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**AN INTERACTIONIST APPROACH TO ASSESSING PERSONALITY IN WORK
CONTEXTS: CONSTRUCT VALIDATION OF A PREDICTOR OF CUSTOMER
SERVICE PERFORMANCE**

By

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ABSTRACT

AN INTERACTIONIST APPROACH TO ASSESSING PERSONALITY IN WORK CONTEXTS: CONSTRUCT VALIDATION OF A PREDICTOR OF CUSTOMER SERVICE PERFORMANCE

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The purpose of this dissertation was to develop an instrument that directly measures basic personality traits within specific work contexts. This instrument was based on a conceptualization of personality that suggests behavior is influenced by a dynamic relationship between traits and situations. There were two main goals of this research. The first was to develop a personality instrument that demonstrated greater predictive validity than traditional measures of basic traits that ignore situational information. The second was to ensure the instrument demonstrated evidence of construct validity. To accomplish these objectives, an instrument was developed to predict customer service performance by formally integrating specific situational and behavioral information together. The construct relations of this instrument were then examined in a nomological network of basic personality traits, contextualized traits, a direct predictor of customer service orientation, and customer service performance. Results found that the proposed instrument typically yielded stronger predictive validity estimates than alternative measures, although evidence of construct validity was less conclusive.

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INTRODUCTION

Despite early skepticism (Guion & Gottier, 1965), several factors have contributed to a renewed interest in the use of personality testing in selection. First, meta-analyses have shown that personality testing (as based on the Big 5 model) can relate to a variety of criteria (e.g., Barrick & Mount, 1991; Hough, 1992; Hough, Eaton, Dunnette, Kamp, & McCloy, 1990; Mount & Barrick, 1995; Tett, Jackson, & Rothstein, 1991). Second, consideration of personality constructs helps to address and understand neglected criterion dimensions untapped by general ability (e.g., contextual performance; Borman & Motowidlo, 1997). Third, personality measures typically produce less adverse impact than measures of cognitive ability (e.g., Sackett & Wilk, 1994; Schmitt, Clause, & Pulakos, 1996). However, the use of traditional measures of personality has often faced a validity “ceiling” of .30 (e.g., Hough, 1998; Mount & Barrick, 1995), which is not unlike the ceiling commonly noted as the limit to cross-situational consistency (Mischel, 1968). The fact that personality constructs demonstrate lower validity than cognitive ability tests (e.g., Hough, 1998; Hunter & Hunter, 1984) suggests their sole use will result in more prediction errors than the sole use of ability tests. Because of this concern, attempts are being made to improve the validity of personality measures

Recently, Schmit, Ryan, Stierwalt, and Powell (1995) found that providing a work-related frame-of-reference in personality tests can lead to increased validity. Thus, one way to increase the predictiveness of personality tests is to incorporate situational or contextual factors. However, Schmit et al. (1995) only added the words “at work” to a traditional set of personality items. As will be described in the following sections, there

are both theoretical and practical reasons to believe a more thorough examination of contextual factors might increase the predictiveness and explanatory value of personality tests.

One way to incorporate these contextual factors might be modeled after an increasingly-used non-cognitive selection instrument called a situational judgment test (SJT). This test provides for the relevant situations an employee might face on the job and requires the applicant to indicate the correct response to each situation. Thus, this type of test is somewhat akin to a paper and pencil version of a situational interview (Latham, Saari, Pursell, & Campion, 1980). Motowidlo and colleagues (Motowidlo, Dunnette, & Carter, 1990; Motowidlo & Tippins, 1993), along with Pulakos and Schmitt (1996) have shown that a SJT can be a valid predictor of job performance (validities around .25 to .30). Unfortunately, what SJTs measure is unclear, as is the transportability of the situations to different organizations. As each situation and correct response option is derived in a particular setting, the items (and thus overall test) are inherently multidimensional and perhaps specific to a particular organization.

The purpose of this dissertation is to create an instrument that explicitly considers situational information when assessing personality constructs in work contexts. In this manner it is a measure of personality within work situations. To formally integrate situational with behavioral information, the proposed instrument will contain questions where the individual is presented with a work situation (i.e., the item) and then needs to indicate what he or she will do in this situation (i.e., the behavioral response options). Note that the response options are behaviors that reflect a range of a particular construct

in the situation (e.g., behaviors reflecting high to low agreeableness when dealing with a customer).

Incorporating specific and explicit situational information directly into the assessment of personality is something that has not (to my knowledge) been attempted when predicting work behavior. Thus, the creation of such an instrument presents several novel features. First, such an instrument should provide a more accurate assessment of dispositions within the context one is most interested in (i.e., work situations). Second, the instrument is based on more current and realistic conceptualizations of personality than past approaches. Third, the method used to develop the instrument attempts to link situations, traits, and behaviors. Fourth, the method also explicitly considers the nature of the criterion domain to provide boundaries for the appropriate situations and behaviors. Finally, the instrument attempts to create a job-relevant and context rich instrument that still can be mapped onto a more basic personality taxonomy (i.e., the five factor model).

The successful development of such an instrument should provide several desirable qualities. First, it should demonstrate higher predictive validity than the Big 5 constructs because the personality items are placed within job-relevant situations (e.g., Schmit et al., 1995). Second, the instrument should maintain moderate levels of fidelity to the actual job context (e.g., Motowidlo et al., 1990). Third, the instrument should help provide a better understanding of work behavior, as dispositional responses to situations are carefully described and assessed (e.g., Mischel & Shoda, 1995). Finally, the instrument should exhibit relatively little or no adverse impact (e.g., Schmitt et al., 1996).

In summary, this dissertation will develop an instrument that attempts to directly measure basic personality traits within specific work situations. There are two main goals

of this research. The first is to develop a personality instrument that is more predictive than the best alternative methods (e.g., direct measures of the five factor model). The second is to ensure that this instrument still measures basic personality constructs (as based on the five factor model). Achieving high prediction without understanding what the instrument measures is as unacceptable as developing an instrument that maps onto the five factor model yet has no predictive validity. Thus, this dissertation considers the possibility for a job-relevant, theoretically-derived, explanatory and predictive instrument applicable to selection contexts. This instrument is conceptualized within the nomological network surrounding the Big 5 personality constructs, yet is contextualized to consider organizationally-relevant situations. This moves the assessment of personality from relatively distal and context-free measures to those more proximal to the criterion behaviors of interest. In the Methods section the development of this instrument is discussed, but first a careful explication of the theoretical framework used to guide this research is considered.

Theoretical Underpinnings

In the following sections, basic personality research and issues are discussed to provide a framework and conceptual foundation for the proposed study. First, a working definition of personality is provided. Second, I review basic research on traits and dispositions, the traditional focus of personality research. Third, I consider the nature of situations and delineate important issues for the study of personality. Fourth, I discuss interactionist approaches that have attempted to integrate dispositional and situational factors as influences on behavior. Finally, I provide a summary of the key implications of this research for the development of a personality instrument to be created for selection

purposes. Note that this review is not exhaustive, as the amount of research directed towards these topics is voluminous. Rather, I limit this review to research most relevant for providing a conceptual grounding of the study proposed later in this manuscript. Thus, this review devotes more attention to more recent theoretical and empirical research than past approaches.

A Working Definition of Personality

Personality has been defined in many ways, and there is no one agreed upon definition (Winter, John, Stewart, Klohnen, & Duncan, 1998). For example, Hogan (1991) argues that “personality refers both to a person’s social reputation and to his or her inner nature: The first is public and verifiable; the second is private and must be inferred” (p. 875). In contrast, Krahe (1992) argues that definitions of personality are somewhat dependent on the theoretical orientation of the researcher, although she notes three features that are common to all researchers. Specifically, personality is: “the reflection of individual uniqueness; enduring and stable; and ...determined by dispositions that reside in the individual” (p. 10). Phares (1991) suggests that “personality is that pattern of characteristic thoughts, feelings, and behaviors that distinguishes one person from another and that persists over time and situations” (p. 4). Others who advocate a more flexible personality system (e.g., Mischel & Shoda, 1995) choose a more dynamic definition. Endler (1983) suggests: “Personality is a person’s coherent manner of interacting with himself or herself and with his or her environment” (p. 179).

Based on these definitions, the present study adopts the following general definition of personality: personality involves (a) a basic organizing structure (e.g., latent

traits or dispositions) that leads an individual to engage in (b) characteristic ways of cognitively processing (e.g., attitudes, cognition, perception, goals) (c) environmental information that (d) influences behavior in relatively stable or enduring ways. As will be shown and more fully developed in the following sections, these points are consistent with the majority of basic personality research.

Research on Personality and Dispositions

From the general definition of personality presented above, we see that the purpose of personality is to describe, predict, and explain behavioral regularities, such as across time or situations (e.g., Hogan, 1991; Krahe, 1992). Traditionally, the most common description of these behavioral regularities has been in terms of traits or dispositions (Krahe, 1992). In fact, one might consider a trait (or disposition) as a specific cluster of similar cognition and behaviors that covary and are to some extent enduring (e.g., Emmons, 1989). For example, speaking to strangers, talking to checkout clerks, and spending hours talking at parties might be described by the trait “talkative.” Notice that this definition of trait is essentially the same as what might otherwise be known as a construct (Binning & Barrett, 1989; Cronbach & Meehl, 1955). Also note that traits have traditionally been understood as dispositional entities; they originate and operate within the person. Kanfer (1990) notes that personality traits may be considered as distal influences on behavior, leading to basic tendencies to respond and act upon environments through more proximal processes, such as goal setting or expectancies, in characteristic ways.

In the personality literature, traits are conceptualized in two ways: a lexical (descriptive) approach and a questionnaire (theoretical) approach. The lexical approach

attempts to study traits in terms of everyday language such as adjectives (e.g., Goldberg, 1993; Saucier & Goldberg, 1996). In perhaps the best known study of the lexical approach, Allport and Odbert (1936) identified all words in the English dictionary that could be used for describing another person. Cattell (1943) further refined this list into what he considered to be the 16 primary factors of personality. An alternative approach is called the questionnaire (or theoretical) approach (Block, 1995). The questionnaire approach usually provides a one-sentence description of a behavior in a situation (e.g., “I am often tired of working”). The best known proponents of the questionnaire approach are McCrae and Costa, who developed the NEO personality inventory (NEO-PI, Costa & McCrae, 1992).

What distinguishes the questionnaire approach from the lexical approach is that, rather than relying on one-word trait descriptors (e.g. energetic, achieving), one assess traits via self-report questions (e.g., “I usually am nervous in groups”). It might be noted that the lexical approach is often considered descriptive and the questionnaire approach explanatory (Block, 1995; Saucier & Goldberg, 1996). This distinction is hard to operationally identify, but the basic premise is that the lexical approach provides for a surface-level description of a trait (and thus behavior) that exists in everyday language, whereas the questionnaire approach is guided by theoretical notions and does not necessarily rely on everyday language (Krahe, 1992; Saucier & Goldberg, 1996). This distinction is not too important for the purposes of the present study, other than to limit the examination of personality research primarily to questionnaire-based methods. Thus, the questionnaire approach will be the focus in this paper, given the more theoretical and explanatory nature of this method.

Early trait research sought to identify the structure of traits, and past research has uncovered an overwhelming number of traits of varying levels of specificity and inclusiveness. For example, a trait like extroversion may refer to a broad tendency to act in interpersonally outgoing ways, and be composed of more specific traits such as assertiveness and excitement-seeking. Unfortunately, much of this research has been plagued by the use of sloppy terms, where the same name is used to describe different constructs or different names to describe the same construct (Block, 1995). The result has been a proliferation of terms and constructs with little evidence of construct validity. However, more recent research has attempted to classify the many traits into an organizing framework. Although considerably more research needs to be conducted, the current result of this effort has led to the development of the Big 5 or five factor model.

Development of the Big 5 can be traced to several early attempts to reduce the large number of trait types into a more parsimonious framework. Early research by Fiske (1949), Tupes and Christal (1958, 1961), and Norman (1963) was among the first to ascribe to five primary personality dimensions (see Block, 1995; Digman, 1990; 1996; Goldberg, 1993). More recent research has attempted to refine this model, both in terms of the lexical approach (Goldberg, 1993) and the questionnaire approach (Costa & McCrae, 1992). The sum of this research has been to describe traits (and thus personality) in terms of five broad dimensions, with each dimension composed of more specific lower-level constructs. Thus, the five factor model is proposed as an organizing framework upon which all other personality constructs can be mapped (Digman, 1990; McCrae & John, 1992). A common conceptualization of the Big 5 contains the following factors: Neuroticism, Extraversion, Openness to experience, Agreeableness, and

Conscientiousness. The first two columns of Table 1 provide definitions for these factors that are based on past research and that will be used throughout this paper (the remaining column shows more specific applications of these traits and will be discussed shortly).

Table 1. Description of each factor in the five factor model

Original Dimensions	Description	Hough's Dimensions	Hough's Description
Neuroticism	anxious, depressed, angry, embarrassed, emotional, worried, insecure	• Adjustment	• emotional stability and stress tolerance
Extraversion	sociable, active, assertive, talkative, and gregarious	• Affiliation • Potency	• degree of sociability • amount of energy
Openness to Experience	imaginative, cultured, curious, broad-minded, intelligent, and artistically sensitive	• Intellectance	• how cultured person is; curious
Agreeableness	courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, tolerant, altruism, nurturing, caring, emotional support	• Agreeableness	• degree of pleasantness
Conscientiousness	dependability, careful, thorough, responsible, organized, planful, hardworking, achievement-oriented, persevering	• Achievement • Dependability	• Competency striving • Conscientiousness
		• Rugged Individualism	• decisive and independent

Note: This table draws heavily from Barrick and Mount (1991) and Digman (1990) to describe each of the five factors (factor names adopted in Costa & McCrae, 1992 are used). The column indicating the names of Hough's dimensions is taken from Hough (1998).

There is some disagreement over the number of factors and the elements that comprise each factor. These issues are interrelated but will be discussed separately. First, alternatives to the five factor model stress a different number of factors. For example, Eysenck's (1947) classic Big 2 contains only neuroticism and extraversion and is still influential today (e.g., Eysenck, 1997). Similarly, Cattell (1956) suggested the presence of 16 personality factors. Hogan (1986) suggests seven factors (obtained by splitting extraversion into ambition and sociability dimensions). More recent research (Digman, 1997) suggests the Big 5 may be composed of two higher order factors, alpha (containing agreeableness, conscientiousness, and neuroticism) and beta (containing extraversion and openness). Parenthetically, it might be noted that the alpha factor is also similar to Ones, Viswesvaran, and Schmidt (1993) description of integrity. Although there are still controversies over the number of factors, this issue most basically reduces to the level of specificity at which personality description and measurement should occur.

This can be seen in the applied literature, where there has been disagreement over the number of factors. I will review this research in more detail below, but the findings from Hough and colleagues (e.g., Hough, 1992; 1998; Hough et al., 1990; Schneider & Hough, 1995; see also Hogan & Shelton, 1998) are relevant here because they appear to be industrial/organizational's (I/O) major alternative to the Big 5. Specifically, these researchers suggest that the Big 5 are too general for adequate prediction of work-related criteria (e.g., job performance, training success) (see Schneider, Hough, & Dunnette, 1996). Their alternative and more specific taxonomy suggests eight factors are necessary to provide optimal prediction and understanding (Hough, 1992; 1998); these are shown in the third column of Table 1. Note that seven of these factors may be roughly mapped

onto the Big 5, but rugged individualism cannot. Rugged individualism is defined by Hough (1998) as “masculine rather than feminine characteristics and values. A person who is high on this construct is decisive, action oriented, independent, and rather unsentimental” (p. 137). Although this taxonomy is just one of several alternatives to the Big 5, the Hough (1998) taxonomy will be examined in addition to the Big 5. The reasons are that (1) the Hough taxonomy was based on revising the Big 5 for optimal prediction of various work-related criteria, (2) it provides an alternative and more specific conceptualization of personality than the Big 5, and (3) it is almost identical to a framework developed independently by Hogan and colleagues, whose seven factor taxonomy is also a popular alternative to the Big 5 (e.g., Hogan, 1996; Hogan & Hogan, 1992; Hogan & Shelton, 1998). Thus, applications of Hough’s (1992; 1998) taxonomy have improved predictive validities over the Big 5 (see Hough, 1998; Schneider & Hough, 1995) and appear to be favored by many in I/O. In this proposal I take the more inclusive view and include both Hough’s (1998) more specific taxonomy and the Big 5.

Similarly, the second issue concerns the interpretation of the five factors. There is substantial agreement over what the extraversion and neuroticism factors mean, but less with the conscientiousness, openness, and agreeableness factors (Digman, 1990). Conscientiousness traits often cross-load on the agreeableness dimension (Digman, 1990), which has been attributed to conscientiousness as being both a measure of achievement (including academic achievement, persevering, e.g., Barrick & Mount, 1991; Smith, 1967; Wiggins, Blackburn, & Hackman, 1969) and dependability (e.g., careful, planned, responsible, thorough; Barrick & Mount, 1991). Similarly, openness has been operationalized as a measure of intellect (but not intelligence), educational

aptitude, and cultural and artistic interests, although it is now considered more as the sum of these elements (Digman, 1990). Clearly Hough's (1998) eight factor model is one attempt to clarify the meaning of the Big 5 (see Table 1).

Overall, the five factor model is still being refined (Goldberg & Saucier, 1995). Despite the uncertainty about the exact nature of the five dimensions, the model provides at the very least an organizing structure to a field that has been lacking one. For example, the model allows a "language" or "map" upon which other traits can be compared and contrasted (such as with Hough, 1998). It also allows applications to applied contexts by providing a common link (i.e., common set of terms) between basic and applied research. However, it should be noted that acceptance of the model is by no means universal (as Hough's, 1998, alternative attests). Concerns within the basic personality literature are discussed at length by Block (1995), but these issues reduce to questions of whether research actually supports five factors, or if personality researchers have tried to ascribe five factors to their studies rather than deriving them from data. Similarly, Block (1995) notes that even if the five factor model is correct, the model is descriptive and does little to aid in understanding behavior. Finally, criticisms stem from the fact that the five factors are not linked to other constructs in a process-oriented framework (i.e., there is no consideration of the mediating psychological processes linking the Big 5 to behavior). There is no theory of personality but only a short list of descriptive terms.

Finally, a more basic concern relates to the utility of a trait model of personality (e.g., Mischel, 1968). This more fundamental attack questions the efficacy of the trait approach versus more situationally-conditioned approaches (e.g., Magnusson & Endler, 1977). The primary attack on the trait position occurred more than 15 years before the

Big 5 gained prominence. Mischel (1968) is often credited with providing the most damaging attack on the trait approach, and as a result affected the following decade's worth of personality research. Mischel's (1968) critique suggested that there was little evidence of cross-situational consistency in behavior, noting that stability coefficients rarely extended beyond .30. He then went on to suggest the majority of the remaining variance was attributable to situational influences. Although the importance of the situation had been identified many years earlier (e.g., Lewin, 1936), it appeared to have had little impact on personality research. Similarly, an entire research paradigm and method based on the situation-response framework (Endler, Hunt, & Rosenstein, 1962) had existed for some time yet had received little popular attention. Despite this, Mischel's (1968) attack shook personality research to its very foundation. Unfortunately, the response was to demonstrate the importance of traits (or more basically dispositions) relative to situations. I say this was unfortunate because much effort was wasted trying to prove one influence was more important than the other, when clearly both factors are important (e.g. Magnusson, 1976). However, an interactionist approach to personality research did result from these efforts, one that explicitly noted the importance of both situations and traits as determinants of behavior (e.g., Kenrick & Funder, 1988; Krahe, 1992; Magnusson & Endler, 1977; Magnusson, 1981; Mischel & Shoda, 1995; Ross & Nisbett, 1991). The issues of situational influences on behavior and joint situational-dispositional influences are of primary importance to applied contexts and are considered next.

Summary. Although by no means universally accepted, the majority of basic personality research to date supports the adoption of a five factor model of personality

(see Digman, 1990). However, within the context of applied psychology and personnel selection, dissatisfaction with the five factor model for the prediction of job performance has led to an alternative conceptualization provided by Hough and colleagues (Hough, 1992; 1998; Hough et al., 1990). In this dissertation, I consider both the more basic (Big 5) and applied (Hough's eight factor model) conceptualizations of personality because Hough's (1998) is largely a more specific (and more predictive of job performance) form of the Big 5. As the purpose of this proposal is not to redefine either personality framework but rather to apply these frameworks within an interactionist perspective to predict job performance, it may be most informative to consider both frameworks.

Research on Situations

Compared to research on traits, relatively little personality research has explicitly considered the influence of situations on traits and behavior. Although during the 1970's and early 1980's there was a wave of experimental research on situational factors (for reviews see Magnusson, 1981; Magnusson & Endler, 1977), trait research has always been the main focus of attention. Clearly the task of identifying the important situational features that influence behavior is complicated and difficult, but an understanding of the important features of situations is perhaps no less important than an understanding of traits. Despite the increasing research that has been conducted on situations, there is little common consensus about the key features or parameters of situations (Frederiksen, 1972). However, this is not to say progress has not been made in understanding important situational characteristics. Rather, it reflects the fact that research on situations is still very much at the beginning, perhaps where personality research was 40 years ago. Thus, it is impossible to prescribe common terms or describe taxonomic structures or

frameworks when describing situations because none currently exist. Instead, I present that research on situations that appears most relevant to the proposed study.

Conceptualizations of situations. There have been several attempts to understand the nature and content of situations. This research may perhaps be best summarized in terms of some key issues and concerns. Unfortunately, each research effort seems to describe these key issues somewhat differently, making cross-domain comparisons difficult. However, Argyle, Furnham, and Graham (1981), and Krahe (1992) provide a summary of these issues.

First, research has considered the objective or subjective nature of situations (e.g., Krahe, 1992; Magnusson & Endler, 1977; see also Magnusson, 1981). The focus on objective or subjective situations is partly dependent on one's theoretical orientation, as some disciplines (e.g., human factors) tend to study objective features while others (e.g., sociology) tend to focus on subjective features (e.g., Argyle et al., 1981). The distinction between objective and subjective situations is important, as has long been known (e.g., Brunswick, 1957; Fechner, 1860; Lewin, 1936). Krahe (1992) reviews past research on this issue and suggests that subjective situations are the most proximal influence on behavior. She suggests objective features of situations influence the individual's subjective interpretation of the situation, which in turn influences behavior. In a slightly different conceptualization, Magnusson and Torestad (1992) argue that objective situations are basically information that is actively processed in a selective manner by individuals. Similarly, research on expertise (see Ericsson & Lehmann, 1996) suggests that when both experts and non-experts are presented with identical objective stimuli (e.g., particular patterns on a chessboard), they manifest different ways of organizing and

acting upon the stimuli—their processing and subjective interpretations of the objective stimuli differ. Thus, it appears that the subjective (as opposed to objective) experience of situations may be the most proximal influence on behavior. I shall return to this point later.

Second, research has examined the level of specificity of situations (see Krahe, 1992). One may contrast very specific features of objective situations, such as the number of chairs in a room, to more inclusive features, such as the social interaction involved in a retail encounter with a salesperson. However, this issue seems rather poorly developed, as situations defined very specifically seem to be more objective than subjective, but situations defined broadly are more amenable to subjective than objective interpretations. For example, consider a grocery checkout line. One might describe this situation specifically in terms of the number of people present (objective) or in terms of the acceptable behavior (e.g., greet checkout clerk, pay for groceries) allowed in the situation (subjective). Overall, there are no clear boundaries to help guide the choice of level of analysis; rather it seems the practical considerations of the researcher and research question should dictate the appropriate level of specificity.

Third, many attempts have been made to describe the dimensionality of situations. Researchers have used categorical techniques, such as hierarchical cluster analysis (e.g., Argyle et al., 1981), and dimensional techniques, such as multidimensional scaling and factor analysis (e.g., Forgas 1979). Argyle et al. (1981) argue that categorical techniques are most appropriate because different types of situations do not necessarily reflect continuous underlying dimensions. Many researchers have attempted to discover the major dimensions of situations (a variety of alternative approaches are described in

Magnusson, 1981; Magnusson & Ender, 1977). Of these many approaches, perhaps the most ambitious program was that conducted by Argyle and colleagues (see Argyle et al., 1981, for a review) to identify important situational features in sports contexts. These researchers identified several situational factors (e.g., goals, roles, skill difficulty) that influenced sports behavior. However, even in this comprehensive program there were numerous difficulties, including the fact that many of the situational features were poorly defined and relevant only for sports situations (the context within which the research was conducted). Thus, despite several calls for such research (e.g., Frederiksen, 1972), there are no universal situational dimensions that have been discovered, and it appears that the number and type of dimensions are almost always dependent on a particular context (e.g., sporting contexts, social situations).

Finally, the type of behavioral responses elicited by the situation have been considered (Argyle et al., 1981; Endler, Hunt, & Rosenstein, 1962). One objective of this research has been show that the enactment of specific behaviors is conditional on specific situational elements. Clearly this type of research requires an understanding of the important antecedent influences on specific behavior responses along with knowledge of the objective or subjective features of the situation (e.g., Hattrup & Jackson, 1996).

In a somewhat different attempt to integrate these concepts, Mischel (1977) tried to classify situations according to their strength. Strong situations are ones where all individuals perceive the situation in an identical fashion, share similar expectancies about the appropriate behavioral responses, require similar skills at the same level of difficulty, and maintain uniform rewards for identical behaviors. In contrast, weak situations are perceived differently by different people, have different expectancies for the

appropriateness of various behaviors, provide different skill requirements for different individuals, and maintain differential rewards for similar behaviors. Using this distinction to illustrate a finding in the applied literature, it becomes more reasonable to expect personality constructs to relate more strongly to contextual performance than task performance—the reason may be that task performance situations are strong and contextual performance situations are weak. Although Mischel's (1977) concept of situational strength is just one of many ways of conceptualizing situations, it has maintained a level of popularity not held by alternative models.

Overall, there is little prescriptive advice one can use to guide research on situations. There are perhaps two main conclusions one may make from this research. The first is that the subjective experience and interpretation of situations is most proximal to an individual's behavior, and most researchers on personality agree that subjective situations (i.e., cognitive interpretations of situations) provide the key to understanding how situations influence behavior (Magnusson & Torestad, 1992; Mischel & Shoda, 1995). The second is that we are nowhere close to developing universal dimensions or taxonomies of objective situations, or even to identifying what the key features of a given situation might be. However, one might question the utility of such attempts in the first place because the study of situations apart from individuals or within the greater environmental context may have little relevance to personality research. That is, if the subjective interpretation of the situation is most important, and this interpretation is partially dependent on the characteristics of the individual and the more general physical (objective) and social context, it may make little sense to search for universal features of situations independent of these other factors. Instead, a more productive approach might

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be to examine how situations (e.g., interpersonal episodes with customers) are related to the behavior of a particular group of individuals (e.g., retail salespersons) in a particular context (e.g., customer service setting).

It should be noted, however, that these issues do help clarify some basic assumptions of a particular study. The level of specificity of the situation, the underlying dimensions of the situation, the defining features of situations, and the types of behaviors elicited by the situation are all important factors to consider. However, these issues only become concrete when considered in the context of one's research goals and behavioral domain of interest (e.g., Wright & Mischel, 1987). Based on these considerations, one might examine the ways in which individuals perceive and react to situations. These issues are discussed next.

Interactionist Approaches: Integrating Personality and Situations

Today, it is widely accepted by dispositional researchers that both situations and traits are important to understand and predict behavior, and the battle between the relative importance of situations and traits is more a matter of historical record (Kenrick & Funder, 1988; Krahe, 1992). Furthermore, research suggests that although absolute levels of consistent behavior may not occur across situations, relative levels of intraindividual consistency may be found (e.g., Krahe, 1992; Wright & Mischel, 1987). For example, a social individual may be likely to talk in line at a store but less likely to talk at a funeral. Although variation does occur across situations with many traits (e.g., Funder & Colvin, 1991; Roberts & Donahue, 1994) and the Big 5 as well (e.g., Sheldon, Ryan, Rawsthorne, & Ilardi, 1997), traits have been shown to be relatively enduring over time (e.g., Costa & McCrae, 1978). Thus, basic traits such as the Big 5 are relatively enduring, but the

strength and behavioral manifestations of the traits are more variable across specific situations (e.g., Murtha, Kanfer, & Ackerman, 1996). An important implication of this research is that the behavioral manifestation of traits will differ to varying degrees across different situations (e.g., Roberts & Donahue, 1994; Sheldon et al., 1997; Wright & Mischel, 1987). It is for this reason that it should be useful to design a personality instrument that explicitly considers contextual information.

Conceptualizations for studying person-situation interactions are presented next. The first (situation-response tradition) and third (cognitive-affective personality system) models have been used to generate a considerable amount of empirical research, although their methods differ considerably. Together, these conceptualizations share the fundamental implication that one must consider both situations and basic traits to accurately predict a given set of behaviors.

The Situation-Response Tradition. Endler et al. (1962) provided a method for the study of person x situation interactions. Their application of what they called the “situation-response” (or S-R) inventory led to a research program that still finds advocates in recent times (e.g., Grote & James, 1991). The S-R model attempts to identify the sources of variance attributable to persons, situations, and their interaction. As such, it is based on the analysis of variance method for decomposing variance to different sources. Essentially the S-R inventory requires one to first identify different situations relevant to a particular domain (e.g., anxious situations). Next, one-sentence descriptions of situations are provided (e.g., “You are going to meet a new date”). Finally, each description is rated in terms of behavioral indicators of the focal construct (e.g., “Your heart beats faster” is rated on a 5 point scale). Thus, the S-R method crosses

all situations with all behavioral ratings, and the variance attributable to the situations, behavioral responses (dispositions), and situation x disposition interaction is estimated. Notice that this model is similar to traditional applications of generalizability theory.

The S-R method proposed by Endler et al. (1962), and some minor variations of the method, led to a number of applications in different substantive areas (e.g., Dworkin & Kihlstrom, 1978; Endler & Hunt, 1968; Grote & James, 1991; Lanning, 1988).

However, there are some clear limitations of the method. First, the S-R method does not allow one to determine the relative importance of a factor because this cannot be determined simply by the amount of variance it accounts for (e.g., Grote & James, 1991; Magnusson, 1976; Mischel, 1973). For example, one may strengthen a given manipulation, thereby increasing the amount of variance attributable to that factor.

Second, the generalizability of the results has been questioned, particularly with respect to how future predictions can be made (e.g., Golding, 1975; Mischel, 1973). Finally, an even more fundamental problem occurs when trying to understand the nature of the person - situation interaction. That is, the S-R method does not allow one to identify the important mechanisms mediating the situation and behavior, nor does it allow for one to test these mechanisms. Thus, in many ways merely identifying the amount of variance attributable to the person, situation, or their interaction provides little insight into how individuals' perceive situations or cognitively process their features. Overall, the S-R method may have value in terms of inventory construction because it empirically assesses how much variability in a given dispositional construct is reflected in various situations, but it provides little information about the nature or cause of the person x situation interaction.

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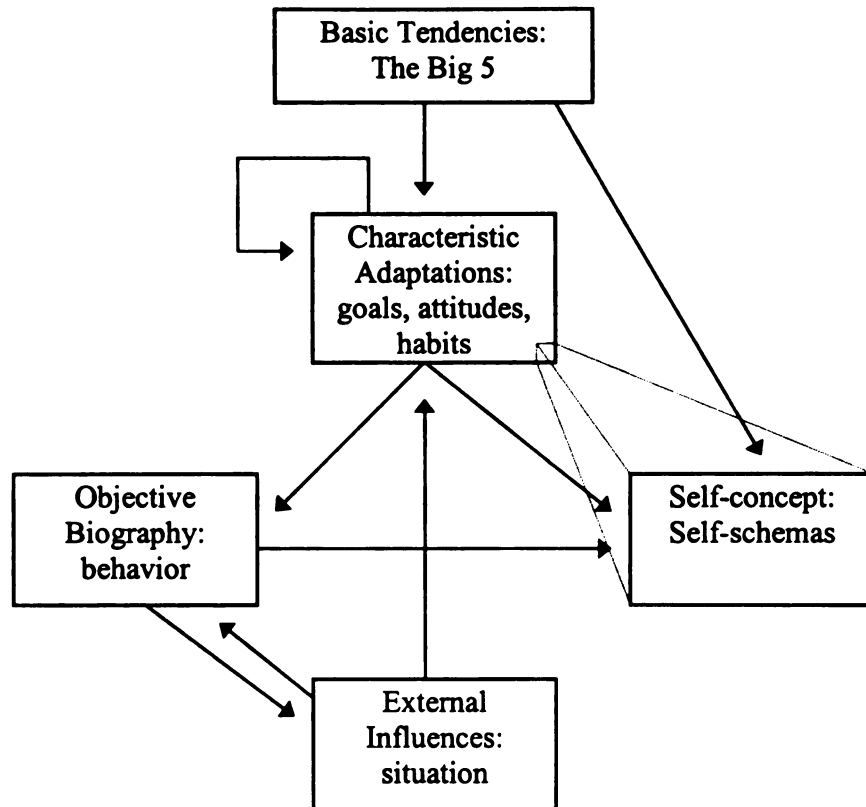
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The McCrae and Costa (1996) Conceptualization. Linking basic traits to specific behavior by considering other important factors (e.g., situations) provides for an explanation and understanding of personality not afforded by sole consideration of the Big 5 framework (Block, 1995). However, as we have seen, treating the interaction between persons and situations in relatively static terms (such as the S-R method does) may not be very informative. The most general attempt to consider the dynamic interplay between traits and other factors to influence a given behavior has been by McCrae and Costa (1996), who have proposed a meta-theoretical model. As shown in Figure 1, the Big 5 operate as distal dispositions and are measures of basic behavioral tendencies. These tendencies influence behavior through various characteristic adaptations (e.g., psychological mediators that include personal strivings, goals, attitudes, habits, and schemas). The characteristic adaptations are mediators between the basic tendencies (i.e., Big 5) and behavior (termed objective biography by McCrae & Costa). External and situational influences affect behavior and the characteristics adaptations but not the Big 5 constructs.



Thus, the Big 5 (distal constructs) influence behavior through psychological mediators (i.e., characteristic adaptations or proximal constructs), as allowed by the situation. This model suggests that situations do not directly influence the Big 5, but rather influence how the basic behavioral tendencies that result from the Big 5 are manifest. Note that this model is consistent with more cognitively mediated personality research (e.g., Eysenck, 1997; Matthews, 1997). Although this is a step in the right direction, the McCrae and Costa (1996) model as a whole is difficult to apply in specific contexts because it provides little in the way of specifying how specific traits will relate to specific psychological mediating processes (instead, the authors present a heuristic list of possible cognitive factors). However, there are three important points this conceptualization makes for personality assessment. First, Big 5 traits explain only part of the variance in a given behavior—situational information must also be considered. It might also be noted that the basic traits are not expected to directly influence behavior, but rather influence behavior indirectly through characteristic adaptations (i.e., cognitive processing). Second, the behavioral manifestation of traits may change in a given situation. Third, individual differences in a given trait should result in differences in the way each person will handle similar situations. Together, these implications suggest that accurate prediction must consider both situations and basic traits. These implications will be developed more shortly.

The Mischel and Shoda (1995) Cognitive-Affective Personality System. Despite the increased acceptance of an interactionist framework, little research has directly considered how traits and situations relate to each other to influence behavior. Research in the situation-response tradition has assumed that dispositions are manifest under the

constraint of situational features (Dworkin & Kihlstrom, 1978; Endler et al., 1962; Magnusson & Ekehammar, 1973; Magnusson & Heffler, 1969; Murtha et al., 1996). That is, there are dispositional tendencies to respond in particular ways to different situations. However, this approach has not attempted to delineate the types of psychological processes that result in these different behavioral manifestations. Stated differently, there has been little consideration of the psychological mediators between personality traits and behavior. This issue was foreshadowed by Mischel (1973), who suggested a cognitive-social conceptualization of personality theory. This basic framework has been applied in several studies and summarized in a general model (Mischel & Shoda, 1995). As this model provides the conceptual basis of the remainder of this study, the model will be examined in some detail.

Mischel (1973) suggested that the traditional trait approach to personality could be better conceptualized as a process interrelating social, cognitive, and learning approaches along with situational features. This approach was not trivially based on earlier social learning research from Rotter (1954) and Bandura (1971). This early work was widely cited, yet produced little in terms of more cognitively-oriented conceptualizations of personality and dynamic relations between traits and situations. However, it did provide a framework from which Mischel and colleagues (Shoda, Mischel, & Wright, 1989; 1993; 1994; Wright & Mischel, 1987; 1988) systematically examined aspects of the model. This early theorizing and research has recently culminated in a revised theoretical framework, the cognitive-affective personality system (CAPS) (Mischel & Shoda, 1995; 1998). The basic position of the model suggests that features in situations influence and stimulate particular psychological responses. This

framework suggests “...if particular features of situations are present...then a particular response is likely.” Thus, an if-then response sequence occurs. For example, if a situation includes a supervisor being present, then one will focus on work-related behaviors (e.g., focus on task completion); but if the supervisor is not present one will be less likely to demonstrate work-related behaviors (e.g., talk to coworkers about the weekend). Thus, there are three main aspects of the model: situations, responses, and the if-then linking rules.

First, situations are conceptualized as exhibiting features that are psychologically meaningful (Wright & Mischel, 1987); as a result the individual will engage in psychological processing about the situational features (this then leads to various behavioral responses). Although one may distinguish between objective (physical or less perceptually based) and subjective (perceived) features of situations, as noted earlier most treatments of situations consider the perceived features to be more important for influencing behavior (e.g., Krahe, 1992; Magnusson, 1981). Similar to the popular lens model (Brunswick, 1956), the relationship between objective situations and behavior is mediated by subjective situations; the mediating mechanisms are cognitive and psychological processes (see Krahe, 1992). The Mischel and Shoda (1995) model is based on this premise. Thus, certain features of situations are more likely to be identified and reacted upon, and certain features may be more salient to particular individuals. This may be considered as a more cognitive representation of the situation-response framework (Endler et al., 1962): rather than simply assessing the different behavioral manifestations in different situations, the CAPS model further attempts to describe what psychological processes mediate the situation-behavior link.

One important feature of situations is the degree of competence in a given psychological trait required to perform effectively in a given situation. Wright and Mischel (1987) demonstrated that situations can be differentiated in terms of required traits or skills (e.g., some situations require more social skills to perform better than others). This is known as the competency-demand hypothesis (see Mischel & Shoda, 1995; Shoda et al., 1993) and suggests that situations that place high demands for competence (or quantities possessed) in a given trait will exhibit more variability in the manifestation of that trait (i.e., greater individual differences in responses but the trait itself is unchanged). This is similar to Argyle et al. (1981) and their notion of difficult situations. For example, a situation may place a high demand on social competence in situations that require a careful balance between appeasing a personally-insulting customer and making a sale. Wright and Mischel (1987) found that in situations where the competency demands on a given trait were high, individual differences on the relevant behavior manifesting that trait were also high.

Second, behavior results from cognitive and affective processing in response to psychologically meaningful features of situations. However, it is not simply an automatic response to the situation that occurs, but rather a response based on the organization of cognitive and affective processes. These processes reflect the linking rule between situations and behavior. Mischel and Shoda (1995) consider such processing as a dynamic interplay between self-regulation, competencies, goals, affect, expectancies, and encodings (i.e., categorization of situational information). A model illustrating these relationships is presented in Figure 2.

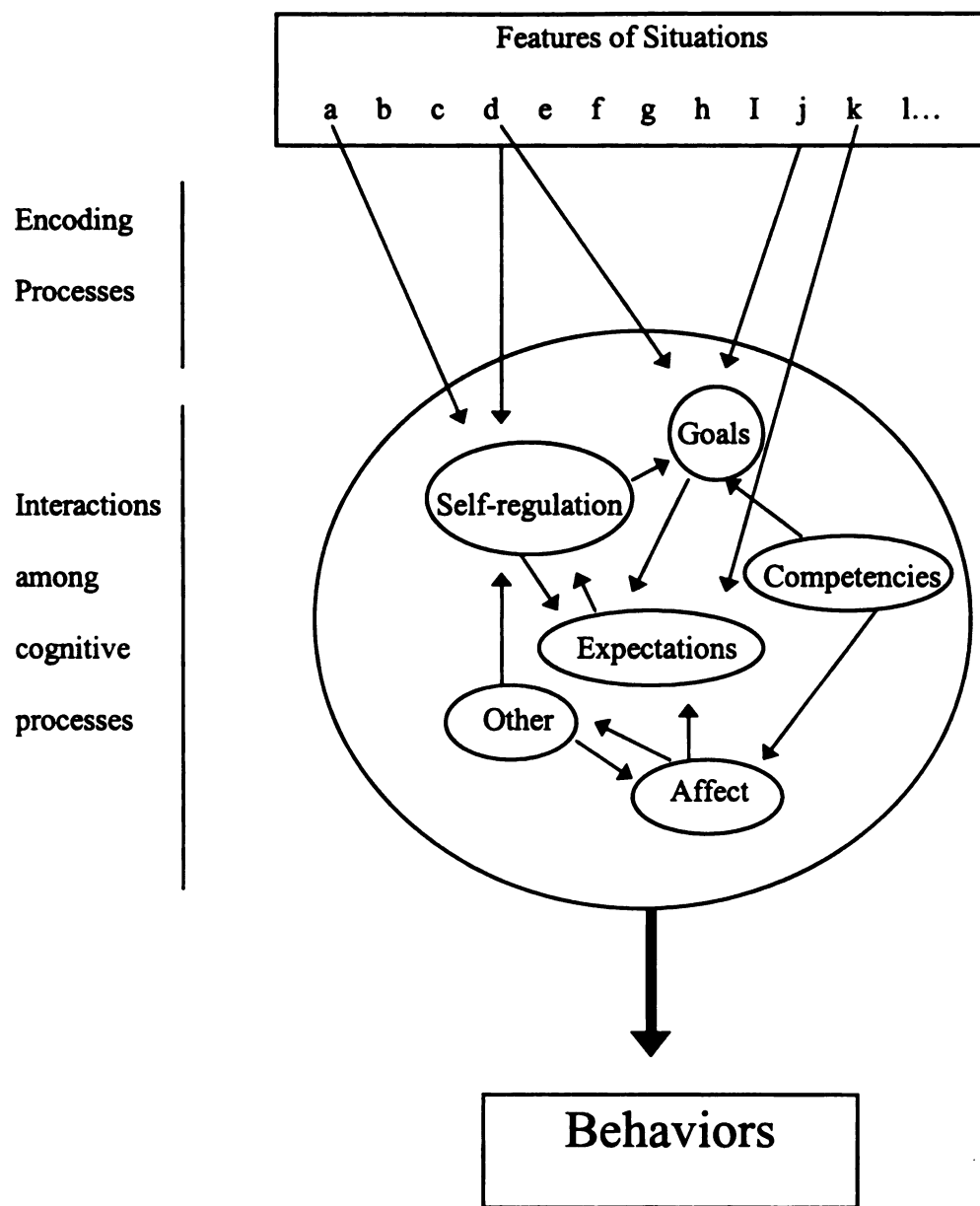


Figure 2. Example of Mischel and Shoda's (1995) cognitive-affective personality system.

(The following text is extremely faint and largely illegible due to extreme blurring and low contrast. It appears to be a list or index of items, possibly names or titles, arranged vertically.)

The functional relations between these mediating constructs and processes is expected to be dynamic over the course of situations, but a similar functional form should occur within similar situations at different times.

The final element contains the features linking the perceived situation to the behavioral response (i.e., if...then). These if...then rules are the probabilities that a given behavior will be manifest in a given situation. Ultimately, it is the identification of these rules that is important for determining the generality and stability of behavior. These rules are conceptually more than simple probabilities, however. As noted above, the rules reflect processes that at a global level may include, for example, cognitive ability, affect, social skills, and self-regulation (e.g., Mischel & Shoda, 1995; Wright & Mischel, 1987). It is the relations between these constructs that ultimately construe the organization of the CAPS system and result in the actual manifestation of behavior (i.e., the linking rule). These relations are conceptualized similar to a connectionist model, where relations are weighted to varying degrees to reflect their importance to behavior. These relations are not static but may be altered through learning and experience. Thus, the system shows a very dynamic and fluid organization and reflects interrelationships between a variety of constructs.

At this point an example may help illustrate these concepts. Imagine a customer service situation where the customer is trying to buy a new car and is being helped by a salesperson. The customer enters this situation with particular goals (e.g., buy a car I like without a hassle) and expectations (e.g., this transaction should be pleasant). These pre-situation expectations should result in certain situational features being salient (e.g., the behavior of the salesperson, the type of car, price). As the situation unfolds, the customer

is cognitively processing these situational features and behaving largely in accordance with this processing (e.g., they have many good cars on the lot so I'll keep looking here, the salesperson is pleasant enough to work with). In this example, the situation includes those features salient to the individual (e.g., number of cars available), the behavior might include talking with the salesperson, leaving the dealership, or buying a car, and the linking if...then rule is the nature of the psychological processing that occurs. Thus, "if...the salesperson is rude, then...I'll go somewhere else" suggests a linking rule of dynamic processing within the cognitive and affective system (e.g., not meeting expectations, negative affect).

One central concept that the Mischel and Shoda (1995) framework does not formally address is that of trait, particularly with reference to the Big 5. The reason is that their framework equates trait with the organization of psychological processing (and possibly the likelihood of particular linking rules). For example, the trait "talkative" would be represented by a particular organization within the cognitive processes (e.g., goals, expectancies) and thus particular types and patterns of behavior (e.g., engaging in small talk with neighbors, discussing the weather with strangers). The Mischel and Shoda (1995) framework is really a process model of personality, and in a more recent review (Mischel & Shoda, 1998) they suggest that research should examine the link between more basic measures of traits (such as the Big 5) and the mediating processes suggested by the CAPS model. Thus, although Mischel and Shoda (1995) are silent on conceptualizations of the Big 5, their framework may be integrated into a broader theoretical statement of the mediating role of psychological processes between basic traits and behavior. It is noteworthy to point out that the constructs identified in the CAPS

framework (Mischel & Shoda, 1995) act as mediators between the Big 5 traits and behavior—thus the processes described in Mischel and Shoda (1995) are similar to the characteristic adaptations or mediators described in McCrae and Costa (1996).

Overall, the Mischel and Shoda (1995) framework allows one to manifest relatively stable behaviors yet still be responsive to situational influences. Although the model is described in terms of a situation influencing a particular behavioral response, the actual stream of behavior-situation relations is ongoing. That is, behavior occurs in response to situations yet at the same time results to changes in the situation features (Snyder & Ickes, 1985). This suggests the relationship between behavior and situations is non-recursive. Thus, integrating the Mischel and Shoda (1995) framework with the Big 5 allows one to fully consider the relations between situations, traits, mediating processes, and behavior. This basic framework will provide the theoretical basis for this study's application of personality to customer service jobs.

A note on situations as information. Given the above conceptualizations, one might suggest that situations are not simply stimuli that elicit a particular behavioral response. Rather, situations may be better conceptualized as information that is actively perceived and cognitively processed in accordance with one's basic dispositional tendencies or traits (Magnusson & Torestad, 1992; Matthews, 1997; Mischel & Shoda, 1995). That is, any particular situation is full of objective cues and features, but among this full set there are different subsets of cues that are meaningful and salient for different individuals. The identification and processing of these cues is an active, cognitive process that occurs in characteristically similar ways and represents an individual's

standing on basic traits. Individual differences in a given trait will result in different features of situations that will be salient and thus acted upon (Wright & Mischel, 1987).

Together, this suggests that perceiving situations is a dynamic and interactive process: situations act as information to be processed by the individual (see also Magnusson & Torestad, 1992), dynamically interacting with his or her traits and personal characteristics to influence behavior. This interaction takes place in the individual's cognitive processing of the situational features, however defined and perceived by the individual. Although individuals may also choose different situations as well as alter existing ones (e.g., Snyder & Ickes, 1985), most interactionist models consider the situation as the stimulus inputs to individual interpretation and processing. Thus, one could propose that objective situations are perceived and processed according to personal characteristics (e.g., goals) and cognitive processing (e.g., selective perception), both of which are likely to differ in accordance with individual differences in basic traits. It is the sum of these relations that leads to behavior. Such a model calls back to Woodworth's (1918) notion of the stimulus-organism-response model, which noted the importance of the individual's goals and motives.

Implications of Basic Personality Research for Personality Assessment

At this point it might be helpful to summarize some of the key implications basic personality research has for personality assessment in general and for this dissertation in particular. First, current research has tended to endorse the five factor model of traits because these five factors exhibit meaningful individual differences. Although there are some legitimate disagreements with this taxonomy (e.g., Block, 1995; Hough, 1998), at the very least researchers can use the five factor model as a starting point and get more

specific as necessary (such as in personnel selection contexts). Second, the above review highlights the importance of considering an interactionist perspective to understand and predict behavior. However, personality measurement has typically ignored situations and focused solely on assessing dispositions. When situations have been considered, they have often been treated in a very static manner as separate factors (e.g., S-R paradigm) and were not included directly as part of the trait assessment. Third, research and theory suggests that behavioral consistency may be greater if one considers behavior within a given situation (Murtha et al., 1996; Roberts & Donahue, 1994; Sheldon et al., 1997). Assessing behavior across situations will continue to show the rather low cross-situational correlations (e.g., Mischel, 1968). Fourth, active cognitive processing of objective situational information accounts for why people with different levels of a trait may perceive the same objective situation differently (e.g., Magnusson & Torestad, 1992; Matthews, 1997; Snyder & Ickes, 1985). This fact suggests that the subjective situation is the most proximal influence on behavior (Krahe, 1992) and is also probably the reason it has been difficult to find universal dimensions of situations. Fifth, within a given situation, people with different levels of a trait will differ in what they perceive to be the correct or most appropriate course of action. Because two people who differ on a trait may subjectively perceive a given situation in very different ways, these two people might report different types of behavior as being appropriate for the same situation. Sixth, as a result of these differences, behavioral manifestations of a given trait may change in different situations but be similar in situations perceptually related (Mischel & Peake, 1982; Mischel & Shoda, 1995; Murtha et al., 1996).

Overall, these implications suggest that if one is interested in predicting a given behavior or set of behaviors in a particular context from some assessment instrument, the most accurate prediction should occur if the assessment method provides a rich description of the context for the individual to indicate what he or she would do. Because the assessment instrument and the target behavior are contextually similar, the correlation between the test and target behavior should be higher than instruments that ignore situational information (Murtha et al., 1996; Roberts & Donahue, 1994). Furthermore, this situational information should be explicitly integrated into the assessment method and not treated as a moderator because, as the previous review has shown (e.g., Krahe, 1992; Magnusson & Torestad, 1992; McCrae & Costa, 1996; Mischel & Shoda, 1995; 1998; Roberts & Donahue, 1994), there is a dynamic interplay between dispositional and situational factors. The manifestation of (and inferences about) basic personality traits are likely to be different in different situations. Looking at situational moderators of personality-behavior relations will not be likely to help one understand the dynamic relationships between these factors. Because relations between these factors are not understood, prediction will similarly be reduced.

The implications raised in this section form the conceptual foundation for the instrument developed in this dissertation. This development of this instrument will be described shortly, but first a review of current personality research in industrial/organizational psychology is provided.

Personality Research in Industrial/Organizational Psychology

Applications of personality theory and research have always been present in applied psychology to varying degrees, but the development of the Big 5 model has led to

a renewed interest in personality for I/O psychology (e.g., Mount & Barrick, 1995). The last decade has seen an increase in applications of the Big 5 to applied contexts, including personnel selection (see Barrick & Mount, 1991; Hough, 1992; 1998), training (e.g., Martocchio & Judge, 1997), and employee absence (e.g., Judge, Martocchio, & Thoresen, 1997). Although this research is important, I limit this discussion to personality research in personnel selection because this is the focus of this study.

In the following sections I describe personality research within personnel selection. First, the past and current use of personality testing in personnel selection is examined, and a critical analysis of current practice is discussed. Second, research that has examined situational predictors of job performance is reviewed, and implications for personality testing for selection is considered. Finally, an conceptual integration of personality and situational testing is proposed.

The Use of Personality in Personnel Selection

Much like the basic personality research described above, personality testing in selection contexts focuses almost exclusively on identification and measurement of traits and gives little to no consideration about situational factors. However, the fact that recent research has attempted to examine personality constructs as predictors of job performance signifies a major break from past research. Specifically, Guion and Gottier (1965) have been credited with halting research on personality predictors of job performance for several decades. Their critique mainly focused on the uncritical application of personality tests to domains for which personality tests were not relevant, along with the use of personality tests that were not designed and validated for selection settings. Adding to these concerns was the lack of a common framework to compare and contrast

various personality measures. Unfortunately, it appears the critique had the unintended outcome of ending personality research in selection (although the review by Mischel, 1968, surely helped).

Within the last decade, the use of personality tests in selection has seen a dramatic resurgence. For example, several empirical studies have recently been conducted (e.g., Barrick & Mount, 1993; Barrick, Mount, & Strauss, 1994; Judge et al., 1997; Stewart, 1996; Wright, Kacmar, McMahan, & Deleeuw, 1995). Reviews of selection research have been similarly supportive (e.g., Adler, 1996, Hough & Schneider, 1996; Mount & Barrick, 1995). Thus, it appears that the time was right for personality to make a comeback, based on at least three factors. First, much of this renewed interest has stemmed from the development of the five factor model (with corresponding measurement instruments), thereby providing applied researchers with a framework to consider construct linkages to various criteria (Mount & Barrick, 1995). Second, several meta-analytic studies used variations of the five factor model to assess the predictive validity of personality constructs. For example, meta-analyses by Barrick and Mount (1991) and Tett et al. (1991) demonstrated moderate predictive validities for the Big 5 constructs. A similar examination by Hough et al. (1990; see also Hough 1992; 1998) demonstrated that predictive relationships between personality constructs more specific than the Big 5 and job performance were possible, and the recent work by Ones, Viswesvaran, and Schmidt (1993) suggests that traits more general than the Big 5 (i.e., integrity) show predictive validity. Thus, the meta-analytic work to date indicates that personality constructs may predict job performance. Finally, the search for alternatives to general mental ability as a means of reducing adverse impact (e.g., Hunter & Hunter,

1984; Sackett & Wilk, 1994), coupled with the expansion of the performance domain (e.g., Campbell et al., 1993; Murphy, 1996) and the widespread belief that personality tests have little adverse impact, have led to increased reasons for the use of personality testing in selection.

Despite the increased acceptance of the use of personality tests in selection, there are still numerous issues that have yet to be resolved. First, many of the observed validities are small to moderate, and even most meta-analytic studies find only slightly higher relations (Adler, 1996; Hough, 1998; Mount & Barrick, 1995; Mischel & Shoda, 1998). It is interesting to note that these validities are often lower than the .30 ceiling Mischel (1968) noted more than two decades ago. For example, Barrick and Mount (1991) found the highest true validity to be only .26 for conscientiousness (observed validities were considerably smaller), and many true validities hovered around .10 or less for neuroticism, extraversion, openness, and agreeableness. One exception to this finding is research by Ones et al. (1993), who found that integrity tests correlated with several criteria greater than .30. However, these results may at best be optimistic. Several of the criterion measures used in their meta-analysis were self-reports completed by the test-takers, and the validities above .30 often occurred in very specific circumstances or were based on few observations. Noting exceptions such as these, most research finds that personality tests demonstrate at best moderate validities. Of course, this is not to say that personality tests do not yield incremental validity over cognitive ability tests. Several studies have suggested personality tests can provide a reasonable amount of incremental validity over ability tests because the correlation between personality tests and ability is relatively low (e.g., Pulakos & Schmitt, 1996; see Sackett & Ellingson, 1997; Schmitt et

al., 1997, for some illustrations). Thus, current personality tests do have value. This proposal does not question whether personality tests have value but whether the predictive validity of these tests can be improved.

Second, little research has considered the effects of situational factors on predictive relationships (e.g., Adler, 1996; Hough & Schneider, 1996; Mount & Barrick, 1995; Weiss & Adler, 1984). As mentioned earlier, basic personality research has for some time attempted to identify features of situations that may interact with personality-behavior relationships, yet there have been few considerations in applied settings (Weiss & Adler, 1984). At a very general level, indications of situational moderators have been found in the meta-analyses by Barrick and Mount (1991) and Hough (1992; see also Hough & Schneider, 1996), who have shown empirically that validities may differ across occupations and jobs. However, some recent research has found situational moderators within jobs. Barrick and Mount (1993) reasoned that the degree of autonomy one has in a job reflects Mischel's (1968) notion of situational strength. They suggested that jobs with greater autonomy would exhibit greater personality-performance relations than jobs with less autonomy. By assessing the autonomy of managers' jobs, they found that predictive relations between conscientiousness and extraversion were greater for jobs that had more autonomy. In a similar study, Stewart (1996) found that the reward structure for salespersons interacted with extraversion to influence performance. Finally, Schmit et al. (1995) found that the addition of "at work" tags to items in the NEO-PI resulted in higher validity than more situationally-generic items, perhaps indicating some inconsistencies in cross-situation behavior (e.g., work as opposed to at home) (this study will be discussed in more detail shortly). However, these studies are very much the

A vertical strip of 18 small, square images showing a sequence of a person's face and upper body, likely a video frame sequence. The images are arranged in a single column, with each frame showing a different pose or expression of the person. The person appears to be a woman with dark hair, wearing a dark top. The background is dark and indistinct. The sequence of images suggests a continuous motion, possibly a dance or a performance.

exception, and most research on personality predictors ignores the possibility of situational moderators. Thus, while interactionism may be the dominant conceptual paradigm in basic personality research, it has not translated into applied empirical research.

Other potential moderators have been identified or suggested in the literature. Hough and Schneider (1996) suggest that criterion construct, criterion measurement method, validation strategy, and rater perceptivity (e.g., self vs. other) may moderate the predictive validities of personality inventories. Much recent attention has examined how linking specific personality constructs to specific criteria can increase validity (Day & Silverman, 1989; Judge et al., 1997; Mount & Barrick, 1995; see Adler, 1996). Similarly, it has been found that personality constructs best predict contextual performance and ability constructs best predict task performance (e.g., Borman & Motowidlo, 1997; Motowidlo & Van Scotter, 1994). Criterion measurement methods have been found to result in different relations to personality, as objective performance measures typically have smaller validities than subjective measures, such as supervisor ratings (e.g., Barrick & Mount, 1991).

Note that although researchers argue for the importance of linking personality to specific criteria, research typically has not (or has not reported) carefully examined the nature of the criterion space and then identified the relevant personality constructs or measurement methods (Guion, 1991). This is important, as predictors derive their importance from criteria (Wallace, 1965). Rather, most research seems to suggest that multiple criteria were correlated with an off-the-shelf Big 5 measure and then significant **univariate** relationships were examined. Clearly questions about both the construct to be

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measured and the method used to measure the construct should be considered based on a thorough understanding of the criterion domain. To date there appears to be almost no consideration given to measurement method, and little discussion of criterion issues. The reason I make such an issue with this fact is that Hough and Schneider (1996) suggest that compound personality traits (i.e., combinations of basic traits, such as integrity being a combination of neuroticism, agreeableness, and conscientiousness) are more predictive than the basic big five traits. The reason is probably because they are most directly tied to the criterion space. Note that this argument does not contradict their suggestion for the use of traits narrower than the Big 5, but rather compliments it by suggesting that specific combinations of narrower traits can be more predictive than the specific traits themselves. Overall, this suggests that to maximize prediction one should develop personality measures that are closely linked to both the five factor (or narrower) model and the criterion domain.

Validation strategies have been shown to have slight influence on validities, as a meta-analysis by Hough (1998) found that predictive studies have slightly lower validities than concurrent studies. However, Tett et al. (1991) also suggest that confirmatory vs. exploratory strategies may demonstrate different validities. There may be many reasons for this, perhaps including different meanings of the constructs in the different settings (e.g., Schmit & Ryan, 1993). Finally, the rating source (self, supervisor, coworker) may result in different relations between personality constructs and criteria (Mount, Barrick, & Strauss, 1994).

