keeping restroom walls and partitions clean and free from smudges and graffiti
- 29. Keeping the gates to the trash corral/area closed
- 30. Toasting sandwich buns correctly
- 31. Checking the quality of products before giving _____
- 32. Rotating packaged fries first in first out ______ in the bagging station
- 33. Cleaning table tops and sides, high chairs, and door handles using cloth and soapy water or sanitizer solution

- 1 = Task is not critical at all to performing successfully as a fast food employee.
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- 7 = This task is so critical that an employee who failed to perform it successfully would probably be dismissed.

34.	Checking to make sure toilets are clean	
35.	Picking up all trash on sidewalks, grass, and street gutters	
36.	Making sure that sufficient supplies of raw products are maintained	····
37.	Delivering the correct products to customers	
38.	Draining shortening from fry baskets before dumping fries into the bagging area	*******
39.	Spot sweeping the dining room floor	
40.	Emptying restroom waste baskets and making sure they are clean	
41.	Removing gum from the sidewalks around the building	
42.	Washing my hands before taking over cooking	

responsibilities

APPENDIX I

Zero-Order Correlations Among Measures

Zero-Order Correlations Among Measures

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