Third, controversy has been raised about the appropriateness of the Big 5 for personnel selection (e.g., Hogan & Shelton, 1998; Hough, 1992; 1998; Hough &

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Schneider, 1996). These concerns echo points raised in basic personality research (e.g., Block, 1995). For example, Hough and Schneider (1996) evaluate the five factor model in some length, and conclude that although it provides a useful starting point it is by no means an accepted framework. Rather, they suggest the five factors are too broad and should be defined more specifically. This is in contrast to Ones et al. (1993), who argue that more general constructs are more appropriate (e.g., integrity). Such issues are similar to the bandwidth-fidelity dilemma and will not be elaborated further (see Hogan & Roberts, 1996; Ones & Viswesvaran, 1996; Schneider, Hough, & Dunnette, 1996; for more detailed discussion). Unfortunately, it appears most applied researchers give little thought to such concerns. For example, many research articles on personality begin by stating the “widespread acceptance” of the Big 5 in basic personality research; the limitations of the Big 5 are most often saved for short sentences in the “limitations” section.

Finally, the neglect of situational factors in personality assessment appears quite widespread (Hattrup & Jackson, 1996; Weiss & Adler, 1984). By far, the most common approach to the assessment of personality in predicting job performance has been to correlate the Big 5 with job performance and examine the univariate relationships irrespective of situations (e.g., Judge et al., 1997). It is somewhat interesting that applied research has used this method because two insightful and widely cited papers (Adler, 1996; Weiss & Adler, 1984) have given several reasons to be skeptical of such an approach. They suggest that the simple univariate relations are rather uninformative **theoretically** because the personality constructs have been removed from their **nomological** networks. Clearly the situational context is a part of this nomological

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network (Weiss & Adler, 1984). And, as raised in the previous review of basic personality research, it is the dynamic interaction between traits and situations that influences behavior (e.g., Krahe, 1992; Magnusson & Torestad, 1992; Mischel & Shoda, 1995). Neglecting situational information is not likely to provide a complete understanding of personality-performance relationships. Thus, although correlating the Big 5 with job performance measures does provide some information about personality influences on behavior, potentially more information could be provided by considering the nature of the work context.

The conditional reasoning approach of James (1998)

Recently, an alternative system of measuring dispositions has been proposed by James (1998). Called a conditional reasoning approach to the measurement of dispositions, this paradigm assumes that individual differences on a particular trait (e.g., anxiety) will exhibit reliable differences in cognitive mechanisms used to justify particular beliefs, behaviors, attributions, and implicit theories. Stated differently, individuals who maintain a certain level on a given trait (e.g., achievement) will be more likely to hold certain beliefs and perceptions (e.g., hard work is good, challenging situations are rewarding) than individuals who are on the opposite pole of the trait (e.g., fear of failing). Because individuals have these beliefs and implicit theories, they establish justification mechanisms that are used to promote the desired opinion. Thus, the James (1998) framework suggests that people who differ on traits will have different forms of biased perceptions and processing. In this case, bias refers to differences in such processes as forming attributions or making judgments.

However, the primary difference between the conditional reasoning approach and more traditional trait assessment lies in the measurement method. In contrast to the typical approach of using questionnaires that assess the prevalence of different behaviors or preferences, the conditional reasoning approach provides questions that require reasoning and judgment. What is unique about the system is that people who differ on a given trait will differ in their likelihood of forming different judgments, thereby choosing different choices in the test. James (1998) describes some preliminary data on two traits (achievement and aggression), providing initial support for the measurement system. Interestingly, the measurement system produced low relations to more typical, self-report measures of achievement.

One can see that on a general level, the conditional reasoning approach of James (1998) shares similarities with the dynamic personality models of McCrae and Costa (1996) and Mischel and Shoda (1995). In particular, the notion that individuals who differ on a particular trait will manifest characteristic differences in cognitive processing (making justifications in this instance) is consistent with much of the current personality research (e.g., Matthews, 1997; Magnusson & Torestad, 1992). However, there are also many differences that weaken the utility of this approach. First, James (1998) has not described and operationalized the nature and types of cognitive processes that are most important. Rather, it is assumed that people differ on a variety of these unspecified processes (e.g., implicit theories), which result in stable differences in behavior. Second, there is no consideration of situational or contextual information in the assessment method. Rather, this method is about as context-free as is possible. Third, the conditional reasoning approach cited in James (1998) provides few conceptual and

theoretical linkages back to basic personality research. For example, on the surface there are clear similarities between Mischel and Shoda's (1995) framework and the conditional reasoning approach, yet it is hard to compare and contrast both approaches because James (1998) devotes more attention to the nature of the measurement system than to the theory upon which it is based. Fourth, there is very little published empirical data that has been collected on the measurement system. Finally, the approach is really more of an alternative method of measurement than a model or theory of how personality relates to behavior.

In sum, the conditional reasoning approach of James (1998) presents a much more cognitively and process-oriented approach to the measurement of personality traits than has been considered in applied psychology. Unfortunately, the approach is limited by a neglect of theory to guide the measurement process.

Contrasting personality in selection with basic personality research

Overall, it is clear that there is still much to be learned about relationships between personality and job performance behaviors, and that a number of issues and challenges must first be addressed before these relations will be firmly understood. At this point it may be instructive to compare and contrast this applied research with the more basic personality research presented earlier.

Recall that the review of basic personality research suggests a relatively more dynamic and cognitively active set of relationships between situations, traits, information processing, and behavior (McCrae & Costa, 1996; Mischel & Shoda, 1995). The implications of this more dynamic conceptualization are that (1) situations are important to consider, (2) basic traits (such as those in a Big 5 structure) do not directly influence

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behavior but do so indirectly through various cognitive and affective mechanisms (e.g., McCrae & Costa, 1996; Mischel & Shoda, 1995), (3) traits influence characteristic ways of perceiving and processing situational information (Magnusson & Torestad, 1992), (4) individual differences in traits are manifest in reliable differences in information processing (e.g., Matthews, 1997), which (5) lead to individual differences in behavior because similar situations are perceived differently, suggesting that (6) increased prediction should occur if personality assessment occurs in psychologically similar situations (Murtha et al., 1996; Roberts & Donahue, 1994; Sheldon et al., 1997).

In contrast, the typical approach in personnel selection has been to identify applicants' standings on Big 5 (or narrower) traits and correlate these results with performance criteria. Thus, the entire focus is on bivariate relationships (Weiss & Adler, 1984). There is little to no consideration of situations, intermediate cognitive or psychological processing, or their relations with traits and behavior. In fact, most selection research assumes a main effect of traits on behavior. Consider the following points.

First, the objective and perceived situation is considered in only a few studies (e.g., Barrick & Mount, 1993; Stewart, 1996). However, even in these studies there is little careful consideration of the nature of the situational features, and how these features might be perceived and processed by the individual. In particular, the moderator approach used in selection is inconsistent with the notion that personality is manifest differently in different situations (Sheldon et al., 1997) because situational information is processed differently (e.g., Magnusson & Torestad, 1992; McCrae & Costa, 1996; Mischel & Shoda, 1995). Conceptualizing situations as information suggests that

situations are not moderators of personality-behavior relationships but are instead dynamically related. In contrast, the typical selection approach is more similar to the S-R model (Endler et al., 1963) than more recent conceptualizations of personality (e.g., Mischel & Shoda, 1995).

Second, there has been little consideration of the criterion to be predicted, even though careful consideration of the criterion domain can aid in prediction (Guion, 1991; Hough & Schneider, 1996). Most basic personality researchers are very careful about the nature of the criterion behavior to be predicted, and then try to develop assessment methods that may be most relevant. In contrast, most selection research debates characteristics of the predictor measures (James, 1998) or constructs (e.g., bandwidth-fidelity, Hogan & Roberts, 1996; Ones & Viswesvaran, 1996; Schneider et al., 1996) with less consideration for the nature and specificity of the criterion. In fact, it is safe to conclude that measures of overall performance (or overall task and contextual performance) comprise the vast majority of criteria for selection-related research. When criterion issues are considered, they most often focus on the task-contextual behavior distinction (e.g., Borman & Motowidlo, 1997) or criterion measurement method or source (e.g., Hough & Schneider, 1996; Mount et al., 1994). Rarely do studies consider the specific nature of the criterion construct, and when they do they are typically at a very general level (e.g., training success versus sales performance).

Third, most of the relationships between personality traits (based on the Big 5 or narrower framework) and criteria are relatively small to modest, particularly when compared to alternative constructs (e.g., ability). Thus, most selection research that considers personality constructs tends to relate the Big 5 directly to the focal criterion

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behaviors of interest, but as the previous basic personality research illustrates, such approaches neglect much of the dynamic relations between personality, situations, and behavior.

The main conclusion to be drawn from contrasting basic and applied perspectives on personality research is that little to no consideration is given to an interactionist perspective in personnel selection. As the review of basic personality research has shown, contemporary models of personality maintain a set of interrelated relationships for both traits and situations (McCrae & Costa, 1996; Mischel & Shoda, 1995). Neglecting an interactionist perspective may actually be suppressing predictive relationships.

Thus, what can one draw from the basic personality literature to improve research in selection? The primary implication is to explicitly consider situational information. Given that traits are expressed differently in different situations (Roberts & Donahue, 1994; Sheldon et al., 1997), the processing of situational information will differ according to different traits (Magnusson & Torestad, 1992), and that prediction and behavioral stability are enhanced when situations are psychologically similar (Mischel & Shoda, 1995; Murtha et al., 1996), the predictive validity of personality measures should be enhanced by incorporating situational information directly into trait assessment. Indeed, Murtha et al. (1996) and Roberts and Donahue (1994) have both made calls for such research. For example, the predictive validities for Big 5 measures obtained in selection studies are smaller than the commonly noted “cross-situational consistency ceiling” of .30 in the more basic personality literature (Mischel, 1968). Now consider that this “ceiling” has been broken by research that considers behavior within similar situations

(see Mischel & Shoda, 1995). Perhaps predictive validities for personality in selection contexts could likewise be enhanced by consideration of situational information.

In the following sections a study is presented that attempts to address many of these issues by developing a personality assessment instrument that considers both dispositional and situational information simultaneously. Research on basic personality traits (i.e., the Big 5) will be integrated with research on situations to develop the instrument. However, research on a relatively new and potentially useful source of situational information, situational judgment tests, may provide a ready means for incorporating situational information into traditional personality testing. Thus, it is instructive to consider this research first as it provides many interesting implications for personality testing.

Situational Testing in Personnel Selection

As noted above, situations often play little role in the specification of predictor constructs. Note that I do not suggest situational artifacts between studies have not been investigated (as evidenced by numerous meta-analyses), but rather that the explicit consideration of situational factors within a prediction context are often ignored (e.g., Hattrup & Jackson, 1996). To date, most research in selection has considered a broadening of the performance domain (e.g., task and contextual performance) and of the predictor domain (e.g., dispositional constructs included with cognitive ability). However, the direct consideration of situations has remained underdeveloped.

There have been varied past attempts in selection to identify how applicants behave in different (often job-relevant) situations, with the expectation that these behaviors will be related to performance behaviors. For example, assessment centers,

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work samples, and job simulations attempt to provide an applicant with the opportunity to perform work behaviors in a context similar to those required on the job (e.g., Klimoski, 1993). While demonstrating high validity, these methods are very resource intensive (i.e., time, money) and thus are often not feasible for large scale testing. These methods also focus more on developing situations that elicit the required KSAs than faithfully reproducing actual work situations (although this does not have to be the case). To provide a more practical alternative, attempts have been made to develop instruments that are easier to administer or score. Situational interviews (e.g., Latham & Saari, 1984; Latham, et al., 1980; Pulakos & Schmitt, 1995) provide a job-relevant situation to which the applicant is supposed to report how he or she would handle the situation. This method is perhaps easier to administer than the assessment center, but provides less realistic situations and responses (i.e., saying what one would do rather than actually perceiving the situation and behaving in it).

Recently, a different approach to assessing situations has been presented by Motowidlo and colleagues (Motowidlo, et al., 1990; Motowidlo & Tippins, 1993). These individuals adapted research from the 1940's and 1950's on low fidelity tests of supervisory potential (e.g., File, 1945) into a method useful for selection purposes. Their method, here referred to as a situational judgment test (SJT), attempts to identify job relevant situations along with appropriate responses to those situations. However, unlike other methods, the SJT is administered in paper and pencil, multiple choice form. Thus, a brief description of the situation is provided, followed by multiple choice behavioral responses. Motowidlo et al. (1990) suggest that the SJT is a low fidelity simulation. By making a distinction between task (i.e., manner in which situations are presented) and

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response (i.e., behavioral response), the SJT may be classified as a low task-low response instrument. In contrast, assessment centers are high task-high response methods, and situational interviews are somewhere between assessment centers and SJTs (because SJTs are paper and pencil tests as opposed to actual interpersonal situations).

The SJT is a relatively new method and validity evidence is sparse. However, the few studies that have been conducted often find at least moderate validities. In a concurrent validation study, Motowidlo et al. (1990) found the SJT correlated from .28 to .37 with supervisory ratings of overall performance. In a predictive validation study, Motowidlo and Tippins (1993) found validities of .25, although only 36 applicants were available. However, they also performed a concurrent study and found a validity of .28 with overall performance ratings. Pulakos and Schmitt (1996) conducted a concurrent validation study and found validities of .20 and .14 with their two criterion ratings. There have also been studies conducted with video-based SJTs (e.g., Weekley & Jones, 1997) that demonstrate similar validities. To date, SJT tests have shown moderate validity and rather small subgroup differences. Thus, SJT instruments appear to have both validities and subgroup differences similar to the Big 5 personality constructs (and often show validities greater than the Big 5, as many Big 5 measures demonstrate rather low validity, Barrick & Mount, 1995).

Although SJTs provide a promising method of assessing behavior in situations and work related contexts, their major limitation is that it is unclear what types of constructs they measure. The derived nature of developing situations (i.e., asking incumbents to describe work-relevant situations) and responses (i.e., what are the appropriate behaviors in each situation) almost ensures that the SJT will be

multidimensional. Evidence on the convergent and discriminant validity of SJTs is also sparse, and that which has been conducted is equivocal. Although Motowidlo et al. (1990) found negligible relations between their SJT and cognitive ability measures, Weekley and Jones (1997) found moderate relations. Thus, at present it is not known what constructs SJTs actually measure.

SJTs should be linked to distal dispositions such as the Big 5. In fact, the dynamic interplay between perceptions of situations and dispositions should influence performance on the SJT. This implies that those possessing particular traits (e.g., high conscientiousness) should respond differently to specific situations in the SJT (i.e., those high on C should be more likely to endorse particular behavioral options). This relationship is complicated, however, because not all situations may be relevant to a particular personality construct. Clearly linking dispositions to situations could provide a means of assessing the relation between these two factors. An assessment instrument developed in such a manner should provide a more theoretically grounded and valid measure of performance than either measure independently. Such an integration is the focus of the following section.

Present Study: Integrating Personality and Situational Judgment Testing

To briefly summarize the points raised above, basic research on personality suggests there is both a theoretical and empirical need to consider the relation between situations and personality as an influence on behavior. In particular, the accuracy of behavioral prediction will be enhanced when one considers situational information (because cross-situational consistency is stronger when situations are similar). Within personnel selection, the vast majority of research has attempted to establish links between

the Big 5 and performance. Research conducted in this manner finds (at best) moderate validity for Big 5 constructs. However, these distal relationships might be strengthened if one also considers the effects of situations. Thus, applications of the Big 5 in selection contexts emphasize the effects of dispositions on behavior and treat situational factors as error (Hattrup & Jackson, 1996). Alternatively, situational information is considered in SJTs. However, these instruments are atheoretical and, while attempting to identify individual differences, they do not directly consider the nature of these differences. In this manner SJTs demonstrate moderate validity yet provide little understanding about the potential constructs they measure. In practice, both approaches neglect an interactionist framework.

This dissertation argues that a theoretically-based integration of personality constructs (to identify relevant behaviors) and SJTs (to identify relevant situations) provides a more conceptually and practically useful means of predicting job performance than considering these factors independently. Such an integration could provide many advantages.

Specifically, incorporating situational features in the assessment of personality constructs should increase predictive validity. As mentioned in previous sections, the consistency of behavior across situations may be considerably more stable if relevant situational information is considered. Thus, the predictive validity of personality tests should be improved by including situational information from relevant job contexts. For example, a recent paper by Schmit et al. (1995) notes how adding “at work” tags to items in the NEO-FFI may increase the validity of personality tests. Reasoning from an interactionist perspective delineated by Mischel and Shoda (1995), these researchers

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suggested that a problem with the use of off-the-shelf personality tests in selection is that the items tap a diverse number of situations (e.g., home, work, social situations).

However, given that considerable research has shown personality to be somewhat variable across situations relative to within situations, they argued that personality tests may be more valid if the situations (items) assessed in a personality inventory all referred to work situations. They thus changed the nature of the situation in each item (e.g., “I try to be courteous to everyone I meet” was changed to “I try to be courteous to everyone I meet at work”). In this manner all respondents had a more similar frame of reference for the item.

In Schmit et al.’s (1995) first study, the effects of adding “at work” tags and providing general versus applicant instructions were examined. Results showed that test scores were more favorable when “at work” tags were used and applicant instructions were given rather than providing general instructions and the general item wording of the NEO-FFI. Furthermore, these changes did not negatively affect the psychometric properties of the scales. In their second study, they examined the criterion related validity of the conscientiousness scale of the NEO-FFI for predicting college grade point average. They also provided general versus specific (school admission context) instructions. Rather than “at work” tags, “at school” tags were used. Results found that validities were highest when “at school” tags were used with specific (school admission) instructions. However, simply using the “at school” tags resulted in a dramatic increase in validity. For example, the validity of the conscientiousness scale was .25 in the general instruction and item condition but .41 in the general instruction - “at school” tag condition. Schmit et al. (1995) explain their results by stating that providing an appropriate frame of

reference in the item reduces the error variance in the predictor measures, thereby increasing validity.

The implications of this research for the proposed integration of personality testing and SJTs are clear. As the results of Schmit et al. (1995) suggest providing a job-relevant frame of reference for personality items should increase validity, one would expect an integrated personality-SJT instrument to have higher validity than traditional methods. Note, however, that Schmit et al. (1995) only included a general “at work” tag. One might thus expect (see Murtha et al., 1996) that even more improvements to validity would be made by embedding a particular behavior within a richer work-related situational context, as the proposed personality-SJT instrument would attempt to do. Thus, consistent with recent basic personality research (Mischel & Shoda, 1995; 1998) and recent applied research (e.g., Chan & Schmitt, 1997; Schmit et al., 1995), identifying relevant work situations should create a common referent for respondents when indicating the extent to which they will endorse a particular behavior. This should in turn increase validity for the instrument yet still result in a conceptual understanding of what the test measures, for at least two reasons.

First, the integration should provide for greater understanding of predictor-performance relationships because the assessment instrument is linked to specific traits and criterion behaviors. For example, Guion (1991) argues that personality measures should explicitly consider and reflect the nature of the performance domain (see also Hough & Schneider, 1996, for a similar point). Thus, by jointly considering the trait and criterion domains, the proposed instrument should enhance understanding of both. Note that this might also help clarify what SJTs measure. By linking behavioral responses to

features of situations and dispositions, one should be able to better understand the mechanisms by which SJTs relate to performance. (i.e., through relationships with dispositions).

Second, the assessment method would be based on an interactionist framework (particularly Mischel & Shoda, 1995; 1998), which is arguably a more realistic conceptualization of personality than the dispositional “main effect” approach that seems dominant in the field (e.g., Weiss & Adler, 1984). The assessment method also directly addresses recent calls for such research (e.g., Murtha et al., 1996; Roberts & Donahue, 1994; Sheldon et al., 1997).

Overall, creating a rich situational work context around a particular dispositional behavior should result in higher validity and greater theoretical understanding. In the following sections I describe the proposed development and evaluation of this instrument. First, however, the nature of the job and job performance for which this instrument is created will be described. This is critical to the establishment of any dispositional construct (e.g., Guion, 1991; Murphy, 1996)

Personality in the Prediction and Explanation of Customer Service Behaviors

This proposal considers the development of an integrated personality-SJT instrument in the context of predicting customer service behaviors. Defining customer service is somewhat difficult because unlike durable goods, customer service is an individual’s perception of quality rather than based on more objective observations (e.g., George & Jones, 1991; Peterson & Wilson, 1992, Parasuraman, Zeithaml, & Berry, 1985). However, customer service most often refers to the interaction that occurs when an employee attempts to satisfy the expectations and demands of a customer (e.g., George

& Jones, 1991; Parasuraman et al., 1985). Although customer satisfaction ultimately lies within the perceptions of the customer (i.e., expectations of what the service encounter should provide), it is the employee's responsibility to assess these needs and expectations and to respond (behave) in a manner to meet these expectations (George & Jones, 1991). Thus, providing acceptable customer service involves an interaction between the employee and the customer, where the employee identifies the needs and expectations of the customer and then uses his/her relevant knowledge, skills, and abilities to behave in ways that will meet these expectations. Some applied researchers (e.g., Hogan, Hogan, & Bush, 1984) describe individuals predisposed to these behaviors as possessing a service orientation. For example, Hogan et al. (1984) describe service orientation as "...a set of attitudes and behaviors that affects the quality of the interaction between [employees] and [customers]..." (p. 167). In particular, they describe service orientation as individuals who are willing to treat customers and coworkers with courtesy, tact, consideration, are perceptive to customers' needs, and can communicate effectively with customers. Note that these behaviors are relatively independent of more technical matters, such as knowing how to operate a cash register or fill out various forms (e.g., George & Jones, 1991). Based on these distinctions, this dissertation attempts to develop an integrated personality-SJT test for service orientation that will be predictive of customer service.

Providing acceptable customer service has become a major area of concern for organizations. For example, more organizations are engaged in the service sector than ever before, and this trend is likely to continue at least until the turn of the century, where over seventy percent of employed individuals are expected to work in service-providing jobs (e.g., Collier, 1983; Northcraft & Chase, 1985; Statistical Abstracts, 1989).

However, unlike the production of durable goods, production in service organizations is characterized by three features (Schneider & Bowen, 1992). First, services are intangible and as such the customer is provided with an experience rather than a good. This is not to say that the customer may not be buying a good such as a car, but that the perception of the service provided by the car salesperson is intangible. Second, providing a service often requires the participation of the customer. In fact, some interaction between the customer and the employee is likely to be required because the employee must try to satisfy the customer's expectations. Third, the production and consumption of a service is simultaneous or nearly so. For example, being treated in a friendly manner by a waiter is something that is produced (waiter engaging in friendly behaviors) and consumed (your perception of those behaviors) almost simultaneously.

With increasing competition, coupled with the greater expectations by consumers for quality service, providing high customer service has become a major way to differentiate an organization from its competitors (e.g., Rudie & Wansley, 1985) and has been shown to relate to important customer behaviors (e.g., retention of customers, repeat buying, positive word-of-mouth). Thus, providing high quality service is one way an organization can achieve a competitive advantage over other companies. However, the creation of high quality service is difficult because service is characterized as being intangible, requiring consumer participation, and having simultaneous production and consumption. Because of these factors, organizations do not have the control over "service production" that they do with durable goods (George & Jones, 1991; Schneider & Bowen, 1992), as the actions and behaviors of the employee dealing with customers may be highly variable (Parasuraman et al., 1985) and are immediately consumed. Thus,

there is an increased reliance on the “front line” employee dealing with the customer. This makes the service experience (i.e., the interaction between the employee and customer) the key to enhancing customer service but is also the feature that the organization may have little direct control over. However, through various human resource tools (e.g., selection, performance appraisal) the organization can try to regulate the type of service its employees provide (Schneider & Bowen, 1992).

The identification and selection of individuals who possess a service orientation may be an effective method for improving customer service (e.g., Frei & McDaniel, 1998; George & Jones, 1991; Hogan et al., 1984; Hough & Schneider, 1996; Schneider & Bowen, 1992). In particular, an integrated personality-SJT instrument should provide an effective means of identifying those with high service orientation. There are several reasons for such an expectation.

First, providing high quality customer service appears to be highly dependent on the personality of the service provider. Conceptually, one might expect that those who are, for example, more outgoing, social, and empathetic would be better able to deal with customers and understand their needs. This has been demonstrated empirically. Hogan et al. (1985) describe the development of a service orientation index, a multidimensional personality measure assessing aspects of adjustment, likeability, social skill, and willingness to follow rules. The validity of this instrument across different samples ranged from .25 to .42. The current Hogan Personality Inventory (HPI; Hogan & Hogan, 1992) manual also lists a variety of validation studies with their service orientation measure, with most validities hovering around .30 (some are considerably higher, e.g., .61 was highest but the sample sizes for these high validities were often very small). In

these studies, supervisory ratings of overall job performance or effectiveness are most often used. Rosse, Miller, and Barnes (1991) found that similar validities were obtained by the HPI's service orientation scale with ratings of service ($r = .19$) and with overall performance ratings ($r = .27$). Finally, Frei and McDaniel (1998) conducted a meta-analysis of service orientation measures. They found an average observed validity of .24; after corrections for range restriction and criterion unreliability the mean validity was .50. Also of interest was the lack of correlation between the service orientation measures and cognitive ability ($r = -.06$). However, the service orientation measures were related to agreeableness ($r = .43$), neuroticism ($r = .37$), and conscientiousness ($r = .42$). Relationships with openness ($r = .07$) and extraversion ($r = .07$) were nearly nonexistent. Similarly, Costa and McCrae (1995) found that the HPI's service orientation measure correlated with neuroticism, agreeableness, and conscientiousness. Finally, Mount, Barrick, and Stewart (1998) conducted a small meta-analysis of Mount and Barrick's (1995) Personal Characteristics Inventory (PCI), an instrument based on the five factor model. They found moderate validities for all of the Big 5 constructs with a criterion composite assessing the quality of interactions with other, although they noted that neuroticism ($r = .14$), agreeableness ($r = .22$), and conscientiousness ($r = .23$) were the most important predictors. Together, these findings suggest that moderate validities can be obtained with service orientation measures.

However, there are two points worth making about this research. First, the observed validities in most studies are similar in magnitude to what is typically found in personality research (i.e., r 's $< .30$). Second, the meta-analysis conducted by Frei and McDaniel (1998) was based on only a few proprietary tests (e.g., HPI service orientation

scale, PDI customer service inventory, McLellan & Paajanen, 1994) because there are (to my knowledge) no non-proprietary instruments available. As a result, the vast majority of these validation studies are unpublished and so I could not examine the methodology of these studies in detail. For example, many of the studies may have used too small of a sample size; examination of the HPI service orientation validation studies provided in the manual (Hogan & Hogan, 1992) finds many studies contained less than 50 subjects. Overall, it might be safest to conclude that service orientation measures demonstrate moderate predictive validity, and that some personality constructs are related to service behaviors more than others.

A second justification for using an integrated personality-SJT instrument is because such an instrument strikes to the heart of the service experience. Specifically, George and Jones (1991) describe a service experience within an interactionist model, considering the relationship between the customer and service provider. As such, they consider the service encounter as a social situation where the employee must identify relevant situational and social cues to assess the needs and expectations of the customer, and then to adapt his or her behavior to meet these expectations. Considered in this manner, one would expect that an instrument that explicitly requires identification of relevant situational cues to provide an appropriate behavioral response would be highly predictive of customer service behavior.

To summarize, the prediction of customer service behaviors by identifying individuals with a service orientation provides an opportunity to develop an instrument where both situations and personality (i.e., their interaction) are important. By integrating personality assessment with situational assessment, one brings together two

important features of service orientation: (a) the relationship between basic personality and work behavior (i.e., providing customer service), and (b) the features of personality (i.e., service orientation) that require identification of situational cues. Thus, the situational nature of the integrated personality-SJT provides the relevant cues, and the personality-linked behavioral responses provides the opportunity to allow adaptive behavior to meet those expectations. Consider each of these components in detail.

First, perceptions of the service situation are influenced by characteristics in the objective service situation and one's standing on basic traits (i.e., service orientation). The review of basic personality research suggests that it is the perceived (rather than the objective) situation that is often most important for influencing behavior (e.g., Argyle et al., 1981; Krahe, 1992; Mischel & Shoda, 1995; Wright & Mischel, 1987). Likewise, the features of the objective situation that are attended to are influenced by one's standing on basic traits (e.g., Mischel & Shoda, 1995; 1998). Because providing customer service occurs within a social situation (e.g., George & Jones, 1991) and requires the service provider to identify important social and situational cues to meet the customer's needs (e.g., Schneider & Bowen, 1992; George & Jones, 1991), an individual's standing on the relevant Big 5 constructs (primarily neuroticism, agreeableness, and conscientiousness; Hogan & Hogan, 1992; Hogan et al., 1984; Frei & McDaniel, 1998) should result in some people more accurately identifying the important features of a given service situation. Clearly, however, it is vital for the proposed assessment method to contain job-relevant and realistic situations. Only by providing situational information will it be possible for individual differences in situational perception to be manifest, thereby leading to individual differences in responses to situations.

Second, the enactment of a specific behavior versus some alternative behavior should be jointly influenced by perceptions of the service situation, distal dispositions (particularly neuroticism, agreeableness, and conscientiousness), and (to a lesser extent) the objective service situation. Interactionist approaches to personality (e.g., see Krahe, 1992; McCrae & Costa, 1996; Mischel & Shoda, 1995; 1998) note the importance of these interacting processes. Within the service context, one's standing on the relevant Big 5 traits (neuroticism, agreeableness, and conscientiousness) and perception of the situation should jointly influence what type of behavior seems warranted or most appropriate in the situation. Here the relationship between situation perception and traits is important: one must perceive the service situation (i.e., identify important social and situational features) and respond in an appropriate manner, but what is perceived as important in the situation is partially dependent on one's standing on personality traits. Thus, the joint relationship between the perception of the service situation and one's service orientation are intertwined, and what is perceived (and how one responds) is likely to be influenced by dispositions.

Note that for the remainder of this proposal, only three of the Big 5 constructs will be examined: neuroticism, agreeableness, and conscientiousness. In addition, the conscientiousness trait will be further broken down into achievement and dependability, as suggested by Hough (1998). The reason for only examining neuroticism, agreeableness, and conscientiousness is because previous research (see above) suggested that a service orientation and the provision of customer service are primarily dependent on these three constructs (e.g., Frei & McDaniel, 1998; Hogan et al., 1985). Similarly, the reason that conscientiousness is broken down into achievement and dependability is

because research in personnel selection tends to show that traits narrower than the Big 5 are necessary to enhance prediction. Again, this does not contradict the fact that compound traits (e.g., integrity) usually are more predictive, but rather suggests that if one is going to use specific traits, one should use traits at a level slightly more narrow than the Big 5 (Hough, 1998; Schneider & Hough, 1996). Thus, this dissertation takes the more inclusive approach by considering both conscientiousness and its facets of achievement and dependability.

Finally, the establishment of predictive validity should be enhanced by integrating situational information with dispositional assessment because the contexts within which one is most interested in predicting behavior (i.e., dealing with customers) are explicitly incorporated into the selection instrument (Murtha et al., 1996). That is, responding to a test is a sample of behavior (Anastasi & Urbina, 1997) and thus responding to the service situation on a test should be an indicator (i.e., a sign) of actual customer service behavior. Given that higher correlations are found for behaviors that occur in similar situations (see Mischel & Shoda, 1995; Sheldon et al., 1997), predictive validity should be higher as well.

Overall, the proposed instrument taps the key features of an interactionist approach to personality assessment: (1) perception of the service situation, because the individual is presented with various service encounters and must identify the important features, and (2) customer service behaviors, because the individual must indicate the type of behavioral response he or she would provide in a given situation.

Methods and Results

The following sections outline the development of a construct-oriented and theoretically-derived measure of personality within customer service situations. Figure 3 shows an overview of the methodology. For the remainder of this paper, the proposed instrument will be called the Dispositional-Situational Inventory (DSI). Before describing the specific details of the proposed method, the primary goals of this research should again be stated.

First, the DSI must provide a reasonable level of predictive validity for the amount of effort expended in its development. At the very least, the DSI must demonstrate predictive validities higher than traditional Big 5 tests. Second, the instrument must still yield evidence of construct validity. The DSI is to be composed of subscales that reflect specific Big 5 traits (i.e., neuroticism, agreeableness, achievement, and dependability), and thus is able to be “mapped” back onto the more generic Big 5 taxonomy.

Please note that the DSI is designed to apply to most customer service situations and to predict customer service behaviors in general. In fact, the instrument is designed to be useful for all jobs that contain a major customer service component. Despite the technical differences of various jobs, it is expected that to provide quality customer service all individuals must demonstrate similar behaviors. This is consistent with research by Parasuraman et al. (1985; 1988; see also Schneider & Bowen, 1995), who examine general service quality dimensions, and George and Jones (1991), who suggest that technical proficiency and service orientation are largely independent.

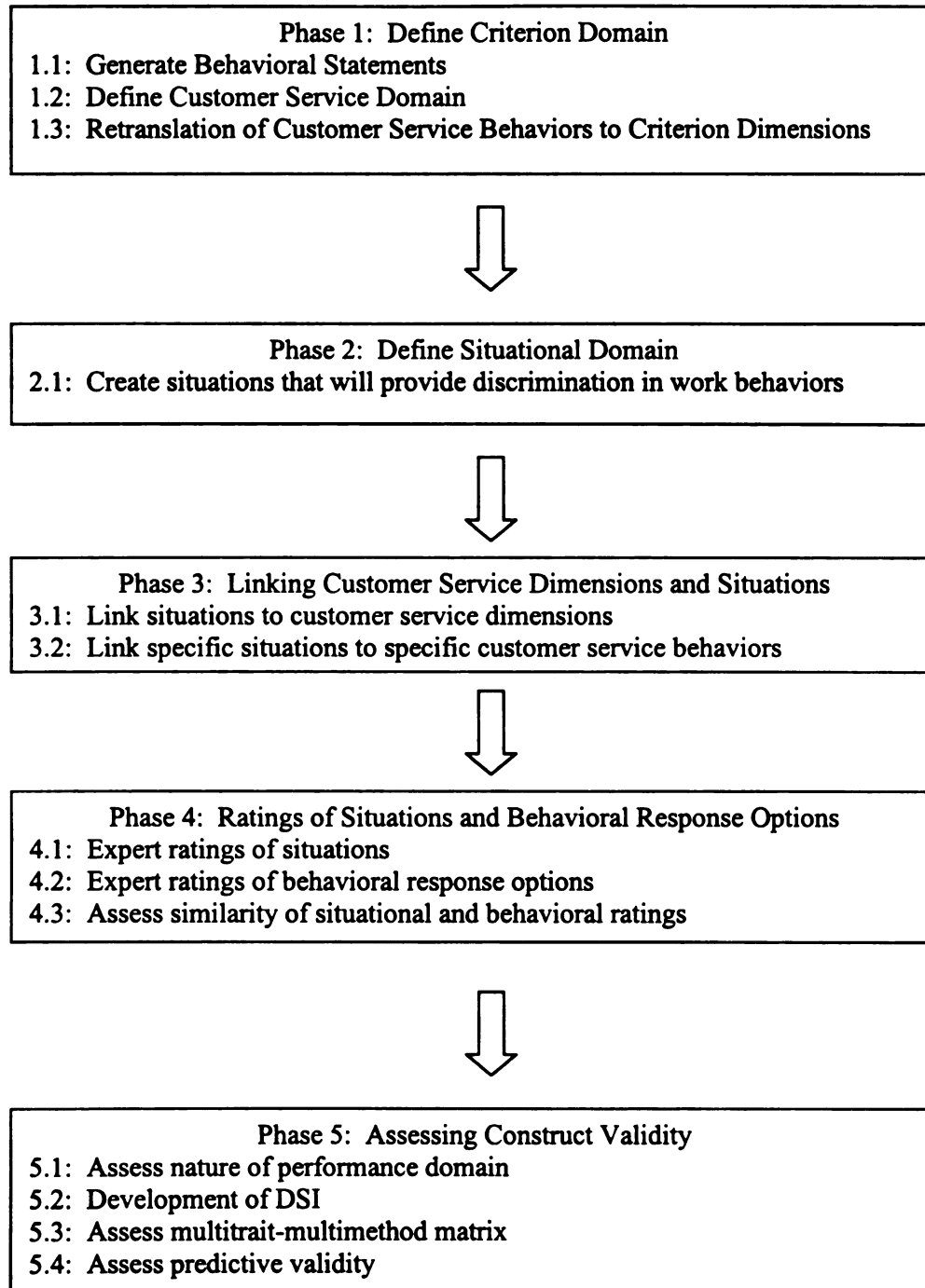


Figure 3. Overview of development methodology used in this study

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Phase 1: Define Criterion Domain

In the development of any predictor construct, it is important to begin with a detailed job analysis to provide an understanding of the performance domain (Guion, 1998; Schneider & Schmitt, 1986; SIOP Principles, 1987). As noted elsewhere (e.g., Campbell, McCloy, Oppler, & Sager, 1993), performance behavior is the behavior of key interest, and thus it seems appropriate to conclude that predictors derive their importance from criteria (Wallace, 1965). This may particularly be important in the development of non-cognitive predictors, as these predictors are more likely to be tied to a particular type of job than ability constructs (Murphy, 1996). Furthermore, Guion (1991) notes the importance of carefully defining the performance domain and using that definition to set the boundaries for predictor development.

Thus, the development of the DSI must begin with a careful specification of the performance domain. Here, the identification of tasks and behaviors are used to define the customer service domain and thus create the major dimensions of customer service performance. Again, the focus is not on a specific job but rather on a set of behaviors related to customer service in general. However, before collecting empirical data, past research on customer service performance was reviewed. This research is discussed in the following section. The remaining sections in Phase 1 ensure that these dimensions do in fact cover the entire customer service performance domain.

Past Research on Customer Service Performance. A review of the applied psychology and marketing literatures overwhelming suggested that the customer service performance domain was best assessed by a basic set of criterion dimensions established

with the Service Quality (SERVQUAL) instrument (Parasuraman et al., 1988). I thus focus primarily on this instrument.

Parasuraman et al. (1985) conducted focus groups and interviews with managers from four service organizations (i.e., retail banking, credit card, securities brokerage, and product repair and maintenance), as well as with customers who use those services. These individuals were asked to report key behaviors and practices that individuals and organizations could provide to influence perceptions of customer service (i.e., organization and job specific behaviors were not excluded from their analysis). These reports were then summarized and collapsed into 10 categories (shown in Table 2). As can be seen by the table, some of the dimensions appear to be more relevant to customer service behavior than others. Research conducted since the development of the SERVQUAL dimensions (e.g., Parasuraman, Zeithaml, & Berry, 1988; 1991) has reduced the number of dimensions to five: tangibles, reliability, responsiveness, assurance (combination of communication, credibility, security, competence, and courtesy items), and empathy (items mainly from understanding customers scale). This reduction was based on factor analytic results in several samples.

Table 2. Dimensions of Customer Service Behaviors (adapted from Parasuraman et al., 1985)

Dimension	Definition	Examples
Reliability	consistency of performance and dependability	<ul style="list-style-type: none"> • keeping records correctly • performing the service at the designated time
Responsiveness	willingness or readiness of employees to provide service; timeliness of service	<ul style="list-style-type: none"> • mailing a transaction slip immediately • calling a customer back quickly • giving prompt service
Competence	possession of required skills and knowledge to perform the service	<ul style="list-style-type: none"> • knowledge and skill of contact personnel • knowledge and skill of support personnel
Access	approachability and ease of contact	<ul style="list-style-type: none"> • service is easily accessible • waiting time to receive service is not excessive
Courtesy	politeness, respect, consideration, and friendliness of contact	<ul style="list-style-type: none"> • consideration of customer's property • clean and neat appearance
Communication	keeping customers informed in language they can understand and listening to them. Adjust language for different customers.	<ul style="list-style-type: none"> • explaining the service • explaining cost of the service • explaining possible trade-offs of the service • assuring the customer the service will be handled correctly
Credibility	trustworthiness, believability, honesty. Keeping the customers best interests at heart	<ul style="list-style-type: none"> • degree of hard sell used • appearance of expertise
Security	freedom from danger or risk	<ul style="list-style-type: none"> • physical safety • financial security • confidentiality
Understanding the customer	making the effort to understand the customer's needs	<ul style="list-style-type: none"> • learning the customers specific requirements • providing individual attention • recognizing the regular customer
Tangibles	physical evidence of service	<ul style="list-style-type: none"> • appearance of service provider • other customers in the setting • characteristics of the product

Overall, the SERVQUAL instrument (Parasuraman et al., 1988) has been perhaps the most widely used measure of its kind (Lewis & Mitchell, 1990). Furthermore, the dimensions identified by Parasuraman et al. (1985) appear to be endorsed by most individuals who research customer service (e.g., George & Jones, 1991; Lewis & Mitchell, 1990; Parasuraman et al., 1988; Schneider & Bowen, 1995). However, to further ensure the dimensions on the SERVQUAL instrument capture the nature of customer service, criteria identified in other research was also considered. Specifically, Hogan et al. (1985) note that customer service requires three behaviors: treating customers with tact, courtesy, and consideration; perceptiveness to customer needs; and providing accurate and pleasant communication. Similarly, the meta-analysis conducted by Frei and McDaniel (1998), building from the development of PDI's Servicefirst Inventory (Fogli & Whitney, 1991), considered customer service to be composed of four dimensions: active customer relations, polite customer relations, helpful customer relations, and personalized customer relations. They further suggest that, across studies, customer service may be composed of friendliness, reliability, responsiveness, and courteousness. Thus, I have integrated these factors into the original SERVQUAL dimensions (which is why there is one additional dimension, communication). Table 3 shows the dimensions that remain after integrating the customer service research noted here with the revised SERVQUAL dimensions identified by Parasuraman et al. (1988; 1991).

Table 3. Revised Dimensions of Customer Service Behaviors

Dimension	Definition	Examples of behavior taken from items
Tangibles	Physical facilities, equipment, and appearance of personnel	<ul style="list-style-type: none">• up to date equipment• appealing physical facilities• service provider's appearance appropriate and neat• appearance of physical facilities appropriate for the service provided
Reliability	Ability to perform the promised service dependably and accurately	<ul style="list-style-type: none">• keeps promises• dependable• provides service within the time promised
Responsiveness	Willingness to help customers and provide prompt service	<ul style="list-style-type: none">• keeps accurate records• does not tell customers when service will be performed• receive prompt service from employee• willing to help customers• respond to customer request promptly
Assurance	Courtesy of employees and their ability to inspire trust and confidence	<ul style="list-style-type: none">• trustworthy• safe• polite• supportive• using tact and consideration• courteous interaction• sympathetic and reassuring
Perceptiveness	Caring, individualized attention to customer's needs and expectations	<ul style="list-style-type: none">• give personal attention• know customer's needs• understands customer's needs• has customer's best interests at heart
Communication	keeping customers informed in language they can understand and listening to them. Adjust language for different customers. Accurate and pleasant communication.	<ul style="list-style-type: none">• explaining the service• explaining cost of the service• explaining possible trade-offs of the service• assuring the customer the service will be handled correctly• pleasant communication• providing accurate information

The six dimensions in Table 3 provide a starting point for defining the customer service performance domain. Although these dimensions are based on considerable research (Frei & McDaniel, 1998; Hogan et al., 1984; Parasuraman et al., 1985; 1988), they may not be complete. In an effort to ensure these dimensions were not deficient, customer service employees were interviewed to generate specific task and behavioral statements, both with and without reference to the six criterion dimensions shown in Table 3. The gathering of this information is discussed next.

Step 1.1: Generate behavioral statements. Participants with customer service experience were recruited from upper level psychology classes to describe common tasks and give behavioral examples (both good and bad) of providing customer service. Requirements for participation were that the individual had worked at least ½ time in a customer service job for at least six months. A total of 12 participants provided examples of customer service behaviors (more participants were not used because the behavioral statements quickly became redundant with those already recorded). This sample was mainly young ($M = 21$ years), female (75%), and White (66%). They were also very experienced with customer service, as the median number of months experience was 81 months (note that many individuals worked two jobs simultaneously yet reported the months on each job separately, so this figure may be slightly inflated).

After first describing what was meant by the term “customer service behavior,” individuals were asked to generate behavioral examples of providing customer service that they engaged in on their many jobs. These sessions lasted between 2-3 hours, and participants were run either individually or in small groups. The behaviors were elicited in two ways. First, participants were asked to freely generate the types of behaviors they

engaged in on their jobs. After exhausting these behaviors, they were then shown the customer service dimensions and asked to generate behaviors to reflect these dimensions. Overall, a total of 348 behavioral statements were elicited, and thus became the content of the criterion domain.

Step 1.2: Define customer service domain. After identifying the relevant customer service behaviors, the next step involved classifying these behaviors into distinct categories. Although the revised SERVQUAL dimensions (i.e., tangibles, reliability, responsiveness, assurance, perceptiveness, and communication; see Table 3) were used as an initial guide, examination of the behaviors showed many inadequacies with these dimensions. For example, there were many behaviors that suggested one needed to work closely with coworkers to provide quality service. Similarly, there were many behaviors that involved maintaining a professional image even though one was not immediately involved with a customer. Finally, many behaviors involved staying current and maintaining competencies with products and services. Some of these behaviors (e.g., remaining current with knowledge about new products) were originally included in the SERVQUAL instrument (Parasuraman et al., 1985) but were later dropped (Parasuraman et al., 1988; 1991). It became clear, however, that the dimensions identified in the SERVQUAL instrument were deficient and more dimensions would be necessary.

Rather than simply create dimensions from behavioral statements, a more theoretically oriented approach was taken to ensure the criterion dimensions would be applicable to most (if not all) customer service jobs. Specifically, the performance taxonomy described by Campbell et al. (1993, 1996) and the contextual performance dimensions identified by Borman and Motowidlo (1997) were integrated with the

dimensions shown in Table 3 (note that the “competence” dimension from the original SERVQUAL instrument was also included, as suggested by the behavioral statements). Definitions of the performance dimensions from each taxonomy are presented in Table 4. As shown in the table, the revised customer service dimensions appear to reflect aspects of both the Campbell et al. (1993; 1996) and contextual performance (e.g., Borman & Motowidlo, 1997) taxonomies, although the dimensions from these different taxonomies are not entirely identical. Thus, it seemed reasonable to integrate these taxonomies to create a complete picture of the customer service performance domain.

Integrating these taxonomies was a rational exercise conducted by the author. A figure mapping these taxonomies onto each other is shown in Figure 4, and the final definitions of each dimension are shown in Table 5. Note that in Figure 4, solid boxes indicate constructs actually measured and dashed boxes indicate constructs in the original taxonomy but not directly measured. Solid lines indicate conceptual relations between constructs, and dashed lines indicate instances where the constructs were so similar that they were combined into a single dimension (to be discussed shortly). As can be seen in Figure 4 and Table 5, some dimensions (e.g., “reliability” and “demonstrating extra effort”) are very similar conceptually (and will likely be empirically indistinguishable). However, before integrating the performance taxonomies it was decided that it would be better to be overly inclusive than to leave out important dimensions or ignore potentially important differences between dimensions. Thus, there are some dimensions that are only slightly different conceptually (e.g., maintaining personal discipline and following organizational rules) but were nonetheless kept distinct for defining the criterion domain and developing the DSI.

Table 4. Original Performance Dimension Definitions

Campbell et al. (1993) Performance Taxonomy

1. **Job specific task proficiency**: degree to which the individual can perform the core important/technical tasks that are central to his or her job in your organization.
2. **Non-job specific task proficiency**: degree to which the individual can perform the core substantive /technical tasks that are important all jobs (for example, waiting on tables, attending to customer needs).
3. **Written and oral task proficiency**: proficiency to be able to write/speak in an appropriate manner.
4. **Demonstrating effort**: expending extra effort when asked; continuing to work even under difficult/adverse conditions; working late; maintaining a high level of intensity; extending extra effort when demands are high (for example, when store is very busy).
5. **Maintaining personal discipline**: minimization of negative behaviors such as absenteeism, tardiness, showing up to work drunk/hung over, substance abuse at work, rule/policy violations, or theft are avoided.
6. **Facilitating peer and team performance**: degree to which the individual supports his or her peers; helps them with problems, and acts as a trainer for employees. Also includes how well the individual helps the group/coworkers function, keeping the group/coworkers goal-directed; and reinforcing participation by the other group members/coworkers.
7. **Supervision/leadership**: extent to which person behaves in ways to influence employees through face-to-face interactions; tries to set goals for employees; teaching effective methods to employees; demonstrate appropriate behaviors; reward or punish behaviors appropriately. This dimension differs from number 6 (the previous dimension) because it focuses on the supervision of employees, not of peers/coworkers.
8. **Management/administration**: extent to which individual is capable of organizing people/resources; articulating goals; monitoring progress; helping to resolve problems/crises that stand in the way of goal accomplishment; controlling expenses; obtaining additional resources; representing the organization or company.

Table 4 (cont'd).

Borman & Motowidlo (1998) Contextual Performance Taxonomy

1. Persisting with enthusiasm and extra effort as necessary to complete one's own task activities (for example, showing perseverance and conscientiousness).
2. Volunteering to carry out task activities that are not formally part of one's own job (for example, suggesting organizational improvements; showing initiative and taking on extra responsibility).
3. Helping and cooperating with other coworkers/managers (for example, assisting or helping coworkers/customers; exhibiting organizational courtesy and not complaining; evidencing altruism).
4. Following organizational rules and procedures (for example, following orders and regulations; showing respect for authority; complying with company values and policies; meeting deadlines; showing civic virtue).
5. Endorsing, supporting, and defending organizational objectives (exhibiting organizational loyalty; showing concern for company/workgroup objectives; staying with the organization during hard times; representing the organization favorably to outsiders).

Revised SERVQUAL Dimensions

1. Tangibles/Appearance: this dimension reflects both the physical appearance of the store and of the service provider.
2. Reliability: performing the promised service dependably and accurately; keeping promises; providing services on time; keeping accurate records.
3. Responsiveness: willingness to help customers and provide prompt service; telling customers when service will be performed; responding to customers promptly.
4. Assurance: courtesy of employees; inspiration of trust and confidence in customer; safe and polite behavior; supportive; use of tact and consideration; courteous; sympathetic and reassuring.
5. Perceptiveness: individualized attention to customer's needs and expectations; knowing and identifying customer's needs; keeping customer's best interests at heart.
6. Communication: using language the customer can understand/listen to; adjust language for different customers/needs; pleasant communication; providing accurate information; explaining costs/benefits of service; telling customer the service will be correctly handled.

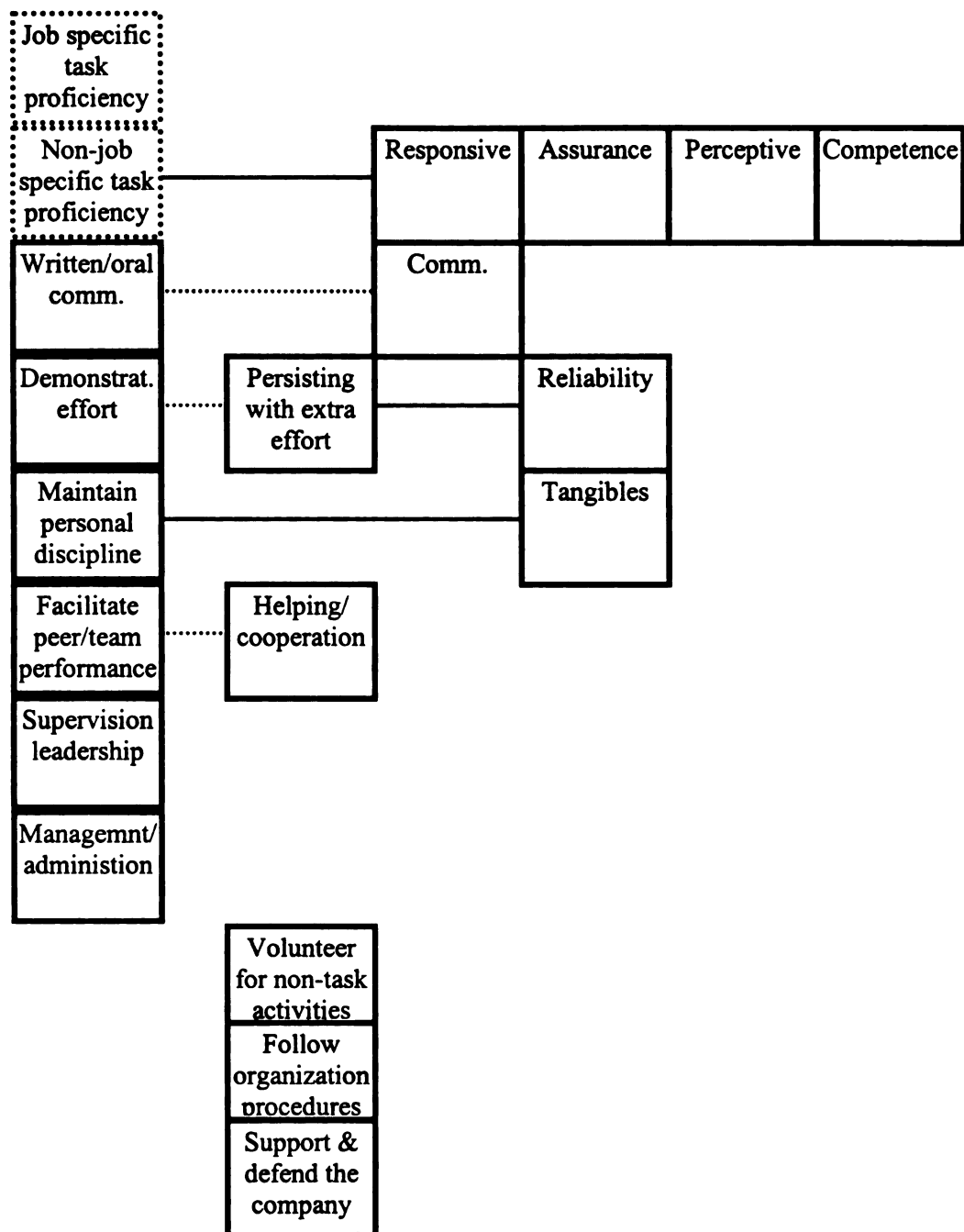


Figure 4. Mapping of performance taxonomies. Solid boxes indicate measured constructs. Solid lines indicate conceptual relations, and dashed lines indicate instances where the constructs were combined into a single dimension.

Table 5. Revised and Integrated Performance Dimension Definitions

1. **Tangibles/Appearance**: this dimension reflects nonverbal behaviors that maintain or enhance both the physical appearance of the store and the personal appearance of the service provider (for example, correct dress/hair, smiling, maintaining eye contact).
2. **Reliability**: performing the promised service dependably and accurately; maintaining consistent behavior with customer; keeping promises to customers; providing services on time; keeping accurate records.
3. **Responsiveness**: willingness or readiness to help customers and provide prompt service; telling customers when service will be performed; responding to customers promptly.
4. **Assurance**: courtesy of employee; inspiration of trust and confidence in customer; safe and polite behavior; supportive; use of tact and consideration; courteous; patient; respectful; sympathetic and reassuring; suggesting alternatives; providing options; explaining costs/benefits of service; telling customer the service will be correctly handled; providing accurate information.
5. **Perceptiveness**: individualized attention to customer's needs and expectations; knowing and identifying customer's needs; keeping customer's best interests at heart; recognizing the regular customer; learning the customer's specific requirements.
6. **Communication (verbal)**: using language the customer can understand/listen to; adjust language for different customers/needs; pleasant communication.
7. **Competence**: possession of the required knowledge and skills to perform the service; staying current with new product developments; being knowledgeable about the features of products; staying current with new developments in the field.
8. **Demonstrating extra effort**: expending extra effort when asked; continuing to work even under difficult/adverse conditions; working late; maintaining a high level of intensity; ; persisting with enthusiasm; extending extra effort when demands are high (for example, when store is very busy).
9. **Maintaining personal discipline**: minimization of negative behaviors such as absenteeism, tardiness, showing up to work drunk/hung over, substance abuse at work, theft, are avoided.
10. **Facilitating peer and team performance**: degree to which the individual supports his or her peers; helps and assists coworkers' with their problems/job duties; cooperates with coworkers (for example, exhibits altruism); acts as a trainer for peers/coworkers. Also includes how well the individual helps the group/coworkers function, keeping the group/coworkers goal-directed; and reinforcing participation by the other group members/coworkers.

Table 5 (cont'd).

11. Supervision/leadership: extent to which person behaves in ways to influence employees through face-to-face interactions; tries to set goals for employees; teaching effective methods to employees; demonstrate appropriate behaviors; reward or punish behaviors appropriately. This dimension differs from number 10 (the previous dimension) because it focuses on the supervision of employees, not of peers/coworkers.
12. Management/administration: extent to which individual is capable of organizing people/resources; articulating goals; monitoring progress; helping to resolve problems/crises that stand in the way of goal accomplishment; controlling expenses; obtaining additional resources.
13. Volunteering: Volunteering to carry out task activities that are not formally part of one's own job (for example, suggesting organizational improvements; showing initiative and taking on extra responsibility).
14. Following company policies: Following organizational rules and procedures (for example, following orders and regulations; showing respect for authority; complying with company values and policies; meeting deadlines; showing civic virtue).
15. Defending the company: Endorsing, supporting, and defending organizational objectives (exhibiting organizational loyalty; showing concern for company/workgroup objectives; staying with the organization during hard times; representing the organization favorably to outsiders).

Alternatively, some dimensions were dropped or combined because they were conceptually indistinguishable. First, the “job-specific task proficiency” dimension was excluded because the purpose of this project was to define a performance domain applicable to most (if not all) customer service jobs. Second, the “non-job specific task proficiency dimension was dropped because it was largely reflected in the revised SERVQUAL dimensions (e.g., assurance). Third, the “written/oral communication dimension from the Campbell et al. (1993; 1996) taxonomy was combined with the “communication” dimension from the original SERVQUAL instrument. Fourth, the “demonstrating effort” dimension from the Campbell et al. taxonomy was combined with the “persisting with enthusiasm and extra effort” dimension from the contextual performance taxonomy. Finally, the “facilitating peer and team performance” dimension was combined with the “helping/cooperation” dimension. Please see Campbell et al. (1996) for a discussion of the overlap between these dimensions.

Overall, there are 15 performance dimensions that reflect aspects of the SERVQUAL (Parasuraman et al., 1988), Campbell et al. (1993; 1996), and contextual performance (Borman & Motowidlo, 1997) taxonomies. As a final check, the fifteen dimensions were reviewed by two individuals familiar with the performance taxonomies and both agreed that the dimensions looked reasonable. These dimensions should provide an exhaustive coverage of the customer service performance domain. The next step was to assign specific customer service behaviors to each customer service dimension.

Step 1.3: Retranslation of customer service behaviors to criterion dimensions.

Two raters took the original 348 behavioral statements and assigned each to a criterion

dimension. Analysis of these classifications found 70% agreement. After discussing their differences and re-evaluating the statements, agreement reached 96% (remaining disagreement was resolved by the author). The behavioral statements clustered into the 15 criterion dimensions are shown in Appendix A. Most behavioral statements are clustered within the original SERVQUAL dimensions. Note, however, the relatively large number of statements clustered within the “maintaining personal discipline” and “facilitating peer and team performance” dimensions. Also notice that only one behavior was classified into the “volunteering” dimension. Although this dimension could probably be dropped, it is included because of its more general theoretical importance (e.g., Borman & Motowidlo, 1998).

Overall, the behaviors classified into dimensions in Appendix A comprise the customer service performance domain. However, as will be further described in Step 3.1 below, when trying to link situations to these behaviors it became apparent that even the 15 criterion dimensions were too broad for concretely linking situations to behaviors. To facilitate the linking process, 26 sub-dimensions were created across the 15 dimensions, resulting in a total of 34 dimensions. For example, the “tangibles” dimension is further broken down into “professional appearance,” “impression management,” and “work area and product appearance” sub-dimensions. The specific definitions for these dimensions and sub-dimensions are presented in Table 6.

Table 6. Performance Dimension and Subdimension Definitions

1. **Tangibles/Appearance**: nonverbal behaviors that maintain or enhance both the physical appearance of the store and the personal appearance of the service provider (for example, correct dress/hair, smiling, maintaining eye contact).
 - a) **Professional Appearance**: maintain a professional appearance
 - b) **Impression Management**: give customer appropriate impressions; give friendly and pleasant appearance; maintaining eye contact with the customer
 - c) **Work Area and Product Appearance**: maintain clean and neat work area, maintain clean and neat product appearance
2. **Reliability**: performing the promised service dependably and accurately; maintaining consistent behavior with customer; keeping promises to customers; providing services on time; keeping accurate records.
 - a) **Perform Consistently**: maintain constant performance/behavior with customer
 - b) **Promises**: keep promises made to customer
 - c) **Record Keeping**: maintain necessary customer documentation
3. **Responsiveness**: willingness or readiness to help customers and provide prompt service; telling customers when service will be performed; responding to customers promptly.
 - a) **Acknowledgment**: let customers know that you are aware of them
 - b) **Promptness**: respond to customers quickly; keep them informed that you are trying to provide prompt service
 - c) **Responding to Requests**: manner in which employee responds to customers requests or inquiries
4. **Assurance**: courtesy of employee; inspiration of trust and confidence in customer; safe and polite behavior; supportive; use of tact and consideration; courteous; patient; respectful; sympathetic and reassuring; suggesting alternatives; providing options; explaining costs/benefits of service; telling customer the service will be correctly handled; providing accurate information.
 - a) **Suggestions/Alternatives**: provides customer with different options, alternatives, and comparisons
 - b) **Compensation**: if there is a problem or mistake, employee provides the customer with some form of compensation
 - c) **Demonstrating Value**: employee provides customers with information that shows the value of product features or options
 - d) **Explaining Service**: employee explains the service process thoroughly as well as future service needs
 - e) **Selling Pressure**: providing adequate pressure on customer to make a purchase; not too little or too excessive; exhibit patience with customer
 - f) **Polite/Courtesy/Respect**: treating customer in respectful and courteous manner
 - g) **Honesty/Truthfulness**: providing customer with accurate and honest information
 - h) **Empathy/Sympathy**: be sympathetic towards his/her needs or situation

Table 6 (cont'd).

5. **Perceptiveness**: individualized attention to customer's needs and expectations; knowing and identifying customer's needs; keeping customer's best interests at heart; recognizing the regular customer; learning the customer's specific requirements.
 - a) **Anticipation**: identification and use of customer cues; handling customer requests before the customer has to ask
 - b) **Identification of Personal Information**: employee tries to learn and use personal information about customer
 - c) **Questioning**: asks appropriate and helpful questions
 - d) **Customer Focus**: handling the customer's needs in a personalized manner; keeping relationships with regular customers
6. **Communication (verbal)**: using language the customer can understand/listen to; adjust language for different customers/needs; pleasant communication.
 - a) **Personal Communication**: speaks with the customer in a personalized manner
 - b) **Appropriate Communication**: provides the appropriate tone, type, content, and amount of communication.
7. **Competence**: possession of the required knowledge and skills to perform the service; staying current with new product developments; being knowledgeable about the features of products; staying current with new developments in the field.
8. **Demonstrating extra effort**: expending extra effort when asked; continuing to work even under difficult/adverse conditions; working late; maintaining a high level of intensity; ; persisting with enthusiasm; extending extra effort when demands are high (for example, when store is very busy).
9. **Maintaining personal discipline**: minimization of negative behaviors such as absenteeism, tardiness, showing up to work drunk/hung over, substance abuse at work, theft, are avoided.
 - a) **Composure**: maintaining personal composure under adverse conditions or stressful situations
 - b) **Social Consideration**: acting appropriately and professionally when in the presence of customers
 - c) **Work Focus**: behaving in ways that contribute to doing one's job, avoiding non-task behaviors
10. **Facilitating peer and team performance**: degree to which the individual supports his or her peers; helps and assists coworkers' with their problems/job duties; cooperates with coworkers (for example, exhibits altruism); acts as a trainer for peers/coworkers. Also includes how well the individual helps the group/coworkers function, keeping the group/coworkers goal-directed; and reinforcing participation by the other group members/coworkers.

Table 6 (cont'd).

11. Supervision/leadership: extent to which person behaves in ways to influence employees through face-to-face interactions; tries to set goals for employees; teaching effective methods to employees; demonstrate appropriate behaviors; reward or punish behaviors appropriately. This dimension differs from number 10 (the previous dimension) because it focuses on the supervision of employees, not of peers/coworkers.
12. Management/administration: extent to which individual is capable of organizing people/resources; articulating goals; monitoring progress; helping to resolve problems/crises that stand in the way of goal accomplishment; controlling expenses; obtaining additional resources.
13. Volunteering: Volunteering to carry out task activities that are not formally part of one's own job (for example, suggesting organizational improvements; showing initiative and taking on extra responsibility).
14. Following company policies: Following organizational rules and procedures (for example, following orders and regulations; showing respect for authority; complying with company values and policies; meeting deadlines; showing civic virtue).
15. Defending the company: Endorsing, supporting, and defending organizational objectives (exhibiting organizational loyalty; showing concern for company/workgroup objectives; staying with the organization during hard times; representing the organization favorably to outsiders).

These more specific dimensions were created rationally by the author, and then classified within dimension by two raters (the same two who conducted the previous ratings). The agreement for the classification of behaviors to sub-dimensions was 90%, with all remaining classifications mutually resolved. Thus, there are 15 customer service criterion dimensions and 26 sub-dimensions, for a total of 34 criterion dimensions. One may conceptualize these sub-dimensions as “items” comprising a “scale” for the particular performance dimension.

Parenthetically, it might be noted that the criterion dimensions developed in this study are almost identical to those developed by Paaajanen, Hansen, and McLellan (1993) in the development of PDI’s Customer Service Inventory, a measure of customer service. What is noteworthy about this similarity is that the criterion dimensions developed in the present study were based on specific customer service behaviors that were mapped onto three conceptual criterion frameworks. The Paaajanen et al. (1993) customer service inventory is based on a lengthy development with several studies and research samples, but without reference to any kind of theoretical performance taxonomy. The similarity between these two criterion domains lends support that the present study’s criterion domain is adequately covered because this similarity was not discovered until after the present study’s criterion domain was specified.

Given that the customer service criterion domain was now defined, the next series of steps involved identifying actual customer service situations that employees faced in a number of customer service contexts (e.g., retail, waiter/waitress, bank, receptionist).

Phase 2: Linking Situations to Customer Service Behaviors

Building from the types of behaviors important for effective customer service, one may now identify situations that reflect these behaviors. Stated differently, it is important to provide situations that will allow variability in the types of behavioral responses shown (e.g., Mischel, 1977; Wright & Mischel, 1987). Strong situations (where everyone must behave the same way) will clearly not allow for individual differences in a given personality construct (Mischel, 1977). Thus, this phase seeks to identify relevant work-related situations where individual differences may be manifest.

Based on the literature cited earlier, it is apparent that the psychological situation is more closely linked to behavior than the objective situation (Krahe, 1992). Thus, the types and features of situations may be derived in terms of the situations that individuals find important and meaningful. Unfortunately, an adequate taxonomy or model of situations does not exist (Frederiksen, 1972), and most typically researchers derive or define situations in terms of their relevance to a particular behavioral domain (e.g., Endler et al., 1962; Murtha et al., 1996; Shoda, Mischel, & Wright, 1993; Wright & Mischel 1987).

Such an approach was used here and is based loosely on research by Shoda et al. (1993) and Wright and Mischel (1987). In those studies, participants identified behaviors relevant to a particular construct of interest (and thus behavioral domains). Next, participants were asked to describe situations where the behaviors relevant to a particular domain are most likely to be observed. This approach basically links the information obtained during the criterion development phase to situations, yet these researchers do not explicitly discuss their method in these terms. However, for all practical purposes they

are identical; the primary difference being that different groups of subject matter experts were used in this study to generate situations and behaviors.

Step 2.1: Create situations that will provide for discrimination in work behavior.

Participants with customer service experience were recruited from upper level psychology classes to give examples of customer service situations. Requirements for participation were that the individual had worked at least ½ time in a customer service job for at least six months. A total of 26 participants provided examples of customer service situations (more participants were not used because the situations became redundant with those already recorded). This sample was mainly young ($M = 21$ years), female (73%), and White (85%). They were very experienced with customer service, as the median number of months experience was 111 months (note that many individuals worked two jobs simultaneously yet reported the months on each job separately, so this figure may be inflated). Overall, this sample was very experienced with providing customer service.

After first describing what was meant by the terms “customer service” and “customer service situation,” individuals were asked to generate situations that they faced on their jobs. In particular, they were asked to think of situations that were (1) frequent and common, (2) difficult or challenging to handle, and (3) important. The reason for choosing situations that were difficult or challenging was based on the fact that only some situations are likely to exhibit variance in particular behaviors. For example, Mischel’s (1977) notion of strong and weak situations would indicate that weak situations for a particular behavior would be more likely to lead to individual differences in that behavior. Situations that are psychologically demanding should be most likely to lead to individual differences; this is the basis of the competency-demand hypothesis (Shoda et

al., 1993) and Argyle et al.'s (1981) notion of situation difficulty. The competency-demand hypothesis suggests that, when situations are psychologically taxing, those with fewer requisite competencies should be less likely to adequately meet the demands of the situation (as opposed to those with greater competencies). One may consider this hypothesis in terms of classical measurement theory; situations that are demanding allow discrimination between those high and low on a trait. One would expect that more psychologically demanding situations would find more variability in the choice of a particular (correct) behavioral response. In contrast, situations that place few demands on one's psychological competencies should result in little discrimination for a particular trait, and thus people of high and low values for that trait should be equally likely to choose the correct response. Overall, the goal was to generate actual work situations where individual differences in a given trait would be manifest by actual differences in behavior.

The experimental sessions lasted between 2-3 hours, and participants were run either as individuals or in small groups. The situations were elicited in two ways. First, participants were asked to freely generate the types of situations they faced on their jobs. After exhausting these examples, they were then shown the customer service dimensions and asked to generate difficult or challenging situations to reflect these dimensions. Overall, a total of 407 situations were elicited, although many of these situations were very similar. These situations thus became the universe of customer service situations from which the test situations were sampled.

Phase 3: Linking Customer Service Dimensions and Situations

With the elements within the customer service behavioral and situational domains generated, the next task involved linking the two domains together. This step formed the development of the basic content of the DSI test items (i.e., situation) and responses (i.e., behavior).

Step 3.1: Linking situations to customer service dimensions. The first linking step involved linking situations to the 15 behavioral dimensions (and 26 sub-dimensions). Specifically, the purpose of this step was to link each situation to a behavior most required or relevant for that situation. For example, consider a situation such as

“You are talking to a customer on the phone and have many other customers waiting on different phone lines. Suddenly, a customer in the store approaches you.”

The behavior that might be most relevant for this situation is “acknowledge customers who are waiting,” which is a behavior within the “acknowledgement” subdimension of “responsiveness.” This situation clearly does not require a behavior such as “learns features of new products as they become available,” which is a “competency” behavior. Thus, this situation would be linked to the “acknowledgement” subdimension in general and the specific behavior of “acknowledge customers who are waiting.”

To provide these classifications, the author first prepared a preliminary classification of situations to behaviors. The reason the author conducted this step alone was because many of the situations were very similar or redundant with other situations, and since the author was very familiar with each of these situations it was easier for him

to provide the preliminary classification. This initial and preliminary classification resulted in 206 situations that were linked to a behavior and category. The other 201 situations were either judged to be redundant, too long or confusing, or potentially offensive.

After this preliminary classification, two individuals were given the task of assigning each situation to a specific behavioral dimension or subdimension. The initial agreement for these two individuals was 76%, with follow-up discussion for the remaining classifications resulting in a final agreement of 89%. The main cause for disagreement resulted when multiple behaviors could be relevant to a particular situation. In instances where the raters could not agree, the author made all final classifications. However, in all instances the author reviewed the ratings made by the raters to check whether the ratings made sense rationally. This initial linking of situations and customer service dimensions is shown in Appendix B.

Step 3.2: Linking specific situations to specific customer service behaviors.

After the raters had classified the 206 situations to a particular dimension or sub-dimension, the author then linked each situation in a dimension to a specific behavior within each dimension or sub-dimension. Since the behaviors within a dimension were very similar, and the situations linked to a dimension were also similar, this step was relatively easy to perform. However, some small editing or changes to either the behavior or situation were sometimes necessary to make these two parts make sense. Once this step was complete, the author constructed the behavioral response options.

Specifically, the behavioral response options were created rationally and written to reflect a range of the specific customer service behavior within a given situation

(Appendix C shows the responses written for each situation). For example, the situation “It is a very hot day and you would like to wear shorts to work. Although wearing shorts is not against the company dress code, your manager prefers that employees wear pants. What might you do on days when it is hot?” (situation 1 in Appendix C) was linked to behavior “wear appropriate type of clothing” in the “tangibles” dimension. The response options were then written to reflect a range of this type of behavior in this specific situation:

- A) Wear pants all of the time and never wear shorts
- B) Wear pants most of the time and rarely wear shorts
- C) Wear pants and shorts about the same amount of time
- D) Wear shorts most of the time and rarely wear pants
- E) Wear shorts all of the time and never wear pants

Each of the behaviors in the other situations were written in a similar manner. The complete list of these situations and response options is shown in Appendix C. In some instances the behaviors and situations were slightly reworded to make the situation and corresponding behaviors more similar, but the original content and meaning of both the situation and behavior were unchanged. Once this step was completed, the initial content of the DSI was complete. The following steps focus on refining the instrument for administration.

Phase 4: Rating of Situations and Behavioral Response Options

In this phase, the primary concern is to have experts rate the situations and behavioral response options for their relevance to the personality constructs most important for providing customer service: neuroticism, agreeableness, dependability, and achievement (e.g., Frei & McDaniel, 1998; Hogan et al., 1984).

Step 4.1: Rating of situations. The situational ratings were conducted with the ultimate goal of assigning to each situation one specific personality trait most “taxed” or required for handling the situation. The situational ratings were made by three graduate students familiar with personality research and the five factor model. Each individual read each situation and made two judgments. First, each situation was judged for its relevance to customer service contexts. Second, each situation was judged for its relevance to a particular personality construct (i.e., neuroticism, agreeableness, dependability, or achievement). That is, each individual rated each situation in terms of which personality trait would be most required to effectively handle that situation. Stated differently, the raters’ task was to assess which personality trait was most “taxed” by each situation. The following rating scale was used:

- 1 = Completely irrelevant: the trait is completely unnecessary for handling the situation
- 2 = Barely relevant: the situation weakly requires the trait, but other traits are more important
- 3 = Moderately relevant: the situation requires the trait, but other traits are equally important
- 4 = Very relevant: the situation requires the trait, and other traits are less important
- 5 = Extremely relevant: the situation could not be handled without the trait

The raters were then given a description of each trait, with high and low manifestations of the trait, as a guide. These definitions are shown in Appendix D and were drawn from several recent definitions (e.g., Hough, 1998; Hogan & Shelton, 1998; McCrae & Costa, 1992). These raters were also given several practice situations to rate to ensure they were all providing ratings in a similar fashion. Note that these individuals focused solely on the situations and did not consider the behavioral response options.

The data that resulted from these ratings was thus continuous for each personality trait. For each situation, the ratings from the three raters were averaged for each

personality trait. This resulted in a total of 824 ratings (i.e., 4 personality ratings for each of the 206 situations). Because the ratings were continuous for each trait, the estimation of categorical indices of agreement (e.g., kappa) was not appropriate. On the other hand, having only three raters precluded the use of variance component models (e.g., generalizability theory) or estimates of within-group agreement (e.g., R_{wg} requires at least 10 subjects). Thus, a rational approach to assessing agreement was required. This rational approach first required ratings for each trait for each situation to be averaged across the three raters, and the standard deviation was computed (it might be noted that the standard deviation has been recommended as an alternative to R_{wg} estimates). Given this basic data, the following criteria were used to decide whether sufficient agreement existed between ratings to warrant the assignment of one specific personality trait to a given situation:

1. The construct with the highest mean (and relatively low standard deviation) was kept
2. There were no constructs with mean ratings closer than .5
3. There were no ties

These criteria were chosen because they provided the best compromise between keeping items in the pool and keeping items where the raters could agree on a particular construct. If a situation met these three criteria, it remained in the item pool and was assigned to a particular personality construct. For example, consider the following situation and ratings:

“You work as a waiter/waitress. As you are delivering food to a customer, you notice your shirt is no longer tucked into your pants (which is required by company policy). Your manager is looking directly at you. What do you do?”

Neuroticism:	Mean = 4.33, SD = 1.15
Agreeableness	Mean = 2.00, SD = 1.73
Dependability	Mean = 4.33, SD = 1.15
Achievement	Mean = 4.33, SD = 1.15

As the ratings of this situation did not meet the previously stated criteria, this situation was dropped because it could not be meaningfully classified to one specific trait. Alternatively, consider this situation that met all of the criteria:

“A customer is telling you a personal story that is completely unbelievable and that you think is factually incorrect. What do you do?”

Neuroticism:	Mean = 2.00, SD = 1.73
Agreeableness	Mean = 5.00, SD = 0.00
Dependability	Mean = 1.67, SD = .58
Achievement	Mean = 3.33, SD = 2.08

Overall, a total of 65 items were eliminated because they failed to meet the above criteria. Although this approach was primarily rational, it did seem to eliminate many ambiguous situations (i.e., those that could not be assigned to a personality construct). In the following section, discussion centers on the ratings of behaviors.

Step 4.2: Rating of behavioral response options. The behavioral response option ratings were conducted in a manner similar to the situational ratings, and again with the ultimate goal of assigning a specific trait to the behavioral options. The situational ratings were made by two graduate students familiar with personality research and the FFM. The rating task proceeded as follows.

First, each individual read the situation and then the behavioral options. Recall that the options were written such that they represented a range of a specific behavior.

Thus, each option was essentially the same behavior as the other options, but differed in the extremity of the behavior. This means the options were on a continuum from high to low examples of the behavior in the specific situation. The raters' first task was to judge the relevance of the situation and behavioral response options to a customer service context. Those situations or behaviors that were considered to be irrelevant were to be crossed out.

Second, the individuals reviewed the behavioral response options and, overall, judged whether the options (as a set) were a manifestation of a particular personality trait.

Similar to the situation ratings, the following scale was used:

- 1 = Completely irrelevant: the trait is completely unrelated to the response options
- 2 = Barely relevant: the trait is weakly related to the response options
- 3 = Moderately relevant: the trait is moderately related to the response options
- 4 = Very relevant: the trait is highly related to the response options
- 5 = Extremely relevant: the trait is extremely related to the response options.

As with the situation ratings, the definition and examples of the personality traits (as shown in Appendix D) were provided. Thus, the trait definitions were to be treated as the latent constructs, and the rating task involved judging whether each set of behavioral response options were a manifestation (in a customer service context) of the latent trait. Ratings were made for each of the four personality constructs for each set of behavioral options; thus with 206 items there were 824 ratings made.

Third, the raters were asked to consider the appropriateness of the behavioral response options for the situation. Those response options considered to be inappropriate for the situation were either dropped or edited to provide greater fidelity.

Finally, the raters examined the continuum upon which the response options were placed. This was done to ensure that the response options were in fact on a behavioral

continuum. In a few instances, the options were edited slightly or re-ordered. Overall, however, very few response options needed any editing or changes.

The data that resulted from these ratings was continuous for each personality trait. For each set of options, the ratings from the two raters were averaged for each personality trait. Similar to assessing agreement in the situational ratings, a rational approach to assessing agreement was required. This rational approach first required ratings for each trait for each set of behavioral options to be averaged across the two raters, and the standard deviation was computed. Given this basic data, the following criteria were used to decide whether sufficient agreement existed between ratings to warrant the assignment of one specific personality trait to a given set of options:

1. The construct with the highest mean (and relatively low standard deviation) was kept
2. There were no constructs with mean ratings closer than 1.00
3. There were no ties

These criteria were chosen because they provided the best compromise between keeping items in the pool and keeping items where the raters could agree on a particular construct. If the response options met these three criteria, it remained in the item pool and was assigned to a particular personality construct. For example, consider the following situation and response options:

“You are helping a customer by bringing different clothes to the fitting room. However, this person has been shopping for over an hour and you are starting to think s/he is not going to buy anything. What do you do?”

- a) Do not rush the customer but let him or her shop at his/her own pace**
- b) Slightly try to hurry the customer**
- c) Moderately try to hurry the customer**
- d) Hurry the customer in any way you can**

Neuroticism:	Mean = 1.5, SD = .71
Agreeableness	Mean = 3.50, SD = .71
Dependability	Mean = 3.00, SD = 0.00
Achievement	Mean = 3.50, SD = 2.12

In this instance, option A is likely to represent agreeableness or dependability, and response options B-D likely represent achievement. As the ratings of these response options did not meet the previously stated criteria, this item was dropped because it could not be meaningfully classified to one specific trait. Alternatively, consider this situation and options that met all of the criteria:

“A customer walks into your store who is not well dressed. Your store is one that sells very expensive clothes, something the customer does not appear to be able to afford. There are better dressed customers who are farther away in the store but have not been waited on. What do you do?”

- a) Immediately help the customer who is poorly dressed**
- b) Watch the poorly dressed customer to see if s/he is a “real” customer, then offer help**
- c) Watch the better dressed customers to see if they might need help first**
- d) Immediately help the customers who are better dressed**

Neuroticism:	Mean = 1.00, SD = 0.00
Agreeableness	Mean = 2.00, SD = 1.41
Dependability	Mean = 5.00, SD = 0.00
Achievement	Mean = 1.50, SD = 0.71

Overall, a total of 50 items were eliminated because they failed to meet the above criteria. As with the situational ratings, the approach used here was conservative in that if

an item was close to meeting the criteria, it was kept for further analysis. Now that the behavioral response options had been rated, it was possible to compare rating of situations to ratings of behaviors.

Step 4.3: Comparing ratings of situations and behaviors. The final rating step involved comparing the situational ratings to the behavioral ratings for all items that remained in the item pool. Of the total 206 original items, 105 items remained. The reason is that 101 items were eliminated in the previous steps: 65 items from the situational analysis, 50 from the behavioral analysis, and between these two analyses only 14 items were shared.

Thus, the behavioral and situational ratings were compared for the remaining 105 items. These results found that 73 of the 105 ratings were in agreement (i.e., both sets of ratings concluded the same personality construct was relevant). Appendix E shows the 105 items and their situational and behavioral ratings, clustered by criterion dimensions. Of the 105 items, five were judged to be neuroticism items, 12 were agreeableness items, 23 were dependability items, and 33 were achievement items. The main sources of disagreement between the two sets of ratings were for the neuroticism dimension (where situational ratings indicated 16 situations tapped neuroticism whereas behavioral ratings indicated 6—one of these did not overlap with the situational ratings) and the dependability dimension (24 situations judged to tap dependability compared to 35 behavioral response options). Although one might argue that the items that were not in agreement should be eliminated from the final scale, it was decided that they would remain in the item pool for all subsequent analyses. The reason is that it was considered

more cautious to consider the empirical characteristics of these items before completely eliminating them from the pool.

Also note that no items remained that were drawn from the criterion assurance sub-dimension “explaining the service,” the communication subdimension “appropriate communication,” and the criterion dimension “supervision/leadership.” For these criterion dimensions, there were no items in agreement (between situational and behavioral ratings) about which personality trait was most representative. Thus, there are no test items linked to these dimensions and subsequent behaviors.

Summary. The test shown in Appendix E represents the final form of the DSI before the empirical portion of the study began. It should be remembered that the items in Appendix E are unique in that they represent several domains simultaneously: (a) they are linked to a specific criterion domain, (b) they are linked to a specific behavior, and (c) they are linked to a specific personality trait (or traits for the 32 items for which situational and behavioral ratings disagreed). Thus, this instrument represents a test assessing personality within a customer service context. The situations should have high fidelity to most customer service contexts, and the behaviors represent actual customer service behaviors within these work contexts. At the same time, these items should represent measures of personality (i.e., neuroticism, agreeableness, dependability, and achievement) in work contexts.

At this point, it may be helpful to briefly contrast the method used here to more traditional SJT development methods. First, the traditional way of developing SJTs is to ask SMEs to describe various work related situations. Second, a different group of SMEs determine the relevance of these situations and provide what they think the best way of

handling the situation would be. Third, experts (e.g., managers) decide what is the best response and/or worst response to each situation. Thus, throughout the development process there is no consideration of the meaning of the situations, the behavioral responses, or the relations between the two. This is probably the reason that it is often unclear what construct(s) SJTs measure (e.g. Weekley & Jones, 1997).

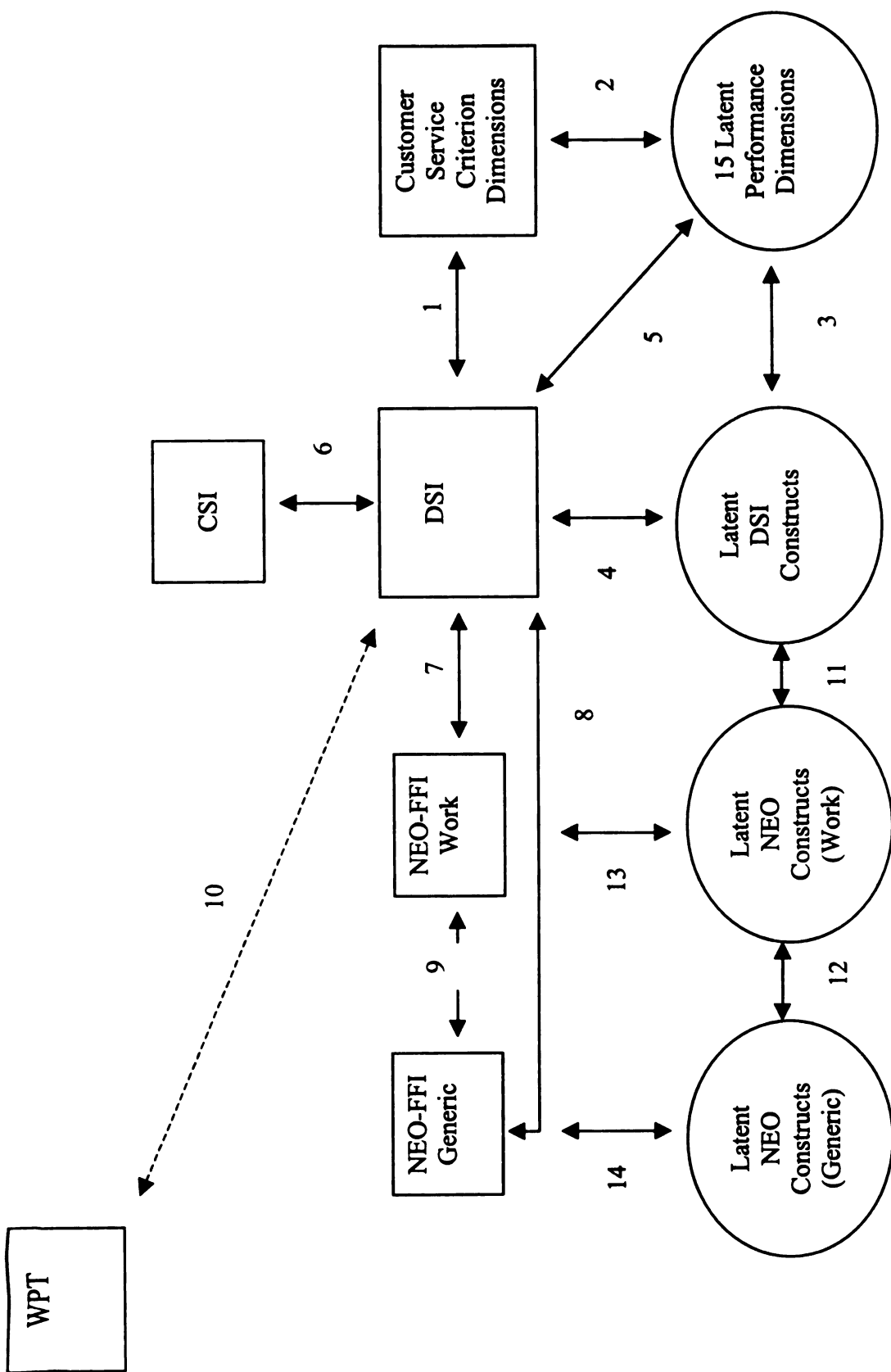
In contrast, the method used here builds from the criterion development phase by identifying important work behaviors and dimensions. Situations are then generated that should result in the maximal amount of variability in the relevant behavior. These criterion behaviors are also linked to specific personality traits. Behavioral response options are then written to reflect variability within a given trait in a given situation. Thus, the work situations are linked to specific work behaviors which reflect a range in a specific trait. This foundation will hopefully provide some meaning into the nature of the situations elicited (e.g., Murtha et al., 1996). Overall, the method used here should result in a more theoretical and construct-oriented situation generation method than is used than is common in SJT development.

At this point, the DSI had been read and deemed content valid by over 10 individuals familiar with personality and customer service. Progress next moved towards the empirical evaluation of the DSI instrument.

Phase 5: Assessing Construct Validity

The assessment of construct validity composes the most critical test for the DSI. In Figure 5, a simplified model of the inferences that support the construct validity of the DSI are presented.

Figure 5. Simplified validity model examined in this study. Note that measures more proximal are more conceptually similar, with constructs on the same horizontal axis representing variations of the same construct and those on the vertical axis representing different constructs. Boxes indicate manifest measures, circles indicate latent constructs, solid arrows indicate theoretical relationships, and dashed arrows indicated relationships that were examined but not theoretically expected. For clarity, only the DSI measure is shown to be related to the criterion dimensions.



Note that Figure 5 draws heavily from an elaborated validation model described by Binning and Barrett (1989), but still incorporates the basic elements of validity (e.g., SIOP Principles, 1987; Schmitt & Landy, 1993): criterion (relationships between manifest DSI and manifest criterion dimensions), and content (relationship between manifest DSI and latent performance domain). Together, the sum of the relationships shown in Figure 5 comprise construct validity for the DSI (e.g., Anastasi, 1986; Guion, 1998).

Note that some evidence of construct validity had already been demonstrated. Specifically, the application of theoretical and rational considerations in the development of the DSI, along with the use of experts who rated the relevance and job-relatedness of the DSI items in the previous phases, provided some support for the content validity of the DSI (Guion, 1998). However, in this phase empirical approaches to assessing construct validity were considered. These are described in several steps.

First (Section 5.1), the criterion domain was assessed to ensure the nature of customer service was adequately described. This provides information about inference 2 in Figure 5. After this step, the remaining steps focus on the final development and validity of the DSI.

Second (Section 5.2), the characteristics of the DSI were examined by assessing various item and test statistics. This provided information for inference 4 in Figure 5. The effort summarized in this step leads to the development of the DSI.

Third (Section 5.3), the construct validity of the DSI constructs were examined in a multitrait-multimethod (MTMM) matrix. Here the DSI was compared to other similar

measures of personality and customer service. This provides information about inferences 6-10

Finally (Section 5.4), an examination of the predictive validity of the DSI constructs (inferences 1 and thus 5) was examined with customer service job incumbents. In this section, both univariate and multivariate examinations of validity are conducted. There was also a comparison of the predictive validities of the various measures shown in Figure 5.

Together, it is the sum of this information comprises construct validity. Brief summaries are provided at the end of each section, but it is the all of the information about the inferences in Figure 5 that will ultimately provide initial evidence about the DSI. Please note that the same study participants were used for the DSI development, MTMM analyses, and assessment of predictive validity. Although some might argue it would be preferable to have separate samples for each analysis (e.g., to reduce the likelihood of sample-specific factors), it was considered appropriate in this instance because all of this information is a form of construct validity (e.g., Guion, 1998; Schmitt & Landy, 1993). Thus, the MTMM and predictive validity analyses were not viewed as separate questions but different ways of answering the same question.

For both the MTMM and predictive validity analyses, a variety of alternative measures were used. This was done to establish the construct validity of the DSI, and to compare the predictive validity of the DSI to alternative measures of the same or similar constructs. In the following sections, the sample, procedure, and measures are described. First, a brief description of the sample is provided. Next, traditional measures that were

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already existing are described in the Measures section. Finally, measures created for this study, including the criterion measures and DSI, are described in 5.1 below.

Participants and Data Collection Procedures

Participants were recruited from several diverse sources but had the common feature of being currently employed in a job that had a substantial customer service component. The total sample size contained 209 individuals (please see Table 7).

Table 7. Demographic Breakdown of Study Participants

Demographic	Overall	Residence Hall	Other Service	Subject Pool
Sample Size	209	123	10	76
Race				
White	81.8%	81.3%	100%	80.3%
African-American	11.5%	12.2%	0	11.8%
Hispanic	1.4%	.8%	0	2.6%
Asian	5.3%	5.7%	0	5.3%
Sex				
Male	16.3%	9.8%	70%	19.7%
Female	83.7%	90.2%	30%	80.3%
Age	20.96 (4.87)	20.28 (1.49)	43 (11.4)	19.71 (1.83)
Job Experience (months)				
Mean (SD)	17.32 (20.65)	15.22 (12.84)	54.7 (63.17)	15.59 (14.71)
Median	11	11	28.5	9
Range	1-178	1-72	1-178	1-60

Residence Hall. Participants included 123 individuals who were employed as residence hall desk receptionists at one of seven Michigan State University residence halls. As Table 7 shows, this sample was predominately White (81.3%), male (90.2%), and young ($M = 20.28$, $SD = 1.49$). This group of individuals had worked on this type of job for an average of 15 months. Job duties for desk receptionists included helping hall residents with questions or problems, handling money, checking out equipment, keeping records, and basically helping individuals with any and all questions they may have. In addition, they were specifically instructed to present a favorable image of the hall and university. Thus, for this sample, customers were primarily composed of hall residents. Although all desk receptionists were students employed part time, it should be emphasized that these were actual employees and this was a real job. These individuals had gone through a selection process (i.e., interviews) and were hired on the basis of their customer service potential. Furthermore, the receptionist personnel were promoted, received raises, and/or were reprimanded based primarily on their customer service performance.

At each residence hall there were several student supervisors who were promoted to this rank under each hall's existing promotional system. These student supervisors reported directly to the assistant director for each residence hall. The supervisors were typically junior or senior students and had worked at the hall for many years. The supervisors were in charge of most administrative duties relating to the desk receptionists (e.g., making merit-based pay decisions) as well as continuing to work as a receptionist. In each hall, two supervisors were instructed to rate each employee under the following conditions: (a) they were very familiar with the employee's performance and (b) had

numerous opportunities to observe the employee at work. Each supervisor was given approximately half an hour of training on how to perform the ratings and minimize rater biases. The residence hall supervisors also completed the battery of test instruments, but typically did not have performance ratings made for them by the assistant director.

Data were collected from the residence halls in one of four ways. First and most common, data were collected from small to moderate sized groups at the start of the monthly residence hall meeting. After describing the project, participants were administered the Wonderlic Personnel Test (WPT). Because this test was a timed test, participants were required to complete the test in the presence of the experimenter. After the WPT was completed, participants were given a booklet containing the remaining tests that were to be completed on the participants' own time but returned within 1-2 weeks (they were usually paid for two hours by the residence hall). Participants were told that they were to complete the tests honestly because they might be used in the future hiring of residence hall receptionists. However, they were also told by the experimenter and director that their employment was not dependent on their test performance, and to ensure their confidentiality the booklet would be returned directly to the experimenter in a sealed envelope. The same was true of the performance ratings for each individual. In this way, no supervisor could see an employee's test scores, and no employee could see a supervisor's performance ratings.

In the second manner of administration, participants were given all test materials in the same meeting and returned them directly to the experimenter. In the third administration mode, the experimenter met with participants individually to administer the WPT, and then left the test booklet to be completed on the individual's own time and

returned directly to the experimenter. In the final administration mode ($n = 24$), participants were simply given all of the test materials and were told to complete the materials on their own time. This was done in instances where somebody missed a meeting but still wanted to participate, but could not schedule a time with the experimenter. Note that these individuals were also instructed to allow themselves only 12 minutes on the Wonderlic Personnel Test. Unfortunately, there was no objective way to determine if these individuals actually followed these instructions, so their Wonderlic Personnel Test scores were simply set to missing. As there was no timed component with the remaining tests, only the Wonderlic scores could not be used.

Other Service. Participants in this job category were individuals ($n = 3$) employed as cashiers in a small bank and as customer service representatives in a small construction company ($n = 7$). Both jobs were actually very similar in that the principal duties involved greeting customers and helping them with their orders, handling customers' money, pointing out services offered, and attempting to solve service problems. Both companies were located in the Midwest. Participation was voluntary, and performance ratings were made by the immediate supervisor. The data from both companies was combined given the small sample sizes and similar job duties in each. In this job category, participants were relatively homogeneous: all were White, most were male (70%), were older ($M = 43$, $SD = 11.4$), and were very experienced in their jobs ($M = 54.7$ months, $SD = 63.17$).

Data collection involved having each participant complete the test materials on his or her own time (although they were paid for their time). Only the WPT was completed with the supervisor being present, although after this test was completed it was sealed in

an envelope and returned directly to the experimenter. The test booklet and performance ratings were also returned directly to the experimenter. Descriptions of the project and confidentiality were conducted by the immediate supervisor in a manner similar to the residence hall sample.

Subject Pool. Participants ($n = 76$) were also recruited from the general psychology subject pool at Michigan State University. However, participation was contingent on the fact that individuals had to be currently employed in customer service jobs (examples were given that included waiter/waitress jobs, retail, cashier, sales, or customer service positions). This sample was primarily White (80.3%), female (80.3%), and young ($M = 19.71$, $SD = 1.83$). These individuals reported working in a variety of jobs, including retail, food service, customer service, and cashier. Many of these individuals reported working part time at these jobs for several months ($M = 15.59$ months, $SD = 14.71$), although it should be noted that most of these jobs were part time and held in the individual's home town (many of these participants only worked there during Summer and breaks). Despite the requirement that participants be employed in customer service jobs, a few individuals had no experience but were still allowed to participate in order to collect data on the predictors.

In the subject pool sample, data collection involved introducing participants to the study and describing all aspects of the project, including confidentiality. In this sample, participants also used a code number to ensure anonymity. They were also asked to take a criterion rating form to their supervisor after the experiment for him or her to complete (their code number was written on the criterion form). They were given a stamped and addressed envelope for the supervisor to return the form directly to the experimenter. It

was made very clear that participants were compensated for their experimental time by course credits and that they would receive no more credit if their supervisor returned the form or not. However, as an incentive to get participants to return the form, the experimenter paid \$10.00 for each criterion form that was completed and returned. After these instructions, participants completed the battery of tests.

I should caution the reader here that, after collection of the criterion data from this sample, the validity of the criterion ratings in the subject pool sample must be viewed cautiously. More will be said about this shortly, but it is worthwhile to mention a few points here. First, the wide variety of jobs these individuals were employed in may make the criterion ratings incomparable. For example, the instructions on the ratings asked the supervisor to rate the employee relative to other employees. Two employees may exhibit identical behaviors, but are likely to be rated differently if one works in a fast food business and one works at a fine dining establishment. Second, providing a monetary incentive for returning the performance appraisal forms probably led to many people simply completing the forms themselves. Although there is no way to be certain, the lack of variance in the ratings (and the speed at which many were returned) makes one question whether the ratings were completed by supervisors. For example, the overall distribution of the ratings in the subject pool sample was rectangular. Although these ratings are included in the following sections, for the reasons just mentioned analyses will be conducted both with the total group of respondents and with this group separate from the others.

Thus, this study will consider two samples: those in the Employed Sample (i.e., residence halls and other service jobs; $n = 133$), and those in the Combined Sample (i.e.,

participants in the employed sample and the subject pool sample; $n = 209$). Note, that the primary problem with the subject pool sample relates to the criterion ratings, not the predictor measures. Thus, for assessment of the construct validity of the DSI (i.e., Sections 5.1 to 5.3), only the combined sample will be considered. Later, when predictive validity is assessed (Section 5.4), the analyses will be conducted for both the combined sample and the employed sample. This means the sample size will be 209 for the DSI scale development phases, and the sample size will be approximately 166 (combined) and 119 (employed) for the predictive validity analyses (these are smaller due to some missing data in the criterion forms).

Measures

In this section, existing measures of demonstrated validity are described.

Together, these measures provide the nomological network around which the proposed DSI *i*nstrument exists. All descriptive statistics, and reliability estimates for each *meas*ure, are shown for the combined sample in Table 8.

Table 8. Note: Correlations below the diagonal are uncorrected; correlations above the diagonal are corrected for attenuation. Reliabilities appear on the diagonal in parentheses. The “W” following some NEO scales indicates at-work tags are used. N’s range from 208 to 209 for all measures except for the WPT, where n = 184. Values greater than .13 are significant at $p < .05$. Underlined type indicates relations that demonstrate convergent validity. Boxed correlations indicate monotrait-heteromethod matrices.

Table 8. Means, Standard Deviations, Intercorrelations among Predictor Measures

Construct	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. NEO Neuroticism	18.17	6.69	(.80)	-.41	-.33	-.62	-.47	.83	-.25	-.42	-.45	-.23	-.28	-.21	-.22	-.44	-.02
2. NEO Agreeableness	34.89	5.44	-.32	(.76)	.31	.39	.45	-.38	.95	.44	.06	.51	.22	.02	.18	.67	.00
3. NEO Achievement	21.79	4.22	-.26	.24	(.77)	.83	.89	-.18	.27	.65	-.10	.20	.68	.25	.44	.33	-.10
4. NEO Dependability	23.06	4.66	-.50	.31	.66	(.82)	.98	-.43	.37	.77	.06	.26	.45	.43	.48	.45	-.15
5. NEO Conscientiousness	36.30	5.73	-.38	.36	.71	.81	(.83)	-.34	.36	.85	-.06	.21	.49	.35	.47	.41	-.07
6. NEO Neuroticism-W	13.48	5.87	.65	-.29	-.14	-.34	-.27	(.77)	-.45	-.42	-.56	-.33	.04	-.20	-.11	-.32	-.13
7. NEO Agreeableness-W	36.56	5.21	-.19	.71	.20	.29	.28	-.34	(.73)	.72	.02	.39	.20	-.09	.04	.49	.05
8. NEO Conscientiousness-W	37.74	5.49	-.34	.35	.52	.63	.70	-.33	.56	(.82)	.06	.21	.60	.34	.40	.30	-.07
9. DSI Neuroticism	2.92	.30	-.23	.03	-.05	.03	-.03	-.28	.01	.03	(.32)	.59	.17	.36	.41	.10	.23
10. DSI Agreeableness	3.07	.35	-.14	.31	.12	.16	.13	-.20	.23	.13	.23	(.48)	.89	.86	.82	.49	-.02
11. DSI Achievement	3.00	.36	-.13	.10	.31	.21	.23	.02	.09	.28	.05	.32	(.27)	1.00	1.00	.32	-.23
12. DSI Dependability	3.25	.40	-.13	.01	.15	.27	.22	-.12	-.05	.21	.14	.41	.39	(.47)	1.00	.17	-.25
13. DSI Conscientiousness	3.03	.29	-.16	.13	.32	.36	.35	-.08	.03	.30	.19	.47	.64	.68	(.68)	.21	-.17
14. CSI	60.77	8.59	-.34	.50	.25	.35	.32	-.24	.36	.23	.05	.29	.14	.10	.15	(.73)	.11
15. WPT	27.29	5.73	-.02	.00	-.08	-.13	-.06	-.11	.04	-.06	.12	-.01	-.11	-.16	-.13	.09	(.88)

Wonderlic Personnel Test (WPT). The WPT is a basic cognitive ability test commonly used in industry (Wonderlic User's Manual, 1992). The test contains 50 items and has a 12 minute time limit. The predictive validity (usually .25 to .40) and reliability (internal consistency .88; test retest .82 to .94) of this test are relatively high. Although this instrument should not be related to service orientation or customer service (see Frei & McDaniel, 1998), it is included for two reasons. The first is to compare the validity of the proposed instrument to that of a cognitive ability test. Ability tests have been shown to be among the best predictors for most jobs (e.g., Hunter & Hunter, 1984) and thus one would like to assess the relations between ability and customer service behaviors in the present study to examine if the DSI is a better predictor. The second reason is that it would be informative to explore the relations between the DSI and g for construct validation issues. According to the User's Manual (1992), the scores on the WPT in this sample ($M = 27.29$, $SD = 5.73$) are about one standard deviation higher than those found in the general adult working population ($M = 21.75$, $SD = 7.6$) and about a third of a standard deviation lower than those found with college graduates ($M = 29.61$, $SD = 6.3$).

NEO-FFI, Generic (NEO-FFI-G). This instrument is the shortened version of the longer NEO-PI-R and is designed to assess the Big 5 factors of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Costa and McCrae's, 1992). This measure has been used widely in past research and is based on considerable empirical development and validation data (see Costa & McCrae, 1992). It has also been widely used in applied contexts (e.g., Psychological Assessment Resources, 1994). Unlike the longer 240 item NEO-PI-R instrument that assess the facet scales of the Big 5, the NEO-FFI measures each of the Big 5 constructs directly by using the best items (i.e.,

those with the strongest factor loadings) from the longer version. There are 60 items for the NEO-FFI (12 items per construct) answered on a five-point scale anchored by strongly disagree-strongly agree. These items are then recoded to fit on a zero to four scale. For all constructs, higher numbers indicate greater quantities of the attribute (this is why neuroticism has negative relationships with other constructs). The reliability of the Big 5 scales is acceptable and similar to the longer NEO form: neuroticism (.90), extraversion (.78), openness (.76), agreeableness (.86), conscientiousness (.90).

As shown in Table 8, the alphas in this study are on average .10 lower than those reported in the manual: neuroticism (.80), agreeableness (.76), conscientiousness (.82). This may be due to the fact that this is a restricted sample of individuals who have been selected to work in (and who have been hired in) customer service jobs. There is some evidence that possibly small amounts of (indirect) range restriction are present (more will be said about this later). The user's manual suggests the unrestricted sample descriptives are: neuroticism ($M = 19.07$, $SD = 7.68$), agreeableness ($M = 32.84$, $SD = 4.97$), conscientiousness ($M = 34.57$, $SD = 5.88$); college-aged samples show similar characteristics. As Table 8 shows, the means in this sample were slightly higher and the standard deviations were .10 to 1 smaller. Thus, the means in this sample are slightly more favorable but the standard deviations are slightly smaller than the normative sample. Finally, the pattern of intercorrelations in this sample is almost identical to that provided by the normative information.

NEO-FFI, Work-related (NEO-FFI-W). This instrument is identical to the NEO-FFI-G noted above, except that "at work" tags have been added to the items. For example, the item "I am not a worrier" is changed to "I am not a worrier at work." Thus,

the primary revision to the original NEO-FFI is the inclusion of a work context, as was done in the Schmit et al. (1995) study. There is no normative data for these measures. However, one can compare the findings in this study to the generic NEO scales described above and the findings in Schmit et al. (1995). First, as shown in Table 8, the at-work scales exhibit more favorable means and smaller standard deviations than the generic NEO scales in this study (this of course also means that the at-work scales exhibit more favorable means and smaller standard deviations than the normative data on the generic NEO scales). For example, the work-referent conscientiousness measure has a mean of 37.74 ($SD = 5.49$), in the normative data with the generic scale the mean is 34.57 ($SD = 5.88$) and in this study the generic measure is 36.30 ($SD = 5.73$). Second, the means and standard deviations of the contextualized scales are similar to those found by Schmit et al. (1995): neuroticism ($M = 16.72$, $SD = 7.19$), agreeableness ($M = 37.35$, $SD = 5.88$), and conscientiousness ($M = 39.16$, $SD = 5.46$). Thus, the at-work scales in this study appear to demonstrate similar characteristics to those found by Schmit et al. (1995), who also used a college sample.

Achievement Striving and Self-Discipline. In this study the construct conscientiousness was broken into two more specific sub-factors, dependability and achievement. This was done because some research (e.g., Hogan & Shelton, 1998; Hough, 1992; 1998) suggests the conscientiousness factor is too broad for predictive purposes in a selection context. Thus, to establish forms of convergent validity for the dependability and achievement factors, more specific measures of conscientiousness would be necessary. This study used two conscientious facet measures from the NEO-PI-R (Costa & McCrae, 1992). Specifically, achievement striving reflects an individual's

work ethic and professional aspirations and is related to the achievement construct examined in this study. Self-discipline reflects an individual's reliability, dutifulness and self-motivation and should be similar to the dependability construct examined in this study. The reliability for achievement striving is .67 and the reliability for self-discipline is .75 (Costa & McCrae, 1994). Both scales were measured with 8 items each, and are scored on a 0-4 scale (higher numbers indicate more achievement and dependability). Compared to the NEO User's Manual (Costa & McCrae, 1992), the scales used here have higher alphas (about .05 - .07 higher), slightly higher means, similar standard deviations, and similar intercorrelations with other NEO measures.

PDI Customer Service Inventory (CSI). The PDI Customer Service Inventory (Paajanen, Hansen, & McLellan, 1993) is among the most popular customer service assessment instruments available (e.g., Frei & McDaniel, 1998). The Customer Service Inventory (hereafter referred to as the CSI) is an instrument that is designed to predict the provision of satisfactory customer service by an employee who deals directly with customers. To accomplish this goal, the CSI measures the types of characteristics (i.e., dispositions) that are required for effectively dealing with customers. The CSI contains three major sections. The first section contains 44 true and false questions that assess the individual's attitudes and opinions toward certain events (e.g., "You are a perfectionist"). The second section contains 10 self-descriptions, where the individual chooses the one word out of three words that best describes him or her (e.g., steady, energetic, or sociable). The final section contains nine customer service situations that require the individual to choose the response that he or she would most likely do. This final section is almost identical to the DSI format.

Given these different formats within the instrument, the CSI is inherently multidimensional. Although this fact prohibits assessment of internal consistency, test-retest reliability appears to be quite high (reliability = .86; Paajanen et al., 1993). Predictive validity for the CSI is consistent with research on personality, with observed predictive validities for overall performance ranging between .11 to .33. The scoring of the CSI is proprietary, but ranges from 5 to 85 (higher numbers indicate greater service orientation). There is very little normative data on the CSI, and the data that is provided appears to be relatively sample-dependent (e.g., flight attendants score 20 points higher than fast food employees). However, given a range of jobs, the mean in this sample (please see Table 8) is similar to an average mean computed from the User's Manual (Paajanen et al., 1993), although the standard deviation is somewhat lower.

One noteworthy feature of the CSI is that it was based on basic personality dimensions (not the Big 5) that were relevant for the customer service context. Thus, the CSI is in some ways similar to the instrument developed here. However, the final CSI instrument is one that is multidimensional and does not have sub-scores for different constructs within the test, despite the fact that five factors are purported to exist (friendly, competent, practical and realistic, courteous and tactful, and open-minded). In this manner the CSI is really a measure of the broad conceptualization of customer service rather than of a specific personality trait or traits. As such, it may provide limited understanding about what aspects of basic personality relate to performance (e.g., Anastasi & Urbina, 1997; Hough, 1998; Mount & Barrick, 1995; Nunnally & Bernstein, 1994; see also Guion, 1963; Schmidt & Kaplan, 1971, for similar ideas). Given the similarities between the CSI and the DSI, the CSI should prove to be a useful instrument

to provide evidence for forms of construct validity (i.e., combining the sub-scales of the DSI is similar to the compound trait of customer service orientation). However, the CSI also illustrates an application of compound (heterogeneous) traits for maximal prediction, and so should provide a good comparison for the predictive validity of the DSI.

Step 5.1: Assessment of performance domain. Given that this study integrated various performance taxonomies to define the customer service performance domain, the first analyses were conducted to assess the structure of this domain. Thus, this section is primarily concerned with Inference 2 in Figure 5 (i.e., the construct validity of the performance measures). To examine this question, the descriptive statistics for the criterion dimensions were examined. Recall that two samples are being used for the criterion ratings: an employed sample (122 residence hall employees and 9 customer service representatives had performance ratings, for a total of 131), and a combined sample (those in the employed sample, plus 47 subject pool participants who had ratings, for a total of 178). Of these, only the residence hall participants (and one participant in the subject pool) were rated by two supervisors each. Because two samples are used for all analyses involving the criterion, descriptive statistics will be provided for (a) the combined sample ($n = 178$) and (b) the employed sample ($n = 131$). Each of these samples will be described below.

First, for the employed sample, assessment must be made as to whether the two supervisors' ratings can be meaningfully combined into a single average rating for each dimension. Table 9 presents the means, standard deviations, intercorrelations, and (when possible) internal consistency estimates for each criterion dimension for each rater. Note that a five-point scale was used for all ratings.

Table 9. Note: All ratings are based on a five-point scale. Internal consistency estimates appear on the diagonal for multi-item scales (except for communication with uses a two-item scale; here the diagonal value represents the intercorrelation between the two items). A “1” or “2” following a criterion dimension indicates whether the rating is respectively for the first or second supervisor. N’s for intercorrelations among first supervisor’s ratings range between 170-173; for intercorrelations among second supervisor’s ratings n = 117; n’s for intercorrelations between first and second supervisors’ ratings range between 110-112.

Table 9. Descriptive Statistics and Intercorrelations of Criterion Dimensions for Both Raters

Criterion Dimension	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Tangibles 1	3.71	.80	.87															
2. Reliability 1	3.74	.80	.78	.88														
3. Responsiveness 1	3.78	.78	.77	.77	.89													
4. Assurance 1	3.70	.68	.74	.81	.81	.93												
5. Perceptiveness 1	3.57	.70	.65	.73	.71	.82	.91											
6. Communication 1	3.71	.70	.64	.76	.74	.78	.79	.76										
7. Competence 1	3.74	.91	.57	.61	.59	.65	.60	.61	-									
8. Effort 1	3.57	.98	.62	.72	.71	.79	.77	.72	.70	-								
9. Personal Discipline 1	3.62	.78	.71	.71	.71	.78	.68	.71	.59	.70	.83							
10. Teamwork 1	3.68	.94	.56	.62	.62	.73	.63	.61	.48	.64	.69	-						
11. Supervision 1	3.43	.90	.63	.66	.62	.77	.72	.66	.54	.69	.63	.66	-					
12. Management 1	3.50	.85	.66	.69	.65	.74	.66	.62	.51	.63	.69	.68	.73	-				
13. Volunteering 1	3.71	.94	.49	.60	.57	.65	.66	.57	.52	.64	.61	.68	.58	.63	-			
14. Follows Policy 1	3.86	.93	.56	.64	.61	.66	.49	.56	.55	.56	.63	.55	.50	.56	.44	-		
15. Defends Company 1	3.46	.80	.58	.66	.61	.66	.59	.66	.57	.62	.64	.55	.47	.62	.59	.53	-	
16. Total Performance 1	3.67	.68	.83	.89	.87	.95	.87	.85	.72	.85	.85	.77	.79	.80	.72	.70	.74	.98

Table 9 (cont'd).

Criterion Dimension	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17. Tangibles 2	3.57	0.57	.57	.44	.47	.49	.45	.39	.42	.46	.49	.39	.47	.45	.38	.47	.32	.53
18. Reliability 2	3.57	0.59	.39	.38	.40	.41	.38	.39	.48	.48	.30	.40	.40	.40	.36	.49	.14	.45
19. Responsiveness 2	3.56	0.51	.35	.33	.30	.26	.30	.32	.31	.29	.27	.13	.22	.26	.18	.31	.19	.32
20. Assurance 2	3.47	0.42	.44	.45	.47	.48	.42	.45	.43	.45	.43	.37	.39	.39	.30	.59	.19	.50
21. Perceptiveness 2	3.46	0.49	.44	.51	.46	.46	.51	.53	.46	.53	.41	.35	.43	.48	.40	.52	.34	.53
22. Communication 2	3.64	0.55	.38	.38	.40	.40	.42	.45	.41	.40	.40	.29	.35	.38	.27	.48	.27	.45
23. Competence 2	3.66	0.79	.42	.45	.50	.45	.50	.51	.47	.53	.42	.45	.44	.51	.48	.43	.25	.53
24. Effort 2	3.36	0.76	.49	.48	.50	.44	.44	.46	.43	.53	.38	.35	.42	.39	.39	.47	.30	.51
25. Personal Discip. 2	3.48	0.57	.39	.43	.40	.41	.41	.37	.41	.45	.37	.34	.37	.38	.30	.47	.26	.45
26. Teamwork 2	3.60	0.68	.15	.23	.18	.15	.29	.26	.30	.35	.12	.14	.22	.16	.35	.27	.08	.24
27. Supervision 2	3.28	0.76	.42	.49	.48	.46	.50	.49	.41	.55	.34	.40	.55	.50	.40	.49	.24	.52
28. Management 2	3.48	0.60	.46	.39	.41	.42	.39	.34	.38	.42	.36	.32	.47	.41	.33	.39	.35	.46
29. Volunteering 2	3.41	0.70	.28	.28	.36	.23	.34	.42	.34	.48	.20	.22	.39	.35	.42	.25	.29	.35
30. Follows Policy 2	3.66	0.70	.26	.29	.29	.29	.26	.33	.28	.31	.29	.26	.26	.25	.10	.48	.17	.32
31. Defends Company 2	3.31	0.50	.37	.34	.42	.37	.34	.37	.28	.38	.35	.32	.39	.44	.28	.41	.21	.41
32. Total Performance 2	3.51	0.44	.51	.52	.52	.51	.52	.53	.51	.56	.46	.42	.49	.50	.41	.59	.30	.58

Table 9 (cont'd).

Criterion Dimension	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
17. Tangibles 2	.74															
18. Reliability 2	.68	.85														
19. Responsiveness 2	.66	.58	.80													
20. Assurance 2	.67	.71	.70	.81												
21. Perceptiveness 2	.58	.60	.73	.79	.80											
22. Communication 2	.53	.59	.60	.71	.73	.79										
23. Competence 2	.53	.72	.46	.65	.59	.58	-									
24. Effort 2	.52	.59	.58	.64	.68	.49	.64	-								
25. Personal Discip. 2	.61	.67	.65	.74	.72	.70	.58	.59	.79							
26. Teamwork 2	.44	.56	.49	.50	.52	.42	.54	.55	.53	-						
27. Supervision 2	.52	.66	.55	.68	.66	.47	.66	.67	.53	.55	-					
28. Management 2	.62	.56	.56	.50	.49	.30	.44	.57	.46	.41	.60	-				
29. Volunteering 2	.35	.48	.41	.45	.53	.33	.55	.63	.45	.53	.52	.48	-			
30. Follows Policy 2	.48	.60	.49	.61	.57	.59	.49	.45	.63	.45	.49	.37	.34	-		
31. Defends Company 2	.38	.47	.48	.52	.50	.28	.52	.50	.42	.31	.61	.49	.46	.44	-	
32. Total Performance 2	.78	.83	.81	.91	.87	.77	.76	.76	.84	.65	.77	.65	.60	.69	.60	.97

An examination of Table 9 can be used to assess the adequacy of averaging both supervisors' ratings together for each dimension. First, for both raters the dimensions show very high means (perhaps indicative of leniency and halo biases), although the second set of raters tends to provide slightly lower ratings with less variability. Second, the internal consistency estimates (which treat differences in item content as error) for the multi-item dimensions are similar for both raters and all are above acceptable limits, with some estimates (e.g., overall performance) being nearly perfect. These estimates are equal to or better than estimates provided by meta-analytic studies (e.g., Viswesvaran, Ones, & Schmidt, 1996). Third, the correlations between both raters for each scale give estimates of interrater reliability (which treats differences in ratings as error). These estimates range (see Table 9) from low to moderate (.14 to .58), but are consistent with previous meta-analytic findings (Viswesvaran et al., 1996). Specifically, Viswesvaran et al. (1996) meta-analyzed several thousand interrater estimates and found that the lower and upper bounds for interrater reliability estimates approximately fell between .40 to .70 for most criterion dimensions. With the exception of the teamwork and defending the company dimensions, all of the estimates in the present study are consistent with the Viswesvaran et al. (1996) meta-analytic results.

Given that this study has both internal consistency (for relevant dimensions) and interrater estimates of reliability, one can estimate the variance attributable to different forms of error (Anastasi & Urbina, 1997; Viswesvaran et al., 1996). Specifically, for each multi-item dimension one can subtract observed interrater reliability values from overall internal consistency values (using data from both raters averaged together) to assess variance due to rater idiosyncrasies. These results showed the following estimates

of error for each multi-item construct attributable to rater perspective: Tangibles 29%, Reliability 49%, Responsiveness 58%, Assurance 44%, Perceptiveness 40%, Communication 36%, Personal Discipline 48%, Overall Performance 40%. Thus, these findings suggest that there is a considerable amount of variance attributable to the differing and possibly idiosyncratic perspectives of both raters.

Overall, these findings demonstrate reliability estimates consistent with past research. Thus, it was decided that the average of both supervisors' ratings for each criterion dimension would be used (both for estimating validity and for correcting for attenuation). This should minimize idiosyncratic perceptions from potentially providing misleading validity estimates. Similarly, the average of the raters' ratings may in fact be more stable, as idiosyncratic rating styles (whether true or not) are averaged to yield possibly more conservative validity estimates. Finally, this is the method endorsed by recent research to provide a more appropriate correction for attenuation (e.g., Viswesvaran et al., 1996). For the remainder of this dissertation, only averaged criterion dimensions will be used. Table 10 (above the diagonal) shows the means, standard deviations, and intercorrelations for these averaged ratings.

Table 10. Intercorrelations of Customer Service Performance Dimensions

Dimension	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Mean			3.65	3.66	3.66	3.57	3.50	3.66	3.69	3.47	3.53	3.63	3.34	3.49	3.54	3.73	3.40	3.58
SD			.62	.62	.57	.52	.58	.57	.77	.83	.63	.70	.77	.65	.75	.73	.56	.54
1. Tangibles	3.80	.67	(.86)	.78	.80	.76	.69	.66	.64	.65	.70	.52	.69	.74	.52	.60	.65	.83
2. Reliability	3.75	.65	.78	(.87)	.82	.86	.79	.78	.78	.77	.76	.70	.73	.72	.65	.71	.73	.91
3. Responsiveness	3.78	.62	.77	.76	(.88)	.86	.82	.83	.74	.89	.89	.62	.71	.69	.65	.67	.73	.91
4. Assurance	3.68	.56	.75	.80	.81	(.92)	.86	.84	.76	.81	.85	.71	.79	.75	.68	.73	.72	.96
5. Perceptiveness	3.57	.62	.67	.71	.74	.82	(.91)	.86	.73	.81	.78	.66	.77	.72	.74	.61	.70	.91
6. Communication	3.74	.64	.65	.77	.72	.77	.79	(.81)	.75	.71	.79	.61	.67	.63	.64	.68	.70	.88
7. Competence	3.73	.77	.60	.66	.59	.67	.64	.64	-	.78	.74	.69	.71	.63	.71	.61	.61	.83
8. Effort	3.54	.86	.65	.71	.69	.77	.78	.68	.73	-	.75	.75	.79	.71	.80	.60	.67	.87
9. Personal Discipline	3.67	.67	.74	.75	.74	.80	.70	.72	.66	.71	(.85)	.68	.67	.68	.65	.70	.66	.89
10. Teamwork	3.76	.74	.56	.65	.62	.69	.59	.57	.58	.67	.69	-	.73	.62	.74	.58	.56	.76
11. Supervision	3.44	.81	.63	.70	.61	.74	.71	.65	.58	.70	.61	.63	-	.81	.69	.60	.63	.84
12. Management	3.59	.66	.68	.68	.63	.68	.63	.53	.55	.59	.65	.62	.70	-	.64	.60	.72	.81
13. Volunteering	3.67	.77	.52	.62	.61	.63	.62	.56	.57	.64	.65	.71	.59	.64	-	.44	.63	.76
14. Follows Policy	3.85	.76	.59	.65	.59	.67	.55	.60	.56	.54	.69	.56	.53	.56	.48	-	.59	.75
15. Defends Company	3.53	.65	.61	.64	.64	.64	.57	.62	.58	.59	.65	.59	.47	.66	.66	.58	-	.79
16. Total Performance	3.68	.56	.85	.89	.87	.94	.88	.84	.76	.84	.88	.75	.79	.77	.73	.72	.73	(.98)

Note: All ratings are based on a five-point scale. Correlations below the diagonal are for combined sample ($n = 178$), correlations

above the diagonal are for employed sample only ($n = 131$). Internal consistency estimates from combined sample are shown on

diagonal for multi-item dimensions.

Second, for the combined sample, Table 10 (below the diagonal) also shows the means, standard deviations, and intercorrelations between the performance dimensions. Examination of the table suggests that the means of the dimensions are typically higher in this sample than in the employed sample, although the standard deviations tend to be slightly larger. Also notice that the pattern of intercorrelations appears to be similar across the two sets of ratings. Although not presented in the tables, it might be noted that the subject pool sample criterion distributions were typically flatter and actually appeared rectangular. Furthermore, the means for each of the dimensions were high (e.g., means near or greater than 4 on the five-point scale).

Finally, examination of the construct validity of the ratings can be assessed by examination of Table 10. First, the highly favorable means for a given scale may be indicative of either leniency bias, halo bias, or both. Together, these forms of bias are likely to decrease the amount of variance in criterion ratings, as is shown by looking at the standard deviations for the different performance dimensions. Second, most of the criterion dimensions are highly interrelated. Although one might conclude that only a general performance factor is present, the high intercorrelations might simply be due to the fact that all of these dimensions were chosen to reflect aspects of customer service performance. This fact, coupled with potential halo bias and common method bias, is likely the reason for the degree of intercorrelation among the measures. Because there is the possibility for only one overall performance factor, overall performance (i.e., average of criterion dimensions) will be examined in addition to each criterion dimension for the predictive relationships.

Now that the performance domain has been considered, attention turns towards the assessment of the construct validity of the DSI.

Step 5.2: Development of the DSI. This section develops the DSI instrument, and so is primarily concerned with demonstrating evidence required to justify Inferences 4 and 6-10 in Figure 5. Of the total sample, 209 participants could be used to assess the construct validity of the DSI. In this section there are two major types of analyses. The first focuses on the DSI items and uses classical item and test theory to assess the characteristics and dimensions of the DSI. The second examines the nature of the construct relations in a multitrait-multimethod matrix.

Before discussing the specific findings, it should be emphasized that the approach taken in this dissertation uses empirical findings to inform rational considerations. Ultimately, it will be rational considerations that form the basis of the DSI development, but these rational considerations will be based on empirical data. One approach that is not taken in this study is to conduct an exploratory factor analysis on the items and then call the factors “scales.” This approach is not taken for two reasons. First and most important, the DSI was developed rationally and the statistical assessment methodology should be consistent with this approach (see Nunnally & Bernstein, 1994, for a lucid discussion on this point). Second, even if an exploratory, factor-analytic study was desired, the sample size employed in this study is not sufficient (e.g., even with a liberal five subject-to-item rule, this study would need 525 participants). Thus, the overall approach adopted here is to perform statistical analyses that most directly address the substantive questions in the simplest (yet no less rigorous) manner possible.

Item Characteristics of DSI (evidence for Inference 4). The goal of the analyses in this section are to eliminate items that do not exhibit acceptable distributional properties. Table 11 provides the means, standard deviations, skewness, and kurtosis estimates for each of the DSI items. Specifically, items with moderate to high skewness (greater than ± 2) and/or kurtosis (greater than ± 7) were eliminated. These values were chosen because they represent moderate violations of a normal distribution (e.g., Curran, West, & Finch, 1998). Items that are perfectly normally distributed will have values equal to zero. However, slight violations (i.e., deviations from zero) will be tolerated because this sample is mainly composed of individuals who currently work in customer service jobs, thus one would expect most people to be more likely to endorse the favorable responses to test items.

Table 11. Descriptive Statistics for DSI items

Item	Drop Item?	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
1		1.71	0.62	0.77	1.97	1	4
2		1.51	0.71	1.44	2.04	1	4
3		2.00	1.17	0.52	-1.38	1	4
4		2.19	0.88	0.33	-0.59	1	4
5		2.54	0.86	0.69	-.75	1	4
6		2.31	0.64	0.81	0.77	1	4
7		1.92	0.76	0.66	0.34	1	4
8		1.83	0.74	0.57	-0.05	1	4
9	Drop	1.28	0.58	2.43	6.61	1	4
10		1.74	1.05	1.04	-0.40	1	4
11		1.83	0.66	0.30	-0.33	1	4
12		2.23	0.94	-0.49	-1.71	1	3
13		1.35	0.54	1.26	0.62	1	3
14		2.45	0.55	0.63	-0.74	2	4
15		1.30	0.58	1.82	2.24	1	3
16		1.46	0.88	1.85	2.28	1	4
17		2.65	0.75	-1.72	1.01	1	3
18		1.67	0.94	1.23	0.38	1	4
19		2.63	0.67	0.31	-0.45	1	4
20	Drop	1.04	0.20	4.53	18.74	1	2
21		1.77	0.92	1.31	1.05	1	4
22		1.71	0.92	0.98	-0.26	1	4
23		2.34	0.80	-0.68	-1.10	1	3
24		1.36	0.56	1.82	4.87	1	4
25	Drop	1.24	0.67	3.21	10.14	1	4
26		1.81	0.64	0.42	0.30	1	4
27		1.87	1.04	1.12	0.06	1	4
28		2.01	0.87	0.03	-1.57	1	4
29	Drop	1.04	0.22	6.21	42.39	1	3
30		1.91	0.91	0.26	-1.56	1	4
31		2.60	0.76	-0.85	0.11	1	4
32		1.60	0.80	1.32	1.23	1	4
33	Maybe	1.98	0.32	-0.53	7.07	1	3
34		1.48	0.78	1.95	3.71	1	4
35	Drop	1.27	0.65	2.48	5.43	1	4
36		1.77	0.65	0.27	-0.70	1	3
37	Drop	1.55	0.60	0.61	-0.55	1	3
38	Maybe	1.33	0.59	2.07	5.13	1	4

Table 11 (cont'd).

Item	Drop Item?	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
39	Drop	1.81	0.55	0.63	4.90	1	5
40		2.27	1.00	-0.38	-1.61	1	4
41		1.80	0.86	0.89	0.09	1	4
42		2.67	0.65	-0.37	0.17	1	4
43		2.19	0.81	-0.02	-0.86	1	4
44		1.72	0.89	0.66	-1.19	1	4
45		2.15	0.75	0.10	-0.51	1	4
46		1.91	0.87	0.44	-0.92	1	4
47		1.33	0.57	1.70	2.70	1	4
48		3.25	1.07	-1.26	0.21	1	4
49		1.92	0.92	0.46	-1.03	1	4
50		2.45	0.69	0.51	-0.07	1	4
51		2.08	1.33	0.62	-1.46	1	4
52		2.15	1.34	0.52	-1.57	1	4
53		2.10	0.61	0.74	1.84	1	4
54		1.69	0.84	0.82	-0.56	1	4
55		2.04	0.73	0.01	-0.94	1	4
56		1.64	0.54	-0.02	-0.90	1	3
57		1.93	0.69	0.54	0.67	1	4
58		1.89	0.56	0.46	2.25	1	4
59		1.86	0.53	0.05	1.31	1	4
60	Maybe	1.28	0.55	2.06	4.14	1	4
61		1.51	0.66	1.04	0.38	1	4
62		1.64	0.62	0.56	0.04	1	4
63		2.04	0.56	0.69	2.50	1	4
64		1.95	0.72	0.54	0.38	1	4
65		1.95	0.99	0.14	-1.91	1	4
66		2.11	0.85	-0.01	-1.22	1	4
67		1.75	0.89	1.26	1.00	1	4
68	Drop	1.13	0.49	4.32	19.54	1	4
69		1.50	1.05	1.76	1.31	1	4
70	Drop	1.72	0.72	0.55	-0.62	1	4
71		1.11	0.46	5.11	27.91	1	4
72		1.68	0.63	1.07	2.95	1	4
73		1.73	0.62	0.87	2.55	1	4
74	Drop	1.51	0.88	1.72	1.94	1	4
75		2.48	0.81	0.16	-0.46	1	4
76		2.77	0.56	-2.19	3.98	1	4

Table 11 (cont'd).

Item	Drop Item?	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
77		2.33	0.60	-0.16	-0.48	1	4
78		2.61	0.76	-0.29	-0.19	1	4
79		1.30	0.53	1.57	1.59	1	3
80		2.31	1.06	0.31	-1.11	1	4
81		1.60	0.55	0.14	-0.96	1	3
82		1.74	0.81	1.00	0.60	1	4
83		1.82	0.85	0.55	-0.89	1	4
84		2.13	1.27	0.60	-1.36	1	4
85		2.05	0.65	0.17	-0.01	1	4
86		2.84	0.97	-0.56	-0.61	1	4
87		1.94	0.81	0.45	-0.49	1	4
88		1.94	0.60	0.96	3.31	1	4
89		1.44	0.68	1.46	1.49	1	4
90		1.37	0.57	1.76	4.41	1	4
91		2.03	0.65	0.51	1.01	1	4
92		1.87	1.33	0.95	-1.05	1	4
93		1.73	1.01	1.15	0.02	1	4
94		1.60	0.73	0.87	-0.36	1	4
95	Drop	1.31	0.73	2.47	5.27	1	4
96		2.08	0.80	0.64	0.23	1	4
97		2.39	0.75	-0.14	-0.42	1	4
98		1.98	1.08	0.90	-0.47	1	4
99	Drop	1.26	0.65	2.92	8.68	1	4
100		2.50	1.12	0.26	-1.37	1	4
101		2.30	1.00	0.51	-0.77	1	4
102		2.22	0.89	0.38	-0.54	1	4
103		2.14	1.01	0.42	-0.95	1	4
104		2.25	1.01	0.66	-0.66	1	4
105		2.48	1.07	0.31	-1.22	1	4

Note: N's=208 to 209. Items 37 and 39 are on a three-point scale, all remaining items are on a four-point scale.

Before describing these analyses, it must be noted that not all items were written with the same number of response options and are thus on different scales. Specifically, items 1, 2, 4, 5, 6, 8, and 56 use a five-point scale, items 37 and 39 use a three-point scale, and the remaining items use a four-point scale. All test items were originally to be written on four-point scales. However, the reason that some items were on different scales was because it was either possible to write five options that made sense, or because it was impossible to create more than three options that made sense. To make the following analyses more interpretable, the two items (i.e., items 37 and 39) with three options were eliminated from all further analyses. Similarly, the items based on a five-point scale (i.e., 1, 2, 4, 5, 6, 8, and 56) were converted to a four-point scale. This is justified because (a) only for item 2 did two people endorse the least favorable option, (b) only for items 1, 5, and 6 did one person endorse the least favorable option, (c) nobody endorsed the least favorable option for items 4, 8, and 46, and (d) converting to a four-point scales improves the distributions for the relevant items (see Table 13). Thus, for these items, the fifth and fourth options are combined into one option so that these items exhibit a four-point scale.

Table 11 shows the means, standard deviations, skewness, kurtosis, and ranges of all items. Note that in general, lower means indicate less favorable responses. These items will be recoded later such that higher numbers mean greater quantities of the attribute (e.g., higher numbers mean less neuroticism, greater agreeableness and conscientiousness) but the raw item characteristics are presented first. As shown in Table 11, ten items are eliminated due to extreme skewness or kurtosis: 9, 20, 25, 29, 35, 68, 71, 76, 95, and 99. Items 33, 38, and 60 are on the borderline for being eliminated, but at

this point will be retained. Thus, there are a total of 93 items remaining. As can be seen from the table, most of these items have means that are skewed towards the favorable end of the scale. Also, most items have variances that are approximately between .5 to 1.00 standard deviations. Overall, these items demonstrate a range of means and variances that is important for early test development (e.g., Nunnally & Bernstein, 1994).

DSI Item-Construct Relationships (evidence for Inferences 4, and 8). The primary purpose of this section is to assess the relationships between individual DSI items and the generic neuroticism, agreeableness, achievement, dependability, and conscientiousness constructs. These are similar (but not identical) to item-total correlations because the DSI items were written to represent one of these specific traits. Note that for all analyses in this section, the personality measures are corrected for unreliability. Note that only relationships with the original (generic) NEO scales are considered in this section because the goal of this step is to assign the DSI items to a specific basic trait construct.

Typically, one uses a cut-off of .30 for item-total correlations, but as Nunnally and Bernstein (1994) suggest, item-total correlations typically range from .0 to .40 (p. 304). One might not expect extremely high correlations between the DSI items and the personality constructs because these relations are item-total correlations in only a loose sense. For example, Murtha et al. (1996) found that manifestations of a given trait in different situations often showed small relations to the general measure of the trait. Thus, the following decision criteria were used to establish which DSI item relates to which construct:

1. An item was assigned to the trait it had the highest correlation with. This was done to establish which construct the item was most related to. However, this assignment was conditional on the following decision rules.
2. Each item must have a correlation with the trait greater than $\pm .10$. This was done to ensure that the item (at the very least) has a moderate relation to the construct. Items that did not meet this criterion were eliminated.
3. Items must not correlate with a different trait greater than approximately 1 standard error (in this case, $\pm .05$ to $.07$). This was done to ensure that the item relates to only one trait to help enhance construct purity. Items that did not meet this criterion were eliminated. Note, however, a possible exception to this point:
 - a) Achievement and dependability constructs are both facet measures of conscientiousness (e.g., Hough, 1992; 1998; Costa & McCrae, 1992). To the extent that these two constructs are highly related, it will be difficult to empirically find different relations between them. Thus, if an item correlates highly with both dependability and achievement, it will not be eliminated but rather assigned to an overall conscientiousness trait. However, if an item relates highly to overall conscientiousness and either achievement or dependability, the item will be assigned to the specific facet measure.

Table 12 shows the item-construct relationships for each set of analyses (including both corrected and uncorrected correlations), along with how each trait was assigned in each analysis. There are several noteworthy features of this table.

Table 12. Correlations between DSI items and Personality Constructs (Corrected for Attenuation)

Item	N _c	A _c	Ca _c	Cd _c	C _c	Assignment	Hypothesized
1	-.02	-.06	.06	.15	.13	Cd	Cd
2	-.06	.16	.23	.15	.27	Ca	Ca/Cd
3	-.18	-.06	-.09	-.05	-.09	N	N/Cd
4	-.08	.09	.23	.25	.23	C	Cd
5	.01	.05	.11	.11	.01	C	A
6	-.10	.17	.08	.08	.09	A	A
7	-.20	.17	.28	.27	.31	C	Cd
8	-.11	.24	.06	.07	.04	A	Cd/Ca
9	X	X	X	X	X	X	Ca
10	-.16	.17	.14	.14	.15		Ca
11	.03	.10	.05	.08	.08		Cd
12	-.16	.17	.08	.14	.14		Ca
13	-.13	.00	.03	.04	-.01	N	Cd
14	.02	.03	-.05	.05	.04		Ca/Cd
15	-.06	.16	.15	.10	.15		Cd
16	-.16	.28	.16	.16	.16	A	Ca/Cd
17	.11	-.03	.08	.00	.09		N/Ca
18	-.06	.19	.18	.09	.09		N/Ca
19	-.13	.06	-.02	.05	-.01	N	A/Cd
20	X	X	X	X	X	X	Cd
21	-.02	.06	.07	.10	.14	C	Cd
22	-.02	.11	.13	.12	.14		Ca
23	-.01	-.01	.09	.11	.19	C	Ca
24	-.16	.02	.06	.10	.02	N	Ca
25	X	X	X	X	X	X	Ca
26	-.09	.08	-.01	.04	-.02		Ca
27	-.13	.16	.07	.10	.11		Ca
28	-.01	.09	.07	.00	.07		A
29	X	X	X	X	X	X	N/A
30	.03	.13	.05	-.03	-.02	A	N/A
31	.16	.06	-.10	-.07	-.03	N	N/A
32	.02	.02	-.01	.04	.01		N/A
33	.11	.13	-.06	-.11	.00		A
34	-.03	.08	-.01	-.03	-.02		Ca
35	X	X	X	X	X	X	Ca
36	-.02	.11	.14	.09	.02		Ca
37	X	X	X	X	X	X	Ca

Table 12 (cont'd).

Item	N _c	A _c	Ca _c	Cd _c	C _c	Assignment	Hypothesized
38	-.16	.00	.06	.09	.02	N	A
39	X	X	X	X	X	X	Cd
40	.18	.11	.02	.08	.08	N	Cd
41	-.08	-.02	-.01	-.04	-.05		A/Cd
42	-.13	.01	-.08	-.07	-.01	N	Ca/A
43	.08	.01	.06	-.03	.02		A
44	-.08	-.01	.02	.01	-.04		N/A
45	-.15	.07	.19	.14	.13	Ca	N/A
46	.01	-.11	-.07	-.04	-.15		A/Cd
47	.01	.00	.09	.01	.05		Ca/A
48	-.03	.01	.05	.04	.03		Ca/A
49	-.02	.02	-.03	-.10	-.07		Ca
50	-.10	-.02	-.09	-.05	-.12	C	A
51	-.02	.07	.11	.11	.13	C	Ca
52	-.02	.06	.09	.12	.11	C	Ca
53	-.03	.00	.10	.07	.07	C	Ca
54	.00	.02	.02	-.01	.04		A
55	-.06	.05	.15	.11	.04	Ca	A
56	.01	.07	.02	.00	.11		N/A
57	-.09	.01	.11	.11	.09		Ca
58	-.08	.00	.22	.18	.15	Ca	Ca
59	-.15	.05	.15	.14	.13		Ca
60	-.13	.05	.13	.18	.13	Cd	Ca
61	-.15	.19	.27	.29	.25	C	Ca
62	-.19	.03	.18	.22	.18		Ca
63	-.06	-.03	.10	.18	.08	Cd	Ca
64	.06	-.02	.00	.00	-.01		Ca
65	.08	.07	-.06	-.09	-.01		N
66	-.16	.16	-.01	.01	-.02		N
67	-.03	.13	-.02	.02	.00	A	N
68	X	X	X	X	X	X	N
69	-.06	.11	-.07	.05	.10		N
70	.10	.06	-.08	.00	-.07		N
71	X	X	X	X	X	X	A/N
72	.07	.01	-.08	-.05	-.03		A
73	.01	.07	.05	.05	.04		A
74	-.15	.24	.03	.20	.22	A	A/Cd
75	-.04	-.11	.02	-.08	-.05		A/Ca

Table 12 (cont'd).

Item	N _c	A _c	Ca _c	Cd _c	C _c	Assignment	Hypothesized
76	X	X	X	X	X	X	Ca
77	.18	-.03	-.05	-.10	-.07	N	A/Ca
78	-.09	.16	.15	.20	.19		Ca
79	-.13	.03	.13	.24	.21	Cd	Ca
80	-.06	.19	.18	.07	.12		Ca
81	.11	.13	-.02	.07	.08		Ca
82	.07	.03	-.07	-.05	-.05		A/Ca
83	.01	.15	.10	.03	.09	A	Ca
84	-.10	.07	.14	.18	.15	Cd	N/Ca
85	-.13	.08	.07	.15	.10		Ca
86	.00	-.14	-.01	.04	-.01	A	Ca
87	-.12	.23	.11	.10	.08	A	N/Ca
88	-.09	.14	-.01	.07	-.04	A	A/Ca
89	-.09	.05	.01	.01	.00		Cd
90	-.07	.18	.14	.18	.23	C	Cd
91	.02	-.06	-.01	.08	.03		Cd
92	-.08	.01	.02	.02	.04		N/ Cd
93	-.11	.06	.08	.12	.11		Cd
94	-.06	-.01	.03	.07	.02		Cd
95	X	X	X	X	X	X	Cd
96	-.04	-.05	.01	.09	.10	Cd	Ca/Cd
97	-.02	.02	.13	.03	.05	Ca	Ca/Cd
98	-.20	.09	.19	.23	.16		Cd
99	X	X	X	X	X	X	Cd
100	-.12	.09	.08	.11	.11		Cd
101	-.19	.08	.09	.15	.15		Cd
102	-.06	.19	.15	.16	.08		Ca/Cd
103	-.15	.18	.15	.10	.12		Cd
104	-.13	.14	.11	.10	.13		Cd
105	-.06	.07	.19	.19	.24	C	Cd

Note: N = neuroticism, A = agreeableness, Ca = achievement, Cd = dependability, C = conscientiousness. All correlations corrected for unreliability and include a "C" subscript. "Assignment" indicates how the DSI item were assigned empirically. "Hypothesized" indicates rated DSI –construct assignments. X's indicate items deleted in previous steps.

First, it can be seen that 42 items met the above criteria and were assigned to a specific personality trait. Specifically, there were 9 neuroticism items, 10 agreeableness items, 5 achievement items, 6 dependability items, and 12 conscientiousness items. Twenty items were eliminated because of Decision Rule 2 (i.e., had item-construct relations smaller than $\pm .10$), and 30 items were eliminated because of Decision Rule 3 (i.e., could not unambiguously be assigned to a single trait).

Second, agreement between the empirical and hypothesized (i.e., raters from previous steps) item-construct relations was found about 50% of the time. The most common area of disagreement was for the conscientious facet scales of dependability and achievement. Specifically, the DSI items generally correlated similarly on both of these scales, thereby prohibiting making any kind of distinction between the two. This is not surprising given the degree of intercorrelation between the two facet scales (uncorrected $r = .66$, corrected $r = .83$). However, despite the high degree of intercorrelation, some items did relate more strongly to one scale than the other: items 2, 45, 55, 58, and 97 were most related to achievement, and items 1, 60, 63, 79, 84, and 96 were most related to dependability. For other items (i.e., 4, 5, 7, 21, 23, 50, 51, 52, 53, 61, 90, and 105) no distinction between achievement and dependability could be made, so these items were assigned to an overall conscientiousness scale (along with the items related specifically to achievement and dependability). Overall, these results suggest that about a third of the items related in modest ways to the basic personality traits.

A third interesting feature in Table 12 is that many of the item-construct relationships were small to moderate. Even with correcting for unreliability in the personality measures, the average item-construct relationship was .18. Although these

relationships appear modest, there may be several reasons that the relationships are not stronger. First, these relations may be slightly suppressed by statistical artifacts such as range restriction. Second, the relations may be low because the expression of personality is different in different situations. This is a fundamental position in the basic personality research discussed earlier (e.g., Magnusson & Torestad, 1992; Mischel & Shoda, 1995), and so one might not expect high relations between the same behaviors in different situations. Indeed, the relations found here are consistent with the typical cross-situation relations found in the general personality literature (Mischel, 1968; Mischel & Shoda, 1995; Murtha et al., 1996). Finally, the endorsement of a particular behavioral option in a work context is probably dependent on multiple traits. Such an explanation has some support in these data because the most common reason for eliminating items was a violation of decision rule 3. Clearly the enactment of work behaviors is multiply determined, and so it is perhaps likely that multiple traits are evoked when enacting a particular behavior. For example, consider item 10 (which has subsequently been reverse scored):

A coworker was helping a very picky customer buy a suit. S/he had requested to try on a number of different jackets, pants, and shirts. Although the customer has gone, the coworker left a big pile of clothes lying around. What do you do?

- A) Return all of the clothes to the correct place even though it is not your job
- B) Return most of the clothes to the correct place even though it is not your job
- C) Return some of the clothes to the correct place but leave the rest for the coworker
- D) Leave the clothes where they are because it is not your job to return them

This item was hypothesized to be an achievement item because individuals with more drive to achieve should be more likely to return the clothes. However, this item was empirically related to all of the trait measures. It might have been related to neuroticism

because an emotionally stable person would be less likely to get upset and leave the clothes. It could be related to agreeableness because an agreeable person might be more likely to put the clothes away in an attempt to be helpful. A conscientious person might put the clothes away because of a sense of duty or work ethic.

Overall, each of these factors may be present and influencing the observed relationships. However, the fact that empirical relationships do exist for the DSI items does provide some evidence of construct validity at the item level. The next section will discuss how these items combine to influence the scale characteristics.

DSI Scale Construction (evidence for Inference 4). The previous step identified the DSI items were used to construct each scale (i.e., neuroticism, agreeableness, achievement, dependability, and conscientiousness). This section focuses on examining the reliability of these scales. Table 13 shows the scale reliabilities, item-total correlations, and internal consistency estimates for each scale and item.

Table 13. Internal Consistency Estimates for DSI Scales

Item	Corrected Item-Total	Alpha if Item Deleted
<u>Neuroticism</u>		
6	.10 (.19)	.20 (.26)
13	.10 (.15)	.20 (.29)
19	.00 (.07)	.25 (.32)
24	.18 (.22)	.17 (.26)
31	.20 (.07)	.14 (.32)
38	.09 (.13)	.20 (.16)
40 ^a	-.01 (-)	.29 (-)
42	.12 (.20)	.19 (.26)
77 ^b	.04 (.05)	.23 (.33)
Initial Estimate		.23
Final Estimate		.32
<u>Agreeableness</u>		
6	.09	.49
8	.32	.42
16	.25	.44
60	.11	.49
67	.33	.41
74	.00	.52
83	.23	.45
86	.17	.47
87	.33	.42
88	.21	.46
Initial Estimate		.48
Final Estimate		.48
<u>Achievement</u>		
2	.02	.33
45	.13	.23
55	.15	.21
58	.21	.18
97	.16	.20
Initial Estimate		.27
Final Estimate		.27

Table 13 (cont'd).

Item	Corrected Item-Total	Alpha if Item Deleted
<u>Dependability</u>		
1	.33	.39
60	.24	.43
63	.34	.40
79	.20	.45
84	.22	.51
96	.26	.42
Initial Estimate		.48
Final Estimate		.48
<u>Conscientiousness</u>		
1	.27	.67
2	.13	.68
4	.40	.65
5	.20	.67
7	.31	.66
21	.01	.69
23	.18	.67
45	.27	.67
50	.07	.68
51	.29	.66
52	.35	.65
53	.02	.68
55	.13	.68
58	.29	.67
60	.24	.67
61	.37	.66
63	.40	.66
79	.27	.67
84	.30	.66
90	.31	.66
96	.20	.67
97	.29	.66
105	.34	.66
Initial Estimate		.68
Final Estimate		.68

^a Item dropped from final scale. ^b Item reverse scored. Values in parenthesis indicate

final estimates after item changes.

As can be seen in the table, most of the reliabilities are lower than the commonly advocated cutoff of .70 to .80. In fact, only for overall conscientiousness does the internal consistency estimate come close to accepted standards. By examining what the internal consistencies will be if an item is deleted, it can also be seen that removing items is not going to improve reliability in any practically meaningful way. In fact, only one item was removed in an attempt to refine the scales: item 40 from the neuroticism scale. The reasons this item was eliminated are (1) it had a very low item-total correlation, and (2) no matter which way the item was scored, it resulted in other items having negative item-total correlations. Further attempts at refining the scales (e.g., dropping items with very low item-total correlations) were not attempted in order to minimize the influence of sample-specific variance. Thus, the reliabilities for the scales are: neuroticism (.32), agreeableness (.48), achievement (.27), dependability (.47), and conscientiousness (.68). Clearly these estimates are lower than conventional standards. However, there are three points worth making about these estimates that may illustrate why these estimates might not be high.

First, these scales most likely exhibit low internal consistency because there is considerable item-specific variance. However, this item-specific variance may not entirely be error (as it is treated in alpha). It is possible that some of the item-specific variance is due to the fact that different situations are being used to assess the same behaviors (i.e., response options). For example, in many traditional personality instruments (e.g., NEO-FFI-G), items ask a number of self-statements for which the respondent is asked to indicate some degree of agreement/disagreement. In contrast, the DSI uses a number of situations as items and uses specific behaviors as options. Thus,

one may consider the items in a given scale as indications of behaviors across different situations (albeit customer service situations). Given the typical estimates of cross-situational stability (e.g., almost always less than .30; Mischel, 1968), one might not expect high estimates of internal consistency because the items reflect behaviors in different situations. Stated differently, the item intercorrelations may be low because the items are actually different situations and so the correlations are similar to estimates of cross-situational consistency.

Support for this explanation is the fact that behaviors associated with each item (i.e., situation) were written to reflect a trait within a given customer service situation, and these situations were to some extent different from each other. Again, this is likely to lead to item-specific variance because each behavior is somewhat specific to a given situation, despite the fact that across situations a set of behaviors should be manifestations of a basic trait (e.g., Murtha et al., 1996; Sheldon et al., 1997; Winters et al., 1998). For example, consider the following items:

7. Your manager wants employees to always look busy. This means you must do simple tasks over and over again, even when they don't need to be done. You are really tired of doing these tasks, the store is empty, and the manager is not around. What do you do?
 - A) Do the tasks even if they don't need to be done or nobody is present
 - B) Do the tasks only when the manager or customers are present
 - C) Do the tasks only when necessary, regardless of who is present
 - D) Don't do the tasks because they don't need to be done and it is a waste of time

90. In your store there are many small tasks (for example, putting away inventory) that are not part of anyone's specific job but are something that everybody is expected to do. Many of your coworkers do not do these tasks, but if they are to get done somebody will have to do them. What do you do? (121)

- A) Perform all of the tasks even though they are not part of your job
- B) Regularly perform most of the tasks
- C) Occasionally perform some of the tasks
- D) Don't perform the tasks since they are not part of your job

105. A coworker gives his family special deals. You know the manager would not approve of such practices. You doubt anyone else is aware that the coworker is breaking the company policy. What do you do?

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

All three items were rationally judged to be manifestations of dependability, and were empirically shown to relate to conscientiousness (r 's = .36, .23, .18; respectively). However, the intercorrelations of these items are not great: items 7 and 90 ($r = .19$), items 7 and 105 ($r = .15$), and items 90 and 105 ($r = .29$). These relatively low inter-item correlations are especially interesting given the fact that for items 7 and 90, both sets of behavioral options are very similar. What can account for the fact that items 7 and 90 are moderately related to conscientiousness but relatively unrelated to each other? The most obvious possibility would be the differences in the situations. Perhaps the first situation (item 7) is different from the second situation (item 90) because the first situation is more of a task behavior (i.e., directly required by supervisor) and the second situation is more of an organizational citizenship behavior (i.e., more optional and discretionary), even though both require performing tasks that are basically undesirable. And, both of these situations are relatively different from the third situation (item 105) because the last situation primarily involves choosing between the organizationally-appropriate behavior versus maintaining relations with coworkers. Thus, some item-specific variance is likely

even though all three items appear to reflect conscientiousness. Indeed, this is consistent with Murtha et al. (1996), who actually found negative correlations between the same manifestations of traits in different situations.

Of course, the counter argument to these arguments is that reliability estimates should be higher in psychologically similar situations (e.g., Mischel & Shoda, 1995; Murtha et al., 1996). In psychometric terms, items that measure similar psychological situations should exhibit higher intercorrelations. Thus, the goal would be to generate items that have high intercorrelations with each other and with basic personality traits. Although this seems reasonable, the current data do not allow one to examine this possibility because all items that were related to a particular trait were included in the scale (remember, the goal was to reproduce the general nature of the work environment). However, in situations that are very similar (e.g., DSI items 50 and 51), the inter-item correlations are quite high.

A second explanation for the low reliabilities could simply be due to range restriction in the sample studied. Nearly all individuals in this study were at least to some extent selected for their customer service ability. Item responses on the DSI showed mostly favorable responses, perhaps indicating an restriction of variance. As inter-item variance is a necessity for internal consistency estimates (e.g., Guion, 1998; Nunnally & Bernstein, 1994), range restriction could work to reduce this variance.

A final point worth making about the reliability estimates is that they are not all that different from those found in the literature for similar instruments. For example, despite the years of cumulative research that has gone into the development of the NEO-PI-R, the eight-item facet scale alphas only range from .50 to .70 (Costa & McCrae,

1992). Similarly, many of the homogeneous item composites from the Hogan Personality Inventory (Hogan & Hogan, 1992) show internal consistency estimates ranging from .29 to .80 (the .29 value is not an outlier, there are several estimates in the .30's and .40's). Similar to the NEO PI-R, these estimates are for scales that are considered to be specific and homogeneous. Thus even these well-developed and often-used personality instruments, reliability estimates are often not impressive (and typically do not become greater than .80 until they use upwards of 20 to 30 items for the very broad Big 5 traits. Of course, it must be remembered that alpha assumes unidimensionality, it does not test for it). Finally, it might also be noted that situational judgment tests yield extremely low internal consistency estimates. In studies by Motowidlo et al. (1990), Pulakos and Schmitt (1996), and Weekly and Jones (1997), internal consistency estimates ranged from a low of .07 in Weekly and Jones (1997) to a high of .74 in Pulakos and Schmitt (1996). Note that each of these estimates may be somewhat inflated because alpha increases with the number of items in a scale (e.g., the Pulakos and Schmitt measure contained 33 items). Parenthetically, it might be noted that the reliability of the 41 remaining DSI items (irrespective of scale content) was .73.

Overall, these points are not raised to justify the low reliabilities found in this study. Clearly it would be desirable to increase the internal consistency of these items. Rather, they are provided to illustrate that such values are not unusual and should not be interpreted as horrifically lower than those found in the extant literature. Furthermore, there are some very valid reasons for why one would expect low internal consistency estimates yet still show meaningful construct relations. To the extent that such points are legitimate, internal consistency may not be the best estimate of reliability (because of the

way it treats true and error variance). However, future research should be devoted more specifically to this issue, as well as an examination of other forms of reliability (e.g., test-retest) and conceptualizations of error. The Discussion section will suggest some of these possibilities.

In the following sections, the validity of the DSI scales will be examined.

Step 5.3. Assess Multitrait-Multimethod Matrix. This section is primarily concerned with providing construct validity evidence to justify Inferences 6-10 in Figure 5. That is, the nomological network surrounding the DSI constructs will be examined. Thus, this section explores the multitrait correlation matrix shown in Table 8 (elements on the diagonal are reliability estimates, correlations above the diagonal are corrected for attenuation). To provide evidence of construct validity, each construct must demonstrate the following relationships (these requirements are based on Anastasi & Urbina, 1997; Campbell & Fiske, 1959).

Convergent validity. Evidence of convergent validity is shown by the validity diagonals (i.e., correlations between same traits measured by NEO-FFI-G, NEO-FFI-W, and DSI) being greater than zero and relatively large. In this instance, we are most concerned with correlations between the DSI and NEO constructs, both the generic and at-work versions. As shown by the boldface correlations in Table 8, each DSI scale is meaningfully related with its respective NEO scale. For example, the DSI neuroticism scale is most highly correlated with the NEO neuroticism scales, both assessed with generic items and with at-work tags (r 's = -.45 and -.56, respectively). The same is true for the other DSI scales; each demonstrate evidence of convergent validity. These correlations are similar to those found in past research with different contextual measures

(e.g., James, 1998; Roberts & Donahue, 1994; Sheldon et al., 1997) A second point worth noting is that the relations between DSI scales, and the generic and at-work NEO scales, are similar in magnitude. Based on the sum of this evidence, it is concluded that convergent validity evidence for the DSI scales is generally provided.

Discriminant validity. Evidence for discriminant validity is demonstrated by three criteria. First, off-diagonal values (i.e., not underlined) in the boxes (see Table 8) represent heterotrait-heteromethod correlations and must be smaller than the validity diagonal. These correlations are typically smaller than the values on the validity diagonal for all relations except those involving intercorrelations between the conscientiousness scale and the facet measures of achievement and dependability (although even these relationships are largely inflated only for the DSI conscientiousness and NEO achievement (corrected $r = .44$) and dependability (corrected $r = .48$) relationships). This is not surprising, since the achievement and dependability measures are more specific facets of the general conscientiousness construct. Further note that even better evidence for discriminant validity between these constructs is found in the box containing intercorrelations with the NEO-FFI-W scales. Second, correlations between different traits measured by the same method should be smaller than the validity diagonal. As shown in the table, the corrected DSI correlations are all highly related, and the corrected conscientiousness measure and facet scales are perfectly corrected. This suggests that there is a lack of discriminant validity for these measures. Third, these mono-method intercorrelations should show the same pattern of correlations across methods. The table shows that the DSI constructs are more highly intercorrelated than the NEO-FFI-G and NEO-FFI-W constructs, but the general pattern of correlations is similar. Furthermore,

the NEO-FFI-G intercorrelations are consistent with the normative data provided in the user's manual (Costa & McCrae, 1992). Also consistent with the normative data is the finding that the strongest relationships occur between the facet measures of conscientiousness. Overall, these analyses suggest that discriminant validity evidence may be lacking.

Finally, notice the relationships between these scales and the CSI and WPT. The CSI is weakly related to the DSI scales, indicating that these measures are tapping different aspects of personality within customer service contexts. Alternatively, the WPT shows negative relations to the DSI achievement and dependability measures. The CSI is also related to the NEO scales (both generic and at-work), although these relations are greater for the NEO-FFI-G scales than the NEO items with work contexts. This might be expected since the CSI items were adapted from a general personality framework. In contrast to the CSI, the WPT shows almost no relation to any of the NEO or DSI measures, as is typical in the literature (e.g., Frei & McDaniel, 1998).

Overall, several conclusions can be reached about the construct validity of the DSI constructs. First, there is evidence for the convergent validity of the DSI scales. Correlations were greater for each DSI scale and its respective basic personality measure than were the correlations between the construct and alternative measures. Only when one examines the facet scales does convergent validity evidence become less clear, but this is to be expected given the overlapping nature of these traits. Second, evidence for discriminant validity is lacking because the DSI constructs are more highly related to each other than to their respective Big 5 scales. Finally, correlations with the CSI illustrate that the DSI scales share some properties with overall customer service, as one

would expect given that the DSI is expected to be a measure of personality within customer service contexts.

Inferences 4, 6, 7, 8, 9, and 10 have now been examined. The final examination considers the support for the predictive validity of the DSI scales relative to these other constructs and measures.

Step 5.4: Assessment of predictive validity (support for Inference 1). In this section, the primary goal is to assess the predictive validity of the DSI, and to compare this validity to alternative predictor measures. Because of missing data, the combined sample is reduced to 166 subjects and the employed sample is reduced to 119 subjects. Again, the reason for examining the employed sample by itself was because this sample (a) contains two raters for almost every employee, (b) there was only one type of job, (c) all participants were rated, and (d) it was certain that a supervisor actually completed the rating forms. In a sense, the predictive validities obtained in this sample are probably the most accurate, and so the reliable form of predictive validity evidence will probably be based on the employed sample.

Before conducting these analyses, some points should be made about range restriction, power, effect size, and significance testing. Clearly there is a relationship between effect size (i.e., magnitude of validity or correlation), power, alpha, and sample size (e.g., Murphy & Myors, 1998). Range restriction and criterion unreliability factor into the mix by attenuating the effect size (i.e., observed validity or correlation). Thus, given an attenuated correlation due to range restriction and criterion unreliability, a study must have a sample size large enough to accurately conclude (i.e., sufficient power) that

the attenuated validity coefficient is sufficiently large (α). Each of these issues is interrelated but will be discussed separately.

The predictive relationships in this study are almost sure to be attenuated to some extent by indirect range restriction (Guion, 1998; Sackett & Wade, 1983; Thorndike, 1949) because participants were hired, promoted, or fired based (to some extent) on their ability to deal with the public. Sackett and Wade (1983) note that range restriction will become worse as the correlations between the unmeasured selection instrument and measured predictors and criteria increase. There is no way to estimate this relationship in this study, although one could speculate the relationship is at least slightly strong because most of the proprietary measures used in this study (e.g., NEO, WPT) demonstrated smaller standard deviations than the normative data (see Measures section).

Unfortunately, attempts to use a multivariate formula for range restriction (e.g., Ree, Carretta, Earles, & Albert, 1994) were not possible because the relevant information was not provided in the user's manual (e.g., no NEO-FFI correlations are presented, no unrestricted data for the CSI). Thus, it is not possible to correct for range restriction in this study. However, this means that the observed validities may be considered the lower limit, and that slightly stronger relationships would be more likely in an unrestricted sample (Schmidt, Hunter, & Urry, 1976). Furthermore, corrections for attenuation (e.g., error due to differences in raters; Viswesvaran et al., 1996) may be done to provide at least some indication of the corrected relationships.

Because it is not possible to estimate the exact amount of range restriction in this study (thereby reducing the size of the validities), coupled with the fact that a huge sample size is not available, significance tests will not be strictly adhered to when

determining whether or not a relationship exists (e.g., Murphy & Myors, 1998; see also Sackett & Wade, 1983; Schmidt et al., 1976). Although relationships that are significant at $p < .05$ and $.10$ will be identified, this is done mainly to follow convention—but keep in mind that these tests are not to be over-interpreted. For example, a validity significant at $.08$ is still likely to be as useful as a validity that is significant at $.05$. Rather, primary focus will be directed towards the size of the effects (i.e., the magnitude of validities across criterion dimensions and predictor constructs). Remember, two of this study's goals were to assess the validity of the DSI, and to determine if this validity would be higher than that found for the alternative constructs (e.g., NEO, CSI). Thus, the criteria used to assess whether a meaningful relationship exists between a predictor and a criterion will be based respectively on effect size, and differences in effect size.

Following popular recommendations (e.g., Cohen, 1988; Murphy & Myors, 1998), this study adopts the following conventions: small effect $r = .10$, moderate effect $r = .30$, large effect $r = .50$. Similarly, for the characteristics of this study, differences in correlations of approximately $.10$ are small effects and $.20$ are moderate effects (see Cohen, 1988). Clearly the meta-analytic research (e.g., Barrick & Mount, 1991; Hough, 1998) suggests that most validities for the measures used here should be small to moderate (for conscientiousness), and the DSI scales are expected to be moderate. The expected differences in validity between the DSI and the alternative predictors should thus be small to moderate. By focusing on effect size, one can discuss the extent to which the predictors meet these expectations and are likely to be related to the various performance dimensions (i.e., validity) in meaningful ways, without perhaps mistakenly ignoring an important relationship (see Murphy & Myors, 1998). In sum, it is the pattern

of these validities across criterion dimensions and samples that will form the final assessment of the DSI constructs.

Although effect size is the primary consideration, power is still a very critical issue. Traditional approaches to power analysis (e.g., Cohen, 1988; Murphy & Myors, 1998) do not fully consider the effects of range restriction and criterion unreliability, and to the extent that these are present, assessment of power may be misleading. However, one can examine the tables presented by Sackett and Wade (1983) to understand how large a sample size might be needed under various conditions of indirect range restriction and criterion unreliability to maintain a level of power at .90. Overall, for most levels of criterion reliability, realistic levels of range restriction (i.e., selection ratio no less than .50), and predictor intercorrelations, the sample size in this study should demonstrate adequate power (.70 to .90) to detect a true but attenuated effect (i.e., meaningful validity coefficient).

In the following sections, the correlations (i.e., validities) between the predictors and performance dimensions will be examined. Note that the purpose of these sections is to primarily discuss the univariate predictive relationships. Regressions analyses will be presented shortly.

Validities for Combined Sample (Table 14). The DSI dimensions show small to modest uncorrected relationships with the various performance dimensions. Neuroticism, conscientiousness, and the facet measures show modest relationships with most of the dimensions, but agreeableness shows a small effect size. After correcting for interrater unreliability (corrected validities are shown in italics), the validities for all measures become closer to moderately strong. Only agreeableness maintains a small effect.

Table 14. Predictive Validity with Performance Dimensions (Combined Sample)

Construct	Tang	Rel	Resp	Assur	Precept	Com	Comp	Effort	Per. D	Team	Super	Mgt	Volun	Policy	Defnd	Total
DSI Neuroticism	.08	<u>.19</u>	.13	.13	.12	.11	.11	.14	.12	.15	.14	.14	<u>.21</u>	.02	.10	<u>.15</u>
	.10	.31	.24	.19	.17	.17	.17	.19	.19	.40	.19	.22	.32	.02	.22	.19
DSI Agreeableness	.00	.09	.03	.09	.07	.10	.12	.11	.08	.10	.11	.05	.07	.00	.07	.08
	.01	.14	.06	.13	.10	.15	.18	.15	.13	.26	.14	.07	.11	.00	.16	.11
DSI Achievement	.11	.08	.04	.13	.08	.04	<u>.16</u>	<u>.15</u>	<u>.18</u>	<u>.15</u>	<u>.17</u>	<u>.19</u>	<u>.20</u>	.08	<u>.17</u>	<u>.14</u>
	.15	.12	.07	.19	.11	.07	.24	.20	.30	.40	.22	.29	.30	.12	.37	.18
DSI Dependability	.14	.14	-.01	.10	.10	.10	<u>.17</u>	.12	<u>.19</u>	<u>.16</u>	.11	<u>.15</u>	.11	.11	<u>.17</u>	.13
	.18	.22	-.02	.14	.14	.14	.26	.16	.31	.43	.15	.24	.17	.16	.36	.17
DSI Consc.	<u>.15</u>	<u>.15</u>	.06	.13	.11	.07	<u>.22</u>	<u>.17</u>	<u>.17</u>	<u>.20</u>	<u>.15</u>	<u>.17</u>	<u>.16</u>	.12	.14	<u>.16</u>
	.20	.25	.11	.19	.16	.11	.32	.23	.28	.54	.21	.26	.24	.17	.31	.21
NEO Neuroticism	.02	-.02	.02	.03	-.03	-.02	-.13	-.06	-.01	-.02	-.01	-.03	-.05	-.05	-.01	-.01
NEO Agreeableness	.02	-.04	.03	.05	-.05	-.04	-.19	-.08	-.02	-.05	-.02	-.04	-.08	-.07	-.01	-.02
	-.02	.04	.05	-.03	-.04	.00	-.07	.00	-.07	.01	.00	.03	-.04	-.16	-.10	-.02
NEO Achievement	-.02	.07	.08	-.05	-.05	.00	-.10	.00	-.12	.04	.00	.05	-.06	-.24	-.21	-.03
	.15	.06	.07	.11	.04	.01	.10	.16	.11	.12	.06	.10	.07	.04	.08	.10
NEO Dependability	.20	.10	.13	.15	.06	.02	.15	.22	.19	.33	.08	.15	.11	.06	.17	.13
	.05	.04	-.01	.02	.05	-.05	.05	.09	.10	.13	-.07	.06	.06	.01	.01	.04
NEO Consc.	.06	.07	-.02	.03	.06	-.07	.07	.12	.16	.34	-.10	.09	.10	.02	.03	.05
	.09	.04	.03	.06	.02	-.04	.01	.10	.10	.16	-.02	.05	.06	.00	-.01	.05
	.12	.07	.05	.08	.02	-.06	.02	.14	.16	.42	-.02	.08	.09	.00	-.01	.07

Table 14 (cont'd).

Construct	Tang	Rel	Resp	Assur	Prcept	Com	Comp	Effort	Per. D	Team	Super	Mgt	Volun	Policy	Defnd	Total
NEO Neuroticism-W	.01	-.06	-.03	.00	-.02	-.04	-.04	-.05	.00	-.02	-.09	-.04	-.04	-.01	.03	-.02
	.02	-.09	-.05	.00	-.02	-.06	-.05	-.06	.00	-.07	-.11	-.06	-.06	-.02	.07	-.03
NEO Agreeableness-W	-.05	.02	.04	-.01	-.07	.01	-.10	-.02	-.04	-.01	-.04	-.02	-.03	-.13	-.08	-.03
	-.07	.03	.07	-.02	-.10	.02	-.15	-.02	-.07	-.03	-.06	-.04	-.05	-.19	-.17	-.04
NEO Consc.-W	.06	.06	.01	.03	.04	-.02	-.01	.06	.10	.07	.01	.10	.08	-.03	.00	.05
	.08	.10	.02	.04	.06	-.03	-.02	.09	.17	.18	.01	.16	.12	-.04	.01	.06
CSI	-.12	-.10	-.12	<u>-.16</u>	-.11	-.10	-.01	-.09	-.06	-.05	-.14	.04	-.10	-.11	-.09	-.12
	-.16	-.17	-.21	-.23	-.16	-.14	-.02	-.12	-.09	-.13	-.19	.07	-.15	-.16	-.20	-.16
WPT	-.11	-.05	-.03	-.04	-.03	.01	.02	-.05	-.08	-.10	-.12	-.08	.03	<u>-.17</u>	-.04	-.06
	-.14	-.07	-.05	-.06	-.05	.01	.02	-.07	-.13	-.26	-.17	-.12	.05	-.25	-.09	-.08

Note: Constructs followed by a "W" indicate scales measured with at-work tags. N for WPT = 155, all other relationships n = 166.

Underlined correlations significant at $p < .05$, correlations greater than .13 significant at $p < .10$. Correlations corrected for criterion unreliability (interrater) are shown immediately under uncorrected correlations for each scale.

The generic NEO scales rarely showed anything stronger than a small effect, although it might be noted that the size of these relationships is certainly within the typical range of observed personality validities (e.g., Barrick & Mount, 1991). Furthermore, adding at-work tags to the NEO items did not result in any noticeable improvement in validity; again, all effects hover around zero. Interestingly, only a small effect size was found for the CSI, which is smaller than those reported in the user's manual (e.g., Paajanen et al., 1993) and a recent meta-analysis (Frei & McDaniel, 1998). Finally, as expected the WPT showed almost no relationship with the various performance dimensions (Frei & McDaniel, 1998). It should be pointed out that although both the CSI and WPT show negative relationships with the various dimensions, these relationships are almost always not significant.

Relative to the effect sizes of alternative predictor measures, the DSI scales appear to show slightly higher levels of validity for most performance dimensions. Of course, one cannot directly interpret the differences in correlations because they are all based on the same sample (Cohen & Cohen, 1983), so the predictors are themselves intercorrelated to some extent. However, differences between the correlations were examined by considering the relationship between the two predictors (i.e., test for the difference between dependent correlations; Cohen & Cohen, 1983). Note that in general, differences in correlations of approximately .10 are small effects and .20 are moderate effects (Cohen, 1988). Using these values as a general guide, results found that several of the uncorrected correlations were significantly different at approximately $p < .10$ and demonstrated small to modest effect sizes. Examination of the corrected validities found many more significant differences in favor of the DSI at an effect size that is more

moderate. Please keep in mind, however, that significance values were used only to help determine the size of differences between correlations, and that the power to detect the differences is rather low (.50 to .70) for correlations exhibiting small differences (e.g., Cohen, 1988). These results are not presented in detail because they will be fully addressed in the multivariate prediction section (i.e., multivariate regression). However, these analyses did suggest that the DSI scales typically exhibited slightly higher uncorrected and corrected validities than the alternative NEO scales (whether measured with generic or at-work tags) and the CSI.

In sum, it appears that (a) the DSI constructs show modest uncorrected relationships with the performance dimensions, and (b) these relationships are slightly greater than those found for alternative measures. When one examines the corrected validities, the results are even more impressive. However, one might argue that using interrater reliability is likely to over-correct the validity estimates because these forms of reliability are typically low, even though this is an approach advocated by some (e.g., Viswesvaran et al., 1996). Further, the lower the interrater reliability, the more this over-correction is likely to be. For present purposes, the point of providing the corrected validities is to see what the observed validities might be under what one might consider ideal circumstances, although range restriction may still be present. Thus, one must cautiously interpret these corrected relationships. Even without consideration of the corrected correlations, however, the findings in Table 14 would suggest that use of the DSI constructs will provide for more accurate prediction of customer service in work-related contexts.

Validities for Employed Sample (Table 15). Although the previous results suggest that the DSI scales exhibit small to moderate validities, one might question the appropriateness of the performance ratings for the subject pool sample. This section considers this question by examining only those individuals who were in the employed sample (and thus are certain to have actual supervisory ratings).

As shown in Table 15, the validities for all DSI measures show effect sizes that are moderately strong. In fact, most of the uncorrected validities are moderately strong and range in the mid .20's. The validity for conscientiousness with overall performance is .28, which is near best estimates for any basic personality instrument (e.g., Barrick & Mount, 1991; Mount & Barrick, 1995). In this sample, agreeableness also shows stronger effects on the various performance dimensions, resulting in a validity of .20 with overall performance. When these validities are corrected for unreliability, moderate to large effects are found for all DSI scales. Noting appropriate cautions about the meaning of these corrected correlations, one can see that the conscientiousness scale shows several validities above .30. Also note that many of these relationships are consistent with what one might expect solely on content grounds. For example, dependability is moderately related to the tangibles ($r = .24$) dimension but unrelated to the volunteering ($r = .11$) dimension, whereas achievement shows the opposite relationships (r 's = .12 and .20, respectively). One might expect individuals who are more dependable to be more likely to follow rules but not necessarily be the ones who will volunteer for extra assignments. In contrast, those more achievement oriented may not necessarily be the ones to follow company rules but may be more likely to volunteer for extra assignments. Thus, the DSI constructs relate to the various customer service dimensions in meaningful ways.

Table 15. Predictive Validity for Performance Dimensions (Employed Sample)

Construct	Tang	Rel	Resp	Assur	Precept	Com	Comp	Effort	Per. D	Team	Super	Mgt	Volun	Policy	Defnd	Total
DSI Neuroticism	.11	<u>.28</u>	<u>.19</u>	<u>.18</u>	<u>.25</u>	<u>.23</u>	<u>.25</u>	<u>.26</u>	<u>.18</u>	<u>.16</u>	<u>.23</u>	<u>.17</u>	<u>.28</u>	<u>.09</u>	<u>.21</u>	<u>.23</u>
	.15	.45	.35	.26	.35	.34	.36	.36	.29	.40	.31	.26	.43	.13	.44	.30
DSI Agreeableness	.13	<u>.21</u>	<u>.16</u>	<u>.19</u>	<u>.18</u>	<u>.25</u>	<u>.24</u>	<u>.17</u>	<u>.17</u>	<u>.14</u>	<u>.16</u>	<u>.12</u>	<u>.14</u>	<u>.17</u>	<u>.20</u>	<u>.20</u>
	.18	.33	.29	.28	.25	.37	.34	.24	.28	.36	.22	.18	.21	.25	.41	.27
DSI Achievement	.12	.11	<u>.11</u>	<u>.20</u>	<u>.12</u>	<u>.14</u>	<u>.20</u>	<u>.17</u>	<u>.20</u>	<u>.16</u>	<u>.21</u>	<u>.22</u>	<u>.20</u>	<u>.09</u>	<u>.18</u>	<u>.18</u>
	.16	.18	.20	.29	.17	.21	.28	.24	.32	.42	.28	.33	.30	.12	.37	.23
DSI Dependability	<u>.24</u>	<u>.26</u>	<u>.12</u>	<u>.18</u>	<u>.19</u>	<u>.23</u>	<u>.21</u>	<u>.17</u>	<u>.22</u>	<u>.20</u>	<u>.18</u>	<u>.21</u>	<u>.11</u>	<u>.17</u>	<u>.21</u>	<u>.22</u>
	.33	.42	.22	.26	.27	.34	.30	.24	.36	.51	.24	.32	.17	.24	.44	.29
DSI Consc.	<u>.22</u>	<u>.29</u>	<u>.21</u>	<u>.28</u>	<u>.23</u>	<u>.26</u>	<u>.29</u>	<u>.23</u>	<u>.24</u>	<u>.26</u>	<u>.25</u>	<u>.24</u>	<u>.20</u>	<u>.22</u>	<u>.24</u>	<u>.28</u>
	.30	.46	.38	.40	.33	.38	.42	.32	.39	.67	.33	.37	.30	.32	.49	.37
NEO Neuroticism	.00	-.03	-.02	.01	-.11	-.06	-.16	-.07	.06	-.04	-.07	-.02	-.02	.05	.03	-.03
	.00	-.04	-.04	.02	-.16	-.09	-.24	-.10	.09	-.11	-.10	-.04	-.03	.07	.06	-.04
NEO Agreeableness	-.03	-.04	.01	-.01	.00	.04	.03	.01	-.05	.04	.03	.04	.01	-.14	.04	-.01
	-.04	-.06	.02	-.01	.00	.06	.05	.01	-.08	.10	.04	.06	.01	-.20	.09	-.01
NEO Achievement	.11	.02	.02	.09	.03	.00	.08	.11	.04	.06	.12	.13	.07	.04	.04	.07
	.15	.04	.04	.13	.05	.00	.12	.15	.07	.14	.16	.19	.11	.06	.08	.09
NEO Dependability	-.01	.00	-.04	-.01	.03	-.07	.02	.03	-.01	.03	-.05	.02	.00	-.06	-.08	-.01
	-.02	.01	-.08	-.01	.05	-.10	.02	.04	-.01	.08	-.06	.02	.00	-.09	-.16	-.01
NEO Consc.	.10	.03	-.01	.03	.00	-.02	.02	.06	.03	.10	.03	.05	.06	-.02	-.02	.03
	.13	.05	-.02	.04	.00	-.02	.03	.08	.06	.27	.04	.08	.09	-.03	-.05	.04

Table 15 (cont'd).

Construct	Tang	Rel	Resp	Assur	Precept	Com	Comp	Effort	Per. D	Team	Super	Mgt	Volun	Policy	Defind	Total
NEO Neuroticism-W	-.08	-.10	-.08	-.06	-.20	-.11	-.11	-.15	-.03	-.08	-.11	-.07	-.06	-.06	-.04	-.10
	-.10	-.15	-.14	-.09	-.27	-.16	-.16	-.20	-.05	-.20	-.15	-.11	-.09	-.08	-.08	-.13
NEO Agreeablnes-W	-.06	-.06	-.01	-.02	.00	.04	.00	.03	-.03	-.02	-.06	-.04	-.05	-.13	.00	-.03
	-.08	-.09	-.03	-.03	.00	.06	-.01	.04	-.05	-.06	-.08	-.06	-.07	-.18	-.01	-.04
NEO Consc.-W	.09	.05	.03	.04	.10	.04	.03	.12	.08	.05	.04	.10	.07	-.04	.03	.07
	.12	.07	.05	.05	.15	.06	.05	.16	.13	.13	.06	.15	.10	-.05	.05	.09
CSI	-.13	-.14	-.10	-.13	-.13	-.03	-.02	-.12	-.07	-.06	-.07	.00	-.10	-.13	-.07	-.11
	-.17	-.23	-.18	-.18	-.18	-.04	-.03	-.16	-.11	-.15	-.09	.00	-.15	-.18	-.14	-.15
WPT	-.06	.00	-.03	-.01	.06	.08	.08	.02	-.05	-.04	-.07	-.12	.12	-.18	-.04	-.01
	-.08	.00	-.05	-.01	.09	.12	.12	.03	-.08	-.11	-.09	-.18	.19	-.26	-.09	-.01

Note: Constructs followed by a “W” indicate scales measured with at-work tags. $N = 119$ for all relationships except for those involving the WPT, where $n = 108$. Boldfaced correlations significant at $p < .05$, correlations greater than .14 significant at $p < .10$. Correlations corrected for criterion unreliability (interrater) are shown immediately under uncorrected correlations for each scale.

Relationships between the NEO-FFI-G and NEO-FFI-W constructs with the performance dimensions are considerably smaller than the DSI constructs. The generic NEO scales show small or insignificant effects for almost all dimensions, and correcting these estimates for attenuation provides little improvement. The use of at-work tags show only slight increases in validity over the generic scales. The CSI demonstrates small to modest validities, although these are again in a negative direction. Why these relationships continue to be negative is unclear. The most likely explanation is that most of these relationships are so close to zero that it is simply due to chance or sample-specific factors. It is also possible that the restriction of range in this sample could be the reason why the direction of the relationship is reversed (e.g., Ree et al., 1994). Both factors are likely to be causing the negative relationship. Finally, the WPT shows some modest relations with specific dimensions, but overall is not consistently related to customer service performance.

As before, one can assess the magnitude of the differences between these dependent correlations to see if the DSI scales exhibit stronger validities than the alternative predictor constructs. Analysis of Table 15 found that many uncorrected relationships were significantly different at the $p < .05$ level, and most relationships were different at the .10 level. These translate into small to moderate differences in effect size (e.g., Cohen, 1988). Correcting for unreliability results in even stronger differences. Thus, the differences in validity for this sample were typically moderate in size.

Overall, these analyses suggest: (a) all of the DSI constructs are approximately moderately related to most of the customer service dimensions, and (b) these relationships are stronger than those found for the alternative predictor measures. There

are two points that should be made about the DSI validities in this sample. First, these uncorrected relationships are higher than most of the observed relationships found in the meta-analytic literature (e.g., Barrick & Mount, 1991; Hough, 1998) and are higher than (or at least as good as) many of the “true” validities reported in those studies. Only the CSI shows lower observed validities (i.e., uncorrected) than those found in the Frei and McDaniel (1998) meta-analysis with customer service inventories. Of course, these findings might be partially due to sampling error, but the findings for the alternative predictor constructs are for the most part consistent with past research. Second, the general DSI measure of conscientiousness is more highly related to most dimensions than are the DSI facet measures of achievement or dependability. Of course, this is to be expected since the general DSI conscientiousness construct contains items from both facet scales. However, even if one creates a scale composed only of the unique items in the DSI conscientiousness scale (i.e., those not shared with the facet measures) and partials the variance in the unique items from the observed DSI achievement and DSI dependability validities, the validities decrease only slightly (on average, about .04). Thus, it appears that there can be some unique and interesting predictions made on the basis of the DSI facet scales of conscientiousness, although best prediction occurs for the general DSI conscientiousness measure.

Conclusions. Overall, the previous analyses present an general picture of the predictive validity of the DSI and the relative validities of the various predictor constructs. It is the patterns of these validities that comprise the support for or against the DSI, and so these patterns are summarized in this section.

First, the uncorrected validities of the DSI constructs are sometimes small and more typically moderate, and these validities can vary across the type of customer service dimension. It appears that the neuroticism, dependability, and conscientious measures exhibit the most consistent validities across dimensions and samples, although the agreeableness and achievement dimensions can show meaningful relationships with some dimensions. Indeed, the validities for the DSI agreeableness measure are well within the range of values found in the meta-analytic literature (e.g., Barrick & Mount, 1991) even though they are lower than the other DSI scales. Thus, all of the DSI constructs generally maintain predictive validity across the various customer service dimensions.

Second, most of the observed validities of the DSI are greater than uncorrected validities found in past research, and are actually more similar to the best “true” estimates found in meta-analytic studies. For example, the meta-analysis of the Big 5 and job performance conducted by Barrick and Mount (1991) is one of the most cited articles of this decade (Barrick & Mount, 1998) supporting the use of personality to predict job performance. However, only for conscientiousness are the validities larger than .20, and these are the corrected or “true” validities. Similar conclusions are made when comparing these findings to Hough’s (1998) review. If one could assume that the corrected validities were in fact more appropriate (e.g., Viswesvaran et al., 1996), then the validities demonstrated by the DSI are quite exceptional and are clearly larger than the .30 validity ceiling. Even the uncorrected validities are close to breaking the .30 barrier in the employed sample, which is likely to suffer from at least small amounts of indirect range restriction. On the other hand, one cannot rule out the potential influence of sampling error, and that these validities might not be as great in different samples.

Third, the magnitudes of the DSI validities are typically higher than those found with the alternative predictor constructs, including the NEO-FFI-W and CSI measures. The magnitude of these differences is at times quite large. For example, in the employed sample, the uncorrected validities for the DSI conscientiousness measure hover around .20-.25 with the various dimensions while the original NEO scales show almost no relationship. It should not be assumed that the validities for the NEO measures are arbitrarily low in this study, because on average they are consistent with the observed validities found in the meta-analytic literature (e.g., Barrick & Mount, 1991; Hough, 1998). Only when one uses the conscientiousness scale with at-work tags and corrects for attenuation do the validities become much larger. Even the CSI scale, which demonstrates some useful levels of validity, is only about half the effect size of the DSI scales. Thus, the DSI scales appear to be more predictive than any of the alternative measures.

Fourth, these results are found without corrections for range restriction. That is, almost all participants in this study were employed in customer service jobs. Furthermore, one can be reasonably sure that indirect range restriction has likely occurred for both the predictors and criteria in the employed samples because all employees were hired based on their customer service potential, and providing excellent customer service was part of their informal performance evaluations. Sackett and Wade (1983) and Schmidt et al. (1976) show how relatively small amounts of range restriction can have a dramatic impact on the observed validity coefficient. However, unless the correlations between the unmeasured third variable and the measured predictor are high, the effects of indirect range restriction are not likely to dramatically alter these findings.

Fifth, why the CSI showed negative predictive validities is not entirely clear, although one might avoid over-interpreting these results because almost all of the uncorrected relationships were not significant by conventional standards and showed only a small effect size.

Sixth, it is interesting to find that the NEO items with at-work tags produced no better validity than the generic NEO items. This in contrast to Schmit et al. (1995), who found considerable improvements in validity for items using at-work tags. There may be several reasons for this. First, it is simply possible that the results of Schmit et al. didn't generalize. Theirs' was the only study that has been published on this topic, so perhaps their findings were simply due to chance. Second, differences in the nature of the criterion may be the cause for the discrepancy, as this study used supervisors providing ratings of customer service, whereas their study used college GPA as a criterion. Indeed, Hough (1998) shows that a criterion measure of educational success shows higher validities with personality measures than job proficiency criteria. Perhaps educational success (e.g., GPA) is simply more highly related to personality than work-related criteria (and thus more influenced by using an at-work context). Finally, the results may be different partly because Schmit et al. only examined changes to conscientiousness on validity, compared to here where neuroticism and agreeableness were also examined. For whatever the reasons, though, this study would caution the assumption that adding at-work tags to generic personality items will improve validity in appreciable ways (at least to the extent the results from this study generalize) for all criterion measures.

Seventh, one may wonder about how the findings might be different if analyses were broken down in the following manner: sample (i.e., combined, employed, subject

pool) x rater (average, first rater, second rater) x criterion dimension. One might also wonder if the results would change as a result of standardizing the performance dimensions measures within-rater. These analyses are not presented but were conducted. Overall, none of these analyses would change the substantive conclusions presented here. Validities did sometimes change across these different conditions, and in the subject pool sample the validities for the alternative measures (i.e., not DSI constructs) did increase slightly relative to the increases in the DSI measures, but the overall conclusion that the DSI predicts customer service and does it as good as or better than alternative measures does not change. Thus, these analyses are not discussed or presented.

Finally, for the DSI scales it appears there is no meaningful advantage to using the conscientiousness facet measures of achievement and dependability. The reason is that, the more general conscientiousness measure predicts more consistently than either facet measure because it is composed of the same sets of items as the facet measures (plus a few extra items not able to be assigned to either facet). However, these extra conscientiousness items do not appear to attenuate or suppress relationships relative to the specific facet scale items. Thus, all remaining analyses with the DSI will be performed using only the overall conscientiousness scale. However, the NEO achievement and dependability scales will still be examined in addition to conscientiousness.

Now that the univariate relationships have been examined, attention turns to examination of the regression analyses.

Assessment of multivariate predictive validity (support for Inference 1). In this section, multiple regression analyses are conducted to assess the effectiveness of the DSI

to account for criterion variance, relative to that provided by (a) the NEO-FFI-G constructs, (b) the NEO-FFI-W constructs, (c) the CSI, and (d) the WPT. A few points need to be made before describing these analyses.

The first point is that, similar to the bivariate analyses, regression analyses will be conducted for only two samples (i.e., the combined sample and employed sample). However, here only overall customer service performance is considered because of the large number of regressions that would be run if one examined each performance dimension separately. Again, overall performance is the average of all performance dimensions.

The second point is that only the conscientiousness measure of the DSI will be examined in these analyses, not the DSI facet measures of achievement and dependability. The reasons are because the corrected correlations showed no evidence for discriminant validity for these measures, and the previous analyses showed the facet measures' validities did not substantially differ from the general conscientiousness validities measure for most performance dimensions. Although not presented here, regression analyses also support this decision. Specifically, two multiple regressions were conducted to predict overall performance from the DSI measures; one used conscientiousness and the other used achievement and dependability. The amount of variance explained by each analysis was identical, but with one degree of freedom saved for the model using conscientiousness. Thus, only the DSI conscientiousness will be considered, not the DSI achievement and DSI dependability scales. However, this applies only for the DSI scales; for the NEO scales, conscientiousness will be examined in addition to achievement and dependability.

The third point is that the regression approach used here employed a model comparison approach (e.g., Cohen & Cohen, 1983; Neter, Wasserman, & Kutner, 1990), where a series of nested models are tested to identify the best fitting model. In this study, the goal is to identify if the DSI scales add incrementally above the alternative predictor constructs in explaining performance variance. This means that hierarchical regressions will be run that compare a baseline model of an alternative measure(s) to a full model that contains the baseline measures plus the DSI scales. Table 16 shows the five different models examined for each sub-sample in this study. First, Model A tests the DSI constructs against a “maximal prediction model” because the CSI should be the strongest predictor of customer service performance. The WPT is included because it traditionally has been argued to be the best predictor of performance for most kinds of jobs (e.g., Hunter & Hunter, 1984), although this is less conclusive for customer service contexts (Frei & McDaniel, 1998). Second, Model B assesses if the DSI constructs predict better than just the CSI. Third, Model C compares the original NEO scales (neuroticism, agreeableness, and conscientiousness) to the DSI constructs. Alternatively Model D provides the same test but uses the NEO achievement and dependability measures instead of the NEO conscientiousness measure (as suggested by Hough, 1998). Finally, Model E tests the contextualized NEO scales (i.e., at-work tags for neuroticism, agreeableness, and conscientiousness) against the DSI. In each analysis there are three primary pieces of information: (1) the size of the incremental effect (i.e., ΔR^2) of the full model with the DSI constructs (i.e., Model 1) over the reduced model (i.e., Model 0), (2) the relative strength of the parameter estimates (β) for each measure in the full model and reduced models (i.e., regression coefficients), (3) and the effect size for the full model (R^2_{full}).

Table 16. Regression Models

	Model
A0: WPT + CSI	
A1: WPT + CSI + DSI Neuroticism + DSI Agreeableness + DSI Conscientiousness	
B0: CSI	
B1: CSI + DSI Neuroticism + DSI Agreeableness + DSI Conscientiousness	
C0: Neuroticism + Agreeableness + Conscientiousness	
C1: Neuroticism + Agreeableness + Conscientiousness + DSI Neuroticism + DSI Agreeableness + DSI Conscientiousness	
D0: Neuroticism + Agreeableness + Achievement + Dependability	
D1: Neuroticism + Agreeableness + Achievement + Dependability + DSI Neuroticism + DSI Agreeableness + DSI Conscientiousness	
E0: Neuroticism-Work + Agreeableness-Work + Conscientiousness-Work	
E1: Neuroticism-Work + Agreeableness-Work + Conscientiousness-Work + DSI Neuroticism + DSI Agreeableness + DSI Conscientiousness	

The fourth point is that significance tests will not be strictly used to assess the overall fit of a model or the relative strength of a predictor. Instead, the adequacy of a model will be based primarily on effect size (i.e., amount of variance explained in the criterion measures or R^2). The reason is because past research (e.g., Barrick & Mount, 1991; Hough, 1998) would suggest that small to moderate effects will be found, and with the given sample sizes and likely range restriction the power to detect significant effects at conventional levels (.05 or .10) may be below .70. Following convention (e.g., Cohen, 1988; Murphy & Myers, 1998) the following values will be used: small effect $R^2 = .01$, moderate effect $R^2 = .10$, and large effect $R^2 = .25$. Adequate models will be ones that demonstrate a moderate effect (i.e., $R^2 = .10$). However, it might be noted that for many of the analyses in the combined sample, the observed power was around .50 because many of the effects were small. In the employed sample, the observed power was .80 or greater for most analyses that exhibited an approximately moderate effect ($R^2 = .07$ to .13). Thus, the significance tests are probably more appropriate for the employed sample, but again the key focus will be on effect size.

Finally, the relative strength of predictors will be based primarily on the standardized β weight and unique variance each predictor adds to the set of predictors (e.g., Pedhazur & Schmelkin, 1991; Tabachnick & Fidell, 1996). Standardized regression coefficients may be interpreted as the amount of change in the criterion resulting from a 1 standard deviation (1 unit) change in the predictor (Pedhazur & Schmelkin, 1991). As such, they are similar to partial correlations (with the remaining predictors partialled out). In terms of required sample size for these analyses, this study meets the general rule of thumb of having at least 10 predictors per independent variable, meaning that in the

employed sample 11 predictors could be used (of course, 11 were not used at once but it illustrates the point). However, the observed power to detect a small or moderate effect (i.e., small or moderate regression coefficient) ranges from around .50 (in the combined sample) to .70 or more (in the employed sample). Thus, as before, the significance tests should be observed with caution and are primarily used to help provide an indication of the strength of a relationship.

Note that both sequential (order of entry matters) and unique (order of entry is irrelevant) significance tests will be provided on the regression coefficients. The sequential tests are provided to assess how much incremental variance the DSI constructs may help explain, and the unique tests are provided to assess how much unique variance each construct may explain relative to all other constructs in the model. Also note that both standardized (β) and unstandardized (b) regression coefficients will be provided. Unstandardized coefficients are used because they are more appropriate for making comparisons across studies with the same variable (e.g., Fox, 1997) and thus may be of some use when comparing these findings to past research. However, the standardized coefficients will provide the basis of interpretation in this study. Thus, the strength of a predictor will be based on (1) the size of its β , (2) the amount of unique variance it adds to the model (relative to the other predictors in the model), and (3) the sequential and unique significance tests.

Consider first the results from the combined sample, shown in the leftmost columns of Table 17. An examination of the regression models shows modest relations between the predictors and the overall customer service performance dimension.

Table 17. Regression Analyses for Overall Performance

<u>Combined Sample</u>										<u>Employed Sample</u>				
Model	<i>b</i>	<i>β</i>	<i>R</i> ²	<i>F</i>	Δ <i>R</i> ²	Δ <i>R</i> ² <i>F</i>	<i>b</i>	<i>β</i>	<i>R</i> ²	<i>F</i>	Δ <i>R</i> ²	Δ <i>R</i> ² <i>F</i>		
<u>DSI Predictors</u>														
DSI Neuroticism	.06*	.12	.012	2.19†	-	-	.05*	.15	.020	.11	4.52*	-		
DSI Agreeableness	-.01	-.01	.000				.04†	.07	.004					
DSI Conscientiousness	.08	.14	.014				.11*	.21*	.033					
<u>MODEL A0</u>														
WPT	-.02	-.04	.001	.93	-	-	.01	.02	.000	.01	.34	-		
CSI	-.06	-.11	.011				-.04	-.08	.007					
<u>MODEL A1</u>														
WPT	-.02	-.03	.001	1.32	.04	1.92	.00	.01	.000	.13	2.77*	.12		
CSI	-.07	-.14	.017				-.10	-.21*	.037			4.17*		
DSI Neuroticism	.06	.10	.009				.08*	.15	.020					
DSI Agreeableness	.02	.04	.001				.08*	.15	.015					
DSI Conscientiousness	.06	.11	.009				.11†	.20†	.029					

Table 17 (cont'd).

Model	<u>Combined Sample</u>					<u>Employed Sample</u>				
	<i>b</i>	β	$\underline{R^2}$	\underline{F}	$\Delta \underline{R^2}$	<i>b</i>	β	$\underline{R^2}$	\underline{F}	$\Delta \underline{R^2}$
<u>MODEL B0</u>										
CSI	-.07	-.12	.014	2.37	-	-.06	-.11	.013	1.50	-
<u>MODEL B1</u>										
CSI	-.08	-.15†	.014	2.48	2.86*	-.11	-.21*	.038	4.76*	5.74*
DSI Neuroticism	.06*	.10	.021			.07*	.14	.018		
DSI Agreeableness	.02	.04	.008			.08*	.14	.014		
DSI Conscientiousness	.08	.14	.015			.12*	.21*	.034		

Table 17 (cont'd).

<u>Combined Sample</u>							<u>Employed Sample</u>						
Model	<i>b</i>	<i>β</i>	<i>R</i> ²	<i>F</i>	Δ <i>R</i> ²	Δ <i>R</i> ² <i>F</i>	<i>b</i>	<i>β</i>	<i>R</i> ²	<i>F</i>	Δ <i>R</i> ²	Δ <i>R</i> ² <i>F</i>	
<u>MODEL C0</u>													
Neuroticism	-.01	-.01	.000	.28	-	-	-.02	-.03	.001	.08	-	-	
Agreeableness	-.03	-.06	.002				-.02	-.03	.001				
Conscientiousness	.04	.07	.004				.02	.03	.001				
<u>MODEL C1</u>													
Neuroticism	.01	.02	.000	1.11	.03	1.66	.02	.03	.001	2.34*	.11	4.61*	
Agreeableness	-.03	-.05	.002				-.03	-.06	.002				
Conscientiousness	.02	.04	.001				-.01	-.02	.000				
DSI Neuroticism	.07†	.12	.012				.08*	.15	.019				
DSI Agreeableness	.00	.01	.000				.05†	.09	.005				
DSI Conscientiousness	.07	.12	.010				.12*	.21*	.030				

Table 17 (cont'd).

Model	<u>Combined Sample</u>					<u>Employed Sample</u>				
	<i>b</i>	β	R^2	F	ΔR^2	$\Delta R^2 F$	<i>b</i>	β	R^2	F
<u>MODEL D0</u>										
Neuroticism	-.02	-.03	.001	.58	-	-	-.04	-.07	.003	.34
Agreeableness	-.03	-.06	.003				-.02	-.03	.001	
Achievement	-.08	.14	.011				.07	.12	.010	
Dependability	-.03	-.05	.001				-.06	-.11	.006	
<u>MODEL D1</u>										
Neuroticism	.00	.00	.000	1.18	.04	2.22†	.00	.00	.000	2.14*
Agreeableness	-.03	-.05	.002				-.03	-.06	.003	.11
Achievement	.08	.14	.010				.05	.09	.005	
Dependability	-.04	-.07	.002				-.06	-.11	.006	
DSI Neuroticism	.07*	.13	.014				.08*	.16	.020	
DSI Agreeableness	.00	.00	.000				.05†	.08	.005	
DSI Conscientiousness	.07	.12	.009				.11†	.21*	.030	
										4.63*

Table 17 (cont'd).

Combined Sample						Employed Sample					
Model	<i>b</i>	β	R^2	F	ΔR^2	$\Delta R^2 F$	<i>b</i>	β	R^2	F	ΔR^2 $\Delta R^2 F$
<u>MODEL E0</u>											
Neuroticism – W	-.02	-.03	.001	.41	-	-	-.06	-.11	.010	.81	-
Agreeableness – W	-.05	-.09	.005				-.06	-.12	.009		
Conscientiousness – W	.05	.08	.005				.05	.09	.006		
<u>MODEL E1</u>											
Neuroticism – W	.00	.00	.000	1.09	.03	1.66	-.04	-.07	.004	2.40*	.09 3.78*
Agreeableness – W	-.03	-.06	.002				-.06	-.10	.005		
Conscientiousness – W	.01	.02	.000				.01	.02	.000		
DSI Neuroticism	.06†	.11	.011				.07*	.13	.012		
DSI Agreeableness	.00	.00	.000				.05†	.09	.005		
DSI Conscientiousness	.07	.12	.009				.11†	.20 †	.025		

* $p < .05$ † $p < .10$

Note: All predictors converted to z scores before conducting analyses. Measures followed by a “W” indicate an at-work tag is used. “b” coefficients are unstandardized and significance tests are performed using sequential sums of squares. “ β ” coefficients are standardized estimates and significance tests are conducted using unique sums of squares. R^2 values for specific predictors are squared semi-partial correlations using unique sums of squares. In combined sample, $n = 166$ for all measures except those involving WPT, where $n = 143$. In employed sample, $n = 119$ for all measures except those involving WPT, where $n = 96$.

In general, the DSI constructs help explain an additional 3% to 5% of the variance in overall performance than the alternative predictor measures. Also notice that it is only when the DSI constructs are added to a set of alternative constructs that R^2 values become greater than .01 (indicating a small effect).

By examining the squared semi-partial correlations for the specific predictors (i.e., the unique variance attributable to each specific measure), one can see that the DSI neuroticism and DSI conscientiousness scales appear to be the more consistent predictors of performance; the DSI agreeableness measure shows only weak relationships with the criterion. Also notice that the CSI is typically related to the criterion slightly stronger than the DSI constructs, although the magnitude of the CSI-criterion relations is similar to that of the DSI conscientious-criterion relations. The differences between the relative effectiveness of the CSI and DSI conscientiousness measures are probably negligible in practical and statistical terms. In general then, the results of the combined sample suggest that most predictor sets explain small amounts of criterion variance, and that this variance may be slightly increased by including the DSI constructs.

In the rightmost columns of Table 17 are shown the results of the regression analyses for the employed sample. Here one finds stronger R^2 values and relations between the individual DSI predictors and the customer service criterion. Most of the effect sizes that include the DSI constructs are moderate. Indeed, all of the incremental F tests show moderate improvements by including the DSI constructs. Similarly, one can see that the DSI constructs typically provide a moderately strong, unique contribution to the predictor set. For example, Model B1 shows that DSI conscientiousness accounts for 3.4% of the explainable variance in performance, and the DSI neuroticism and DSI

agreeableness scales each contribute 1.4%. In general, the DSI conscientiousness predictor seems to be the most important of the three DSI constructs, and seems to explain similar amounts of variance as the CSI instrument. Examination of Model C also shows how much improvement might result from using the DSI constructs rather than generic personality measures. For example, using the DSI measures explained 11% more variance than the NEO measures, which by themselves did not account for even a small amount of variance. This is noteworthy because it suggests that even though the DSI constructs can be “mapped” back onto a Big 5 framework, the instrument predicts better than generic personality instruments. And this advantage is not lessened when one considers adapting generic personality items to reflect work contexts (i.e., Model E). Here, the DSI constructs help explain 9% more criterion variance. Thus, there appears to be advantages to explicitly considering contextual information.

Before ending this section two last issues must be considered. First, the cross-validity of the regression-weighted DSI predictor composite needs to be considered. Specifically, it is important to assess the extent to which the multiple R 's found by the predictor composition in this study might generalize to different populations (only the DSI predictors will be examined for cross-validation). Formula-based cross validity estimates are preferred to empirical cross-validation because the full sample can be employed in the regression analysis, thereby providing more stable regression coefficients (Schmitt, Coyle, & Rauschenberger, 1977; Ragu, Bilgic, Edwards, & Fleer, 1997). Although numerous formula estimate exist, this study uses the formula derived by Browne (1975) and described by Cattin (1980), which is perhaps the most appropriate across many diverse situations (e.g., Schmitt et al., 1977; Schmitt & Ployhart, 1999;

Schneider & Schmitt, 1986). By using the estimates provided in the “DSI Predictors” section of Table 17, one finds that the estimated population cross-validity is .12 in the combined sample and .27 in the employed sample (R^2 s = .014 and .07, respectively). This suggests that the regression-weighted DSI predictor composition should exhibit meaningful and practically useful information in different samples.

Second, demographic differences were examined on the DSI and alternative scales. However, there were only a small number of minority participants, and most participants were female, so these analyses might not entirely generalize. Still, the only demographic difference found for all predictors and criteria was a one standard deviation difference on the WPT, such that minority participants scored lower. This finding has long been known and is consistent with past research (e.g., Sackett & Wilk, 1994).

Discussion

The purpose of this dissertation was to create an instrument that was based on a conceptualization of personality as being a dynamic interaction between traits, situations, and behavior, and thus explicitly considered situational information when assessing personality constructs in work contexts. As such, it was developed to be a measure of personality within work situations. To date, the field has either ignored situational information (e.g., Hatrup & Jackson, 1996) or treated situations as moderators of basic trait – behavior relations (e.g., Barrick et al., 1995). However, a survey of the basic personality literature suggests that neither approach is conceptually correct because situations, traits, and behaviors are dynamically intertwined (e.g., Magnusson & Torestad, 1992; Mischel & Shoda, 1995; 1998). This literature suggests that if one is most interested in predicting a particular behavior in a particular setting, that setting must

be explicitly considered (e.g., Argyle et al., 1981; Krahe, 1992; Mischel & Shoda, 1995; Murtha et al., 1996; Roberts & Donahue, 1994; Sheldon et al., 1997) because behavior is likely to be more stable within psychologically similar situations.

Although attempting to develop an instrument that directly measures basic personality traits within specific work related situations seems intuitive (and indeed has been called for by several researchers, e.g., Murtha et al., 1996; Roberts & Donahue, 1994; Schmit et al., 1995), to my knowledge it has not been attempted in either the basic or applied literatures. There were two main goals of this research. The first was to develop a personality instrument that was more predictive than the best alternative methods (e.g., direct measures of the five factor model). The second was to ensure that this instrument could be mapped onto basic personality constructs (as based on the five factor model), thereby contributing to theoretical understanding. The prediction of customer service provided the context for this study.

Overall, the results of this study find that these goals were generally achieved. First, the DSI constructs were related to most of the customer service dimensions in meaningful ways, and these relations were at least as strong or stronger than alternative measures (e.g., NEO-FFI-G, NEO-FFI-W, CSI, WPT). Second, the DSI constructs related back to the basic personality measures in theoretically consistent ways, although evidence for discriminant validity was somewhat weak. Beyond these two primary goals, however, this study provides information on a number of important but unexamined basic and applied questions. For example, in the basic personality literature there has been little research that has examined how the Big 5 could vary across situational features (e.g., Sheldon et al., 1997). Similarly, the applied research on situational judgment

testing has not been able to identify the types of constructs those instruments measure. This study suggests that the problem may be with the item development process rather than with the test as a whole, so trying to find construct relations for an overall SJT (as is the typical approach, e.g., Weekly & Jones, 1997) may be inappropriate.

These basic and applied implications will be discussed in the following sections. First, the major findings in this study will be summarized in terms of the construct relations in Figure 5. Second, the findings in this study are compared to basic personality research, and similarities and differences are discussed. Third, the findings in this study will be compared and contrasted to the methods currently used in applied psychology, including the use and measurement of traits and situations for selection purposes. Fourth, these findings will be compared to research on situational judgment tests. Fifth, the implications of this research for the prediction and understanding of customer service performance will be explored. Sixth, directions for future research will be provided. Seventh, potential contributions of this study for practice will be provided. Finally, limitations of this study will be discussed.

Construct Validity of the Dispositional-Situational Inventory

This study provides a preliminary examination of the construct validity of the DSI instrument. Recall that the purpose of this instrument was to achieve the dual goals of prediction and understanding. Discussion of these goals may be facilitated by consideration of Figure 5.

Consider first the evidence accumulated for the construct relations with the DSI. First, the DSI items used in the final scales each exhibited an empirical relationship with one personality construct (e.g., agreeableness, neuroticism, achievement, dependability,

or conscientiousness). Thus, at the item level there is support for Inferences 4 and 8. This support was also shown at the scale level (i.e., convergent validity), as each DSI construct related most highly with its respective trait (Inference 8). In addition, the DSI constructs related to the contextualized personality measures (Inference 7). Similarly, the DSI constructs maintained modest relations with the CSI (Inference 6), which is an overall measure of customer service. Because the DSI constructs are measures of personality within customer service situations, modest relations would be expected, again providing support for convergent validity. On the other hand, divergent validity evidence was not found. The primary reason was that the DSI constructs were more highly related to themselves than they were to their respective Big 5 measure. This suggests that the DSI might be tapping a context (i.e., customer service situations) more than specific traits (e.g., neuroticism, agreeableness, conscientiousness). Overall, it appears convergent but not divergent validity evidence was found for the DSI constructs. Because complete support for construct validity was not found, one must interpret the meaning of the DSI subscales cautiously.

Now consider evidence found for the predictive validity of the DSI constructs. First, support was present for Inference 3 because the constructs the DSI attempts to measure (i.e., neuroticism, agreeableness, and conscientiousness) have been shown in past research to be most relevant for predicting customer service (e.g., Frei & McDaniel, 1998; Hogan & Hogan, 1992; Hogan et al., 1984; Paajanen et al., 1993). Furthermore, the nature and content of the DSI items (i.e., situations and behavioral responses) were derived from the customer service performance domain, and survived several reviews by individuals who were very familiar with customer service and personality. Second, there

was considerable support for Inference 1. Empirical predictive validities for the DSI constructs showed small to moderate effect sizes with most criteria. In fact, many of the uncorrected validities in the employed sample were greater than .20, and many of the corrected validities were .30 or greater.

These effects are equal to or larger than those typically found in the literature (e.g., Hough, 1998; Mount & Barrick, 1995). For example, a meta-analysis by Barrick and Mount (1991) report observed validities for neuroticism, agreeableness, and conscientiousness less than .15 across several studies. Even in a more optimistic follow-up meta-analysis, the observed validities of conscientiousness across several criteria was around .20 (although did reach around .30 for an “effort” criterion). Thus, the DSI constructs maintain a level of validity greater than those typically found for neuroticism, agreeableness, achievement, and dependability. In fact, the DSI scales show levels of validity that are among the best estimates that have been found to date (e.g., Mount & Barrick, 1995). In contrast to the NEO scales, the DSI measures maintain a clear level of incremental explanatory value. The regression analyses suggested that the DSI measures may explain sizeable amounts of criterion variance even after controlling for the basic trait measures. This suggests that even though the DSI scales tap essentially the same trait as the basic measure (i.e., NEO scales), the DSI explain greater amounts of criterion variance. This finding occurred for both the generic NEO scales and the NEO scales that used at-work tags. Thus, the basic question of whether integrating contextual information with trait-based behaviors will result in greater prediction over more generically-measured traits, the answer is a clear yes. Moving trait assessment more proximal to the

criterion (e.g., Guion, 1991) and including situational information appears to account for this increased predictiveness.

Note that the DSI exhibited validities similar to or stronger than the CSI, an instrument based on personality traits but empirically developed and scored to predict customer service (Paajanen et al., 1993). This is encouraging because the CSI is perhaps one of the most predictive customer service inventories currently available (e.g., Frei & McDaniel, 1998). However, why the CSI demonstrated negative validities is not clear. One explanation is because there was range restriction in the sample, but it would take rather severe instances of range restriction to make the sign of the observed validities change (e.g., Ree et al., 1994). It is not likely that such range restriction is present in this sample.

The relations between the DSI and the WPT were low, as might be expected because personality and customer service inventories exhibit little relations to cognitive ability (e.g., Frei & McDaniel, 1998; Hough et al., 1998; Sackett & Wilk, 1994). Consistent with past research (Frei & McDaniel, 1998), the relations between cognitive ability and the DSI constructs were negative, although these relations were very small and barely significant. The DSI constructs provided incremental prediction over cognitive ability, suggesting that at least for customer service types of jobs, *g* may not be the strongest predictor.

Overall, the DSI constructs demonstrated small to moderate sized validities with the various criteria, and typically added incremental prediction above the more basic personality measures. The first goal of this study, to provide more effective prediction by explicitly considering situational information and integrating this information with trait

assessment, was supported. The second goal of this study, to show that the scales developed from this instrument were related to basic personality traits in a Big 5 framework in conceptually meaningful ways, was only partially achieved. Thus, this study found that integrating work-related situational information with dispositional information resulted in greater prediction than the application of basic (and generically measured) traits, but what the scales measure is not entirely clear. However, the findings of this study suggest that there may be real practical benefits to considering situational information directly into the assessment of basic traits. Treating cross-situational variability as error, as is typically done in personality tests, appears to remove criterion related variance. The implications of these findings for basic and applied personality research will be described fully in the following sections.

One important point that must be addressed first, however, is to what extent the low internal consistencies for the DSI scales limit its construct validity. Typically, it is thought that understanding can only occur when one measures homogenous constructs (e.g., Hough, 1997). The reason is that with multidimensional measures, one can never be sure what is leading to observed relationships (Nunnally & Bernstein, 1994). However, one might not expect high validities for the type of test created here, even though the items are expected to be manifestations of basic personality traits. This issue was describe in detail in Section 5.2, but will be briefly examined again here.

The important questions are to what extent the DSI scales should exhibit high internal consistency estimates, and (since they do not) to what extent low internal consistency estimates reduce understanding. As noted in section 5.2, there are probably two reasons for why the reliability estimates are lower than desired: range restriction (a

lack of variance will reduce internal consistency estimates) and item-specific variance. The range restriction explanation is obvious and not likely to be so strong, so attention will be directed towards understanding the second point.

To understand this second point, one must first understand coefficient alpha. Basically, alpha treats shared variance between items as true variance, and variance unique to items as error (Anastasi & Urbina, 1997). Note that alpha assumes unidimensionality, and so to the extent a set of items measure a common latent construct, the item covariances will be high and alpha will be large. The fact that the DSI scales exhibit low alphas suggests there is considerable unique variance in the set of items for each scale. In Section 5.2 it was suggested that there are theoretical reasons to expect the DSI item covariances to be low because the items were written to reflect different customer service situations. Specifically, the abundance of research on cross-situational stability (e.g., Epstein, 1979; Kenrick & Funder, 1988; Mischel, 1968; Murtha et al., 1996) suggests behaviors in different situations will covary approximately zero (Mischel & Shoda, 1995), or at least very low. However, Mischel and Shoda (1995) demonstrate that it is the behavior that occurs in psychologically similar situations that will remain stable across time (i.e., intra-situational stability of behavior); behavior across psychologically dissimilar situations will show no consistency. For example, an individual may act very meek every time he or she deals with an irate customer, but get very hostile when a coworker asks him or her to cover an extra shift on a weekend. Across these two situations the behavior is inconsistent, but within each situation the behavior is consistent for the individual. And most importantly, in both instances the behavior reflects instances of aggression.

There are two important points about this research. First, internal consistency estimates may not be the best estimate of reliability because the items should not all covary highly—the reason is that they tap diverse customer service situations (e.g., Murtha et al., 1996). Rather, test-retest reliability should be high because the same person presented with the same situational stimuli should respond in approximately the same manner. This is the intra-situational consistency over time finding discussed by Mischel and Shoda (1995). Thus, test-retest reliability is probably more appropriate and is certainly more consistent with the Mischel and Shoda (1995) conceptualization (in fact, they argue against internal consistency estimates of cross-situational behavior because it treats situational variance as error, even though this approach has been advocated by some; e.g., Epstein, 1979, 1980). Second, just because internal consistency (i.e., cross-situational consistency) is low does not have to mean that the items tapped by the DSI are not behavior manifestations of a specific personality construct. This means that in this instance, low alphas does not have to signify construct heterogeneity. Indeed, all of the DSI items were expected to relate to a specific trait, and the final set of items all showed empirical relationships with these basic traits. The DSI items for a given construct are thus behavioral manifestations of that trait in a general customer service context, even though each item taps a different type of customer service situation. Thus, the items may not all covary to great amounts because they are actually different situations, but within each situation (item) the behavioral options are manifestations of a basic trait. This is of course the point behind a conditional conceptualization of traits (e.g., Mischel & Shoda, 1995), and several researchers (e.g., Murtha et al., 1996; Sheldon et al., 1997) show that the direction of a trait-response linkage may change dramatically depending on the

situation (see also McCrae & Costa, 1995; and Motowidlo et al., 1997, for some similar support for this point). The more psychologically similar the situations are, the greater should be the correlation between items. Evidence for this does exist, for example, DSI items 50 and 51 are almost perfectly related. Thus, as Murtha et al. (1996) found, the more psychologically similar the situation, the greater the internal consistency.

Overall, future efforts will need to be devoted to developing more homogenous measures. Most likely research will need to develop classes of situations that are fully crossed with classes of behaviors. In such a fully crossed design, the class of behaviors within each class of situations should exhibit higher internal consistency estimates relative to cross-situational or cross-behavioral covariances.

Contributions to Basic Personality Research

Although this study has primarily tried to apply the theory and research from the more basic personality literature to selection contexts, the findings in this study can provide contributions to this more basic research.

First, the study provides some support for the Mischel and Shoda (1995) conceptualization of personality (i.e., CAPS). Although there is a sizeable amount of research that has been amassed in support of the theory (e.g., Shoda 1990; Shoda et al., 1989; 1993; Wright & Mischel, 1983; 1987), most of the research has been gathered in the same context (i.e., a summer camp setting) with the same general population (i.e., young children) and for a limited set of behaviors. To my knowledge, no study has attempted to use the CAPS framework to either design an assessment instrument or to apply much of the framework to work contexts.

Thus, this study provides new support for the CAPS conceptualization by illustrating the conditional nature of traits in work settings. For example, the fact that the relatively context-free traits (e.g., neuroticism) did not relate to the criteria as strongly as the DSI scales is entirely consistent with the notion that behavior will be more stable when it occurs within similar situations. Although there are clearly differences between taking a test and providing customer service, a good test will be a sample of behavior (Anastasi & Urbina, 1997)—in this case, a sample of behavior that occurs in very specific situations. This may be one reason for the stronger DSI validities. What is also a contribution of this study is how the basic method for assessing situations and behaviors that was used to develop the CAPS model could be integrated with current methods in applied psychology to provide a reasonable method for developing instruments like the DSI. Specifically, this study tried to link situations and traits such that the situations exhibit variability in the trait. More will be said about this later.

Second, the results of this study are consistent with the meta-theoretical framework discussed by McCrae and Costa (1996), which is shown in Figure 1. For example, they state that measures of personality should assess what they call “characteristic adaptations,” which are basically intermediate psychological processes (e.g., goals, intentions). However, they also note that these adaptations may be situationally dependent, as is behavior (i.e., “objective biography”). Thus, and consistent with their model, if one wants to predict a specific behavior in a specific situation, one must faithfully assess the influences of that behavior—that is, situations and adaptations. Notice that they do not suggest basic traits (e.g., the Big 5) directly influence behavior, instead they argue they do so indirectly through characteristic adaptations (e.g., goals).

So, the DSI fits within this framework by integrating the situational information with trait directly into trait assessment. Although the characteristic adaptations were not directly studied, they are assumed to be present. That is, an individual chooses a behavioral response on the DSI by processing the situational information in a manner consistent or characteristic with his or her basic traits. The contribution of this study is thus the empirical examination for part of this general framework (i.e., NEO constructs less predictive than the DSI).

Third, this research contributes to the large literature on interactionist approaches to personality. By showing that highly contextualized items (i.e., the DSI items) were more strongly related to customer service performance than generic personality items (NEO-FFI-G) or work-related personality items (NEO-FFI-W), evidence is provided for the effects of situations on behavior (and thus prediction). Such a finding extends some earlier approaches. For example, Murtha et al. (1996) speculate about the possibility of incorporating situational information directly in to the measurement of basic traits, and how such an integration should prove to be more predictive than measures that ignore situational information. Thus, this study extends the Murtha et al. (1996) study by showing such an approach has merit. This study is also consistent with Sheldon et al. (1997) and Roberts and Donahue (1994), who call for research examining situational influences on the Big 5 constructs. Similarly, this study extends research conducted in a stimulus-response tradition (e.g., Dworkin & Khilstrom, 1978; Endler et al., 1963) by showing how combining situations with dispositions can be used for practical purposes (i.e., prediction) as well as understanding.

However, it should be noted that the actual personality by situation interaction could not be directly studied in this research. For example, no situational framework was used to develop situations. Similarly, situations were for the most part constant (i.e., all were customer service situations) and probably have to be given the relatively stable nature of the job in personnel selection. To more directly study the interaction one would need to cross all behaviors with all situations, but this might not be possible given the current focus of developing a selection instrument that incorporates situational features. Future selection research might be devoted to exploring the interaction directly.

In sum, the findings in this study are consistent and support a number of theoretical statements that have been made in recent years (e.g., McCrae & Costa, 1996; Mischel & Shoda, 1996; Sheldon et al., 1997) but have not been widely studied. Furthermore, it extends some recent research (Murtha et al., 1996) calling for consideration of situations for predictive purposes. As such, this study contributes to the more basic personality literature by showing that the more basic theories and frameworks can be meaningfully applied to real-world contexts.

This study suggests several future directions for research. For example, it would be interesting to more explicitly consider the concept of goals within this research. Several researchers (see Argyle et al., 1981; Pervin, 1989) have already made this point, but what seems necessary is to consider how traits, goals, behavior, and situations interact. It is possible that certain situations make certain goals salient, but actual choice and enactment of these goals is dependent on basic traits. Similarly, a better and more explicit consideration of the important psychological mediating mechanisms should be conducted. All major theories discussed in this section describe these constructs in

general, but then usually end by saying the nature of these constructs depends on the specific situation and behavior one is trying to predict. Only limited research has examined how traits relate to cognitive functioning (e.g., Matthews, 1997), but it seems that this is an idea whose time has come. For example, extraverts have been shown to characteristically process information differently than introverts, but this research has not really been linked to any kind of practical outcomes (Matthews, 1997). It would be interesting to determine what mechanisms account for individuals with different levels of trait perceiving and reacting to identical situational stimuli, and what the consequences of these differences might be. Here research on basic cognitive psychology, social cognition, and expertise seems relevant.

Contributions to the Application of Personality for Personnel Selection Research and Practice

It is common practice in personnel selection to base predictions about job performance on basic traits, particularly the Big 5 or some minor variation thereof (e.g., Hough, 1992; 1998; Barrick & Mount, 1998; Mount & Barrick, 1995). This is in contrast to research in the basic personality literature, where both situations and traits are important to consider because behavior will only be consistent to the extent that it occurs in psychologically similar situations (Magnusson & Torestad, 1992; McCrae & Costa, 1995; Mischel & Shoda, 1995; Murtha et al., 1996). Furthermore, this research suggests that the expression of basic traits can change across situations (Murtha et al., 1996; Sheldon et al., 1997). These results suggest that if one wants to maximally predict a specific behavior, one must understand the context within which that behavior is to occur. This of course means that any predictive assessment instrument should include the

contextual information for which the behavior to be predicted is embedded in (Murtha et al., 1996; Roberts & Donahue, 1994), something that is not typically considered in selection contexts.

Only recent research in personnel selection reflects these points. Mount, Barrick, and Strauss (1994) found that, when making trait ratings, different frames of reference (e.g., self, peer, supervisor) resulted in different validities. Schmit et al. (1995) found that adding at-work referents to a set of generic personality items increased the predictive validity of the instrument. Consistent with Murtha et al. (1996), Schmit et al. argued that future research should (a) replicate their study with a field sample and different criteria, and (b) consider even more explicit contextual information. Murtha et al. (1996) argued that behavior might be better predicted by including specific contextual information during the assessment phase. The present study was conducted to consider these issues raised within the basic personality literature within the context of personnel selection for customer service jobs. Thus, the present study builds on the more basic research and extends the more applied research. Several novel contributions have been made.

First, this study found that the contextualized measures of personality (i.e., the DSI) consistently predicted customer service performance better than either generic or contextual NEO scales, and better than broad or general measures of conscientiousness. Furthermore, the higher validities for the DSI were often not trivial and would have resulted in practically meaningful improvements in predictive validity. This suggests that consideration of contextual information can improve the prediction of job performance by appreciable amounts, as was hypothesized by Murtha et al. (1996) but not empirically shown.

Second, consideration of specific situational information improved prediction beyond that provided by simply adding an at-work referent to each item. Theoretically this should occur because (a) people perceive and process situational information in characteristically different ways, and (b) at least some of the explanation for these different processing characteristics is due to basic traits (McCrae & Costa, 1996; Mischel & Shoda, 1995). Thus, situations are not moderators, but rather an important and necessary part of trait assessment. The reason, then, that the DSI was more predictive than simply using at-work referents to items was because it provided the type of rich situational information that allows one to more accurately say what he or she would actually do in a work context. Although using at-work tags surely reduces the number of situations one may consider when responding to the item (Schmit et al., 1995), it does not faithfully produce the different situational stimuli that might be present within a general work situation. As such, this study is the first to show that specific situational information should be included in trait assessment to increase predictive validity. Previous research has only shown how personality may differ across very broad types of nominal situations (e.g., Murtha et al., 1995; Schmit et al., 1995).

It should be noted that contextualizing personality items affects the tests fidelity to work contexts and is independent of the test's bandwidth (i.e., broad or narrow trait measures). Contextualizing personality items moves the trait measure closer to the criterion domain, thereby influencing fidelity. However, this can be done for both broad (Big 5) or narrow (facet) measures of traits. Thus, contextualizing personality items may make the test more context-specific, but does not necessarily mean the test is a narrower measure of personality. One way to formally test this assertion is to examine the factors

that are produced from analyzing the contextualized items. If more specific factors emerge that are “traits within situations,” one has developed an instrument that is more specific but not in the typical bandwidth-fidelity sense.

Third, this study shows how an instrument such as the DSI could be as predictive as an empirically keyed measure of compound personality traits. Hough and Schneider (1996) suggest that combining the basic traits (e.g., Big 5) into specific ways for the prediction of specific work criteria may enhance prediction. Indeed, this is the strategy adopted by many popular integrity tests and customer service inventories. Of course, these tests are inherently multidimensional because items are only retained if they have meaningful relations with their respective criteria (e.g., lack of theft, courteous to customers). Instruments developed in this manner typically demonstrate higher validities than basic personality traits (e.g., Frei & McDaniel, 1998; Hogan et al., 1984). However, this study shows that integrating situational and dispositional information into a single test format can be as predictive as these “compound” measures (at least for service orientation), yet still provide understanding about individual differences on basic traits. For example, the DSI constructs were about as predictive as the CSI, but could be linked back to specific personality traits to help understand which traits were most important for providing excellent service. Specifically, it appears that conscientiousness and to a lesser extent neuroticism are the primary predictors of customer service performance, and that agreeableness may be important for some criteria more than others. This information could not be identified using an instrument such as the CSI.

Fourth, this study replicates Schmit et al. (1995) by including both generic and at-work items for the NEO-FFI. In contrast to their study, however, no meaningful

improvement in predictive validity was found. The Schmit et al. (1995) study was a simulated selection procedure using volunteers as participants and GPA as the criterion. Furthermore, only conscientiousness was examined. Here, real incumbents were used (at least for certain in the employed sample), actual supervisory ratings were collected, and neuroticism and agreeableness were also considered in addition to conscientiousness. The results of this study parallel those in Schmit et al (1995) by finding higher means in the contextualized scales, but unlike their study found little to no improvement in validity. Although there may be several reasons for this (e.g., range restriction, criterion problems; see Study Limitations section below), the fact remains that future research must examine this issue more closely. Concluding that adding at-work referents alone with improve prediction may not be warranted, or at least may not be warranted unless certain conditions are present.

Fifth, this study is one of the first that attempts to develop a personality instrument by explicitly considering the nature of the criterion. That is, the options in the DSI reflect actual customer service behaviors, rather than generic or general types of behavioral statements. Guion (1991) notes the importance of the criterion when developing personality tests, but with the exception of criterion-referenced tests (e.g., CSI, Paajanen et al., 1993) few attempts of trait assessment in selection have considered this approach (however, see Raymark, Schmit, & Guion, 1997, for an application to job analysis). This is interesting because researchers (e.g., Anastasi & Urbina, 1997; Rynes, 1993) have argued that making tests job-related (i.e., sampling from the criterion domain to develop the test items) should provide many desirable qualities (e.g., increased prediction, more favorable reactions). This study would suggest that making test items

job related may also improve validity, but to what extent is unclear because all of the DSI items were written to reflect specific customer service behaviors and situations (as opposed to just customer service behaviors).

Overall, this research contributes to the existing selection literature by empirically demonstrating that the continued use of selection instruments based on broad and generic personality measures may not provide maximal prediction. Rather, and more consistent with theory and interactionist personality research, this study suggests that contextual information should be included as part of trait assessment. Neglecting such information is likely to provide less accurate prediction for specific work behaviors, as others have noted (Murtha et al., 1996; Roberts & Donahue, 1994) but no one has empirically shown. Of course, these conclusions are based on several conditions that will be described in the Study Limitations section below.

Contributions to the Development and Use of Situational Judgment Tests

Although the primary purpose of this research was to develop an instrument of personality within work contexts, the manner in which the DSI was developed may have some implications for the development of situational judgment tests, or of any instrument that attempts to link situations to behavior.

First consider the differences in scale development. The traditional manner in which SJTs are developed is to use job analysis information to develop common work situations. The job analysis information may or may not be used to rationally create general dimensions (e.g., Motowidlo et al., 1990; Weekly & Jones, 1997). Next, a different group of incumbents is required to generate responses to each situation. Finally, a third group of experts is given the task of choosing the best response for each situation

(Weekly & Jones, 1997), and sometimes the best and worst responses for each situation (e.g., Motowidlo et al., 1990; Pulakos & Schmitt, 1997). These items are then correlated with performance for an overall estimate of validity.

To date, nobody has persuasively shown what constructs SJTs measure because they are inherently multidimensional. Consideration of basic personality research suggests why this is so. The fact that situations are drawn from work contexts is not problematic because the behaviors to be predicted are embedded in these situations (Murtha et al., 1996). However, identical objective situations are perceived differently as a function of different dispositions (Mischel & Shoda, 1995). Assuming that there are individual differences on basic personality traits in the sample that generates the responses (and the sample that judges the correct responses), different options may be related to different traits. Of course, these relations are not likely to be found empirically because the entire process goes through several revisions (at a minimum two, those who generate responses and those that rate them). Furthermore, behavior is multiply determined, so one should not be surprised that there are multiple construct relations to items, both within and across options. Thus, throughout the development process there are multiple constructs being assessed, there is no conceptual basis for including or rejecting particular situations, or to judge what might be better situations than others, and there is no theoretical basis for choosing among alternative behavioral options—in short, there is no theory that is being assessed. This is not to say that these tests are not designed to tap specific criterion dimensions or behaviors (e.g., interpersonal skills; Motowidlo et al., 1999), but ultimately the test is developed in a very multidimensional and atheoretical manner.

Now contrast this approach with the method used here. First, a heuristic conceptualization of how basic traits should be manifest in work situations (primarily that of Mischel & Shoda, 1995) was used to guide the development process. Specific traits that have shown relations to the customer service criteria in previous research (Frei & McDaniel, 1998; Hogan et al., 1984; Paajanen et al., 1993) were to be measured by considering contextual information. This is typically not done when creating SJTs. Second, a job analysis was conducted to determine both relevant work behaviors and situations that should exhibit the most variability in those behaviors. Specifically, respondents were asked to describe situations that were difficult, challenging, and ambiguous. Next, the situations and behaviors were written to reflect a range of one behavior in a given situation, and this behavior was expected to be a manifestation of a basic trait in the situation. Traditional SJTs use multiple behavioral options that are scored as more or less correct; the method used here provided only one type of behavior (e.g., help a customer) that was written to reflect a range of that behavior (e.g., “help the customer at all costs” to “help the customer only as much as necessary”). Endorsement of a particular degree of this behavior was considered to be determined by a person’s standing on a basic trait and be analogous to choosing between “strongly agree” to “strongly disagree” on a traditional personality scale. Third, items that exhibited a relationship to only one personality trait were considered. This step is not done when developing SJTs. Fourth, in this study the items are summed to form scales, but there are no correct or incorrect answers for the items. Instead, the instrument is scored like a personality test by unit weighting items to form an overall score. In contrast, SJTs use right or wrong answers.

Thus, by comparing these two methods one can see that SJTs suffer from a multidimensional approach that is built in throughout the stages of their development. However, depending on the purpose and goals for developing these instruments, they may be able to be improved based on the findings of this study. First, it may be better to reflect a range of one type of behavior than to consider multiple behaviors for each situation. Each behavior generated by multiple individuals to a specific situation may be multiply determined by several dispositional and contextual factors. However, using a range of only one behavior (e.g., high to low on demonstrating effort) should make these items more unidimensional. Second, researchers developing SJTs may need to adopt formal criteria for developing or retaining situations; criteria that will result in the maximal variability in the behavior rather than simply using most work-related situations identified. Anecdotal evidence from this project would suggest that, when given clear definitions and examples of what is meant by difficult situations, participants can identify situations that are relatively difficult to handle. Third, should one desire to measure a specific construct using a SJT format, a method similar to the one used in this study could be adopted. This should improve the SJT by: (a) requiring a clear conceptualization of the construct to be measured, (b) explicating how situations should relate to the manifestation (i.e., behavioral response options) of this construct, (c) developing options that reflect a range of a behavior rather than multiple behaviors (that are probably multidimensional anyway), and (e) assessing the relations of these items to an alternative measure of the construct.

It is also instructive to compare the findings in this study to past research on SJTs. In contrast to research on SJTs (e.g., Motowidlo et al., 1990, Pulakos & Schmitt, 1996;

Weekly & Jones, 1997) this study found theoretically consistent and reliable relationships with specific traits, providing evidence for construct validity. To date, no published study on SJTs has been able to demonstrate such findings (although Motowidlo et al., 1990, did show modest correlations between their SJT and some dimensions tapped by interviews and assessment centers, their SJT did not measure a specific construct). Furthermore, this understanding did not come at a price of reduced predictiveness because the validities for the DSI constructs were generally similar to those found in past research. When one compares the values for the corrected validities, or for the validities in the employed sample, one finds that the DSI constructs predicted performance with the range of the best estimates for SJTs in the literature. Finally, this occurs without requiring greater resources from the organization: after the criterion behaviors and situations are elicited, further development can proceed without the help of job incumbents. SJTs would further require incumbents to (a) generate behavioral options and (b) rate these options. Thus, the DSI method maintains levels of validity as good as SJTs but with less labor requirements—yet provides greater understanding.

Finally, one might contrast the traditional SJT approach with the empirical scoring key used here for the DSI. These approaches are similar in that there is little explicit consideration given to understanding a construct or constructs in the measure. Instead, the interest is in maximal prediction. Thus, the similarity between these approaches is in their goals and the fact that both tests are empirically scored, but their differences lie mainly in the way the situations and response options are generated (as the above section that compared and contrasted these methods has noted). The results from this analysis suggest that the validities of the empirical DSI (r 's = .39 to .41) were similar

to the best estimates published to date ($r = .37$; Motowidlo et al., 1990). Thus, there may be some very practical improvements in validity for SJTs simply by adopting the situation and response development method used here.

Contributions to the Understanding of Customer Service Performance

This study was primarily concerned with developing an instrument of personality within work contexts. However, this study also provides a novel contribution to research on customer service and the prediction of customer service performance. First, this study integrated three performance taxonomies to define the customer service performance domain: the SERVQUAL dimensions (Parasuraman et al., 1991), Campbell's performance taxonomy (Campbell et al., 1993; 1996), and contextual performance (Borman & Motowidlo, 1993; 1998). Integrating these taxonomies provided a more complete description of the customer performance domain than did each framework independently.

What is most important to note for present purposes is that the SERVQUAL dimensions (Parasuraman et al., 1991) were deficient. The data collected during the job analysis indicated that a variety of behaviors were important for providing customer service; these were largely related to contextual performance dimensions (e.g., willingness to help coworkers). Although the SERVQUAL dimensions describe the customer service performance domain in terms of the behaviors needed to deal with customers, they are deficient in terms of the behaviors required to function effectively in a service organization (particularly a retail or foodservice environment). This is important to note because most applied psychological research that attempts to study customer service uses the SERVQUAL dimensions (e.g., Schneider & Bowen, 1995).

This study suggests it is premature to settle on these dimensions without more research (of course, it might be noted that these dimensions were all highly correlated. This issue is discussed in the Study Limitations section below).

In addition, this study is among only a few that has attempted to predict customer service performance. Most of the research that has been done has been conducted to help validate a proprietary instrument (e.g., Hogan et al., 1984; Paajanen et al., 1993). Almost no published research has explicitly considered the application of basic traits to predict customer service, and no published research has examined the use of contextualized predictor measures. Thus, this study provides a contribution both to the understanding and prediction of the customer service domain as well.

Future Directions: Towards an Integration of Basic and Applied Perspectives

The direction of this study was based on a considerable amount of research in the basic personality literature. However, the goals of this study were to use this research to provide a more predictive instrument than current measures, yet still provide for understanding. As a result of these efforts, future research directions are considered.

First, an immediate question that must be addressed is to examine the test-retest correlations of the DSI constructs. Should these correlations be high, it supports the notion that the DSI is similar to Mischel and Shoda's (1995) conceptualization of personality: behavior is inconsistent across situations, but is consistent within similar situations. Thus, the very next step should be to assess the DSI constructs at two different times. However, the more basic NEO and NEO with at-work tags measures should also be examined because it would be interesting to compare the relative stabilities across time.

Second, it is important to replicate the current results in a different sample of customer service employees. Also needed is more information about possible sub-group differences. Similarly, it would be interesting to adopt the approach used to develop the DSI to create predictors for other types of jobs. For example, managerial performance may be influenced by a number of traits (e.g., Hough & Schneider, 1996) that are more or less required in certain situations (e.g., dealing with employee conflict, developing trust). If such information is confirming, it helps to further validate the rationale for the DSI.

Third, it would be interesting to more directly apply the CAPs conceptualization (Mischel & Shoda, 1995) to the measurement and understanding of customer service jobs. For example, customer service jobs are relatively fast-paced and dynamic, and require a number of skills simultaneously (e.g., self-regulation, impression management). These constructs are similar to those identified in the CAPs system, and so an interesting study would be to assess these constructs along with measures of basic traits (i.e., Big 5) and the DSI to predict performance. One would expect the DSI to be related to the more proximal mediating mechanisms, and these more proximal constructs should completely mediate any Big 5 - performance relations.

Fourth, a policy capturing study that examines if individuals who differ on a particular trait identify different salient features of the DSI situations would help provide more evidence that situational information should be considered as part of trait assessment. This is consistent with theoretical frameworks (e.g., McCrae & Costa, 1996; Mischel & Shoda, 1995) but has hardly been explored (e.g., Matthews, 1997). Such information could then be used to scale situations in terms of their effects on behavior, leading to the development of a situational taxonomy.

Fifth, the more basic understanding of within and between situation stability, within and between individual stability over time, and traits needs to be more fully considered. Almost no research has considered the issue of temporal stability in conjunction with situational stability. However, these two issues are clearly interrelated, and there are considerable opportunities to consider how these factors may be related in samples of job incumbents or college students.

Contributions to Practice

This study suggests that the practice of using general trait measures of the Five Factor Model may not be the most effective method for using personality to select individuals. Rather, a careful consideration of the situational context within which a trait will be manifest should be likely to improve prediction, resulting in greater utility. It should be noted that the method proposed here does not require any more organizational resources than costs required for developing a SJT (indeed, the required time and people resources are probably less). However, it does require more resources than using an off-the-shelf personality instrument such as the NEO-FFI or the Hogan Personality Inventory. On the other hand, the predictive validity of the DSI appears to be greater than these generic instruments. Furthermore, after the DSI is developed and construct validity evidence is gathered, use of the DSI is no more costly than these proprietary methods. Given the increased validity afforded by the DSI method, it may prove to be a useful alternative to many personality instruments. And, given its low relations to cognitive ability, may be an attractive complement to predictors measuring g.

Study Limitations

The conclusions and recommendations provided in the previous sections should be considered in light of the following study limitations. First, more construct validity evidence needs to be collected. Although this study finds interesting and meaningful relations between the DSI, other predictor constructs, and customer service performance, it would be desirable to have another sample to conduct empirical cross-validation.

Second, one may question the appropriateness of the sample used in this study. However, the residence hall sample was composed of individuals who held actual customer service jobs, and these individuals were rated by two supervisors, so this sample should generally be representative of other organizational contexts. Less certainty can be placed with the subject pool sample because there was no way to know (a) if these individuals were employed in customer service jobs, (b) if their supervisors actually completed the forms, and (c) if the jobs were comparable. To help minimize these concerns, analyses were run for both the overall sample and the employed sample. These results were generally consistent, although were slightly more favorable for the DSI in the employed sample.

Third, one may question whether the criterion dimensions were truly distinct. Clearly they were all interrelated, but they all also reflect specific aspects of customer service. However, across dimensions the results were mainly consistent, so whether one considers these dimensions as distinct or in combination will not make much of a substantive difference. One explanation for the degree of intercorrelations among these dimensions is halo bias, where the same person is rated similarly on multiple dimensions. Although rater training was provided, this bias still appears to be present. Leniency also

appeared to be present because most of the ratings were above average. However, if anything these forms of bias should attenuate the observed validities by reducing variance across all dimensions. Stronger validity evidence might have been found had the rating scales exhibited greater variability.

Fourth, the power for detecting true relationships in this study is on the minimum side of accepted levels (.70) for many analyses. However, the primary focus in this study was on effect size, as this provides more information than do significance tests (e.g., Murphy & Myers, 1998). Of course, indirect range restriction may have slightly attenuated these effects (Schmidt et al., 1976), but if one considers reasonable amounts of indirect range restriction this study still provides adequate power for most analyses (Sackett & Wade, 1983). Still, there is no substitute for larger sample sizes and empirical cross-validation.

Finally, one might question the construct validity evidence given that method bias may be present. Although method bias is probably present, the degree of NEO intercorrelations shown in the table is consistent with that found in past research (e.g., Costa & McCrae, 1992). Thus, method bias does not appear to be the sole factor accounting for the intercorrelations among the measures.

Conclusion

This study shows that consideration of specific situational information when assessing traits can lead to both greater prediction and understanding. Thus, this study is more consistent with basic personality research and theory. However, it also contributes to this basic literature. For example, Murtha et al. (1996) argued that many important criteria are embedded within situations, and that to accurately predict this criteria one

must incorporate the relevant situational stimuli with the predictor. This study is the first to provide evidence that this approach seems warranted with a Big 5 framework. Similarly, this study contributes to the applied literature by illustrating how such information can be incorporated and used to develop trait-based predictors of job performance. As such, this study argues that future trait-based selection research should consider the nature of contextual work information to provide a more accurate assessment and prediction of work behavior. By maximizing prediction with a construct-oriented approach, one can better develop instruments that provide for greater prediction and understanding.

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APPENDIX A

Behavioral Statements Clustered into Criterion Dimensions

Examples of Each Dimension

1. Tangibles/Appearance

1. smile when greeting a customer
2. act in a professional manner at all times one is visible
3. always smile
4. always provide eye contact
5. keep work area clean and neat
6. maintain respectable/appropriate personal appearance
7. don't chew gum/eat/drink when working with customers
8. don't smoke outside of store when working
9. maintain a professional appearance until officially off the work premise (e.g., don't squeal tires out of the parking lot)
10. if you can be identified with the company, maintain a professional appearance
11. always look busy
12. look/act interested in what your doing
13. maintain a professional personal appearance
14. always maintain eye contact
15. don't overdo it so you come across as fake
16. if busy, give customer the appearance that you're giving them special treatment
17. Maintain clean personal appearance
18. keep work area neat and clean
19. keep product appearance neat and clean
20. minimize clutter as much as possible
21. don't fix hair in public (do it in private)
22. guys should wear long hair in an appropriate manner
23. women should not wear obnoxious makeup—be conservative
24. don't adjust clothes (e.g., shirt, underwear) when in public
25. keep folding clothes/clean up appearance of products during free moments
26. present a pleasant appearance when performing uncomfortable tasks
27. continuously clean work area
28. clean/dust areas not directly visible
29. always look busy
30. put products away where they belong when you're done showing them to a customer
31. look customer in the eye when talking to them
32. look eager to help the customer
33. if customers are present, always look busy
34. if store is busy, walk fast to give impression that you're trying
35. always give the customer an appearance of control
36. if on phone with another customer, maintain eye contact with the present customer
37. thank customers/tell them to have a good day when they leave
38. act professional and appropriate
39. try to have your nonverbal and verbal actions consistent
40. act strong when appearing sympathetic
41. maintain eye contact/listen carefully to customer

42. ensure product is accurately displayed/advertised
43. maintain a pleasant tone, upbeat, eye contact, stay focused on customer
44. laugh if customer laughs
45. smile and nod as customer talks
46. maintain eye contact with customers
47. Be friendly
48. smile at customers when they first enter the store
49. speed up your personal behaviors (eg, walking) if the store is busy
50. say goodbye to a customer when they leave the store
51. exhibit self-confidence when dealing with customers
52. don't eat/drink/attend to personal concerns when helping a customer

2. Reliability

1. be very careful with customers money
2. double check the customers money to give them the correct amount
3. treat all customers in an identical fashion
4. stay with customer until the transaction is completed
5. perform in a constant pace/flow
6. don't make another promise with the customer you can't keep
7. overestimate the length of time to get back to a customer
8. perform a consistent system when providing service
9. write down all relevant information the customer mentions
10. if on phone, write down all relevant information the customer mentions
11. write all relevant customer information down
12. keep records as necessary (e.g., customer orders, who you should call back)
13. maintain contact with the customer
14. don't leave the customer until the customer leaves the store
15. remain with customer until their question is answered, don't pass the buck
16. never leave a customer/walk away, call manager or coworker to you
17. walk with customer to show them where a product/service is located (don't just point)
18. keep customer orders separate

3. Responsiveness

1. Greet a new customer
2. put the customer before your own needs/considerations
3. move promptly with the customer
4. always ask the customer if there is anything you can do
5. always ask if need help
6. if customer is waiting, periodically inform their on the status of their order
7. be prompt with customers
8. greet customers when they first enter the store
9. acknowledge the customer (ie, you know they're present) even if your busy (eg, "I'll be right with you")
10. never leave a question unanswered
11. treat everyone in store like a potential customer
12. always physically check if a product is in stock

13. call other stores to see if product is in stock when you don't have it
14. call customer back if there are problems with the order/questions
15. be especially prompt with customer if you fail to keep a promise
16. if you are running late with a customer, tell customer you why you are running late
17. provide the customer with specific times about when you will get back to them
18. give customers your name and where you'll be if you're too busy to help them
19. greet customer quickly upon their entering the store
20. tell the customer you will get to them shortly if you cannot help customer right away
21. keep customers glasses filled; keep refilling (RESTAURANT SETTING)
22. periodically check up on customer/call to ensure their purchase has been satisfactory
23. if on phone, acknowledge that you see the present customer with a nod or smile
24. go to a present customer as soon as you get off the phone
25. keep updating the customer on the status of their service/order
26. don't ask customers questions that are obvious—just do it
27. if you are not the customers server, let them know somebody is coming to help them
28. do all that is possible to improve the customers situation
29. give customers exactly what they ask for
30. tell customer when a service will be provided if it can't be provided immediately
31. Greet customer right away when they enter the store
32. introduce yourself to customers when they enter the store

4. Assurance

1. tell the customer what is typical service for the product
2. be patient with the customer if they were rude
3. never argue with the customer
4. provide extras for the customers (provide little gifts, favors)
5. be courteous with the customer
6. if customer is angry, suggest alternatives or options
7. if customer is angry, show sympathy in a personalized manner
8. ask the customer how there shopping experience has been
9. let the customer state their opinions about the shopping experience before leaving the store
10. admit to the customer when you don't know the answer, and find someone who can help
11. show patience with customers
12. direct customers to the correct department/direction
13. off suggestions/comprise with the customer if you don't offer the product/service they desire
14. offer your opinions/advice to the customer
15. be truthful/honest with customer
16. if customer is making a bad decision, suggest your opinion tactfully
17. empathize with the customer
18. always give the customer a way out of the purchase (eg, mention returns, exchanges)
19. if break promise, apologize and take care of it right away
20. if you fail, offer some form of compensation for the inconvenience
21. be respectful to the customer at all times
22. don't be too pushy when checking up on customers
23. treat all customers with respect regardless of their appearance

24. if you can't help the customer fast enough, offer suggestions/
25. don't rush the customer
26. if you must perform a job that appears unimportant, mention to the customer why it is important
27. refer customer to customer service cards/feedback cards
28. provide the customer with options or alternative services
29. provide product comparisons for the customer
30. allow the customer the opportunity to return the product/point out they can return it
31. provide service/product options to the customer
32. if somehow the customer is embarrassed, try to joke/show you understand/it happens to everyone
33. exaggerate how sorry you are for a customer
34. be tactful (eg, I always do the same thing)
35. make light of embarrassing situations, try to get customer to laugh
36. give the customer suggestions
37. be honest/up front with customers
38. make alternative suggestions for customer if you've made a mistake
39. don't oversell the product or service
40. always remind the customer that they can go back on a sale
41. don't pressure the customer into making a sale
42. offer suggestions to the customer
43. provide personal experiences/opinions to the customer
44. be polite to the customer
45. give the customer time to ponder purchase/product characteristics
46. offer to help if customer is carrying many bags
47. point out different areas of the store
48. offer suggestions if you can't meet their expectations
49. use catalogs/other information to illustrate options and show alternatives
50. recommend closest substitute to a service if you can't provide the service they want
51. be patient with customers
52. suggest various payment plans
53. explain non-obvious details of a product or service; pros and cons
54. if customer is unhappy, provide cheap alternatives to enhance their experience
55. offer the customer suggestions/deals/sales information
56. check back with customers to ensure service was provided/product was satisfactory
57. offer general suggestions to customer and watch for their reaction to each suggestion
58. if you fail, be up front about it and say you're sorry
59. describe to customer how they get their dollars worth
60. explain entire service process thoroughly
61. show customer step by step, each aspect of product and how much options cost
62. understand and explain the difference between products/options
63. explain features of the product so customer knows they made the right purchase
64. give customer information about the care of their product
65. identify with customers problems/concerns
66. make customer feel important if you don't offer the product/service they desire
67. if you can't keep a promise, ask customer if there is anything you could do instead

68. try to provide incentives to the customer for them to make a purchase
69. mention past customers and their service

5. Perceptiveness

1. don't judge customers based solely on appearance
2. invite questions from the customer
3. ask customer leading questions
4. don't judge customers based on their clothes/appearance
5. don't allow the customer's appearance to bias your treatment of the customer
6. start with very basic questions (eg, what are you looking for)
7. Ask open ended questions
8. Keep attention focused on the attention on the customer
9. always put the customer needs before you own
10. if busy, leave customers your name
11. focus on customer appearance to understand their needs
12. focus on customer dress to understand their needs
13. observe customer response to your greeting to see if they want your help
14. give each customer individual treatment
15. bend the organizational policy to satisfy the customer's needs
16. give the customer individualized attention
17. use the customers name
18. try to learn the customers name
19. get to know information about repeat customers (names, kids names)
20. use regular customers names
21. talk to regular customers about their personal lives
22. give small favors to regular customers
23. anticipate future services for the customer
24. don't bother the customer with too many questions
25. give the customer personal attention as soon as they enter the store
26. don't give the customer too much of your own personal information
27. show customers the key product you think will best meet their needs
28. watch customers behavior to assess what type of service they want (servant, be left alone)
29. use a test question to determine if customer wants to be left alone
30. ask customer for questions
31. ask the customer personal questions
32. gauge customer's attention/interest to determine when to leave customer alone
33. show customer that you are taking their order seriously (ie, focus on them, give special treatment, describe the actions you're taking)
34. do what customer says—each instance
35. try to remember as much personal information about the customer as possible
36. listen to customers the first time they say something (ie, don't ask what did you say)
37. anticipate the customers actions
38. ask the customer questions about what they want
39. observe customer behavior to determine if they need/want help
40. give the customer what they want
41. focus your attention on determining the customers needs/expectations

42. give the customer personalized attention
43. ask customer specific questions
44. repeat customers questions/statements back to him
45. try to learn about customers personal information (eg, kids, comment on appearance)---
46. try to determine why customer is making a purchase (eg, ask questions—is it a gift, how much do you want to spend)
47. identify the observe the customers body language to determine what they want
48. spend more time with regular customers than you would with other customers—but not so much that anyone is neglected
49. bring regular customers their regular orders without asking
50. keep relationships with regular customers
51. always ask regular customers about the quality of the product or your service
52. give regular customers personalized small gifts
53. ask customers leading questions
54. don't give customers the 'run around'
55. don't ignore customers requests/questions
56. ask questions or follow up questions based on the customers answers
57. watch which sections customer to into; observe which products they look at first, then greet
58. pay attention to those the customer (is it the kid or the parent)
59. pay particular attention to regular customers
60. give regular customers special attention
61. give customers the impression that the produce is personalized
62. read customer facial expressions to gauge correct content/speed/tone of speech
63. repeat to the customer what he or she says
64. listen carefully to the customer
65. always focus on customer, not personal concerns
66. acknowledge the customer is present (eg, nod of head) even if you're busy
67. don't assume the customer is at the same level you are
68. do not provide the customer with too much personal information
69. put off personal needs until you've completed helping a customer

6. Communication

1. switch the manner/type of questions asked to suit the customers needs/expectations
2. get the customer to talk about themselves, not about you
3. always provide friendly conversation
4. always say hello
5. speak to the customer in a language they can comprehend (no jargon)
6. speak intellectually with customers
7. use appropriate language with customers
8. use specific words/strong words to say how something will be done
9. speak confidently to the customer
10. don't ramble on when talking with customers
11. don't use slang with customers
12. if waiting for a computer/credit check, talk to customer (or at least don't talk to coworkers)
13. start conversations with the customer at a very basic level and move to more complex

14. if need to ask customer for personal information, explain to them why
15. provide the appropriate type and amount of information
16. adjust speed of communication/talking to each customers needs (eg., foreign)
17. use pictures/displays to convey information
18. be descriptive and specific (eg, what's on sale)
19. first sell the product and then say how much it cost
20. use different ways of speaking for different customers
21. talk at customers level of language
22. talk to customer within their own language—but never inappropriately
23. maintain a level of respect in your tone when dealing with other customers
24. maintain an appropriate tone for the store/service provided
25. speak loudly and clearly with customers, don't mumble
26. speak slowly with customers
27. don't use jargon the customer can't understand
28. explain key concepts without the use of jargon
29. give written information along with your explanation
30. pause regularly during long explanations
31. be concise
32. open up yourself, be willing to communicate with customers

7. Competence

1. learn features of new products as they arrive
2. keep yourself familiarized with the store layout
3. stay familiar with layout of store
4. keep up on product information
5. be familiar with products to quickly direct customers to relevant products

8. Demonstrating Extra Effort

1. exceed customer's needs or expectations
2. always remain with a customer even if you are scheduled for a break
3. don't rush customers (even if it's cutting into your break/time to leave)
4. if coworker is unreliable, don't ask them for help

9. Maintaining Personal Discipline

1. if customer is rude, maintain a professional demeanor
2. discuss problems with boss/company aware from customers' presence
3. don't talk about inappropriate topics/language around customers (e.g., drinking, sex)
4. if customers can hear, don't talk about inappropriate topics with coworkers
5. don't gossip about boss/company/miscellaneous around coworkers
6. if customer is present, don't carry on inside conversations with coworkers
7. don't take customer insults personal (ie, don't get into argument)
8. show emotional stability
9. don't have friends visit you while working
10. don't let friends hang out at your workplace
11. keep personal visits/calls to a minimum and keep them professional
12. don't joke around with coworkers on the job

13. if play music at work, keep it relatively quiet and ensure its not offensive/vulgar
14. don't sing vulgar songs to yourself at work/in public
15. don't talk to coworkers about issues irrelevant to the customer if customer is present
16. if customer is rude, let them vent and don't argue
17. if customer is rude, don't speak until they are done speaking
18. don't screw around with coworkers when in public (e.g., sticking out tongue at friend)
19. don't talk to coworkers about non-task matters when helping a customer
20. don't stop what you do to have a conversation, work while you talk
21. maintain a calm demeanor
22. don't let personal concerns influence your appearance at work
23. don't make fun of customers
24. don't act condescendingly around customers
25. don't talk to friends who may be present at work when you are waiting on another customer
26. walk away from rude and personally insulting customers
27. keep conversations with coworkers to a minimum

10. Facilitating Peer and Team Performance

1. cover/help out other employees when they are busy
2. do other employees tasks if they appear to busy to do them
3. drop your more mundane duties to help other employees' with their tasks if they're busy
4. do not pawn off your tasks to other employees
5. help coworkers with their tasks if you are not busy
6. help other employees if their task is a higher priority for customer service than your task
7. maintain awareness of coworkers progress on providing customer service
8. work as a team with coworkers
9. help your coworkers when they are busy
10. if coworker isn't helping a customer fast enough, jump in to help them speed things up
11. maintain good relations with coworkers
12. help out coworkers if they are getting too busy
13. communicate with other employees to provide seamless service
14. help other employees when they're busy
15. drop your less important tasks to help other employees who are busy

11. Supervision/Leadership

1. try to inspire the employee to trust you
2. monitor unreliable employees

12. Management/Administration

1. when busy, prioritize your customers
2. if don't know answer to a customers question find out who does
3. if customer is rude, send the customer to the manager
4. prioritize your tasks
5. never say I don't know—find someone who does
6. if you fail to keep a promise/can't keep a promise, direct the customer to the manager
7. don't overextend your tasks so that you can't devote enough time to each one

8. call for help if you're falling behind
9. be prepared for service encounter (ie, check to ensure you have pens, paper, etc.)
10. refer the customer to the manager if you can't help them
11. if you're having trouble, bring in the manager for help
12. get more knowledgeable coworker to ensure a promise is kept (e.g., manager)

13. Volunteering

1. be friendly/professional with regular customers if you see them out of work context

14. Following Company Policies

1. Provide the organizational policy when necessary
2. remain consistent/true to organizational policy
3. if customer is rude, explain company policy but uphold it
4. comply with organizational dress code
5. follow uniform code exactly
6. follow the company's guidelines on language (eg, swearing, etc)
7. Wear the company uniform

15. Defending the Company

1. always be selling for the most expensive products
2. put the company before your own needs/considerations
3. maintain vigilance/watch for shoplifters

APPENDIX B

Initial Linking of Situations to Criterion Dimensions

SECTION 1A: Tangibles (Professional Appearance)

1. It is a very hot day and you would like to wear shorts to work. Although wearing shorts is not against the company dress code, your manager prefers that employees wear pants. What might you do on days when it is hot? (218)
2. Your store hires a number of temporary employees for the summer. These temporary employees dress very differently from the regular employees, but management does not seem to care. You'd like to wear those style clothes as well, but believe customers may not take you as seriously. What do you do? (217)
3. You work as a waiter/waitress. As you are delivering food to a customer, you notice your shoelace is untied. What do you do?
4. You work as a waiter/waitress. As you are delivering food to a customer, you notice your shirt is no longer tucked into your pants (which is required by company policy). Your manager is looking directly at you. What do you do?

SECTION 1B: Tangibles (Impression Management)

5. It has been a very busy day in the store and you are very tired. You finally get a few minutes to relax because there are only a few customers in the store. However, you are not scheduled for a break and so you can't leave the customer area.. What do you do?
6. A customer is telling you a story that is not particularly interesting to you. It is a long story, and you have several other customers that need help. What do you do?
7. You are helping a customer who keeps talking and talking. You have more customers to help. What do you do? (137)
8. A customer tells a joke that you don't find the least bit funny. What do you do?
9. It is a very busy day in your store. Although when in-between customers you have the chance to take a break for a few seconds, you cannot officially leave the customer area. What do you do?
10. A customer is telling you a personal story that is completely unbelievable and that you think is factually incorrect. What do you do?
11. Your manager wants employees to always look busy. This means you must do simple tasks over and over again, even when they don't need to be done. You are really tired of doing these tasks, the store is empty, and the manager is not around. What do you do? (320)

12. You are helping a rude customer who is making small talk about things you find very stupid and boring. What do you do? (397)

SECTION 1C: Tangibles (Work area/product appearance)

13. You notice that many coworkers are not returning merchandise to its proper place after showing it to customers. This makes the entire store look very disorganized because an employee must look all over the store for a given product. However, nobody seems to care. What might you do in this situation? (220)
14. A coworker was helping a very picky customer buy a suit. S/he had requested to try on a number of different jackets, pants, and shirts. Although the customer has gone, the coworker left a big pile of clothes lying around. What do you do?

SECTION 2A: Reliability (Perform Consistently)

15. You are helping a customer and go to check on a product for him/her in the store room. When you return the customer is nowhere to be seen. However, there are several other customers waiting to be helped. What do you do? (255)
16. You need to call a customer but his/her phone is always busy. You try repeatedly but can never get through, and the customer does not have an answering machine. What do you do? (257)
17. It is getting near your lunch break and you are not yet finished helping a customer. You only get a set amount of time for your break, so if you miss it you won't get another. You see a coworker around who does not appear to be busy. What do you do?
18. A customer is upset about a shirt that shrunk after s/he washed it. However, it is about five minutes before the end of your shift, and you have made plans with your friends. Many of your coworkers are not very busy and could help this customer. What do you do? (92)

SECTION 2B: Reliability (Promises)

19. You are talking to a customer and promise to call the customer the next day. However, after the customer leaves you realize you have the next three days off. What do you do? (248)
20. A customer calls and asks how long it will take to get their order together. You know you can do it in 30 minutes. How long do you tell this customer it will take? (252)

21. It is Saturday and you promise a customer you will call them on Sunday to inform them about the status of their order. Sometime after the call, your supervisor tells you that you will be working on Monday instead of Sunday. What do you do? (246)
22. You work as a waiter/waitress in a restaurant. A customer asks when his/her food will be ready and you think it will take about five minutes. What do you say? (284)

SECTION 2C: Reliability (Record Keeping)

23. You are working at a cash register. The register makes a mistake and overcharges a customer. The customer does not seem to notice, and there is a long line waiting for you. It would take some time to figure out the correct amount to charge the customer. What do you do? (155)
24. A customer calls you about a very detailed order. You have handled this order a number of times and don't feel it is any big deal. What do you do? (236)

SECTION 3A: Responsiveness (Acknowledgment)

25. You are one the phone with an important customer when another customer walks over to you. You are really busy with the individual on the phone. How do you handle the customer who is physically right in front of you? (40)
26. You are talking to a customer on the phone and have many other customers waiting on different phone lines. Suddenly, a customer in the store approaches you. What do you do? (66)
27. You're working the cash register on a very busy shift. There is a long line waiting to check out, and you can see several individuals are getting impatient. What might you do? (264)
28. You are helping a customer buy a pair of shoes. You notice another customer walks into your store and nobody waits on them. They are looking around for help. What do you do? (263)

SECTION 3B: Responsiveness (Promptness)

29. You are talking to an important customer on the phone when a customer interrupts, saying s/he is unhappy with your store and wants attention right now. S/he is speaking in a loud voice that other customers can hear. What do you do? (176)
30. You had helped a customer order a product from your supplier. The supplier has called and said the product will be a few days late. What do you do?

31. You deal with a supplier who has not delivered a product as promised. You call the supplier, but they tell you there is nothing they can do. They also say they are not going to call the customer because they don't deal with customers directly. What do you do? (261)
32. A customer wants a refund on a product that has obviously been misused. Although you could normally refer such problems to the manager, s/he will be gone for the next several hours. What do you do? (41)
33. You are answering the phones at your store. There are many customers who have called your restaurant and are on hold. You answer the phone and ask the customer to please be put on hold. The customer starts yelling that they have been on hold for fifteen minutes. What do you do? (73)

SECTION 3C: Responsiveness (Responding to Requests)

34. A customer requests a product that you do not have in stock. Although you could call other stores to see if they have it, you are almost certain it will be a waste of your time. What do you do? (43)
35. A customer wants a product that you don't have in your store. You begin to call other stores to see if they carry the product. However, each store takes a long time to check and the customer is getting very impatient. You know that one of the stores is likely to have the product but it will take some time to find out. What would you do? (243)
36. A customer calls and inquires about a particular product. There should be plenty of the products on the shelves. What do you do?

SECTION 4A: Assurance (Suggestions/Alternatives)

37. You are helping a customer buy a computer. The customer is not sure what kind to buy. What might you do?
38. A customer asks you about a competitor's product. You are familiar with this product. What do you tell them? (319)
39. A customer is unsure about choosing between a more expensive item and a less expensive item. S/he asks you what you think. You know that both products are very similar but have some different features. What do you do?
40. A customer is looking at a watch similar to the one you are wearing. The customer asks you if you think it is worth the money. Although you like the watch, it does have some features you don't like. What do you say?

41. You work in an appliance store. You ask the customer if you can help and the customer tells you s/he wants a specific stereo. You think you know about a stereo that would work better. What do you do? (358)
42. You work as a waiter/waitress and a customer orders a dish that is not on the menu. You mention this politely but the customer gets very upset. What do you do? (93)

SECTION 4B: Assurance (Compensation)

43. You are working right before Christmas and the store is very busy. A customer inquires about a product you have on sale. You check and realize the product has been sold out. The customer wanted the product before Christmas. What might you do in this situation? (95)
44. A regular customer calls to complain that s/he did not receive a product s/he ordered. You check and realize that your supplier is behind schedule. The customer is a regular customer who usually spends a lot of money in the store. Your manager is not present. What might you do? (136)
45. A customer is dining in your restaurant with six children. The children all want a particular dish that you do not have. The children all start to yell and scream. What do you do? (179)
46. A customer calls to inquire about a stereo advertised in the newspaper. You describe the stereo and the customer says s/he will be right in to pick it up. However, after the customer arrives you discover that there are no more of those stereos in stock, and it might be several weeks before your store will get more. What might you do? (249)
47. You work in a restaurant. A customer orders the special but you have just run out. The customer is very upset and mentions that was the only reason s/he came to the restaurant. What do you do? (305)
48. It is the day before Christmas and a mother wants to get a doll for her daughter. Unfortunately, you have just sold out. The mother becomes very upset and starts to cry. What do you do? (325)
49. You work as a waiter/waitress in a restaurant. One of the cooks is joking around and throws some food at a coworker. However, s/he misses and hits one of your customers. The customer is furious. What do you do? (77)
50. Your restaurant is very busy, and a large party is unhappy with the food and service. The people in this party are each complaining to you, and this is taking up so much time that your orders with other customers are falling behind. What do you do? (71)

51. You work in a restaurant. A customer eats most of his/her meal, then suggests it was awful and wants a different meal. What do you do? (81)
52. A customer calls to see if you have a particular pair of shoes in stock. You check and your store does. Later, when the customer comes into the store to pick of the shoes you see that they have been sold. The customer is very upset. What do you do? (133)

SECTION 4C: Assurance (Demonstrating Value)

53. You are helping a customer purchase an entertainment center. The customer appears nervous and hesitant about buying the product. What might you do? (302)
54. A customer is looking at buying an expensive VCR with many options, but does not seem sure about the purchase. What might you do?

SECTION 4D: Assurance (Explaining Service)

55. Although a customer has just purchased an expensive leather jacket, s/he appears to be unsure that it was a good purchase. What might you do?
56. A customer had purchased a television set from you a week ago. The customer seemed rather nervous about the purchase. What might you do?
57. A customer has just bought a rather expensive television from you. What might you do now that the purchase is complete? (384)

SECTION 4E: Assurance (Selling Pressure)

58. It is typical in your store for employees to really push certain products. However, customers often don't appreciate such tactics being used on them. What do you do? (324)
59. You are helping a customer around quitting time. You are very tired and have had a long day. It is pretty obvious that the customer has no idea about what s/he wants and you can tell this is going to take a long time. What do you do? (327)
60. You have nearly finished selling a customer an expensive product. However, the customer seems unsure about making the purchase because it costs so much money. What might you do?

61. Your store pays its employees by the hour, but still expects each employee to meet minimum dollar amount of sales each day. If this minimum is not met, it goes on your performance evaluation and could affect the possibility for future pay raises. Although you try to meet this quota, it is very difficult and often requires you to give a "hard sell" to the customer. You do not feel comfortable doing this, and your customers often do not appear to appreciate this tactic. What do you do? (12)
62. You are helping a customer by bringing different clothes to the fitting room. However, this person has been shopping for over an hour and you are starting to think s/he is not going to buy anything. What do you do? (42)
63. You are selling a customer a rather expensive product. The customer appears to be nervous and hesitant about making the purchase because s/he has taken a very long time. What might you do?
64. You work in a store that pays its employees a commission of their total sales. You are waiting on a customer that is very demanding but only buying a relatively inexpensive product. You know you are missing helping customers who are buying more expensive products. What do you do? (58)

SECTION 4F: Assurance (Politeness)

65. A customer walks into your store and looks very grumpy. Further, he does not look like a "serious" customer. You are busy checking inventory and are falling behind schedule, something your manager will not appreciate. You notice no other coworkers are currently in the section. What do you do? (266)
66. You work in a store that pays its employees a commission of their total sales. You notice that most coworkers will not wait on customers who do not have the appearance of being "big spenders." One of these individuals walks into the store and nobody waits on them. What do you do? (59)

SECTION 4G: Assurance (Honesty)

67. You are a new employee and realize you've made a mistake with a customer's order. Specifically, you did not charge the customer enough money. You could call the customer and tell him/her to pay the difference, or simply not do anything. What do you do?
68. You make a mistake and undercharge a customer. Your boss says you will either have to make up the difference out of your paycheck or call the customer and get him/her to pay the difference. What do you do? (184)

69. You're waiting on a customer who asks for a special request. You think you can meet the request adequately but are not sure. Unfortunately, your manager will be gone for a half an hour. What do you do? (211)
70. A customer asks you questions you don't know how to answer. You think you might be able to figure out the answer, though, if you give it some thought. What might you do? (237)
71. You work for a delivery service. A customer calls to ask why their order took so long to be delivered. It was a big order and you want to keep this customer happy. You are pretty sure the order was late because the delivery driver went to the wrong address. What do you do? (251)
72. A customer is trying on a pair of sunglasses that quite frankly make them look funny. They ask you for your opinion. What do you say? (290)

SECTION 4H: Assurance (Empathy)

73. It's Christmas time and your store has a product advertised that has been very popular. A younger girl wants to purchase the product but you realize it is sold out and will not be possible to get more until after Christmas. The young girl starts to cry, saying "Thanks for nothing—you've ruined my Christmas." What might you do in this situation? (60)
74. A customer who consistently writes bad checks needs to be told s/he cannot write a check for his/her purchase. There are many other customers around who could hear you. What do you do? (170)
75. A customer orders a dress. The customer comes to the store on the day the order was to arrive, but the warehouse has not been able to deliver the dress. The customer gets very upset with you. What do you do? (19)
76. You are working at a cash register right before Christmas. The line is very long and customers are generally impatient. As you cash out one customer, you realize that his/her credit card is denied. What do you do? (94)

SECTION 5A: Perceptiveness (Anticipation)

77. You work as a waiter/waitress in a restaurant. One of your tables is involved in a very private conversation. You want to ask them if you can get them anything else, but every time you approach they give you a very nasty look—as if to say "leave us alone." What might you do? (78)

78. You greet a customer walking into your store by smiling and saying "hello." This customer does not smile back but only nods. What might you do next? (267)
79. One customer you are helping is very factual and straight to the point. As you help this person, what might you do? (299)
80. There is a regular customer in your restaurant that all employees know because he always orders the same meal. Although you are a new employee and have never waited on this gentleman, you do know what he looks like. One day he sits in your section. What might you do? (328)
81. A customer walks into your store and you ask if s/he wants help. S/he politely declines, and then walks around the store in a very confused manner. What would you be most likely to do? (329)
82. A customer enters the store and you say hello. Although the customer says hello, s/he just keeps walking past you. What do you do? (361)
83. A customer enters the store and you say hello. The customer does not respond and just keeps walking. What do you do? (362)
84. A customer enters the store and you say hello. The customer does not respond but stops and looks around the store. What do you do? (363)
85. A customer walks into your store who is not very well dressed. Your store is one that sells very expensive clothes, something the customer does not appear to be able to afford. There are better dressed customers who are farther away in the store but have not been waited on. What do you do? (389)
86. You greet a customer who does not immediately respond. What do you do? (391)
87. You work in a department store and see a female customer enter the automotive section. How might you greet this customer?
88. You are helping a customer purchase a new telephone. What might you do next?

SECTION 5B: Perceptiveness (Identify Personal Information)

89. You see a customer that you have waited on before. How might you greet this customer?
90. You are helping a couple who has three small children with them. What might you do?

91. A customer is telling you a story about himself/herself and is providing you with very personal information. S/he asks if you have had a similar experience. Imagine you have had a similar experience. What do you tell this customer?
92. You work in a clothing store. You are helping a man buy a gift for his wife. What do you do? (395)
93. You work in a clothing store. You are helping a woman buy a gift for her husband. What do you do? (396)

SECTION 5C: Perceptiveness (Questioning)

94. A customer keeps asking you questions that are very annoying. In fact, s/he has already asked you about 30 questions and does not seem to be running out. What do you do? (269)
95. You see a customer standing around the store. What might you do?
96. You observe a customer looking at your store's sale brochure. What might you do?
97. A customer is looking at buying a computer and has asked you a rather complicated question. What might you do next?
98. A customer tells you s/he wants to buy a television. What might you do next?
99. A customer wants to buy a VCR but is not sure about what kind or how much s/he wants to spend. How might you inquire about this information? (337)
100. A customer comes into the store and tells you exactly what s/he wants. What do you do? (346)
101. You observe a customer looking toward the kitchen supply area of your department store. You work in the clothing department. What do you do? (348)

SECTION 5D: Perceptiveness (Customer Focus)

102. As a salesperson, you are asked to influence customers to purchase the most expensive products even when a cheaper product may satisfy their needs. You are sure that many of your customers are on limited incomes. What do you do? (213)
103. A customer is trying on a jacket. Although the jacket fits fine, you know of a cheaper jacket that would look just as good. However, if you sell the expensive jacket and both you and the store would make a nice commission. What might you do? (291)

104. A customer expects you to do something that is not part of your job—look up the address of a competitor. What do you do? (318)
105. You recognize a regular customer who spends a lot of money in your store. However, all coworkers are very busy, as are you. None of the other coworkers seems to notice this customer, and you are currently helping a customer purchase a small item that is not very expensive. What do you do? (332)
106. Many customers request a particular name brand VCR. You know a lesser known brand has the identical VCR. Further, you know that both VCRs are made by the same company. Do you tell customers about the cheaper VCR? (338)
107. Your store pays its employees a commission of their total dollar sales. You are helping a customer that believes everything you recommend. You know you could sell this person a lot of things they probably don't need. What might you do? (339)
108. A customer walks into the store and you greet him/her as usual. However, it turns out this is a regular customer and s/he gets upset for you not recognizing him/her. What do you do? (164)

SECTION 6A: Communication (Personalized)

109. You are waiting on two customers who don't speak English. They are obviously tourists. Your store is very busy and you are falling behind. What might you do? (375)
110. An older woman walks into your store. How might you talk to her? (374)
111. You are going to explain to a customer how to perform a very complicated repair. The customer acts as though he already understands all of this information, but you suspect he might not. What might you do? (379)
112. An older customer and a younger customer both ask you identical questions. How would you respond to these questions? (381)
113. Your manager asks employees to treat all customers in the same friendly manner. What might you do when dealing with customers? (385)
114. An couple of customers are placing an order in your restaurant. The restaurant is very busy and you are not getting to your other customers as fast as you should. What do you do? (388)

115. You deal with customers over the phone. Many customers do not speak English very well, and often neither one of you can understand each other. It is often very frustrating. How might you handle these situations? (401)

SECTION 6B: Communication (Appropriate)

116. You work in a computer store. Many of your customers know very little about computers. How might you convey your knowledge of computers? (376)
117. You work in a rather hip clothing store and are helping a customer who is using very foul language. This language is typical for many of your customers, but you think other customers don't appreciate the foul language and become offended. What might you do? (377)
118. A customer comes into the store who is about your same age. S/he speaks to you in a very casual manner. How might you respond?
119. You are describing how to use a rather complicated product for a customer. It is a long explanation with a lot of information. What might you do?
120. You work in a very noisy store. You often cannot hear customers very well, and sometimes they get upset because they think you are not paying attention. How might you handle these situations? (403)

SECTION 7: Competence

121. You receive some information about products you know a competitor carries. What might you do?
122. Your store receives new products every week. However, many of these products are only sold for a few weeks before your store stops selling them. What might you do?
123. You work in a store that sells electronics. When new products arrive, your store receives a brief, non-technical product description and a complicated, in-depth product description. What would you be most likely to do?
124. You work in a restaurant where some dishes on the menu change weekly. What might you do?

SECTION 8: Demonstrating Extra Effort

125. You work as a delivery driver. It is Friday night, almost quitting time, and you have plans for the evening. A customer calls at the last minute and asks if you can deliver a product that will take you several hours. All of the other drivers have left for the night. Your boss says it is up to you. What do you do? (208)
126. There are some minor duties and tasks that all employees are expected to do. Your coworkers do not help with these tasks because you all get paid the same amount. Although you are fairly busy, you could also do their jobs as well. What do you do? (188)
127. You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because you are making everyone else look bad. What do you do? (189)
128. You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because the manager is gone for the day. What do you do? (190)
129. You work in a store that has a few peak times during a day but is otherwise pretty slow. During the slow times, coworkers joke around, use the company phone for personal calls, and generally look bored. However, there are many maintenance tasks that could be done during this time, such as cleaning the shelves. What do you do? (50)
130. Your manager is very easy going. Many of your coworkers take advantage of this and give themselves very easy work schedules. Unless you take advantage of this manager's flexibility, you will have to work very undesirable hours. What do you do? (107)
131. Some of your coworkers don't care about their job or the store. These individuals often do not do their job duties, which means somebody else has to do them. However, you all get paid the same amount. Now you see one of these individuals leaving for the night and his/her work area is a mess. What do you do? (74)
132. You work the day shift. The people in the night shift do not perform their basic cleanup tasks. If you do their tasks in addition to your own, you waste your time and so your customers may have to suffer. What do you do? (126)
133. You work the morning shift in a restaurant. The night shift has gotten into the habit of not keeping the work area clean. Now, in addition to your regular duties, you also have to clean the work area. This makes your job much more difficult. You've brought the matter up with your supervisor, who says s/he is looking into it. Now, you come into work and notice the work area is even dirtier than usual, and there are several customers already coming into the store. What might you do? (87)

SECTION 9A: Maintain Personal Discipline (Composure)

134. A customer is very upset with your company's return policy. You have no say or control over the return policy, but this customer is basically "venting" his/her frustration to you. How do you handle this situation? (36)
135. A customer is upset and getting personally insulting with you. Further, the customer is starting to threaten you with physical harm. What do you do? (72)
136. You have had a very bad day by the time you show up for work. Now, the first customer you wait on is also in a bad mood and starts yelling at you right away. This customer is getting very personal. How do you handle this customer? (99)
137. A customer starts yelling at you because you sold him/her a TV that was broken. This customer is upset because s/he had to drive 50 miles to get to the store. Although it is not your fault, this customer is very rude and offensive. How would you handle this situation? (15)
138. A customer orders a specially made desk. When the desk arrives, the customer does not like the look of it and refuses to purchase it. You are now going to lose the commission on the order, and even worse, are going to have to tell your supervisor that the desk must be returned to the warehouse at the company's expense. What do you tell this customer? (20)
139. You work in a pizza shop. A customer orders a pizza (for delivery) that you make yourself. A half hour later this customer calls you to complain about the pizza—it was a small instead of a medium. You can't remember which size pizza you made, but you suspect the customer ordered the wrong size pizza. What might you do? (69)
140. When waiting on a customer you realize that s/he is trying to get a cheaper price that is listed for the product. Basically, this customer changed the price tag on the item. When you mention the price looks to be too low and that you are going to check its price in the computer, the customer starts to complain and questions your competence. What do you do? (100)
141. You promise a customer to call them on a specific day. However, every time you call the person is not home, and you can't leave a message because they don't have an answering machine. Sometime later the customer calls you and is very upset because you never called them back. What might you do? (247)

SECTION 9B: Maintain Personal Discipline (Social Consideration)

142. A couple of your coworkers are complaining about their pay and about working for the company. They ask you what you think. You can see there are a few customers in the store but you doubt they can hear anything. What do you do? (76)

143. You are helping a customer when a coworker comes up to you and asks if you would like to join some of your colleagues for a few drinks after work. Assume you want to join them for drinks. What do you do?
144. You and a coworker are working at the cash register. Although there are many customers in line, it is a rather boring job. The coworker starts talking to you about what s/he is going to do for the weekend. What do you do? (353)
145. You and a coworker are working at the cash register. There are many customers in line. The coworker starts talking about how much s/he hates working at the store. You know customers can hear this. What do you do? (354)
146. A coworker is talking to you and using rather foul language. A customer approaches you both for help and your coworker continues to talk in the offensive manner. What do you do? (404)
147. A coworker who is also your friend appears to be personally interested in a customer. The coworker starts to talk to you about the customer in a provocative manner. You fear other customers might soon overhear. What do you do? (406)
148. A customer makes a demand that requires you to ask your manager. Your manager says to deny the request. You do, and the customer gets very upset and asks to see the manager. However, the manager accepts the customer's demand, making you look very bad. The customer complains about you to the manager and the manager seems to agree. What do you do? (18)
149. As a waiter/waitress, you often must take the blame when customers are unhappy with their food (for example, it took too long to get it, it is cold, it doesn't taste good). Even though it is usually not your fault, customers usually get very upset with you personally. Some even complain to your supervisor. How might you handle these types of customers? (14)
150. A customer is upset at you and is very rude because the entertainment center she ordered was not the one that was delivered. You check her order and see that one of your coworkers wrote down the wrong number for the delivery staff, so in fact it was your coworker's fault the order was incorrect. This customer is very upset and is taking it out on you. What do you do? (16)
151. You're working in a very busy restaurant. Your section is very busy and a coworker helps you out. Unfortunately, the coworker incorrectly places a customer's food order. The customer is upset and does not leave you a tip. Even worse, this customer complains to your supervisor, who begins to reprimand you. What do you do? (22)

152. You work in a store that pays its employees a commission of their total sales. You are helping a very demanding customer that has taken up much of your time, but it will be worth it because s/he is purchasing a very expensive stereo. You are just about to finish the sale when your manager asks you to take a phone call. When you return, you see your manager is just about to close the sale—and take your commission. The manager acts as though nothing has happened. What do you do? (57)
153. You work for commission. You are helping a customer when you have to leave momentarily. When you return, you find that your coworker is helping the customer and ringing up their sale—meaning the coworker will get your commission. What do you do? (131)

SECTION 9C: Maintain Personal Discipline (Work Focus)

154. A few of your friends or family stop in to see how you're doing. Your store is not particularly busy. What do you do?
155. Some coworkers ask you to help play a joke on a newer coworker. You think the joke is rather inappropriate but no customers are likely to see it. What do you do?
156. A good friend calls your store and wants to make plans for when you're done with work. The store is moderately busy. What do you do?
157. Your store is very empty and you are performing the rather simple task of dusting and cleaning. A coworker stops by to talk. What do you do?

SECTION 10: Facilitating Peer and Team Performance

158. A coworker is very busy and could use some help. You have only a few customers in your section, but you're not sure if you should leave them to help your coworker. What do you do?
159. You work in a restaurant. You are helping cover a coworker's table, where two customers were getting upset because they had to wait so long. As you help this coworker's customers, you notice customers from your own section getting impatient. You realize you are not likely to get a tip from your coworker's customers, but you will probably get tips from your own customers. What do you do? (194)
160. A coworker in another section is very busy helping customers and could obviously use some help. In fact, some customers are starting to leave. Your section is relatively quiet at the moment but could get busy very quickly. What do you do? (a25)

161. Many of your coworkers are lazy and only do the minimum amount of work they have to. Your supervisor either doesn't notice this or doesn't seem to care. Because of these individuals, you have to do twice as much work as you should—including some of their duties. What do you do? (23)
162. In your company, there is a very strong peer pressure not to work harder than your coworkers. You are relatively new and are trying to do a good job. Although your manager notices and says to keep up the good work, your coworkers are getting upset because you are making them look bad. One of them even told you to quit working so hard. What are you going to do? (27)
163. A coworker has a long line at his/her checkout station. Many of the customers appear very impatient and are getting upset. Although you are not helping a customer at the moment, you have also not had a break all day—and you have plenty of tasks to do in your own section that you have not had time to finish. What might you do? (62)
164. Your department store is understaffed. You are responsible for one department and are an assistant for three other departments. You are called into one of the secondary departments. Unfortunately, you don't know much about this department, and you are not very familiar with the products or where they are located. A customer asks you for help. What do you do? (89)
165. You are leaving your section to take a scheduled break. Your store policy is such that you have to take a scheduled break, and that you are not paid for the time you are on break. On your way to the break room, you notice a coworker who is swamped with customers. What do you do? (349)
166. Some long term employees are making part time employees do their routine tasks. This frees up the long term employees' time so that they can help more customers. The supervisor does not seem to care, and you could certainly use some more time to help customers. What do you do in this situation? (106)
167. You work in a restaurant. You and a coworker misunderstand each other and do not wait on a table. Later, you both recognize the mistake and can see that the customers at the table are very upset. You doubt who ever helps them will get a tip. Your coworker asks if you want the table. What do you do? (195)

SECTION 11: Supervision

168. You notice a new coworker has made a big mistake with a customer's order. The customer is upset and starts yelling at the coworker. What might you do? (68)
169. A new coworker makes a mistake with an order and asks for your help. You already have a long line of customers. However, the new coworker also has many customers. What do you do? (165)

170. A new coworker is helping customers but is very far behind, causing customers to wait longer than they should have to. You offer to help the coworker but s/he says, "No, I've got it under control." You don't think s/he can handle the number of customers. What do you do? (355)
171. You see a new coworker provide very poor service (for example, is rude, does not explain the product to the customer). You don't think the customer is going to purchase anything in the store because of the coworker's poor service. What might you do? (182)

SECTION 12: Management

172. A customer completes an order to have delivered to his/her house. The manager promises this person that the product will be delivered on time. Several days later, the product is not delivered and the customer calls to complain. Although you did not make the mistake, the customer is blaming you. You know you can handle the incident without involving the manager. What might you do? (244)
173. You are helping a customer who has an unusual request. Although you could probably help this customer, you know a coworker is more experienced in this area. What might you do?
174. You are performing a maintenance task that your supervisor instructed you to get completed right away. As you work on this task, you notice a customer in your section. What do you do?
175. A customer orders spicy barbecue sauce for his ribs. After he eats the entire meal, he complains that the barbecue sauce was too spicy. You remind him that he ordered the spicy barbecue sauce but he disagrees, saying he ordered the regular sauce. He now refuses to pay for the order. What do you do? (4)
176. Your store is short staffed so you go to another coworkers section to help at the cash register (so that s/he can focus on his/her customers' questions). There is now a long line at the checkout counter when you notice new customers are coming into your own section. There is no one who can help them. What might you do? (63)
177. You work in a restaurant. A customer orders a meal and eats it all. During the meal you had not asked if everything was OK. Later, when you give the customer the bill, the customer says the meal was awful and refuses to pay for it. What do you do? (103)

SECTION 13: Volunteering

178. One night at a social gathering (that is not work-related) you see a coworker. The coworker admits to you that s/he has secretly been stealing from the company for several months. What do you do? (172)
179. One night at a social gathering (that is not work-related) you see a coworker who appears to be on drugs. In fact, the coworker admits to you that s/he is high much of the time, even sometimes at work. What do you do? (173)
180. You are delivering some products with a coworker in the company van. The coworker is driving recklessly, cutting off other drivers, honking, and swearing at them through the window. When you return your manager says somebody called and complained about the people driving the van. The coworker denies the incident. What do you do? (203)
181. You have a much deserved day off from work and have made a fun day of plans. Your boss calls the night before and asks if you can work because one of your coworkers can't make it. You suspect the coworker is really going to a concert because s/he mentioned doing it in the past. What do you do? (113)
182. In your store there are many small tasks (for example, putting away inventory) that are not part of anyone's specific job but are something that everybody is expected to do. Many of your coworkers do not do these tasks, but if they are to get done somebody will have to do them. What do you do? (121)
183. On one of your days off your manager calls to ask you to come to work because the store is short staffed. You had planned to spend this day with your friend or family for over a week. What do you do? (129)
184. Each employee in your store is given a very detailed description of his/her job duties. Unfortunately, most employees only do their specific duties and do not help out coworkers when necessary. In fact, many employees will sit and do nothing instead of helping other coworkers because "it is not their job." You are particularly busy and are getting very frustrated because you can't help all of the customers in your area. Your coworkers just sit and watch. Later, when you have more time, you notice your coworkers could use some help. What might you do? (49)
185. A coworker calls you to ask if you can cover his/her Saturday morning shift because s/he is not feeling well. Although you don't mind doing covering the shift once in awhile, this coworker has asked you for this favor on several past occasions. You suspect the coworker is going out the night before and is simply too tired to work. What do you do? (112)

SECTION 14: Follows Company Policy

186. Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. Now, a customer asks you why you have to take this information and refuses to give it to you. What do you do?
187. Your company has a dress code that all employees are supposed to follow. However, you notice that several of your coworkers are wearing clothes that some might consider inappropriate. The supervisors do not seem to be concerned. You personally would prefer to dress like the coworkers. What do you do? (214)
188. Your company has a very specific dress code but nobody follows it. The managers do not seem to care. You don't particularly like following the dress code and would like to wear some different clothes. What do you do? (231)
189. You work as a waiter/waitress in a restaurant. One trick many of your coworkers do is to give customers free soda or minimally-priced appetizers in order to get a better tip. The company policy explicitly forbids this practice. You could certainly use the extra money from tips, and the supervisor has not noticed or said anything about this practice. What do you do? (108)
190. Your store policy is absolutely no returns on clothes over \$100.00. A customer returns an outfit costing \$110.00. You can tell that the outfit has not been worn, but the store policy says you cannot return it. You feel very bad and don't agree with the policy in this instance. However, you could classify the outfit as defective and nobody would ever know—although this is also against company policy. What do you do? (148)
191. You work at a cash register in a grocery store. There is a huge lottery prize, and so the store is swamped with customers buying lottery tickets. However, you are to stop selling lottery tickets promptly at midnight. It is 12:01 and a customer wants to place an order. You refuse and they get very upset, as do the remaining customers who have been waiting over half an hour. What do you do? (33)
192. A customer is trying to buy beer but has forgotten his/her identification in the car. This customer looks to be around 30 years old and is dressed very well. You have seen the customer in the store on a regular basis but have not waited on him/her yourself. What do you do? (102)
193. Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. You personally do not approve of this policy and don't think the store actually uses this information. Now, a very good customer says s/he doesn't want to give you this information. What do you do? (139)

194. You are working at a cash register in a grocery store when a customer tries to buy alcohol. When you ask for his/her identification, s/he gets upset and says s/he doesn't have it, but s/he does show you his/her five credit cards and truck drivers medical card. S/he looks to be about twenty five years old. What do you do? (150)

SECTION 15: Defending the Company

195. You catch an individual shoplifting. Although your store has security for these purposes, they are nowhere to be seen. You also know the manager is on a lunch break. The shoplifter is starting to walk out of the store. What do you do?
196. You feel personally uncomfortable trying to sell high dollar merchandise to people who do not appear to be able to afford it. However, your managers really push employees to always direct customers to the large dollar items. What do you do? (13)
197. A coworker complains about the working conditions so that customers can hear him/her. You generally agree with what the coworker is saying. After the coworker leaves, a customer you are helping asks if it is true. What might you do in this situation? (159)
198. Your store hires a number of part-time employees for the summer. You catch several of these individuals playing around with some of the company equipment. When you mention their behavior is against company regulations, they just laugh and say they are quitting in a few weeks anyway and don't really care. What do you do? (28)
199. Your store has a number of summer-time only employees. It is near the end of summer when you notice one of these employees stealing ten dollars from the register. As you confront the employee, s/he informs you that s/he was shorted ten dollars on their last paycheck and so was only "making things balance." S/he says it will not happen again if you don't say anything. How do you handle this situation? (29)
200. You work in a pizza store. One day you catch a well-respected employee giving free sodas and appetizers to his/her friends. Although this is not worth much money, it is against company policy. What would you do? (30)
201. You catch one of your fellow coworkers (who is also a good friend) making deals with customers in order to increase her sales. Because part of your salary is based on commission, this is an easy way for her to make more money even though the company will suffer reduced profits. You remind this person that the company does not tolerate these actions, but your friend does not seem to care. Do you report this person to your supervisor? (31)

202. A coworker is walking past a customer and asks to you loudly, "Don't you just hate this job." The customer looks surprised and stares at you. What do you do? (79)
203. You are very good friends with some of your coworkers. You learn that a few of your friends are stealing from the company. What do you do? (161)
204. You work for a home delivery company. You catch one of the delivery drivers smoking marijuana on the job. However, your supervisor does not suspect a thing. What do you do? (202)
205. A coworker has a tendency to give customers s/he likes special deals that would not be approved by the company. You are probably the only one who knows about this. What do you do? (205)
206. A coworker gives his family special deals. You know the manager would not approve of such practices. You doubt anyone else is aware that the coworker is breaking the company policy. What do you do? (206)

APPENDIX C

Customer Service Situations and Behavioral Response Options

SECTION 1A: Tangibles (Professional Appearance)

1. It is a very hot day and you would like to wear shorts to work. Although wearing shorts is not against the company dress code, your manager prefers that employees wear pants. What might you do on days when it is hot? (218)
 - A) Wear pants all of the time and never wear shorts
 - B) Wear pants most of the time and rarely wear shorts
 - C) Wear pants and shorts about the same amount of time
 - D) Wear shorts most of the time and rarely wear pants
 - E) Wear shorts all of the time and never wear pants

2. Your store hires a number of temporary employees for the summer. These temporary employees dress very differently from the regular employees, but management does not seem to care. You'd like to wear those style clothes as well, but believe customers may not take you as seriously. What do you do? (217)
 - A) Wear your usual style of clothes all of the time
 - B) Wear your usual style of clothes most of the time
 - C) Wear your usual style of clothes and those like the temporary employees about equally
 - D) Wear clothes like the temporary employees most of the time
 - E) Wear clothes like the temporary employees all of the time

3. You work as a waiter/waitress. As you are delivering food to a customer, you notice your shoelace is untied. What do you do?
 - A) Wait to tie the shoelace until no customers can see you
 - B) Wait to tie the shoelace until your specific customers can't see you
 - C) Tie the shoelace after you give the customer the food
 - D) Set the food down immediately and tie the shoelace right away

4. You work as a waiter/waitress. As you are delivering food to a customer, you notice your shirt is no longer tucked into your pants (which is required by company policy). Your manager is looking directly at you. What do you do?
 - A) Wait until you are out of customers' sight and then tuck in the shirt
 - B) Wait until you are out of your specific customers' sight and then tuck in the shirt
 - C) Tuck in the shirt immediately after you give the customer the food
 - D) Set the food down and tuck in the shirt

SECTION 1B: Tangibles (Impression Management)

5. It has been a very busy day in the store and you are very tired. You finally get a few minutes to relax because there are only a few customers in the store. However, you are not scheduled for a break and so you can't leave the customer area.. What do you do?
- A) Continue working hard until your next scheduled break
 - B) Continue working but don't push yourself very hard
 - C) Continue working but every so often sit down and relax for a few seconds
 - D) Stop working to relax for a few minutes
 - E) Stop working to relax until you are rested
6. A customer is telling you a story that is not particularly interesting to you. It is a long story, and you have several other customers that need help. What do you do?
- A) Look completely interested with everything the customer says
 - B) Look somewhat interested with some of the things the customer says
 - C) Look neither interested nor disinterested, but instead just listen to the customer
 - D) Look somewhat disinterested with some of the things the customer says
 - E) Look completely disinterested in everything the customer says
7. You are helping a customer who keeps talking and talking. You have more customers to help. What do you do? (137)
- A) Look very interested so the customer keeps talking until finished
 - B) Look somewhat interested so that the customer will finish talking faster than usual
 - C) Maintain a neutral impression, looking neither interested or disinterested
 - D) Look somewhat bored so that the customer will finish talking almost immediately
 - E) Look like you're bored so the customer will quit talking immediately
8. A customer tells a joke that you don't find the least bit funny. What do you do?
- A) Laugh and smile like it is the funniest joke you have ever heard
 - B) Laugh and smile a little to make it look like it is a good joke
 - C) Laugh and smile halfheartedly
 - D) Smile but don't bother laughing
 - E) Don't bother laughing or smiling at the joke
9. It is a very busy day in your store. Although when in-between customers you have the chance to take a break for a few seconds, you cannot officially leave the customer area. What do you do?
- A) Continue looking busy even though you're not helping a customer
 - B) Take one quick break to rest
 - C) Take a couple of breaks until you are rested

- D) Sit down and relax until you are completely rested
10. A customer is telling you a personal story that is completely unbelievable and that you think is factually incorrect. What do you do?
- A) Smile and nod in agreement with the customer, and say you agree with the story
 - B) Smile and nod in agreement with the customer, but say nothing
 - C) Nod in agreement with the customer, but say nothing
 - D) Nod in agreement with the customer, then correct the customer's story
 - E) Correct the customer immediately and tell him or her why the story is wrong
11. Your manager wants employees to always look busy. This means you must do simple tasks over and over again, even when they don't need to be done. You are really tired of doing these tasks, the store is empty, and the manager is not around. What do you do? (320)
- A) Do the tasks even if they don't need to be done or nobody is present
 - B) Do the tasks only when the manager or customers are present
 - C) Do the tasks only when necessary, regardless of who is present
 - D) Don't do the tasks because they don't need to be done and it is a waste of time
12. You are helping a rude customer who is making small talk about things you find very stupid and boring. What do you do? (397)
- A) Completely maintain eye contact with the customer to show you're interested
 - B) Mostly maintain eye contact with the customer, but sometimes look around the store
 - C) Look at the customer directly and around the store about equally
 - D) Rarely maintain eye contact with the customer, but often look around the store
 - E) Don't look the customer in the eye but instead look around the store to show you're bored

SECTION 1C: Tangibles (Work area/product appearance)

13. You notice that many coworkers are not returning merchandise to its proper place after showing it to customers. This makes the entire store look very disorganized because an employee must look all over the store for a given product. However, nobody seems to care. What might you do in this situation? (220)
- A) Return all of the merchandise to their correct places
 - B) Return some of the merchandise to the correct places
 - C) Pile the merchandise up and set it aside, but don't return it
 - D) Leave the merchandise where it is

14. A coworker was helping a very picky customer buy a suit. S/he had requested to try on a number of different jackets, pants, and shirts. Although the customer has gone, the coworker left a big pile of clothes lying around. What do you do?
- A) Return all of the clothes to the correct place even though it is not your job
 - B) Return most of the clothes to the correct place even though it is not your job
 - C) Return some of the clothes to the correct place but leave the rest for the coworker
 - D) Leave the clothes where they are because it is not your job to return them

SECTION 2A: Reliability (Perform Consistently)

15. You are helping a customer and go to check on a product for him/her in the store room. When you return the customer is nowhere to be seen. However, there are several other customers waiting to be helped. What do you do? (255)
- A) Physically look for the customer you were helping until you find him/her
 - B) Physically look for the customer you were helping for just a few moments
 - C) Quickly glance around the store, then help the other customers
 - D) Help the other customers immediately
16. You need to call a customer but his/her phone is always busy. You try repeatedly but can never get through, and the customer does not have an answering machine. What do you do? (257)
- A) Keep calling no matter how long it takes
 - B) Try calling a few more times over the next couple of days
 - C) Try calling a few more times today
 - D) Quit calling, you've done all you can do
17. It is getting near your lunch break and you are not yet finished helping a customer. You only get a set amount of time for your break, so if you miss it you won't get another. You see a coworker around who does not appear to be busy. What do you do?
- A) Remain with the customer as long as it takes, even if you don't get a break
 - B) Try to hurry the customer to make a purchase so you can have part of your break
 - C) Ask the coworker to help your customer so you can take your break
 - D) Tell your customer it is time for you to take your break, and then leave

18. A customer is upset about a shirt that shrunk after s/he washed it. However, it is about five minutes before the end of your shift, and you have made plans with your friends. Many of your coworkers are not very busy and could help this customer. What do you do? (92)

- A) Personally help the customer until the transaction is completed, even if your shift is over
- B) Help the customer but try to get him/her to hurry so you can leave
- C) Help the customer until the end of your shift, then ask the coworkers to help the customer
- D) Ask the coworkers to help the customer since your shift is almost over

SECTION 2B: Reliability (Promises)

19. You are talking to a customer and promise to call the customer the next day. However, after the customer leaves you realize you have the next three days off. What do you do? (248)

- A) Call the customer immediately and tell them you won't be able to contact them for three days
- B) Call the customer later and tell them you won't be able to contact them for three days
- C) Call the customer after you return from your three days off
- D) Wait until the customer calls you back

20. A customer calls and asks how long it will take to get their order together. You know you can do it in 30 minutes. How long do you tell this customer it will take? (252)

- A) "20 minutes"
- B) "30 minutes"
- C) "40 minutes"
- D) "It's hard to say"

21. It is Saturday and you promise a customer you will call them on Sunday to inform them about the status of their order. Sometime after the call, your supervisor tells you that you will be working on Monday instead of Sunday. What do you do? (246)

- A) Call the customer immediately and tell them you won't be able to contact them until Monday
- B) Call the customer later and tell them you won't be able to contact them until Monday
- C) Call the customer after you return to work on Monday
- D) Wait until the customer calls you back, since it is only one day

22. You work as a waiter/waitress in a restaurant. A customer asks when his/her food will be ready and you think it will take about five minutes. What do you say? (284)

- A) "Right away"
- B) "3 minutes"
- C) "5 minutes"
- D) "8 minutes"

SECTION 2C: Reliability (Record Keeping)

23. You are working at a cash register. The register makes a mistake and overcharges a customer. The customer does not seem to notice, and there is a long line waiting for you. It would take some time to figure out the correct amount to charge the customer. What do you do? (155)

- A) Take the time to determine the correct change to give the customer
- B) Try to find the error, and if it takes too long help the other customers first
- C) Tell the customer there was an error but ask him/her to wait until you help the other customers
- D) Wait on the next customer, since there is a long line and nobody noticed the error

24. A customer calls you about a very detailed order. You have handled this order a number of times and don't feel it is any big deal. What do you do? (236)

- A) Write down every detail the customer says
- B) Write down a summary of the details
- C) Write down only a few key details
- D) Don't bother writing down the information since you've done this many times

SECTION 3A: Responsiveness (Acknowledgment)

25. You are one the phone with an important customer when another customer walks over to you. You are really busy with the individual on the phone. How do you handle the customer who is physically right in front of you? (40)

- A) Smile and look at the customer as you continue talking on the phone
- B) Look at the customer as you continue talking on the phone
- C) Momentarily interrupt the person on the phone to say, "I will be with you in a moment"
- D) Avoid noticing the customer so that s/he will look for help from a coworker

26. You are talking to a customer on the phone and have many other customers waiting on different phone lines. Suddenly, a customer in the store approaches you. What do you do? (66)
- A) Ask the customer to look around and you'll help him/her as soon as possible
 - B) Ask the customer to wait while you finish with the people on the phone
 - C) Look at the customer while you help the people on the phone
 - D) Tell the customers on the phone you will call them right back
27. You're working the cash register on a very busy shift. There is a long line waiting to check out, and you can see several individuals are getting impatient. What might you do? (264)
- A) Tell them you appreciate their patience
 - B) Regularly look at those waiting so that they know you are aware of them
 - C) Once in a while look at those waiting so that they know you are aware of them
 - D) Focus on your job as a cashier and don't look at those waiting
28. You are helping a customer buy a pair of shoes. You notice another customer walks into your store and nobody waits on them. They are looking around for help. What do you do? (263)
- A) Tell the new customer you'll be with them in a moment
 - B) Look at the new customer but don't say anything
 - C) Leave your current customer to greet the new customer, then go back to your original customer
 - D) Leave your current customer to help the customer who came into the store

SECTION 3B: Responsiveness (Promptness)

29. You are talking to an important customer on the phone when a customer interrupts, saying s/he is unhappy with your store and wants attention right now. S/he is speaking in a loud voice that other customers can hear. What do you do? (176)
- A) Help this customer immediately and hang up the phone
 - B) Ask this individual if s/he can wait until you are done on the phone
 - C) Ask the customer on the phone if you can call him/her back
 - D) Wait to help this customer until you finished with the individual on the phone

30. You had helped a customer order a product from your supplier. The supplier has called and said the product will be a few days late. What do you do?
- A) Call the customer immediately to inform him or her of the delay
 - B) Call the customer in a few days, after the order is officially late
 - C) Call the customer only if the delay changes
 - D) Don't call the customer since there is nothing anyone can do about the delay
31. You deal with a supplier who has not delivered a product as promised. You call the supplier, but they tell you there is nothing they can do. They also say they are not going to call the customer because they don't deal with customers directly. What do you do? (261)
- A) Immediately call the customer yourself to describe the delay
 - B) Call the customer but downplay how long the delay will last
 - C) Call the customer but mention there might be a delay with the order
 - D) Don't call the customer since it is not your store's fault
32. A customer wants a refund on a product that has obviously been misused. Although you could normally refer such problems to the manager, s/he will be gone for the next several hours. What do you do? (41)
- A) Inform the customer s/he will have to wait a few hours until the manager is present
 - B) Inform the customer s/he will have to wait until the manager is present
 - C) Inform the customer s/he will have to wait
 - D) Inform the customer your store cannot give a refund
33. You are answering the phones at your store. There are many customers who have called your restaurant and are on hold. You answer the phone and ask the customer to please be put on hold. The customer starts yelling that they have been on hold for fifteen minutes. What do you do? (73)
- A) Immediately help this customer since they have waited so long
 - B) Help the other customers who have waited longer than 15 minutes, then help this customer
 - C) Tell the customer s/he will have to wait for his or her turn.
 - D) Tell the customer you will call him or her back

SECTION 3C: Responsiveness (Responding to Requests)

34. A customer requests a product that you do not have in stock. Although you could call other stores to see if they have it, you are almost certain it will be a waste of your time. What do you do? (43)
- A) Call all of the possible stores to see if they have the product
 - B) Call most of the stores to see if they have the product
 - C) Call just a few stores that would be most likely to have the product
 - D) Don't bother calling the stores since you know they won't have it
35. A customer wants a product that you don't have in your store. You begin to call other stores to see if they carry the product. However, each store takes a long time to check and the customer is getting very impatient. You know that one of the stores is likely to have the product but it will take some time to find out. What would you do? (243)
- A) Call all of the possible stores regardless of how long it takes
 - B) Call as many stores as possible, until it starts to take too long
 - C) Call just a few stores that would be most likely to have the product in order to save time
 - D) Don't bother calling the stores since it will take too long
36. A customer calls and inquires about a particular product. There should be plenty of the products on the shelves. What do you do?
- A) Check for yourself that the product is in stock
 - B) Ask a coworker to check to see if the product is in stock
 - C) Tell the customer the product is in stock, since you're pretty sure it will be

SECTION 4A: Assurance (Suggestions/Alternatives)

37. You are helping a customer buy a computer. The customer is not sure what kind to buy. What might you do?
- A) Compare and contrast for the customer the different options and features of all relevant computers
 - B) Show the customer a couple of computers and describe options and features
 - C) Show the customer a couple of computers but don't describe options and features
 - D) Show the customer the one best computer your store has

38. A customer asks you about a competitor's product. You are familiar with this product. What do you tell them? (319)
- A) Describe and compare the good and bad features of your store's and the competitor's products
 - B) Describe the good features of your store's product and the bad features of the competitor's product
 - C) Only mention the negative information about the competitor's product
 - D) Don't mention the competitor's product and show the customer your store's product
39. A customer is unsure about choosing between a more expensive item and a less expensive item. S/he asks you what you think. You know that both products are very similar but have some different features. What do you do?
- A) Show the customer all of the similarities and differences between each item
 - B) Show the customer the key similarities and differences between each item
 - C) Show the customer the main differences between each item
 - D) Tell the customer the features of only the most expensive item
40. A customer is looking at a watch similar to the one you are wearing. The customer asks you if you think it is worth the money. Although you like the watch, it does have some features you don't like. What do you say?
- A) Tell the customer what you like and don't like about the watch
 - B) Tell the customer only what you like about the watch
 - C) Tell the customer only what you don't like about the watch
 - D) Don't tell the customer anything about the watch
41. You work in an appliance store. You ask the customer if you can help and the customer tells you s/he wants a specific stereo. You think you know about a stereo that would work better. What do you do? (358)
- A) Compare and contrast the main features of both stereos for the customer
 - B) Suggest to the customer that s/he tries another stereo you think might work better
 - C) Point out some of the disadvantages of the stereo the customer originally wanted
 - D) Sell the customer the stereo s/he wanted
42. You work as a waiter/waitress and a customer orders a dish that is not on the menu. You mention this politely but the customer gets very upset. What do you do? (93)
- A) Suggest alternative main dishes and side orders that might be of interest
 - B) Suggest alternative dishes that might be of interest to the customer
 - C) Suggest only those alternative dishes that are very similar to the dish the customer wanted
 - D) Tell the customer there is nothing you can do

SECTION 4B: Assurance (Compensation)

43. You are working right before Christmas and the store is very busy. A customer inquires about a product you have on sale. You check and realize the product has been sold out. The customer wanted the product before Christmas. What might you do in this situation? (95)
- A) Try to offer the customer some form of a substitution with a slight discount
 - B) Try to offer the customer some form of a substitution
 - C) Try to offer the customer a chance to order the product
 - D) Tell the customer there is simply nothing you can do
44. A regular customer calls to complain that s/he did not receive a product s/he ordered. You check and realize that your supplier is behind schedule. The customer is a regular customer who usually spends a lot of money in the store. Your manager is not present. What might you do? (136)
- A) Apologize and provide some small gift or discount on the purchase to show you appreciate the customer's patience
 - B) Apologize to the customer and give them a small discount on a future purchase
 - C) Apologize, and say you'll do what you can to speed up the delivery
 - D) Apologize, but say there is nothing you can do
45. A customer is dining in your restaurant with six children. The children all want a particular dish that you do not have. The children all start to yell and scream. What do you do? (179)
- A) Try to provide some form of a substitution they might like better
 - B) Try to offer the children free soda pop
 - C) Try to offer the customer a slight discount
 - D) Ignore the children since there is nothing you can do
46. A customer calls to inquire about a stereo advertised in the newspaper. You describe the stereo and the customer says s/he will be right in to pick it up. However, after the customer arrives you discover that there are no more of those stereos in stock, and it might be several weeks before your store will get more. What might you do? (249)
- A) Offer the customer a better stereo for the same price as the customer originally wanted
 - B) Offer the customer a discount on a different stereo you have in stock
 - C) Offer the customer a discount on the stereo when it finally gets delivered
 - D) Offer the customer a discount on a future purchase

47. You work in a restaurant. A customer orders the special but you have just run out. The customer is very upset and mentions that was the only reason s/he came to the restaurant. What do you do? (305)
- A) Offer the customer a better meal for the same price as the one you don't have
 - B) Offer the customer a slight discount on his or her meal
 - C) Encourage the customer to try a different meal
 - D) Tell the customer there is nothing you can do
48. It is the day before Christmas and a mother wants to get a doll for her daughter. Unfortunately, you have just sold out. The mother becomes very upset and starts to cry. What do you do? (325)
- A) Offer to sell the woman two similar dolls for the price of the sold-out doll
 - B) Offer the woman a slight discount on a future purchase
 - C) Suggest to the woman she purchase a different doll
 - D) Tell the woman there is nothing you can do
49. You work as a waiter/waitress in a restaurant. One of the cooks is joking around and throws some food at a coworker. However, s/he misses and hits one of your customers. The customer is furious. What do you do? (77)
- A) Offer the customer a free meal
 - B) Offer the customer a discount on their meal
 - C) Offer the customer a coupon for a future purchase
 - D) Tell the customer you are sorry and that it won't happen again
50. Your restaurant is very busy, and a large party is unhappy with the food and service. The people in this party are each complaining to you, and this is taking up so much time that your orders with other customers are falling behind. What do you do? (71)
- A) Offer the party a discount on their meal
 - B) Offer the party a free round of drinks or desserts
 - C) Offer the party a discount on future meals
 - D) Tell the party there is nothing you can do
51. You work in a restaurant. A customer eats most of his/her meal, then suggests it was awful and wants a different meal. What do you do? (81)
- A) Offer the customer a free meal in the future
 - B) Tell the customer you can only offer him or her a free dessert
 - C) Tell the customer you can only offer him or her a slight price reduction for the meal
 - D) Tell the customer there is nothing you can do since s/he already ate the meal

52. A customer calls to see if you have a particular pair of shoes in stock. You check and your store does. Later, when the customer comes into the store to pick of the shoes you see that they have been sold. The customer is very upset. What do you do? (133)
- A) Offer the customer some free shoe care products for the inconvenience, if a purchase is made
 - B) Offer to hold the customer a pair of the shoes when they are delivered
 - C) Tell the customer you are sorry but there is nothing you can do
 - D) Tell the customer there is nothing you can do

SECTION 4C: Assurance (Demonstrating Value)

53. You are helping a customer purchase an entertainment center. The customer appears nervous and hesitant about buying the product. What might you do? (302)
- A) Describe to the customer the cost of each feature on the product to show it is worth the money
 - B) Tell the customer the product is worth the money because of its many features
 - C) Tell the customer you get what you pay for
 - D) Say nothing and let the product speak for itself
54. A customer is looking at buying an expensive VCR with many options, but does not seem sure about the purchase. What might you do?
- A) Explain the value and benefits of each product option
 - B) Tell the customer the cost is high because there are so many options
 - C) Tell the customer there are many options on the VCR
 - D) Don't tell the customer anything, let the product sell itself

SECTION 4D: Assurance (Explaining Service)

55. Although a customer has just purchased an expensive leather jacket, s/he appears to be unsure that it was a good purchase. What might you do?
- A) Tell the customer how to care for the jacket to ensure it lasts a long time
 - B) Inform the customer where to find information on how to care for the jacket so that it lasts a long time
 - C) Tell the customer that with the right care, the jacket will last a long time
 - D) Tell the customer the jacket will last a long time

56. A customer had purchased a television set from you a week ago. The customer seemed rather nervous about the purchase. What might you do?
- A) Call the customer to make sure everything is working correctly
 - B) If you ever help the customer again, ask how the television is working
 - C) Do nothing, the customer will call if there is a problem
57. A customer has just bought a rather expensive television from you. What might you do now that the purchase is complete? (384)
- A) Call the customer to make sure everything is working correctly
 - B) If you ever help the customer again, ask how the television is working
 - C) Do nothing, the customer will call if there is a problem

SECTION 4E: Assurance (Selling Pressure)

58. It is typical in your store for employees to really push certain products. However, customers often don't appreciate such tactics being used on them. What do you do? (324)
- A) Apply no pressure on the customer to buy those particular products
 - B) Apply slight pressure on the customer to buy those particular products
 - C) Apply moderate pressure on the customer to buy the particular products
 - D) Apply heavy pressure on the customer to buy the particular products
59. You are helping a customer around quitting time. You are very tired and have had a long day. It is pretty obvious that the customer has no idea about what s/he wants and you can tell this is going to take a long time. What do you do? (327)
- A) Do not rush the customer but let him or her shop at his/her own pace
 - B) Slightly try to hurry the customer by asking questions to learn the customer's needs
 - C) Moderately try to hurry the customer by providing suggestions (but not asking questions)
 - D) Hurry the customer by telling him or her it is almost quitting time
60. You have nearly finished selling a customer an expensive product. However, the customer seems unsure about making the purchase because it costs so much money. What might you do?
- A) Remind the customer s/he can always return the product
 - B) Tell the customer s/he is making a good purchase
 - C) Don't say anything to the customer so that s/he can decide for him or herself

61. Your store pays its employees by the hour, but still expects each employee to meet minimum dollar amount of sales each day. If this minimum is not met, it goes on your performance evaluation and could affect the possibility for future pay raises. Although you try to meet this quota, it is very difficult and often requires you to give a "hard sell" to the customer. You do not feel comfortable doing this, and your customers often do not appear to appreciate this tactic. What do you do? (12)
- A) Do not push sales even if it means you might not meet your minimum
 - B) Push sales so that you get close to meeting your minimum, but do not push beyond that point
 - C) Push sales so that you usually meet your minimum, but do not push beyond that point
 - D) Push sales so that you will always meet your minimum
62. You are helping a customer by bringing different clothes to the fitting room. However, this person has been shopping for over an hour and you are starting to think s/he is not going to buy anything. What do you do? (42)
- A) Do not rush the customer but let him or her shop at his/her own pace
 - B) Slightly try to hurry the customer
 - C) Moderately try to hurry the customer
 - D) Hurry the customer in any way you can
63. You are selling a customer a rather expensive product. The customer appears to be nervous and hesitant about making the purchase because s/he has taken a very long time. What might you do?
- A) Give the customer as much time to think about the purchase as s/he needs
 - B) Give the customer a moderate amount of time to make the purchase
 - C) Give the customer just a little more time to make the purchase
 - D) Try to get the customer to make the purchase immediately
64. You work in a store that pays its employees a commission of their total sales. You are waiting on a customer that is very demanding but only buying a relatively inexpensive product. You know you are missing helping customers who are buying more expensive products. What do you do? (58)
- A) Give the customer as much time to think about the purchase as s/he needs
 - B) Give the customer a moderate amount of time to make the purchase, then try to hurry the customer
 - C) Give the customer just a little more time to make the purchase, then try to hurry the customer
 - D) Try to get the customer to make the purchase immediately

SECTION 4F: Assurance (Politeness)

65. A customer walks into your store and looks very grumpy. Further, he does not look like a "serious" customer. You are busy checking inventory and are falling behind schedule, something your manager will not appreciate. You notice no other coworkers are currently in the section. What do you do? (266)
- A) Approach the customer and ask if you can help
 - B) Say hello to the customer but do not offer to help
 - C) Nod to the customer but do not offer to help
 - D) Ignore the customer and continue checking inventory
66. You work in a store that pays its employees a commission of their total sales. You notice that most coworkers will not wait on customers who do not have the appearance of being "big spenders." One of these individuals walks into the store and nobody waits on them. What do you do? (59)
- A) Approach the customer and ask if you can help
 - B) Say hello to the customer but do not offer to help
 - C) Nod to the customer but do not offer to help
 - D) Ignore the customer and wait for a better customer to help

SECTION 4G: Assurance (Honesty)

67. You are a new employee and realize you've made a mistake with a customer's order. Specifically, you did not charge the customer enough money. You could call the customer and tell him/her to pay the difference, or simply not do anything. What do you do?
- A) Call the customer and tell him or her you made a mistake
 - B) Tell your supervisor but do not call the customer
 - C) Do nothing
68. You make a mistake and undercharge a customer. Your boss says you will either have to make up the difference out of your paycheck or call the customer and get him/her to pay the difference. What do you do? (184)
- A) Don't call the customer, but simply pay for the difference yourself
 - B) Don't call the customer but instead send a bill for the customer to pay the difference
 - C) Call the customer to explain the mistake, then send a bill for the customer to pay the difference
 - D) Call the customer to explain the mistake and insist he or she pays the difference

69. You're waiting on a customer who asks for a special request. You think you can meet the request adequately but are not sure. Unfortunately, your manager will be gone for a half an hour. What do you do? (211)
- A) Admit you're uncertain whether you can meet the request, and then try to meet it
 - B) Admit you're uncertain whether you can meet the request, and then wait for the manager
 - C) Don't admit you're uncertain whether you can meet the request, and then wait for the manager
 - D) Don't admit you're uncertain whether you can meet the request, just try to meet it
70. A customer asks you questions you don't know how to answer. You think you might be able to figure out the answer, though, if you give it some thought. What might you do? (237)
- A) Admit you're uncertain whether you know the answer, and then try to find an answer
 - B) Admit you're uncertain whether you know the answer, and don't even try to help
 - C) Don't admit you are uncertain whether you know the answer, and don't try to help
 - D) Don't admit you are uncertain whether you know the answer, just try to find an answer
71. You work for a delivery service. A customer calls to ask why their order took so long to be delivered. It was a big order and you want to keep this customer happy. You are pretty sure the order was late because the delivery driver went to the wrong address. What do you do? (251)
- A) Say that you think the delivery driver went to the wrong address
 - B) Say that you think the delivery driver had made a mistake
 - C) Say that you think the delivery driver was late because there was a lot of traffic
 - D) Say that you don't know why the order took so long
72. A customer is trying on a pair of sunglasses that quite frankly make them look funny. They ask you for your opinion. What do you say? (290)
- A) "Those glasses look funny on you"
 - B) "Those glasses kind of look funny on you"
 - C) "Those glasses look OK on you"
 - D) "Those glasses look really good on you"

SECTION 4H: Assurance (Empathy)

73. It's Christmas time and your store has a product advertised that has been very popular. A younger girl wants to purchase the product but you realize it is sold out and will not be possible to get more until after Christmas. The young girl starts to cry, saying "Thanks for nothing—you've ruined my Christmas." What might you do in this situation? (60)
- A) Sit the girl down and say how sorry you are
 - B) Say how sorry you are
 - C) Tell the girl you wish you had more of the product
 - D) Tell the girl that the store is sold out and there is nothing you can do
74. A customer who consistently writes bad checks needs to be told s/he cannot write a check for his/her purchase. There are many other customers around who could hear you. What do you do? (170)
- A) Tell the customer you are sorry and that this has even happened to you, but you can't accept the check
 - B) Tell the customer you are sorry and that these things sometimes happen, but you can't accept the check
 - C) Tell the customer you are sorry but that you cannot accept the check
 - D) Tell the customer you cannot accept the check
75. A customer orders a dress. The customer comes to the store on the day the order was to arrive, but the warehouse has not been able to deliver the dress. The customer gets very upset with you. What do you do? (19)
- A) Say to the customer you are sorry and would be mad too if you couldn't get the dress, but these things sometimes happen
 - B) Say to the customer you are sorry and would be mad too if you couldn't get the dress
 - C) Say to the customer you are sorry
 - D) Tell the customer there is nothing you can do about the dress
76. You are working at a cash register right before Christmas. The line is very long and customers are generally impatient. As you cash out one customer, you realize that his/her credit card is denied. What do you do? (94)
- A) Talk to the customer using his/her first name, say you are sorry, and that these things happen
 - B) Tell the customer you are sorry and that these things happen
 - C) Tell the customer you are sorry
 - D) Tell the customer there is nothing you can do

SECTION 5A: Perceptiveness (Anticipation)

77. You work as a waiter/waitress in a restaurant. One of your tables is involved in a very private conversation. You want to ask them if you can get them anything else, but every time you approach they give you a very nasty look—as if to say “leave us alone.” What might you do? (78)
- A) Watch the table to guess when someone might want something (for example, water)
 - B) Watch the table and wait for a customer to call on you (for example, waving their hand)
 - C) Approach the table less frequently than you would have normally
 - D) Approach the table as you normally would
78. You greet a customer walking into your store by smiling and saying “hello.” This customer does not smile back but only nods. What might you do next? (267)
- A) Move on to a different customer who wants or needs your help
 - B) Wait for this customer to approach you for help
 - C) Watch this customer to see if s/he wants your help
 - D) Immediately ask the customer if s/he wants your help
79. One customer you are helping is very factual and straight to the point. As you help this person, what might you do? (299)
- A) Treat the customer like s/he knows exactly what s/he wants
 - B) Treat the customer like s/he probably knows what s/he wants
 - C) Treat the customer like s/he might know what s/he wants
 - D) Treat the customer like s/he has no idea what s/he wants
80. There is a regular customer in your restaurant that all employees know because he always orders the same meal. Although you are a new employee and have never waited on this gentleman, you do know what he looks like. One day he sits in your section. What might you do? (328)
- A) Order this customer his regular meal without asking
 - B) Ask the customer if he wants to order his regular meal
 - C) Ask the customer what he would like to order, but indicate you know he is a regular customer
 - D) Ask the customer what he would like to order like any other customer

81. A customer walks into your store and you ask if s/he wants help. S/he politely declines, and then walks around the store in a very confused manner. What would you be most likely to do? (329)
- A) Move on to a different customer who wants or needs your help
 - B) Wait for this customer to approach you for help
 - C) Watch this customer to see which section s/he enters if he or she might want your help
 - D) Watch this customer to see what section s/he enters
82. A customer enters the store and you say hello. Although the customer says hello, s/he just keeps walking past you. What do you do? (361)
- A) Move on to a different customer who wants or needs your help
 - B) Wait for this customer to approach you for help
 - C) Watch this customer to see if s/he wants your help
 - D) Immediately ask the customer if s/he wants your help
83. A customer enters the store and you say hello. The customer does not respond and just keeps walking. What do you do? (362)
- A) Move on to a different customer who wants or needs your help
 - B) Wait for this customer to approach you for help
 - C) Watch this customer to see if s/he wants your help
 - D) Immediately ask the customer if s/he wants your help
84. A customer enters the store and you say hello. The customer does not respond but stops and looks around the store. What do you do? (363)
- A) Move on to a different customer who wants or needs your help
 - B) Wait for this customer to approach you for help
 - C) Watch this customer to see if s/he wants your help
 - D) Immediately ask the customer if s/he wants your help
85. A customer walks into your store who is not very well dressed. Your store is one that sells very expensive clothes, something the customer does not appear to be able to afford. There are better dressed customers who are farther away in the store but have not been waited on. What do you do? (389)
- A) Immediately help the customer who is poorly dressed
 - B) Watch the poorly dressed customer to see if s/he is a "real" customer, then offer help
 - C) Watch the better dressed customers to see if they might need help first
 - D) Immediately help the customers who are better dressed

86. You greet a customer who does not immediately respond. What do you do? (391)

- A) Move on to a different customer who wants or needs your help
- B) Wait for this customer to approach you for help
- C) Watch this customer to see if s/he wants your help
- D) Immediately ask the customer if s/he wants your help

87. You work in a department store and see a female customer enter the automotive section. How might you greet this customer?

- A) "What can I help you find for your vehicle?"
- B) "Working on your vehicle today?"
- C) "What can I help you find?"
- D) "Can I help you?"

88. You are helping a customer purchase a new telephone. What might you do next?

- A) Recommend other products the customer may want to use with the telephone or office
- B) Recommend other products the customer may want to use with the telephone
- C) Ask the customer if s/he wants any other products
- D) Let the customer tell you if s/he wants any other products

SECTION 5B: Perceptiveness (Identify Personal Information)

89. You see a customer that you have waited on before. How might you greet this customer?

- A) Use whatever relevant personal information you can remember about this customer in your greeting
- B) Use just the customer's name in your greeting
- C) Be more friendly to this customer than usual but don't use personal information
- D) Greet this customer just like all customers

90. You are helping a couple who has three small children with them. What might you do?

- A) Talk to the children and try to learn their names and interests
- B) Talk to the children and try to learn their names
- C) Talk to the children
- D) Help these customers without trying to learn personal information about them

91. A customer is telling you a story about himself/herself and is providing you with very personal information. S/he asks if you have had a similar experience. Imagine you have had a similar experience. What do you tell this customer?

- A) Tell the customer your experience without leaving anything out
- B) Tell the customer you have experienced something similar but provide a little detail
- C) Tell the customer you have experienced something similar but provide no detail
- D) Tell the customer you have not experienced anything similar

92. You work in a clothing store. You are helping a man buy a gift for his wife. What do you do? (395)

- A) Ask questions about the wife to identify her interests and preferences
- B) Ask what the wife likes to do
- C) Ask what the husband and wife like to do together
- D) Ask what the husband wants to buy for his wife

93. You work in a clothing store. You are helping a woman buy a gift for her husband. What do you do? (396)

- A) Ask questions about the husband to identify his interests and preferences
- B) Ask what the husband likes to do
- C) Ask what the husband and wife like to do together
- D) Ask what the wife wants to buy for her husband

SECTION 5C: Perceptiveness (Questioning)

94. A customer keeps asking you questions that are very annoying. In fact, s/he has already asked you about 30 questions and does not seem to be running out. What do you do? (269)

- A) Answer all questions regardless of how many there are
- B) Answer most of the questions, then ask what s/he really wants
- C) Answer a few more questions, then ask what s/he really wants
- D) Stop answering the questions and ask what s/he really wants

95. You see a customer standing around the store. What might you do?

- A) Approach the customer and say "What product can I help you find today"
- B) Approach the customer and say "What can I help you find"
- C) Approach the customer and say "Are you looking for something"
- D) Approach the customer and say "Can I help you"

96. You observe a customer looking at your store's sale brochure. What might you do?

- A) Ask the customer what in the brochure s/he is looking for
- B) Ask the customer if s/he needs help finding something in the brochure
- C) Ask the customer if s/he is finding everything s/he needs
- D) Ask the customer if you can help them

97. A customer is looking at buying a computer and has asked you a rather complicated question. What might you do next?

- A) Restate the question back to the customer, then answer the question
- B) Ask the customer what s/he really means, then answer the question
- C) Immediately attempt to answer the question

98. A customer tells you s/he wants to buy a television. What might you do next?

- A) Ask follow-up questions to determine why the customer wants this television
- B) Ask the customer what kind of television s/he would like
- C) Ask the customer how much s/he wants to spend
- D) Show the customer a television you think s/he would like

99. A customer wants to buy a VCR but is not sure about what kind or how much s/he wants to spend. How might you inquire about this information? (337)

- A) Ask the customer what features s/he might actually need and use
- B) Ask the customer what features s/he wants
- C) Ask the customer what brand of VCR s/he wants
- D) Ask the customer how much s/he wants to spend

100. A customer comes into the store and tells you exactly what s/he wants. What do you do? (346)

- A) Restate the question to make sure you understand what the customer wants
- B) Ask the customer why s/he wants that specific product
- C) Ask the customer if s/he is sure that product is what s/he wants
- D) Get the customer exactly what s/he wanted without further questions

101. You observe a customer looking toward the kitchen supply area of your department store. You work in the clothing department. What do you do? (348)

- A) Ask the customer if s/he wants to look at something from the kitchen department
- B) Ask the customer if you can help him or her find some clothes
- C) Ask the customer if you can help him or her find something
- D) Ask the customer if you can help

SECTION 5D: Perceptiveness (Customer Focus)

102. As a salesperson, you are asked to influence customers to purchase the most expensive products even when a cheaper product may satisfy their needs. You are sure that many of your customers are on limited incomes. What do you do? (213)
- A) Sell customers the least expensive products that satisfy their needs
 - B) Sell customers the less expensive products that almost satisfy their needs
 - C) Sell customers the more expensive products that almost satisfy their needs
 - D) Sell customers the most expensive products that satisfy their needs
103. A customer is trying on a jacket. Although the jacket fits fine, you know of a cheaper jacket that would look just as good. However, if you sell the expensive jacket and both you and the store would make a nice commission. What might you do? (291)
- A) Try to sell the cheaper jacket
 - B) Recommend both jackets, but then try to sell the cheaper jacket
 - C) Recommend both jackets, but then try to sell the expensive jacket
 - D) Try to sell the expensive jacket
104. A customer expects you to do something that is not part of your job—look up the address of a competitor. What do you do? (318)
- A) Look up the specific address as the customer requests
 - B) Just give general directions to the customer
 - C) Show the customer where a phone book is so s/he can look it up himself or herself
 - D) Tell the customer it is not your job to sell the competitor's products
105. You recognize a regular customer who spends a lot of money in your store. However, all coworkers are very busy, as are you. None of the other coworkers seems to notice this customer, and you are currently helping a customer purchase a small item that is not very expensive. What do you do? (332)
- A) Stay with your customer until s/he is done, then help the regular customer
 - B) Ask your customer to wait for a few moments, then go help the regular customer
 - C) Try to hurry your customer so you can help the regular customer sooner
 - D) Tell your customer you have to go, and then help the regular customer

106. Many customers request a particular name brand VCR. You know a lesser known brand has the identical VCR. Further, you know that both VCRs are made by the same company. Do you tell customers about the cheaper VCR? (338)

- A) Try to sell the cheaper VCR
- B) Recommend both VCRs, but then try to sell the cheaper VCR
- C) Recommend both VCRs, but then try to sell the expensive VCR
- D) Try to sell the expensive VCR

107. Your store pays its employees a commission of their total dollar sales. You are helping a customer that believes everything you recommend. You know you could sell this person a lot of things they probably don't need. What might you do? (339)

- A) Sell the customer only the products that s/he actually needs
- B) Sell the customer a few products that s/he may not need
- C) Sell the customer several products that s/he may not need
- D) Sell the customer as many products as you can, regardless of whether s/he needs them

108. A customer walks into the store and you greet him/her as usual. However, it turns out this is a regular customer and s/he gets upset for you not recognizing him/her. What do you do? (164)

- A) Spend a large amount of extra time with this customer to make up for the mistake
- B) Spend a moderate amount of extra time with this customer to make up for the mistake
- C) Spend a small amount of extra time with this customer to make up for the mistake
- D) Don't spend any extra time with this customer than you would for anybody else

SECTION 6A: Communication (Personalized)

109. You are waiting on two customers who don't speak English. They are obviously tourists. Your store is very busy and you are falling behind. What might you do? (375)

- A) Speak quite a bit slower than normal
- B) Speak slightly slower than normal
- C) Speak normally
- D) Speak slightly faster than normal since the store is so busy
- E) Speak quite a bit faster than normal since the store is so busy

110. An older woman walks into your store. How might you talk to her? (374)

- A) Completely alter your way of speaking to fit this woman's interest
- B) Moderately alter your way of speaking to fit this woman's interest
- C) Slightly alter your way of speaking to fit this woman's interest
- D) Talk to her the same way you talk to all of your customers

111. You are going to explain to a customer how to perform a very complicated repair. The customer acts as though he already understands all of this information, but you suspect he might not. What might you do? (379)
- A) Start at the most basic level, and then get more complicated
 - B) Start at an easy level, then get more complicated
 - C) State at a moderate level, then get more complicated
 - D) Start at a complicated level since the customer already knows this
112. An older customer and a younger customer both ask you identical questions. How would you respond to these questions? (381)
- A) Tailor each response to a manner appropriate for each customer's age
 - B) Moderately tailor each response to a manner appropriate for each customer's age
 - C) Slightly tailor each response to a manner appropriate for each customer's age
 - D) Make each response in an identical manner
113. Your manager asks employees to treat all customers in the same friendly manner. What might you do when dealing with customers? (385)
- A) Completely alter the way you are friendly for each customer
 - B) Moderately alter the way you are friendly for each customer
 - C) Slightly alter the way you are friendly for each customer
 - D) Treat all customers in an identical friendly manner
114. A couple of customers are placing an order in your restaurant. The restaurant is very busy and you are not getting to your other customers as fast as you should. What do you do? (388)
- A) Speak quite a bit slower than normal
 - B) Speak slightly slower than normal
 - C) Speak normally
 - D) Speak slightly faster than normal since the store is so busy
 - E) Speak quite a bit faster than normal since the store is so busy
115. You deal with customers over the phone. Many customers do not speak English very well, and often neither one of you can understand each other. It is often very frustrating. How might you handle these situations? (401)
- A) Speak quite a bit slower than normal
 - B) Speak slightly slower than normal
 - C) Speak normally
 - D) Speak slightly faster than normal since the store is so busy
 - E) Speak quite a bit faster than normal since the store is so busy

SECTION 6B: Communication (Appropriate)

116. You work in a computer store. Many of your customers know very little about computers. How might you convey your knowledge of computers? (376)
- A) Provide very simple descriptions without the use of technical terms
 - B) Provide relatively simple descriptions with little use of technical terms
 - C) Provide moderately in-depth descriptions with moderate use of technical terms
 - D) Provide in-depth descriptions with the appropriate technical terms
117. You work in a rather hip clothing store and are helping a customer who is using very foul language. This language is typical for many of your customers, but you think other customers don't appreciate the foul language and become offended. What might you do? (377)
- A) Do not swear with customers under any circumstances
 - B) Swear with customers only if no other customers are present
 - C) Swear with customers occasionally, even if other customers are present
 - D) Swear with the customer as often as the customer swears with you
118. A customer comes into the store who is about your same age. S/he speaks to you in a very casual manner. How might you respond?
- A) Speak in a identical casual manner
 - B) Speak in a moderately casual manner
 - C) Speak in a mildly casual manner
 - D) Speak in a professional manner the same as you do with all customers
119. You are describing how to use a rather complicated product for a customer. It is a long explanation with a lot of information. What might you do?
- A) Provide all of the very specific information about the product
 - B) Provide most of the specific information about the product
 - C) Provide some of the specific information about the product
 - D) Provide only general summary information about the product
120. You work in a very noisy store. You often cannot hear customers very well, and sometimes they get upset because they think you are not paying attention. How might you handle these situations? (403)
- A) Speak slower and periodically ask customers if they understand
 - B) Speak slower if customers appear to have trouble hearing you
 - C) Speak normally but tell customers you are having trouble hearing them
 - D) Speak normally and tell customers you are paying attention if they get upset

SECTION 7: Competence

121. You receive some information about products you know a competitor carries. What might you do?
- A) Read the information closely and become very familiar with it
 - B) Skim over the information to get most of the points or features
 - C) Skim over the information to get only the main points or features
 - D) Don't bother reading the information
122. Your store receives new products every week. However, many of these products are only sold for a few weeks before your store stops selling them. What might you do?
- A) Try to remain current and familiar with all new products as they arrive
 - B) Try to remain familiar with most new products as they arrive
 - C) Try to remain familiar with a few key products as they arrive
 - D) Try to remain familiar only with the products that do not change from week to week
123. You work in a store that sells electronics. When new products arrive, your store receives a brief, non-technical product description and a complicated, in-depth product description. What would you be most likely to do?
- A) Read both types of information comprehensively and in careful detail
 - B) Read both types of information to gain a general understanding of the key points
 - C) Read only the non-technical information to understand all key points
 - D) Read only the non-technical information to understand the few major points
124. You work in a restaurant where some dishes on the menu change weekly. What might you do?
- A) Memorize all details of each new dish as it becomes available
 - B) Be familiar with most details of each new dish as it becomes available
 - C) Be familiar with the major details of each new dish as it becomes available
 - D) Remain familiar with the regular dishes since they don't change

SECTION 8: Demonstrating Extra Effort

125. You work as a delivery driver. It is Friday night, almost quitting time, and you have plans for the evening. A customer calls at the last minute and asks if you can deliver a product that will take you several hours. All of the other drivers have left for the night. Your boss says it is up to you. What do you do? (208)
- A) You take the delivery immediately
 - B) Tell your boss you'll take the delivery first thing the next morning
 - C) Tell your boss you'll take the delivery the next day
 - D) Tell your boss you don't want to take the order because you have plans
126. There are some minor duties and tasks that all employees are expected to do. Your coworkers do not help with these tasks because you all get paid the same amount. Although you are fairly busy, you could also do their jobs as well. What do you do? (188)
- A) Perform all of the minor tasks in addition to your regular duties
 - B) Perform the minor tasks only when you are not performing your regular duties
 - C) Perform the minor tasks only when they absolutely have to be done
 - D) Don't perform the minor tasks since nobody else is doing them
127. You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because you are making everyone else look bad. What do you do? (189)
- A) Continue working as hard as you had been
 - B) Work moderately harder than everyone else
 - C) Work a little bit harder than everyone else
 - D) Work only as hard as everyone else
128. You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because the manager is gone for the day. What do you do? (190)
- A) Continue working as hard as you had been
 - B) Work a little bit less hard
 - C) Stop working so hard when the manager is not around
 - D) Stop working so hard at all times

129. You work in a store that has a few peak times during a day but is otherwise pretty slow. During the slow times, coworkers joke around, use the company phone for personal calls, and generally look bored. However, there are many maintenance tasks that could be done during this time, such as cleaning the shelves. What do you do? (50)

- A) Perform the maintenance tasks whenever you are not helping customers
- B) Perform the maintenance tasks only when the store is extremely slow
- C) Perform the maintenance tasks only when told to do so
- D) Don't perform the maintenance tasks since nobody else does them

130. Your manager is very easy going. Many of your coworkers take advantage of this and give themselves very easy work schedules. Unless you take advantage of this manager's flexibility, you will have to work very undesirable hours. What do you do? (107)

- A) Never take advantage of the manager's flexibility and thus always work the undesirable hours
- B) Occasionally take advantage of the manager's flexibility to get better working hours
- C) Regularly take advantage of the manager's flexibility to get better working hours
- D) Always take advantage of the manager's flexibility to get better working hours

131. Some of your coworkers don't care about their job or the store. These individuals often do not do their job duties, which means somebody else has to do them. However, you all get paid the same amount. Now you see one of these individuals leaving for the night and his/her work area is a mess. What do you do? (74)

- A) Clean up the entire coworker's work area yourself
- B) Clean up the coworker's work area so that it is fairly clean
- C) Clean up the coworker's work area just a little
- D) Leave the coworker's work area for him or her to clean

132. You work the day shift. The people in the night shift do not perform their basic cleanup tasks. If you do their tasks in addition to your own, you waste your time and so your customers may have to suffer. What do you do? (126)

- A) Clean up after the night shift in addition to performing your regular tasks
- B) Clean up after the night shift only when you aren't performing your regular tasks
- C) Tidy up a little but leave most of the mess as you found it
- D) Leave the mess since the night shift made it

133. You work the morning shift in a restaurant. The night shift has gotten into the habit of not keeping the work area clean. Now, in addition to your regular duties, you also have to clean the work area. This makes your job much more difficult. You've brought the matter up with your supervisor, who says s/he is looking into it. Now, you come into work and notice the work area is even dirtier than usual, and there are several customers already coming into the store. What might you do? (87)

- A) Clean up after the night shift in addition to helping your customers
- B) Clean up after the night shift only when you aren't helping customers
- C) Tidy up a little but leave most of the mess as you found it—focus on your customers
- D) Leave the mess since the night shift made it—focus on your customers

SECTION 9A: Maintain Personal Discipline (Composure)

134. A customer is very upset with your company's return policy. You have no say or control over the return policy, but this customer is basically "venting" his/her frustration to you. How do you handle this situation? (36)

- A) Remain calm and let the customer voice his or her concerns
- B) Remain calm, but tell the customer to settle down
- C) Remain calm, but tell the customer you have no control over the policy
- D) Get a little aggressive and tell the customer you have no control over the policy

135. A customer is upset and getting personally insulting with you. Further, the customer is starting to threaten you with physical harm. What do you do? (72)

- A) Remain calm and don't take it personally
- B) Remain calm and tell the customer to settle down
- C) Stand firm and tell the customer to settle down
- D) Get aggressive so that the customer will back down

136. You have had a very bad day by the time you show up for work. Now, the first customer you wait on is also in a bad mood and starts yelling at you right away. This customer is getting very personal. How do you handle this customer? (99)

- A) Ignore the customer's comments and try to help
- B) Try to remain calm but tell the customer to settle down
- C) Tell the customer to settle down
- D) Tell the customer you are not going to help anyone who makes personal attacks on you

137. A customer starts yelling at you because you sold him/her a TV that was broken. This customer is upset because s/he had to drive 50 miles to get to the store. Although it is not your fault, this customer is very rude and offensive. How would you handle this situation? (15)

- A) Stand firm and try to find a replacement TV
- B) Stand firm and tell the customer it is not your fault
- C) Stand firm and tell the customer to quit yelling because it is not your fault
- D) Stand firm and tell the customer to either calm down or leave

138. A customer orders a specially made desk. When the desk arrives, the customer does not like the look of it and refuses to purchase it. You are now going to lose the commission on the order, and even worse, are going to have to tell your supervisor that the desk must be returned to the warehouse at the company's expense. What do you tell this customer? (20)

- A) Tell the customer you appreciate his/her business and ask if there is anything else you can do
- B) Tell the customer that you will lose your commission unless s/he buys the desk
- C) Tell the customer that unless s/he buys the desk the company will have to pay for it
- D) Tell the customer that s/he should buy the desk since s/he ordered it

139. You work in a pizza shop. A customer orders a pizza (for delivery) that you make yourself. A half hour later this customer calls you to complain about the pizza—it was a small instead of a medium. You can't remember which size pizza you made, but you suspect the customer ordered the wrong size pizza. What might you do? (69)

- A) You take the entire blame for the pizza
- B) Try to imply that you are at fault but don't explicitly say so
- C) Try to imply that the customer is at fault but don't explicitly say so
- D) Tell the customer it is his or her fault

140. When waiting on a customer you realize that s/he is trying to get a cheaper price that is listed for the product. Basically, this customer changed the price tag on the item. When you mention the price looks to be too low and that you are going to check its price in the computer, the customer starts to complain and questions your competence. What do you do? (100)

- A) Remain calm and professional, and continue to check the price
- B) Remain calm and professional, but say s/he had better settle down
- C) Tell the customer you know s/he has changed the price, so s/he had better settle down
- D) Tell the customer you know s/he has changed the price and are going to call the manager

141. You promise a customer to call them on a specific day. However, every time you call the person is not home, and you can't leave a message because they don't have an answering machine. Sometime later the customer calls you and is very upset because you never called them back. What might you do? (247)

- A) Tell the customer you are sorry and try to help him or her as much as possible
- B) Tell the customer you are sorry but that it was not your fault
- C) Tell the customer you tried calling
- D) Tell the customer s/he should have been around because you have tried to call

SECTION 9B: Maintain Personal Discipline (Social Consideration)

142. A couple of your coworkers are complaining about their pay and about working for the company. They ask you what you think. You can see there are a few customers in the store but you doubt they can hear anything. What do you do? (76)

- A) Don't say anything to the coworkers at this time
- B) Tell the coworkers what you think but leave out any negative opinions
- C) Tell the coworkers what you think but make sure nobody can hear you
- D) Tell the coworkers exactly what you think

143. You are helping a customer when a coworker comes up to you and asks if you would like to join some of your colleagues for a few drinks after work. Assume you want to join them for drinks. What do you do?

- A) Tell the coworker you'll get back to him or her later
- B) Tell the coworker you're really not interested
- C) Tell the coworker you probably will join them
- D) Tell the coworker you'd be happy to join them

144. You and a coworker are working at the cash register. Although there are many customers in line, it is a rather boring job. The coworker starts talking to you about what s/he is going to do for the weekend. What do you do? (353)

- A) Tell the coworker you're too busy to talk
- B) Talk briefly, but try to end the conversation as soon as possible
- C) Try to change the subject to something more work-related
- D) Talk to the coworker about the weekend

145. You and a coworker are working at the cash register. There are many customers in line. The coworker starts talking about how much s/he hates working at the store. You know customers can hear this. What do you do? (354)

- A) Tell the coworker you can't talk right now
- B) Try to end the conversation as soon as possible
- C) Try to change the subject to something not related to work
- D) Carry on a conversation with the coworker

146. A coworker is talking to you and using rather foul language. A customer approaches you both for help and your coworker continues to talk in the offensive manner. What do you do? (404)

- A) Move the customer away from the coworker as soon as possible
- B) Try to change the topic of the coworker's conversation
- C) Try to get the customer to join the conversation
- D) Help the customer in the presence of the coworker, pretending nothing happened

147. A coworker who is also your friend appears to be personally interested in a customer. The coworker starts to talk to you about the customer in a provocative manner. You fear other customers might soon overhear. What do you do? (406)

- A) Leave the coworker so that s/he quits talking
- B) Carry on the conversation but try to end it as soon as possible
- C) Carry on the conversation but try to change it to something else as soon as possible
- D) Carry on the conversation since the coworker is also your friend

148. A customer makes a demand that requires you to ask your manager. Your manager says to deny the request. You do, and the customer gets very upset and asks to see the manager. However, the manager accepts the customer's demand, making you look very bad. The customer complains about you to the manager and the manager seems to agree. What do you do? (18)

- A) Say and do nothing, and continue to act in a polite manner
- B) Say nothing but make it very obvious that you are upset
- C) Tell the customer that the manager had just told you the demand could not be met
- D) Ask the manager why s/he changed his or her mind

149. As a waiter/waitress, you often must take the blame when customers are unhappy with their food (for example, it took too long to get it, it is cold, it doesn't taste good). Even though it is usually not your fault, customers usually get very upset with you personally. Some even complain to your supervisor. How might you handle these types of customers? (14)

- A) Tell them you are sorry and take all of the blame
- B) Tell them you are sorry but then explain why it is not your fault
- C) Explain to the customer why it is not your fault
- D) Explain to the customer why it is not your fault, and tell them the manager understands this

150. A customer is upset at you and is very rude because the entertainment center she ordered was not the one that was delivered. You check her order and see that one of your coworkers wrote down the wrong number for the delivery staff, so in fact it was your coworker's fault the order was incorrect. This customer is very upset and is taking it out on you. What do you do? (16)

- A) Take the customer's blame and try to solve the problem yourself
- B) Tell the customer it is not your fault, but you will try to solve the problem yourself
- C) Tell the customer it was a coworker's mistake and that s/he should settle down
- D) Tell the customer it was a coworker's mistake and that s/he should talk to him

151. You're working in a very busy restaurant. Your section is very busy and a coworker helps you out. Unfortunately, the coworker incorrectly places a customer's food order. The customer is upset and does not leave you a tip. Even worse, this customer complains to your supervisor, who begins to reprimand you. What do you do? (22)

- A) Tell your supervisor you are sorry and that it won't happen again
- B) Tell your supervisor you are not sure how the mistake happened
- C) Tell your supervisor that you and your coworker had mixed up the order
- D) Tell your supervisor that your coworker made the mistake

152. You work in a store that pays its employees a commission of their total sales. You are helping a very demanding customer that has taken up much of your time, but it will be worth it because s/he is purchasing a very expensive stereo. You are just about to finish the sale when your manager asks you to take a phone call. When you return, you see your manager is just about to close the sale—and take your commission. The manager acts as though nothing has happened. What do you do?

- A) Do nothing and move on to the next customer
- B) Wait until the manager is done, and then tell him or her you want your commission
- C) Tell the manager you appreciate him or her helping your customer, and try to close the sale
- D) Tell the manager that s/he was your customer and that you should close the sale

153. You work for commission. You are helping a customer when you have to leave momentarily. When you return, you find that your coworker is helping the customer and ringing up their sale—meaning the coworker will get your commission. What do you do? (131)

- A) Do nothing and move on to the next customer
- B) Wait until the coworker is done, and then tell him or her you want your commission
- C) Tell the coworker you appreciate him or her helping your customer, and try to close the sale
- D) Tell the coworker that s/he was your customer and that you should close the sale

SECTION 9C: Maintain Personal Discipline (Work Focus)

154. A few of your friends or family stop in to see how you're doing. Your store is not particularly busy. What do you do?

- A) Tell them you don't have time to hang out with them at work
- B) Hang out with them a few minutes, then tell them they have to leave
- C) Hang out with them until the store gets busy
- D) Hang out with them until they leave

155. Some coworkers ask you to help play a joke on a newer coworker. You think the joke is rather inappropriate but no customers are likely to see it. What do you do?

- A) Do not participate in the joke
- B) Tell your coworkers you will participate only if it occurs after work
- C) Tell your coworkers you will help, but then don't
- D) Help play the joke on the coworker

156. A good friend calls your store and wants to make plans for when you're done with work. The store is moderately busy. What do you do?

- A) Tell your friend you'll call him or her back when you're on break
- B) Tell your friend you'll call him or her back when the store is slower
- C) Tell your friend to call you back in a little while
- D) Make plans with your friend so you won't have to call him or her back

157. Your store is very empty and you are performing the rather simple task of dusting and cleaning. A coworker stops by to talk. What do you do?

- A) Continue cleaning while you talk to the coworker
- B) Alternate between talking and cleaning
- C) Stop to talk to the coworker for a few minutes, then get back to work
- D) Stop to talk to the coworker until s/he leaves

SECTION 10: Facilitating Peer and Team Performance

158. A coworker is very busy and could use some help. You have only a few customers in your section, but you're not sure if you should leave them to help your coworker. What do you do?
- A) Leave your section to help your coworker until s/he completely catches up
 - B) Go help your coworker until s/he is almost caught up, then hurry back to your own section
 - C) Stay in your own section a little longer, then hurry to help your coworker
 - D) Stay in your section and help your own customers
159. You work in a restaurant. You are helping cover a coworker's table, where two customers were getting upset because they had to wait so long. As you help this coworker's customers, you notice customers from your own section getting impatient. You realize you are not likely to get a tip from your coworker's customers, but you will probably get tips from your own customers. What do you do? (194)
- A) Help your coworker until s/he completely catches up
 - B) Primarily help your coworker's customers but also help your own customers when possible
 - C) Primarily help your own customers and help your coworker only if it is convenient
 - D) Go help your own customers
160. A coworker in another section is very busy helping customers and could obviously use some help. In fact, some customers are starting to leave. Your section is relatively quiet at the moment but could get busy very quickly. What do you do? (a25)
- A) Leave your section to help your coworker until s/he completely catches up
 - B) Primarily help your coworker, but return to your own section once in a while
 - C) Primarily stay in your own section, but help the coworker once in a while
 - D) Stay in your section just in case you suddenly get more customers
161. Many of your coworkers are lazy and only do the minimum amount of work they have to. Your supervisor either doesn't notice this or doesn't seem to care. Because of these individuals, you have to do twice as much work as you should—including some of their duties. What do you do? (23)
- A) Perform all of the duties regardless of whether it is your job or not
 - B) Primarily perform your own duties, but try to perform the other duties as much as possible
 - C) Primarily perform your own duties, then perform the other duties at your convenience
 - D) Perform only your duties

162. In your company, there is a very strong peer pressure not to work harder than your coworkers. You are relatively new and are trying to do a good job. Although your manager notices and says to keep up the good work, your coworkers are getting upset because you are making them look bad. One of them even told you to quit working so hard. What are you going to do? (27)

- A) Continue working hard
- B) Don't work as hard as you were, but don't work as slow as the coworkers
- C) Stop working so hard when around your coworkers
- D) Do as the coworkers say and stop working so hard

163. A coworker has a long line at his/her checkout station. Many of the customers appear very impatient and are getting upset. Although you are not helping a customer at the moment, you have also not had a break all day—and you have plenty of tasks to do in your own section that you have not had time to finish. What might you do? (62)

- A) Help your coworker until s/he completely catches up
- B) Primarily help your coworker, but work on your own tasks once in a while
- C) Primarily work on your own tasks, but help the coworker once in a while
- D) Attend to your own affairs—take the break and complete your own tasks

164. Your department store is understaffed. You are responsible for one department and are an assistant for three other departments. You are called into one of the secondary departments. Unfortunately, you don't know much about this department, and you are not very familiar with the products or where they are located. A customer asks you for help. What do you do? (89)

- A) Tell the customer this is not your department, but you will try to help
- B) Tell the customer this is not your department but you will find someone to help him/her
- C) Tell the customer this is not your department and that they should ask someone else
- D) Tell the customer this is not your department and get back to your own section

165. You are leaving your section to take a scheduled break. Your store policy is such that you have to take a scheduled break, and that you are not paid for the time you are on break. On your way to the break room, you notice a coworker who is swamped with customers. What do you do? (349)

- A) Go help the coworker even if it means you won't get a break
- B) Go help the coworker for as long as possible, but be sure to take at least some of your break
- C) Go help the coworker for just a few moments, then take most of your break
- D) Take your break and help the coworker as soon as you are done

166. Some long term employees are making part time employees do their routine tasks. This frees up the long term employees' time so that they can help more customers. The supervisor does not seem to care, and you could certainly use some more time to help customers. What do you do in this situation? (106)

- A) Continue doing your own routine tasks and do not delegate them to the part time employees
- B) Give the part time employees some of your routine tasks
- C) Give the part time employees most of your routine tasks
- D) Give the part time employees all of your routine tasks

167. You work in a restaurant. You and a coworker misunderstand each other and do not wait on a table. Later, you both recognize the mistake and can see that the customers at the table are very upset. You doubt who ever helps them will get a tip. Your coworker asks if you want the table. What do you do? (195)

- A) Agree to take the table yourself
- B) Split the table between you and the coworker
- C) Give the table to the coworker, but help out if necessary
- D) Say you don't want the table

SECTION 11: Supervision

168. You notice a new coworker has made a big mistake with a customer's order. The customer is upset and starts yelling at the coworker. What might you do? (68)

- A) Jump in and help the customer yourself
- B) Observe the coworker, and if s/he starts having trouble jump in and help the customer yourself
- C) Observe the coworker, and if s/he starts having trouble offer to help
- D) Let the coworker deal with the customer himself or herself

169. A new coworker makes a mistake with an order and asks for your help. You already have a long line of customers. However, the new coworker also has many customers. What do you do? (165)

- A) Help the coworker right away
- B) Help the coworker after you have finished helping a couple more customers
- C) Help the coworker after you have finished helping most of your customers
- D) Help the coworker after you have completely finished helping your customers

170. A new coworker is helping customers but is very far behind, causing customers to wait longer than they should have to. You offer to help the coworker but s/he says, "No, I've got it under control." You don't think s/he can handle the number of customers. What do you do? (355)

- A) Jump in and help the coworker until s/he is entirely caught up
- B) Help the coworker for just a few moments, until s/he is starting to get caught up
- C) Help the coworker if it appears that customers are starting to get upset
- D) Don't help until the coworker explicitly asks for help

171. You see a new coworker provide very poor service (for example, is rude, does not explain the product to the customer). You don't think the customer is going to purchase anything in the store because of the coworker's poor service. What might you do? (182)

- A) Jump in help the customer yourself, then explain to the coworker what s/he was doing wrong
- B) Wait until the customer leaves, then tell the coworker what s/he did wrong
- C) Help only if the coworker asks you for help
- D) Do nothing; let the coworker to learn on his or her own

SECTION 12: Management

172. A customer completes an order to have delivered to his/her house. The manager promises this person that the product will be delivered on time. Several days later, the product is not delivered and the customer calls to complain. Although you did not make the mistake, the customer is blaming you. You know you can handle the incident with out involving the manager. What might you do? (244)

- A) Handle the complaint yourself and take the blame
- B) Handle the complaint yourself, but remind the customer it was the manager's mistake
- C) Help the customer but then forward him or her to the manager, since it was the manager's mistake
- D) Get the manager to handle the complaint, since s/he was the one who made the mistake

173. You are helping a customer who has an unusual request. Although you could probably help this customer, you know a coworker is more experienced in this area. What might you do?

- A) Handle the request yourself
- B) Get the coworker to observe you handling the request
- C) Get the coworker and watch him or her handle the request
- D) Get the coworker to handle this request so you can do something else

174. You are performing a maintenance task that your supervisor instructed you to get completed right away. As you work on this task, you notice a customer in your section. What do you do?

- A) Help the customer until s/he is finished shopping
- B) Help the customer for just a few moments, then return to your maintenance task
- C) Greet the customer but continue working on your maintenance task
- D) Complete your maintenance task until it is completely finished, then help the customer

175. A customer orders spicy barbecue sauce for his ribs. After he eats the entire meal, he complains that the barbecue sauce was too spicy. You remind him that he ordered the spicy barbecue sauce but he disagrees, saying he ordered the regular sauce. He now refuses to pay for the order. What do you do? (4)

- A) Handle this problem yourself, do not involve the manager
- B) Try to handle this problem yourself, but involve the manager if necessary
- C) Try to handle this problem yourself, but involve the manager right away
- D) Immediately get the manager to handle this problem

176. Your store is short staffed so you go to another coworkers section to help at the cash register (so that s/he can focus on his/her customers' questions). There is now a long line at the checkout counter when you notice new customers are coming into your own section. There is no one who can help them. What might you do? (63)

- A) Continue working at the cash register until there are no more customers
- B) Continue working at the cash register until there are very few customers, then go to your own section
- C) Help a couple more customers, then go to your own section
- D) Leave the cash register immediately to go to your own section

177. You work in a restaurant. A customer orders a meal and eats it all. During the meal you had not asked if everything was OK. Later, when you give the customer the bill, the customer says the meal was awful and refuses to pay for it. What do you do? (103)

- A) Handle this problem yourself, do not involve the manager
- B) Try to handle this problem yourself, but involve the manager if necessary
- C) Try to handle this problem yourself, but involve the manager right away
- D) Immediately get the manager to handle this problem

SECTION 13: Volunteering

178. One night at a social gathering (that is not work-related) you see a coworker. The coworker admits to you that s/he has secretly been stealing from the company for several months. What do you do? (172)

- A) Turn this coworker in to your supervisor when you return to work
- B) Imply to your supervisor that someone has been stealing from the company
- C) Ask your coworker to turn himself or herself in to the supervisor
- D) Do nothing and pretend you never heard this information

179. One night at a social gathering (that is not work-related) you see a coworker who appears to be on drugs. In fact, the coworker admits to you that s/he is high much of the time, even sometimes at work. What do you do? (173)

- A) Turn this coworker in to your supervisor when you return to work
- B) Imply to your supervisor that someone has been using drugs at work
- C) Ask your coworker to stop using drugs at work
- D) Do nothing and pretend you never heard this information

180. You are delivering some products with a coworker in the company van. The coworker is driving recklessly, cutting off other drivers, honking, and swearing at them through the window. When you return your manager says somebody called and complained about the people driving the van. The coworker denies the incident. What do you do? (203)

- A) Tell the manager exactly what happened
- B) Wait until the coworker is gone, then tell the manager exactly what happened
- C) Wait until the coworker is gone, then imply to the manager that the coworker drives poorly
- D) Tell the manager that nothing happened and you don't know that the complaint is about

181. You have a much deserved day off from work and have made a fun day of plans. Your boss calls the night before and asks if you can work because one of your coworkers can't make it. You suspect the coworker is really going to a concert because s/he mentioned doing it in the past. What do you do? (113)

- A) Go in to work
- B) Tell the supervisor that you suspect the coworker might be lying, but that you'll work
- C) Tell the supervisor the coworker is lying, but that you'll work
- D) Tell the supervisor the coworker is lying and that you can't work

182. In your store there are many small tasks (for example, putting away inventory) that are not part of anyone's specific job but are something that everybody is expected to do. Many of your coworkers do not do these tasks, but if they are to get done somebody will have to do them. What do you do? (121)

- A) Perform all of the tasks even though they are not part of your job
- B) Regularly perform most of the tasks
- C) Occasionally perform some of the tasks
- D) Don't perform the tasks since they are not part of your job

183. On one of your days off your manager calls to ask you to come to work because the store is short staffed. You had planned to spend this day with your friend or family for over a week. What do you do? (129)

- A) Tell your manager you'll come in to work right away
- B) Tell your manager you'll work until s/he can find somebody else
- C) Tell your manager you will work only if s/he can't find anybody else
- D) Tell your manager you can't work today

184. Each employee in your store is given a very detailed description of his/her job duties. Unfortunately, most employees only do their specific duties and do not help out coworkers when necessary. In fact, many employees will sit and do nothing instead of helping other coworkers because "it is not their job." You are particularly busy and are getting very frustrated because you can't help all of the customers in your area. Your coworkers just sit and watch. Later, when you have more time, you notice your coworkers could use some help. What might you do? (49)

- A) Give your coworkers as much help as they need
- B) Help the coworkers, but do not go too far out of your way
- C) Provide help only if absolutely necessary
- D) Do not provide any help since none of them helped you

185. A coworker calls you to ask if you can cover his/her Saturday morning shift because s/he is not feeling well. Although you don't mind doing covering the shift once in awhile, this coworker has asked you for this favor on several past occasions. You suspect the coworker is going out the night before and is simply too tired to work. What do you do? (112)

- A) Help the coworker with no questions asked
- B) Offer to work the morning shift only if s/he covers one of your morning shifts
- C) Offer to work the morning shift only if s/he will cover several of your morning shifts
- D) Don't help the coworker

SECTION 14: Follows Company Policy

186. Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. Now, a customer asks you why you have to take this information and refuses to give it to you. What do you do?

- A) Do not return the item unless you get all of the information
- B) Do not return the item unless you get the phone number and at least see the drivers license
- C) Return the item if you at least get the phone number
- D) Return the item even though you do not any information

187. Your company has a dress code that all employees are supposed to follow. However, you notice that several of your coworkers are wearing clothes that some might consider inappropriate. The supervisors do not seem to concerned. You personally would prefer to dress like the coworkers. What do you do? (214)

- A) Always follow the company dress code
- B) Mostly follow the company dress code
- C) Mostly wear the clothes you want
- D) Always wear the clothes you want

188. Your company has a very specific dress code but nobody follows it. The managers do not seem to care. You don't particularly like following the dress code and would like to wear some different clothes. What do you do? (231)

- A) Always follow the company dress code
- B) Mostly follow the company dress code
- C) Mostly wear the clothes you want
- D) Always wear the clothes you want

189. You work as a waiter/waitress in a restaurant. One trick many of your coworkers do is to give customers free soda or minimally-priced appetizers in order to get a better tip. The company policy explicitly forbids this practice. You could certainly use the extra money from tips, and the supervisor has not noticed or said anything about this practice. What do you do? (108)

- A) Never engage in these activities
- B) Occasionally engage in these activities
- C) Regularly engage in these activities
- D) Engage in these activities whenever you can

190. Your store policy is absolutely no returns on clothes over \$100.00. A customer returns an outfit costing \$110.00. You can tell that the outfit has not been worn, but the store policy says you cannot return it. You feel very bad and don't agree with the policy in this instance. However, you could classify the outfit as defective and nobody would ever know—although this is also against company policy. What do you do? (148)

- A) Do not allow the outfit to be returned
- B) Do not allow the outfit to be returned, but have the customer speak with the manager
- C) Classify the product as defective but only allow an exchange—do not return the money
- D) Classify the product as defective and return the money

191. You work at a cash register in a grocery store. There is a huge lottery prize, and so the store is swamped with customers buying lottery tickets. However, you are to stop selling lottery tickets promptly at midnight. It is 12:01 and a customer wants to place an order. You refuse and they get very upset, as do the remaining customers who have been waiting over half an hour. What do you do? (33)

- A) Do not sell any tickets because it is past midnight
- B) Sell tickets to just the customer who is upset
- C) Sell tickets to just the next few customers
- D) Sell tickets to the remaining customers in line

192. A customer is trying to buy beer but has forgotten his/her identification in the car. This customer looks to be around 30 years old and is dressed very well. You have seen the customer in the store on a regular basis but have not waited on him/her yourself. What do you do? (102)

- A) Do not sell the customer the beer unless you first see his or her drivers license
- B) Do not sell the customer the beer unless a coworker will say the customer is old enough
- C) Sell the customer the beer but ask that s/he bring you his/her drivers license
- D) Sell the beer since this customer obviously looks old enough

193. Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. You personally do not approve of this policy and don't think the store actually uses this information. Now, a very good customer says s/he doesn't want to give you this information. What do you do? (139)

- A) Do not return the item unless you get all of the information
- B) Do not return the item unless you get the phone number and at least see the drivers license
- C) Return the item if you at least get the phone number
- D) Return the item even though you do not any information

194. You are working at a cash register in a grocery store when a customer tries to buy alcohol. When you ask for his/her identification, s/he gets upset and says s/he doesn't have it, but s/he does show you his/her five credit cards and truck drivers medical card. S/he looks to be about twenty five years old. What do you do? (150)

- A) Do not sell the customer the beer unless you first see his or her drivers license
- B) Do not sell the customer the beer unless a coworker says the customer is old enough
- C) Sell the customer the beer but ask that s/he bring you his/her drivers license
- D) Sell the beer since this customer looks old enough and has other identification

SECTION 15: Defending the Company

195. You catch an individual shoplifting. Although your store has security for these purposes, they are nowhere to be seen. You also know the manager is on a lunch break. The shoplifter is starting to walk out of the store. What do you do?

- A) Call the police first, and then stop the shoplifter and tell him/her to wait for the police
- B) Call the police and in the meantime follow the shoplifter yourself
- C) Call the police
- D) Do nothing, it is not worth you potentially getting hurt

196. You feel personally uncomfortable trying to sell high dollar merchandise to people who do not appear to be able to afford it. However, your managers really push employees to always direct customers to the large dollar items. What do you do? (13)

- A) Sell the high dollar merchandise because that is your job
- B) Regularly (but not always) sell the high dollar merchandise
- C) Once in a while sell the high dollar merchandise
- D) Do not sell the high dollar merchandise because you don't agree with that policy

197. A coworker complains about the working conditions so that customers can hear him/her. You generally agree with what the coworker is saying. After the coworker leaves, a customer you are helping asks if it is true. What might you do in this situation? (159)

- A) Say that it is not true and that the working conditions are good
- B) Say that it is not true, but say nothing more
- C) Say that it is true, but say nothing more
- D) Say that it is true and that the working conditions are poor

198. Your store hires a number of part-time employees for the summer. You catch several of these individuals playing around with some of the company equipment. When you mention their behavior is against company regulations, they just laugh and say they are quitting in a few weeks anyway and don't really care. What do you do? (28)

- A) Turn these individuals in to your supervisor
- B) Threaten to report these individuals to the supervisor if you catch it happening again
- C) Threaten to report these individuals to the supervisor, but actually do nothing
- D) Ignore the incident since they will soon be quitting anyway

199. Your store has a number of summer-time only employees. It is near the end of summer when you notice one of these employees stealing ten dollars from the register. As you confront the employee, s/he informs you that s/he was shorted ten dollars on their last paycheck and so was only "making things balance." S/he says it will not happen again if you don't say anything. How do you handle this situation? (29)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

200. You work in a pizza store. One day you catch a well-respected employee giving free sodas and appetizers to his/her friends. Although this is not worth much money, it is against company policy. What would you do? (30)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

201. You catch one of your fellow coworkers (who is also a good friend) making deals with customers in order to increase her sales. Because part of your salary is based on commission, this is an easy way for her to make more money even though the company will suffer reduced profits. You remind this person that the company does not tolerate these actions, but your friend does not seem to care. Do you report this person to your supervisor? (31)

- A) Turn your friend in to your supervisor
- B) Threaten to report your friend to the supervisor if you catch it happening again
- C) Threaten to report your friend to the supervisor, but actually do nothing
- D) Forget the incident ever happened

202. A coworker is walking past a customer and asks to you loudly, "Don't you just hate this job." The customer looks surprised and stares at you. What do you do? (79)
- A) Tell the customer you like your job
 - B) Say nothing and ask the customer if you can help him or her
 - C) Laugh but say nothing
 - D) Pretend you did not hear the coworker's comment
203. You are very good friends with some of your coworkers. You learn that a few of your friends are stealing from the company. What do you do? (161)
- A) Turn them in to your supervisor
 - B) Offer them the opportunity to turn themselves in, or else you will do it
 - C) Tell them that if it ever happens again you will report them
 - D) Do nothing and forget the incident ever happened
204. You work for a home delivery company. You catch one of the delivery drivers smoking marijuana on the job. However, your supervisor does not suspect a thing. What do you do? (202)
- A) Turn the delivery driver in to your supervisor
 - B) Offer the delivery driver the opportunity to turn himself or herself in, or else you will do it
 - C) Tell the delivery driver that you will report him or her if it happens again
 - D) Do nothing and forget the incident ever happened
205. A coworker has a tendency to give customers s/he likes special deals that would not be approved by the company. You are probably the only one who knows about this. What do you do? (205)
- A) Turn this person in to your supervisor
 - B) Threaten to report this individual to the supervisor if you catch it happening again
 - C) Threaten to report this individual to the supervisor, but actually do nothing
 - D) Forget the incident ever happened
206. A coworker gives his family special deals. You know the manager would not approve of such practices. You doubt anyone else is aware that the coworker is breaking the company policy. What do you do? (206)
- A) Turn this person in to your supervisor
 - B) Threaten to report this individual to the supervisor if you catch it happening again
 - C) Threaten to report this individual to the supervisor, but actually do nothing
 - D) Forget the incident ever happened

APPENDIX D

Definitions of Personality Traits Used in Rating Tasks

Personality Trait Definitions

1. **Neuroticism: amount of emotional stability and stress tolerance. Key words include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability.**
 - High: nervous, moody, easily irritated, tends to worry a lot, goes to pieces in times of stress
 - Low: calm, even mood, not distraught by stressful situations, maintains composure and rationality during stress
2. **Agreeableness: degree of pleasantness exhibited in interpersonal relations, degree of altruism. Key words include trust, straightforwardness, altruism, compliance, modesty, tender-mindedness.**
 - High: altruistic, sympathetic to others and eager to help, believes others will be equally helpful. Likable and pleasant, tolerant, tactful, helpful, not defensive, easy to get along with
 - Low: critical, fault finding, touchy, defensive, alienated, generally contrary
3. **Dependability: degree of conscientiousness**
 - High: disciplined, well-organized, planful, respectful of laws and regulations, honest, trustworthy, wholesome, accepting of authority
 - Low: unreliable, acts on the spur of the moment, rebellious and contemptuous of laws and authority
4. **Achievement: tendency to strive for competence at work**
 - High: works hard, sets high standards, tries to do a good job, endorses the work ethic, concentrates and persists on tasks at hand, confident, feels success from past undertakings, expects to succeed in future
 - Low: little ego involvement in work, feels incapable and self-doubting, does not expend undue effort, does not feel hard work is desirable

APPENDIX E

Final DSI Items Sorted by Situational Ratings, Behavioral Ratings, and Criterion Dimensions

SITUATIONAL RATING; BEHAVIORAL RESPONSE RATING

CRITERION DIMENSION 1A: Tangibles (Professional Appearance)

DEPENDABILITY

1 It is a very hot day and you would like to wear shorts to work. Although wearing shorts is not against the company dress code, your manager prefers that employees wear pants. What might you do on days when it is hot? (218)

- A) Wear pants all of the time and never wear shorts
- B) Wear pants most of the time and rarely wear shorts
- C) Wear pants and shorts about the same amount of time
- D) Wear shorts most of the time and rarely wear pants
- E) Wear shorts all of the time and never wear pants

ACHIEVEMENT; DEPENDABILITY

2 Your store hires a number of temporary employees for the summer. These temporary employees dress very differently from the regular employees, but management does not seem to care. You'd like to wear those style clothes as well, but believe customers may not take you as seriously. What do you do? (217)

- A) Wear your usual style of clothes all of the time
- B) Wear your usual style of clothes most of the time
- C) Wear your usual style of clothes and those like the temporary employees about equally
- D) Wear clothes like the temporary employees most of the time
- E) Wear clothes like the temporary employees all of the time

NEUROTICISM; DEPENDABILITY

3 You work as a waiter/waitress. As you are delivering food to a customer, you notice your shoelace is untied. What do you do?

- A) Wait to tie the shoelace until no customers can see you
- B) Wait to tie the shoelace until your specific customers can't see you
- C) Tie the shoelace after you give the customer the food
- D) Set the food down immediately and tie the shoelace right away

CRITERION DIMENSION 1B: Tangibles (Impression Management)

DEPENDABILITY

4 It has been a very busy day in the store and you are very tired. You finally get a few minutes to relax because there are only a few customers in the store. However, you are not scheduled for a break and so you can't leave the customer area. What do you do?

- A) Continue working hard until your next scheduled break
- B) Continue working but don't push yourself very hard
- C) Continue working but every so often sit down and relax for a few seconds
- D) Stop working to relax for a few minutes
- E) Stop working to relax until you are rested

AGREEABLENESS

5 A customer tells a joke that you don't find the least bit funny. What do you do?

- A) Laugh and smile like it is the funniest joke you have ever heard
- B) Laugh and smile a little to make it look like it is a good joke
- C) Laugh and smile halfheartedly
- D) Smile but don't bother laughing
- E) Don't bother laughing or smiling at the joke

AGREEABLENESS

6 A customer is telling you a personal story that is completely unbelievable and that you think is factually incorrect. What do you do?

- A) Smile and nod in agreement with the customer, and say you agree with the story
- B) Smile and nod in agreement with the customer, but say nothing
- C) Nod in agreement with the customer, but say nothing
- D) Nod in agreement with the customer, then correct the customer's story
- E) Correct the customer immediately and tell him or her why the story is wrong

DEPENDABILITY

7 Your manager wants employees to always look busy. This means you must do simple tasks over and over again, even when they don't need to be done. You are really tired of doing these tasks, the store is empty, and the manager is not around. What do you do? (320)

- E) Do the tasks even if they don't need to be done or nobody is present
- F) Do the tasks only when the manager or customers are present
- G) Do the tasks only when necessary, regardless of who is present
- H) Don't do the tasks because they don't need to be done and it is a waste of time

DEPENDABILITY; ACHIEVEMENT

8 You are helping a rude customer who is making small talk about things you find very stupid and boring. What do you do? (397)

- A) Completely maintain eye contact with the customer to show you're interested**
- B) Mostly maintain eye contact with the customer, but sometimes look around the store**
- C) Look at the customer directly and around the store about equally**
- D) Rarely maintain eye contact with the customer, but often look around the store**
- E) Don't look the customer in the eye but instead look around the store to show you're bored**

CRITERION DIMENSION 1C: Tangibles (Work area/product appearance)

ACHIEVEMENT

9 You notice that many coworkers are not returning merchandise to its proper place after showing it to customers. This makes the entire store look very disorganized because an employee must look all over the store for a given product. However, nobody seems to care. What might you do in this situation? (220)

- A) Return all of the merchandise to their correct places**
- B) Return some of the merchandise to the correct places**
- C) Pile the merchandise up and set it aside, but don't return it**
- D) Leave the merchandise where it is**

ACHIEVEMENT

10 A coworker was helping a very picky customer buy a suit. S/he had requested to try on a number of different jackets, pants, and shirts. Although the customer has gone, the coworker left a big pile of clothes lying around. What do you do?

- E) Return all of the clothes to the correct place even though it is not your job**
- F) Return most of the clothes to the correct place even though it is not your job**
- G) Return some of the clothes to the correct place but leave the rest for the coworker**
- H) Leave the clothes where they are because it is not your job to return them**

CRITERION DIMENSION 2A: Reliability (Perform Consistently)

DEPENDABILITY

11 You need to call a customer but his/her phone is always busy. You try repeatedly but can never get through, and the customer does not have an answering machine. What do you do? (257)

- A) Keep calling no matter how long it takes**
- B) Try calling a few more times over the next couple of days**
- C) Try calling a few more times today**
- D) Quit calling, you've done all you can do**

ACHIEVEMENT

12 It is getting near your lunch break and you are not yet finished helping a customer. You only get a set amount of time for your break, so if you miss it you won't get another. You see a coworker around who does not appear to be busy. What do you do?

- A) Remain with the customer as long as it takes, even if you don't get a break
- B) Try to hurry the customer to make a purchase so you can have part of your break
- C) Ask the coworker to help your customer so you can take your break
- D) Tell your customer it is time for you to take your break, and then leave

CRITERION DIMENSION 2B: Reliability (Promises)

DEPENDABILITY

13 You are talking to a customer and promise to call the customer the next day. However, after the customer leaves you realize you have the next three days off. What do you do? (248)

- A) Call the customer immediately and tell them you won't be able to contact them for three days
- B) Call the customer later and tell them you won't be able to contact them for three days
- C) Call the customer after you return from your three days off
- D) Wait until the customer calls you back

ACHIEVEMENT; DEPENDABILITY

14 A customer calls and asks how long it will take to get their order together. You know you can do it in 30 minutes. How long do you tell this customer it will take? (252)

- A) "20 minutes"
- B) "30 minutes"
- C) "40 minutes"
- D) "It's hard to say"

DEPENDABILITY

15 It is Saturday and you promise a customer you will call them on Sunday to inform them about the status of their order. Sometime after the call, your supervisor tells you that you will be working on Monday instead of Sunday. What do you do? (246)

- A) Call the customer immediately and tell them you won't be able to contact them until Monday
- B) Call the customer later and tell them you won't be able to contact them until Monday
- C) Call the customer after you return to work on Monday
- D) Wait until the customer calls you back, since it is only one day

CRITERION DIMENSION 2C: Reliability (Record Keeping)

ACHIEVEMENT; DEPENDABILITY

- 16 You are working at a cash register. The register makes a mistake and overcharges a customer. The customer does not seem to notice, and there is a long line waiting for you. It would take some time to figure out the correct amount to charge the customer. What do you do? (155)
- A) Take the time to determine the correct change to give the customer
 - B) Try to find the error, and if it takes too long help the other customers first
 - C) Tell the customer there was an error but ask him/her to wait until you help the other customers
 - D) Wait on the next customer, since there is a long line and nobody noticed the error

CRITERION DIMENSION 3A: Responsiveness (Acknowledgment)

NEUROTICISM; ACHIEVEMENT

- 17 You are one the phone with an important customer when another customer walks over to you. You are really busy with the individual on the phone. How do you handle the customer who is physically right in front of you? (40)
- A) Smile and look at the customer as you continue talking on the phone
 - B) Look at the customer as you continue talking on the phone
 - C) Momentarily interrupt the person on the phone to say, "I will be with you in a moment"
 - D) Avoid noticing the customer so that s/he will look for help from a coworker

NEUROTICISM; ACHIEVEMENT

- 18 You're working the cash register on a very busy shift. There is a long line waiting to check out, and you can see several individuals are getting impatient. What might you do? (264)
- A) Tell them you appreciate their patience
 - B) Regularly look at those waiting so that they know you are aware of them
 - C) Once in a while look at those waiting so that they know you are aware of them
 - D) Focus on your job as a cashier and don't look at those waiting

CRITERION DIMENSION 3B: Responsiveness (Promptness)

AGREEABLENESS; DEPENDABILITY

19 You are talking to an important customer on the phone when a customer interrupts, saying s/he is unhappy with your store and wants attention right now. S/he is speaking in a loud voice that other customers can hear. What do you do? (176)

- E) Help this customer immediately and hang up the phone
- A) Ask this individual if s/he can wait until you are done on the phone
- B) Ask the customer on the phone if you can call him/her back
- C) Wait to help this customer until you finished with the individual on the phone

DEPENDABILITY

20 You had helped a customer order a product from your supplier. The supplier has called and said the product will be a few days late. What do you do?

- A) Call the customer immediately to inform him or her of the delay
- B) Call the customer in a few days, after the order is officially late
- C) Call the customer only if the delay changes
- D) Don't call the customer since there is nothing anyone can do about the delay

DEPENDABILITY

21 A customer wants a refund on a product that has obviously been misused. Although you could normally refer such problems to the manager, s/he will be gone for the next several hours. What do you do? (41)

- A) Inform the customer s/he will have to wait a few hours until the manager is present
- B) Inform the customer s/he will have to wait until the manager is present
- C) Inform the customer s/he will have to wait
- D) Inform the customer your store cannot give a refund

CRITERION DIMENSION 3C: Responsiveness (Responding to Requests)

ACHIEVEMENT

22 A customer requests a product that you do not have in stock. Although you could call other stores to see if they have it, you are almost certain it will be a waste of your time. What do you do? (43)

- A) Call all of the possible stores to see if they have the product
- B) Call most of the stores to see if they have the product
- C) Call just a few stores to see if they have the product
- D) Don't bother calling the stores since you know they won't have it

ACHIEVEMENT

23 A customer wants a product that you don't have in your store. You begin to call other stores to see if they carry the product. However, each store takes a long time to check and the customer is getting very impatient. You know that one of the stores is likely to have the product but it will take some time to find out. What would you do? (243)

- E) Call all of the possible stores regardless of how long it takes
- A) Call as many stores as possible, until it starts to take too long
- B) Call just a few stores that would be most likely to have the product in order to save time
- C) Don't bother calling the stores since it will take too long

CRITERION DIMENSION 4A: Assurance (Suggestions/Alternatives)

ACHIEVEMENT

24 You are helping a customer buy a computer. The customer is not sure what kind to buy. What might you do?

- A) Compare and contrast for the customer the different options and features of all relevant computers
- B) Show the customer a couple of computers and describe options and features
- C) Show the customer a couple of computers but don't describe options and features
- D) Show the customer the one best computer your store has

ACHIEVEMENT

25 A customer asks you about a competitor's product. You are familiar with this product. What do you tell them? (319)

- A) Describe and compare the good and bad features of your store's and the competitor's products
- B) Describe the good features of your store's product and the bad features of the competitor's product
- C) Only mention the negative information about the competitor's product
- D) Don't mention the competitor's product and show the customer your store's product

ACHIEVEMENT

26 A customer is unsure about choosing between a more expensive item and a less expensive item. S/he asks you what you think. You know that both products are very similar but have some different features. What do you do?

- E) Show the customer all of the similarities and differences between each item
- A) Show the customer the key similarities and differences between each item
- B) Show the customer the main differences between each item
- C) Tell the customer the features of only the most expensive item

ACHIEVEMENT

27 You work in an appliance store. You ask the customer if you can help and the customer tells you s/he wants a specific stereo. You think you know about a stereo that would work better. What do you do? (358)

- A) Compare and contrast the main features of both stereos for the customer**
- B) Suggest to the customer that s/he tries another stereo you think might work better**
- C) Point out some of the disadvantages of the stereo the customer originally wanted**
- D) Sell the customer the stereo s/he wanted**

AGREEABLENESS

28 You work as a waiter/waitress and a customer orders a dish that is not on the menu. You mention this politely but the customer gets very upset. What do you do? (93)

- A) Suggest alternative main dishes and side orders that might be of interest**
- B) Suggest alternative dishes that might be of interest to the customer**
- C) Suggest only those alternative dishes that are very similar to the dish the customer wanted**
- D) Tell the customer there is nothing you can do**

CRITERION DIMENSION 4B: Assurance (Compensation)

NEUROTICISM; AGREEABLENESS

29 A customer is dining in your restaurant with six children. The children all want a particular dish that you do not have. The children all start to yell and scream. What do you do? (179)

- A) Try to provide some form of a substitution they might like better**
- B) Try to offer the children free soda pop**
- C) Try to offer the customer a slight discount**
- D) Ignore the children since there is nothing you can do**

NEUROTICISM; AGREEABLENESS

30 You work in a restaurant. A customer orders the special but you have just run out. The customer is very upset and mentions that was the only reason s/he came to the restaurant. What do you do? (305)

- A) Offer the customer a better meal for the same price as the one you don't have**
- B) Offer the customer a slight discount on his or her meal**
- C) Encourage the customer to try a different meal**
- D) Tell the customer there is nothing you can do**

NEUROTICISM; AGREEABLENESS

31 It is the day before Christmas and a mother wants to get a doll for her daughter. Unfortunately, you have just sold out. The mother becomes very upset and starts to cry. What do you do? (325)

- E) Offer to sell the woman two similar dolls for the price of the sold-out doll**
- A) Offer the woman a slight discount on a future purchase**
- B) Suggest to the woman she purchase a different doll**
- C) Tell the woman there is nothing you can do**

NEUROTICISM; AGREEABLENESS

32 Your restaurant is very busy, and a large party is unhappy with the food and service. The people in this party are each complaining to you, and this is taking up so much time that your orders with other customers are falling behind. What do you do? (71)

- A) Offer the party a discount on their meal**
- B) Offer the party a free round of drinks or desserts**
- C) Offer the party a discount on future meals**
- D) Tell the party there is nothing you can do**

AGREEABLENESS

33 A customer calls to see if you have a particular pair of shoes in stock. You check and your store does. Later, when the customer comes into the store to pick the shoes you see that they have been sold. The customer is very upset. What do you do? (133)

- E) Offer the customer some free shoe care products for the inconvenience, if a purchase is made**
- A) Offer to hold the customer a pair of the shoes when they are delivered**
- B) Tell the customer you are sorry but there is nothing you can do**
- C) Tell the customer there is nothing you can do**

CRITERION DIMENSION 4C: Assurance (Demonstrating Value)

ACHIEVEMENT

34 You are helping a customer purchase an entertainment center. The customer appears nervous and hesitant about buying the product. What might you do? (302)

- E) Describe to the customer the cost of each feature on the product to show it is worth the money**
- A) Tell the customer the product is worth the money because of its many features**
- B) Tell the customer you get what you pay for**
- C) Say nothing and let the product speak for itself**

ACHIEVEMENT

35 A customer is looking at buying an expensive VCR with many options, but does not seem sure about the purchase. What might you do?

- E) Explain the value and benefits of each product option
- A) Tell the customer the cost is high because there are so many options
- B) Tell the customer there are many options on the VCR
- C) Don't tell the customer anything, let the product sell itself

CRITERION DIMENSION 4D: Assurance (Explaining Service)

CRITERION DIMENSION 4E: Assurance (Selling Pressure)

ACHIEVEMENT

36 It is typical in your store for employees to really push certain products. However, customers often don't appreciate such tactics being used on them. What do you do? (324)

- E) Apply no pressure on the customer to buy those particular products
- A) Apply slight pressure on the customer to buy those particular products
- B) Apply moderate pressure on the customer to buy the particular products
- C) Apply heavy pressure on the customer to buy the particular products

ACHIEVEMENT

37 You have nearly finished selling a customer an expensive product. However, the customer seems unsure about making the purchase because it costs so much money. What might you do?

- D) Remind the customer s/he can always return the product
- A) Tell the customer s/he is making a good purchase
- B) Don't say anything to the customer so that s/he can decide for him or herself

CRITERION DIMENSION 4F: Assurance (Politeness)

AGREEABLENESS

38 A customer walks into your store and looks very grumpy. Further, he does not look like a "serious" customer. You are busy checking inventory and are falling behind schedule, something your manager will not appreciate. You notice no other coworkers are currently in the section. What do you do? (266)

- A) Approach the customer and ask if you can help
- B) Say hello to the customer but do not offer to help
- C) Nod to the customer but do not offer to help
- D) Ignore the customer and continue checking inventory

CRITERION DIMENSION 4G: Assurance (Honesty)

DEPENDABILITY

39 You are a new employee and realize you've made a mistake with a customer's order. Specifically, you did not charge the customer enough money. You could call the customer and tell him/her to pay the difference, or simply not do anything. What do you do?

- A) Call the customer and tell him or her you made a mistake
- B) Tell your supervisor but do not call the customer
- C) Do nothing

DEPENDABILITY

40 You make a mistake and undercharge a customer. Your boss says you will either have to make up the difference out of your paycheck or call the customer and get him/her to pay the difference. What do you do? (184)

- E) Don't call the customer, but simply pay for the difference yourself
- A) Don't call the customer but instead send a bill for the customer to pay the difference
- B) Call the customer to explain the mistake, then send a bill for the customer to pay the difference
- C) Call the customer to explain the mistake and insist he or she pays the difference

AGREEABLENESS; DEPENDABILITY

41 You work for a delivery service. A customer calls to ask why their order took so long to be delivered. It was a big order and you want to keep this customer happy. You are pretty sure the order was late because the delivery driver went to the wrong address. What do you do? (251)

- E) Say that you think the delivery driver went to the wrong address
- A) Say that you think the delivery driver had made a mistake
- B) Say that you think the delivery driver was late because there was a lot of traffic
- C) Say that you don't know why the order took so long

ACHIEVEMENT; AGREEABLENESS

42 A customer is trying on a pair of sunglasses that quite frankly make them look funny. They ask you for your opinion. What do you say? (290)

- E) "Those glasses look funny on you"
- A) "Those glasses kind of look funny on you"
- B) "Those glasses look OK on you"
- C) "Those glasses look really good on you"

CRITERION DIMENSION 4H: Assurance (Empathy)

AGREEABLENESS

43 It's Christmas time and your store has a product advertised that has been very popular. A younger girl wants to purchase the product but you realize it is sold out and will not be possible to get more until after Christmas. The young girl starts to cry, saying "Thanks for nothing—you've ruined my Christmas." What might you do in this situation? (60)

- E) Sit the girl down and say how sorry you are
- A) Say how sorry you are
- B) Tell the girl you wish you had more of the product
- C) Tell the girl that the store is sold out and there is nothing you can do

NEUROTICISM; AGREEABLENESS

44 A customer orders a dress. The customer comes to the store on the day the order was to arrive, but the warehouse has not been able to deliver the dress. The customer gets very upset with you. What do you do? (19)

- E) Say to the customer you are sorry and would be mad too if you couldn't get the dress, but these things sometimes happen
- A) Say to the customer you are sorry and would be mad too if you couldn't get the dress
- B) Say to the customer you are sorry
- C) Tell the customer there is nothing you can do about the dress

NEUROTICISM; AGREEABLENESS

45 You are working at a cash register right before Christmas. The line is very long and customers are generally impatient. As you cash out one customer, you realize that his/her credit card is denied. What do you do? (94)

- E) Talk to the customer using his/her first name, say you are sorry, and that these things happen
- A) Tell the customer you are sorry and that these things happen
- B) Tell the customer you are sorry
- C) Tell the customer there is nothing you can do

CRITERION DIMENSION 5A: Perceptiveness (Anticipation)

AGREEABLENESS; DEPENDABILITY

46 You work as a waiter/waitress in a restaurant. One of your tables is involved in a very private conversation. You want to ask them if you can get them anything else, but every time you approach they give you a very nasty look—as if to say “leave us alone.” What might you do? (78)

- A) Watch the table to guess when someone might want something (for example, water)
- B) Watch the table and wait for a customer to call on you (for example, waving their hand)
- C) Approach the table less frequently than you would have normally
- D) Approach the table as you normally would

ACHIEVEMENT; AGREEABLENESS

47 One customer you are helping is very factual and straight to the point. As you help this person, what might you do? (299)

- E) Treat the customer like s/he knows exactly what s/he wants
- A) Treat the customer like s/he probably knows what s/he wants
- B) Treat the customer like s/he might know what s/he wants
- C) Treat the customer like s/he has no idea what s/he wants

ACHIEVEMENT; AGREEABLENESS

48 You work in a department store and see a female customer enter the automotive section. How might you greet this customer?

- A) “What can I help you find for your vehicle?”
- B) “Working on your vehicle today?”
- C) “What can I help you find?”
- D) “Can I help you?”

CRITERION DIMENSION 5B: Perceptiveness (Identify Personal Information)

ACHIEVEMENT

49 You see a customer that you have waited on before. How might you greet this customer?

- A) Use whatever relevant personal information you can remember about this customer in your greeting
- B) Use just the customer’s name in your greeting
- C) Be more friendly to this customer than usual but don’t use personal information
- D) Greet this customer just like all customers

AGREEABLENESS

50 A customer is telling you a story about himself/herself and is providing you with very personal information. S/he asks if you have had a similar experience. Imagine you have had a similar experience. What do you tell this customer?

- A) Tell the customer your experience without leaving anything out
- B) Tell the customer you have experienced something similar but provide little detail
- A) Tell the customer you have experienced something similar but provide no detail
- B) Tell the customer you have not experienced anything similar

ACHIEVEMENT

51 You work in a clothing store. You are helping a man buy a gift for his wife. What do you do? (395)

- A) Ask questions about the wife to identify her interests and preferences
- B) Ask what the wife likes to do
- C) Ask what the husband and wife like to do together
- D) Ask what the husband wants to buy for his wife

ACHIEVEMENT

52 You work in a clothing store. You are helping a woman buy a gift for her husband. What do you do? (396)

- A) Ask questions about the husband to identify his interests and preferences
- B) Ask what the husband likes to do
- C) Ask what the husband and wife like to do together
- D) Ask what the wife wants to buy for her husband

CRITERION DIMENSION 5C: Perceptiveness (Questioning)

ACHIEVEMENT

53 A customer tells you s/he wants to buy a television. What might you do next?

- A) Ask follow-up questions to determine why the customer wants this television
- B) Ask the customer what kind of television s/he would like
- C) Ask the customer how much s/he wants to spend
- D) Show the customer a television you think s/he would like

CRITERION DIMENSION 5D: Perceptiveness (Customer Focus)

AGREEABLENESS

54 A customer expects you to do something that is not part of your job—look up the address of a competitor. What do you do? (318)

- A) Look up the specific address as the customer requests
- B) Just give general directions to the customer
- C) Show the customer where a phone book is so s/he can look it up himself or herself
- D) Tell the customer it is not your job to sell the competitor's products

CRITERION DIMENSION 6A: Communication (Personalized)

AGREEABLENESS

55 You are going to explain to a customer how to perform a very complicated repair. The customer acts as though he already understands all of this information, but you suspect he might not. What might you do? (379)

- A) Start at the most basic level, and then get more complicated
- B) Start at an easy level, then get more complicated
- C) State at a moderate level, then get more complicated
- D) Start at a complicated level since the customer already knows this

NEUROTICISM; AGREEABLENESS

56 You deal with customers over the phone. Many customers do not speak English very well, and often neither one of you can understand each other. It is often very frustrating. How might you handle these situations? (401)

- A) Speak quite a bit slower than normal
- B) Speak slightly slower than normal
- C) Speak normally
- D) Speak slightly faster than normal since the store is so busy
- E) Speak quite a bit faster than normal since the store is so busy

CRITERION DIMENSION 6B: Communication (Appropriate)

CRITERION DIMENSION 7: Competence

ACHIEVEMENT

57 You work in a store that sells electronics. When new products arrive, your store receives a brief, non-technical product description and a complicated, in-depth product description. What would you be most likely to do?

- A) Read both types of information comprehensively and in careful detail
- B) Read both types of information to gain a general understanding of the key points
- C) Read only the non-technical information to understand all key points
- D) Read only the non-technical information to understand the few major points

CRITERION DIMENSION 8: Demonstrating Extra Effort

ACHIEVEMENT

58 You work as a delivery driver. It is Friday night, almost quitting time, and you have plans for the evening. A customer calls at the last minute and asks if you can deliver a product that will take you several hours. All of the other drivers have left for the night. Your boss says it is up to you. What do you do? (208)

- A) You take the delivery immediately
- B) Tell your boss you'll take the delivery first thing the next morning
- C) Tell your boss you'll take the delivery the next day
- D) Tell your boss you don't want to take the order because you have plans

ACHIEVEMENT

59 There are some minor duties and tasks that all employees are expected to do. Your coworkers do not help with these tasks because you all get paid the same amount. Although you are fairly busy, you could also do their jobs as well. What do you do? (188)

- A) Perform all of the minor tasks in addition to your regular duties
- B) Perform the minor tasks only when you are not performing your regular duties
- C) Perform the minor tasks only when they absolutely have to be done
- D) Don't perform the minor tasks since nobody else is doing them

ACHIEVEMENT

60 You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because you are making everyone else look bad. What do you do? (189)

- A) Continue working as hard as you had been
- B) Work moderately harder than everyone else
- C) Work a little bit harder than everyone else
- D) Work only as hard as everyone else

ACHIEVEMENT

61 You are doing your regular job duties. A coworker approaches you and tells you to stop working so hard because the manager is gone for the day. What do you do? (190)

- A) Continue working as hard as you had been
- B) Work a little bit less hard
- C) Stop working so hard when the manager is not around
- D) Stop working so hard at all times

ACHIEVEMENT

62 You work in a store that has a few peak times during a day but is otherwise pretty slow. During the slow times, coworkers joke around, use the company phone for personal calls, and generally look bored. However, there are many maintenance tasks that could be done during this time, such as cleaning the shelves. What do you do? (50)

- A) Perform the maintenance tasks whenever you are not helping customers
- B) Perform the maintenance tasks only when the store is extremely slow
- C) Perform the maintenance tasks only when told to do so
- D) Don't perform the maintenance tasks since nobody else does them

ACHIEVEMENT

63 You work the day shift. The people in the night shift do not perform their basic cleanup tasks. If you do their tasks in addition to your own, you waste your time and so your customers may have to suffer. What do you do? (126)

- A) Clean up after the night shift in addition to performing your regular tasks
- B) Clean up after the night shift only when you aren't performing your regular tasks
- C) Tidy up a little but leave most of the mess as you found it
- D) Leave the mess since the night shift made it

ACHIEVEMENT

64 You work the morning shift in a restaurant. The night shift has gotten into the habit of not keeping the work area clean. Now, in addition to your regular duties, you also have to clean the work area. This makes your job much more difficult. You've brought the matter up with your supervisor, who says s/he is looking into it. Now, you come into work and notice the work area is even dirtier than usual, and there are several customers already coming into the store. What might you do? (87)

- A) Clean up after the night shift in addition to helping your customers
- B) Clean up after the night shift only when you aren't helping customers
- C) Tidy up a little but leave most of the mess as you found it—focus on your customers
- D) Leave the mess since the night shift made it—focus on your customers

CRITERION DIMENSION 9A: Maintain Personal Discipline (Composure)

NEUROTICISM

65 A customer is very upset with your company's return policy. You have no say or control over the return policy, but this customer is basically "venting" his/her frustration to you. How do you handle this situation? (36)

- A) Remain calm and let the customer voice his or her concerns
- B) Remain calm, but tell the customer to settle down
- C) Remain calm, but tell the customer you have no control over the policy
- D) Get a little aggressive and tell the customer you have no control over the policy

NEUROTICISM

66 A customer is upset and getting personally insulting with you. Further, the customer is starting to threaten you with physical harm. What do you do? (72)

- A) Remain calm and don't take it personally
- B) Remain calm and tell the customer to settle down
- C) Stand firm and tell the customer to settle down
- D) Get aggressive so that the customer will back down

NEUROTICISM

67 You have had a very bad day by the time you show up for work. Now, the first customer you wait on is also in a bad mood and starts yelling at you right away. This customer is getting very personal. How do you handle this customer? (99)

- A) Ignore the customer's comments and try to help
- B) Try to remain calm but tell the customer to settle down
- C) Tell the customer to settle down
- D) Tell the customer you are not going to help anyone who makes personal attacks on you

NEUROTICISM

68 A customer starts yelling at you because you sold him/her a TV that was broken. This customer is upset because s/he had to drive 50 miles to get to the store. Although it is not your fault, this customer is very rude and offensive. How would you handle this situation? (15)

- A) Stand firm and try to find a replacement TV**
- B) Stand firm and tell the customer it is not your fault**
- C) Stand firm and tell the customer to quit yelling because it is not your fault**
- D) Stand firm and tell the customer to either calm down or leave**

NEUROTICISM

69 A customer orders a specially made desk. When the desk arrives, the customer does not like the look of it and refuses to purchase it. You are now going to lose the commission on the order, and even worse, are going to have to tell your supervisor that the desk must be returned to the warehouse at the company's expense. What do you tell this customer? (20)

- A) Tell the customer you appreciate his/her business and ask if there is anything else you can do**
- B) Tell the customer that you will lose your commission unless s/he buys the desk**
- C) Tell the customer that unless s/he buys the desk the company will have to pay for it**
- D) Tell the customer that s/he should buy the desk since s/he ordered it**

AGREEABLENESS

70 You work in a pizza shop. A customer orders a pizza (for delivery) that you make yourself. A half hour later this customer calls you to complain about the pizza—it was a small instead of a medium. You can't remember which size pizza you made, but you suspect the customer ordered the wrong size pizza. What might you do? (69)

- A) You take the entire blame for the pizza**
- B) Try to imply that you are at fault but don't explicitly say so**
- C) Try to imply that the customer is at fault but don't explicitly say so**
- D) Tell the customer it is his or her fault**

AGREEABLENESS; NEUROTICISM

71 When waiting on a customer you realize that s/he is trying to get a cheaper price than is listed for the product. Basically, this customer changed the price tag on the item. When you mention the price looks to be too low and that you are going to check its price in the computer, the customer starts to complain and questions your competence. What do you do? (100)

- A) Remain calm and professional, and continue to check the price
- B) Remain calm and professional, but say s/he had better settle down
- C) Tell the customer you know s/he has changed the price, so s/he had better settle down
- D) Tell the customer you know s/he has changed the price and are going to call the manager

CRITERION DIMENSION 9B: Maintain Personal Discipline (Social Consideration)

AGREEABLENESS

72 As a waiter/waitress, you often must take the blame when customers are unhappy with their food (for example, it took too long to get it, it is cold, it doesn't taste good). Even though it is usually not your fault, customers usually get very upset with you personally. Some even complain to your supervisor. How might you handle these types of customers? (14)

- A) Tell them you are sorry and take all of the blame
- B) Tell them you are sorry but then explain why it is not your fault
- C) Explain to the customer why it is not your fault
- D) Explain to the customer why it is not your fault, and tell them the manager understands this

AGREEABLENESS

73 A customer is upset at you and is very rude because the entertainment center she ordered was not the one that was delivered. You check her order and see that one of your coworkers wrote down the wrong number for the delivery staff, so in fact it was your coworker's fault the order was incorrect. This customer is very upset and is taking it out on you. What do you do? (16)

- A) Take the customer's blame and try to solve the problem yourself
- B) Tell the customer it is not your fault, but you will try to solve the problem yourself
- C) Tell the customer it was a coworker's mistake and that s/he should settle down
- D) Tell the customer it was a coworker's mistake and that s/he should talk to him

CRITERION DIMENSION 9C: Maintain Personal Discipline (Work Focus)

AGREEABLENESS; DEPENDABILITY

74 Some coworkers ask you to help play a joke on a newer coworker. You think the joke is rather inappropriate but no customers are likely to see it. What do you do?

- A) Do not participate in the joke
- B) Tell your coworkers you will participate only if it occurs after work
- C) Tell your coworkers you will help, but then don't
- D) Help play the joke on the coworker

CRITERION DIMENSION 10: Facilitating Peer and Team Performance

AGREEABLENESS; ACHIEVEMENT

75 A coworker is very busy and could use some help. You have only a few customers in your section, but you're not sure if you should leave them to help your coworker. What do you do?

- A) Leave your section to help your coworker until s/he completely catches up
- B) Go help your coworker until s/he is almost caught up, then hurry back to your own section
- C) Stay in your own section a little longer, then hurry to help your coworker
- D) Stay in your section and help your own customers

ACHIEVEMENT

76 You work in a restaurant. You are helping cover a coworker's table, where two customers were getting upset because they had to wait so long. As you help this coworker's customers, you notice customers from your own section getting impatient. You realize you are not likely to get a tip from your coworker's customers, but you will probably get tips from your own customers. What do you do? (194)

- A) Help your coworker until s/he completely catches up
- B) Primarily help your coworker's customers but also help your own customers when possible
- C) Primarily help your own customers and help your coworker only if it is convenient
- D) Go help your own customers

AGREEABLENESS; ACHIEVEMENT

77 A coworker in another section is very busy helping customers and could obviously use some help. In fact, some customers are starting to leave. Your section is relatively quiet at the moment but could get busy very quickly. What do you do? (a25)

- A) Leave your section to help your coworker until s/he completely catches up
- B) Primarily help your coworker, but return to your own section once in a while
- C) Primarily stay in your own section, but help the coworker once in a while
- D) Stay in your section just in case you suddenly get more customers

ACHIEVEMENT

78 Many of your coworkers are lazy and only do the minimum amount of work they have to. Your supervisor either doesn't notice this or doesn't seem to care. Because of these individuals, you have to do twice as much work as you should—including some of their duties. What do you do? (23)

- A) Perform all of the duties regardless of whether it is your job or not
- B) Primarily perform your own duties, but try to perform the other duties as much as possible
- C) Primarily perform your own duties, then perform the other duties at your convenience
- D) Perform only your duties

ACHIEVEMENT

79 In your company, there is a very strong peer pressure not to work harder than your coworkers. You are relatively new and are trying to do a good job. Although your manager notices and says to keep up the good work, your coworkers are getting upset because you are making them look bad. One of them even told you to quit working so hard. What are you going to do? (27)

- A) Continue working hard
- B) Don't work as hard as you were, but don't work as slow as the coworkers
- C) Stop working so hard when around your coworkers
- D) Do as the coworkers say and stop working so hard

ACHIEVEMENT

80 You are leaving your section to take a scheduled break. Your store policy is such that you have to take a scheduled break, and that you are not paid for the time you are on break. On your way to the break room, you notice a coworker who is swamped with customers. What do you do? (349)

- A) Go help the coworker even if it means you won't get a break
- B) Go help the coworker for as long as possible, but be sure to take at least some of your break
- C) Go help the coworker for just a few moments, then take most of your break
- D) Take your break and help the coworker as soon as you are done

ACHIEVEMENT

81 Some long term employees are making part time employees do their routine tasks. This frees up the long term employees' time so that they can help more customers. The supervisor does not seem to care, and you could certainly use some more time to help customers. What do you do in this situation? (106)

- A)** Continue doing your own routine tasks and do not delegate them to the part time employees
- B)** Give the part time employees some of your routine tasks
- C)** Give the part time employees most of your routine tasks
- D)** Give the part time employees all of your routine tasks

AGREEABLENESS; ACHIEVEMENT

82 You work in a restaurant. You and a coworker misunderstand each other and do not wait on a table. Later, you both recognize the mistake and can see that the customers at the table are very upset. You doubt who ever helps them will get a tip. Your coworker asks if you want the table. What do you do? (195)

- A)** Agree to take the table yourself
- B)** Split the table between you and the coworker
- C)** Give the table to the coworker, but help out if necessary
- D)** Say you don't want the table

CRITERION DIMENSION 11: Supervision

CRITERION DIMENSION 12: Management

ACHIEVEMENT

83 You are performing a maintenance task that your supervisor instructed you to get completed right away. As you work on this task, you notice a customer in your section. What do you do?

- A)** Help the customer until s/he is finished shopping
- B)** Help the customer for just a few moments, then return to your maintenance task
- C)** Greet the customer but continue working on your maintenance task
- D)** Complete your maintenance task until it is completely finished, then help the customer

CRITERION DIMENSION 13: Volunteering

NEUROTICISM; ACHIEVEMENT

84 You have a much deserved day off from work and have made a fun day of plans. Your boss calls the night before and asks if you can work because one of your coworkers can't make it. You suspect the coworker is really going to a concert because s/he mentioned doing it in the past. What do you do? (113)

- A) Go in to work**
- B) Tell the supervisor that you suspect the coworker might be lying, but that you'll work**
- C) Tell the supervisor the coworker is lying, but that you'll work**
- D) Tell the supervisor the coworker is lying and that you can't work**

ACHIEVEMENT

85 In your store there are many small tasks (for example, putting away inventory) that are not part of anyone's specific job but are something that everybody is expected to do. Many of your coworkers do not do these tasks, but if they are to get done somebody will have to do them. What do you do? (121)

- E) Perform all of the tasks even though they are not part of your job**
- F) Regularly perform most of the tasks**
- G) Occasionally perform some of the tasks**
- H) Don't perform the tasks since they are not part of your job**

ACHIEVEMENT

86 On one of your days off your manager calls to ask you to come to work because the store is short staffed. You had planned to spend this day with your friend or family for over a week. What do you do? (129)

- A) Tell your manager you'll come in to work right away**
- B) Tell your manager you'll work until s/he can find somebody else**
- C) Tell your manager you will work only if s/he can't find anybody else**
- D) Tell your manager you can't work today**

NEUROTICISM; ACHIEVEMENT

87 Each employee in your store is given a very detailed description of his/her job duties. Unfortunately, most employees only do their specific duties and do not help out coworkers when necessary. In fact, many employees will sit and do nothing instead of helping other coworkers because "it is not their job." You are particularly busy and are getting very frustrated because you can't help all of the customers in your area. Your coworkers just sit and watch. Later, when you have more time, you notice your coworkers could use some help. What might you do? (49)

- A) Give your coworkers as much help as they need
- B) Help the coworkers, but do not go too far out of your way
- C) Provide help only if absolutely necessary
- D) Do not provide any help since none of them helped you

AGREEABLENESS; ACHIEVEMENT

88 A coworker calls you to ask if you can cover his/her Saturday morning shift because s/he is not feeling well. Although you don't mind doing covering the shift once in awhile, this coworker has asked you for this favor on several past occasions. You suspect the coworker is going out the night before and is simply too tired to work. What do you do? (112)

- A) Help the coworker with no questions asked
- B) Offer to work the morning shift only if s/he covers one of your morning shifts
- C) Offer to work the morning shift only if s/he will cover several of your morning shifts
- D) Don't help the coworker

CRITERION DIMENSION 14: Follows Company Policy

DEPENDABILITY

89 Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. Now, a customer asks you why you have to take this information and refuses to give it to you. What do you do?

- A) Do not return the item unless you get all of the information
- B) Do not return the item unless you get the phone number and at least see the drivers license
- C) Return the item if you at least get the phone number
- D) Return the item even though you do not any information

DEPENDABILITY

90 You work as a waiter/waitress in a restaurant. One trick many of your coworkers do is to give customers free soda or minimally-priced appetizers in order to get a better tip. The company policy explicitly forbids this practice. You could certainly use the extra money from tips, and the supervisor has not noticed or said anything about this practice. What do you do? (108)

- A) Never engage in these activities
- B) Occasionally engage in these activities
- C) Regularly engage in these activities
- D) Engage in these activities whenever you can

DEPENDABILITY

91 Your store policy is absolutely no returns on clothes over \$100.00. A customer returns an outfit costing \$110.00. You can tell that the outfit has not been worn, but the store policy says you cannot return it. You feel very bad and don't agree with the policy in this instance. However, you could classify the outfit as defective and nobody would ever know—although this is also against company policy. What do you do? (148)

- A) Do not allow the outfit to be returned
- B) Do not allow the outfit to be returned, but have the customer speak with the manager
- C) Classify the product as defective but only allow an exchange—do not return the money
- D) Classify the product as defective and return the money

NEUROTICISM; DEPENDABILITY

92 You work at a cash register in a grocery store. There is a huge lottery prize, and so the store is swamped with customers buying lottery tickets. However, you are to stop selling lottery tickets promptly at midnight. It is 12:01 and a customer wants to place an order. You refuse and they get very upset, as do the remaining customers who have been waiting over half an hour. What do you do? (33)

- A) Do not sell any tickets because it is past midnight
- B) Sell tickets to just the customer who is upset
- C) Sell tickets to just the next few customers
- D) Sell tickets to the remaining customers in line

DEPENDABILITY

93 A customer is trying to buy beer but has forgotten his/her identification in the car. This customer looks to be around 30 years old and is dressed very well. You have seen the customer in the store on a regular basis but have not waited on him/her yourself. What do you do? (102)

- A) Do not sell the customer the beer unless you first see his or her drivers license**
- B) Do not sell the customer the beer unless a coworker will say the customer is old enough**
- C) Sell the customer the beer but ask that s/he bring you his/her drivers license**
- D) Sell the beer since this customer obviously looks old enough**

DEPENDABILITY

94 Your store policy says that when a customer returns an item you must write down their phone number and copy their drivers license. Many customers don't like to give you their drivers license. You personally do not approve of this policy and don't think the store actually uses this information. Now, a very good customer says s/he doesn't want to give you this information. What do you do? (139)

- A) Do not return the item unless you get all of the information**
- B) Do not return the item unless you get the phone number and at least see the drivers license**
- C) Return the item if you at least get the phone number**
- D) Return the item even though you do not any information**

DEPENDABILITY

95 You are working at a cash register in a grocery store when a customer tries to buy alcohol. When you ask for his/her identification, s/he gets upset and says s/he doesn't have it, but s/he does show you his/her five credit cards and truck drivers medical card. S/he looks to be about twenty five years old. What do you do? (150)

- A) Do not sell the customer the beer unless you first see his or her drivers license**
- B) Do not sell the customer the beer unless a coworker says the customer is old enough**
- C) Sell the customer the beer but ask that s/he bring you his/her drivers license**
- D) Sell the beer since this customer looks old enough and has other identification**

CRITERION DIMENSION 15: Defending the Company

ACHIEVEMENT; DEPENDABILITY

96 You feel personally uncomfortable trying to sell high dollar merchandise to people who do not appear to be able to afford it. However, your managers really push employees to always direct customers to the large dollar items. What do you do? (13)

- A) Sell the high dollar merchandise because that is your job
- B) Regularly (but not always) sell the high dollar merchandise
- C) Once in a while sell the high dollar merchandise
- D) Do not sell the high dollar merchandise because you don't agree with that policy

ACHIEVEMENT; DEPENDABILITY

97 A coworker complains about the working conditions so that customers can hear him/her. You generally agree with what the coworker is saying. After the coworker leaves, a customer you are helping asks if it is true. What might you do in this situation? (159)

- A) Say that it is not true and that the working conditions are good
- B) Say that it is not true, but say nothing more
- C) Say that it is true, but say nothing more
- D) Say that it is true and that the working conditions are poor

DEPENDABILITY

98 Your store hires a number of part-time employees for the summer. You catch several of these individuals playing around with some of the company equipment. When you mention their behavior is against company regulations, they just laugh and say they are quitting in a few weeks anyway and don't really care. What do you do? (28)

- A) Turn these individuals in to your supervisor
- B) Threaten to report these individuals to the supervisor if you catch it happening again
- C) Threaten to report these individuals to the supervisor, but actually do nothing
- D) Ignore the incident since they will soon be quitting anyway

DEPENDABILITY

99 Your store has a number of summer-time only employees. It is near the end of summer when you notice one of these employees stealing ten dollars from the register. As you confront the employee, s/he informs you that s/he was shorted ten dollars on their last paycheck and so was only "making things balance." S/he says it will not happen again if you don't say anything. How do you handle this situation? (29)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

DEPENDABILITY

100 You work in a pizza store. One day you catch a well-respected employee giving free sodas and appetizers to his/her friends. Although this is not worth much money, it is against company policy. What would you do? (30)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

DEPENDABILITY

101 You catch one of your fellow coworkers (who is also a good friend) making deals with customers in order to increase her sales. Because part of your salary is based on commission, this is an easy way for her to make more money even though the company will suffer reduced profits. You remind this person that the company does not tolerate these actions, but your friend does not seem to care. Do you report this person to your supervisor? (31)

- A) Turn your friend in to your supervisor
- B) Threaten to report your friend to the supervisor if you catch it happening again
- C) Threaten to report your friend to the supervisor, but actually do nothing
- D) Forget the incident ever happened

ACHIEVEMENT; DEPENDABILITY

102 You are very good friends with some of your coworkers. You learn that a few of your friends are stealing from the company. What do you do? (161)

- A) Turn them in to your supervisor
- B) Offer them the opportunity to turn themselves in, or else you will do it
- C) Tell them that if it ever happens again you will report them
- D) Do nothing and forget the incident ever happened

DEPENDABILITY

103 You work for a home delivery company. You catch one of the delivery drivers smoking marijuana on the job. However, your supervisor does not suspect a thing. What do you do? (202)

- A) Turn the delivery driver in to your supervisor
- B) Offer the delivery driver the opportunity to turn himself or herself in, or else you will do it
- C) Tell the delivery driver that you will report him or her if it happens again
- D) Do nothing and forget the incident ever happened

DEPENDABILITY

104A coworker has a tendency to give customers s/he likes special deals that would not be approved by the company. You are probably the only one who knows about this. What do you do? (205)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

DEPENDABILITY

105A coworker gives his family special deals. You know the manager would not approve of such practices. You doubt anyone else is aware that the coworker is breaking the company policy. What do you do? (206)

- A) Turn this person in to your supervisor
- B) Threaten to report this individual to the supervisor if you catch it happening again
- C) Threaten to report this individual to the supervisor, but actually do nothing
- D) Forget the incident ever happened

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