

Age Discrimination in Personnel Decisions: A Reexamination and Extension

A Thesis  
Presented to  
The Academic Faculty

by

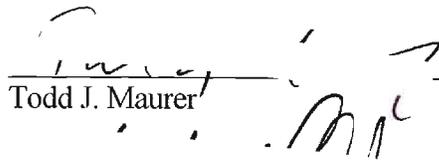
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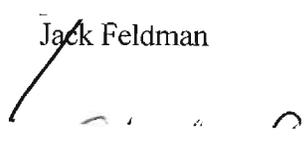
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AGE DISCRIMINATION IN PERSONNEL DECISIONS: A REEXAMINATION AND  
EXTENSION

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## DEDICATION

This thesis is dedicated to my mother, Judy Keasal, who always believed I could do anything I set my mind to. She has taught me the importance of being determined, of educating myself, and has shown me what it means to be a strong, successful woman. Without her guidance and love, this accomplishment would not have been possible.

## ACKNOWLEDGEMENTS

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## SUMMARY

As the population ages, potential issues resulting from the aging of the workforce become important topics for research. As legal concerns arise with regard to age discrimination in all areas of work, identifying causes of age discrimination in an effort to reduce its occurrence becomes crucial. There is empirical support spanning 20 years for negative stereotyping of older workers. In this study, Rosen and Jerdee's (1976b) classic study on age discrimination was replicated and extended to include implicit theories of work-related qualities as individual difference variables as predictors of the use of stereotype-based information in administrative decisions regarding older and younger targets. Two of the five original scenarios from the Rosen and Jerdee (1976b) study replicated their findings, with older workers rated more poorly than younger workers, and three scenarios did not have any significant differences among the age groups. Implicit theory did not serve as a moderator of the relationship between the age of the scenario's target and the outcome ratings, nor did it predict ratings of the target's likelihood of having specific skills or abilities relevant to the situation. A second study was conducted to rule out the presentation of additional measures not in the original study as a cause of the result in Study 1. The results from Study 2 supported those from Study 1. Possible reasons for these results and directions for future research are discussed.

## CHAPTER I

### INTRODUCTION

The population is getting older as the baby boomer generation reaches middle age and improved health care provides opportunities for individuals to live longer. The group of persons aged 55 to 64 is expected to increase by 10 million over the 1998-2008 period, which represents a much larger increase than the 655,000 increase over the 1988-1998 period. The highest population growth over the 1998-2008 period is expected to occur in the 45 to 64 age group, while the number of persons aged 35 to 44 is expected to decline by 3.7 million (Fullerton, 1999). These changes in the makeup of the United States population have led to what has been termed the "graying of the workforce," the gradual climb in the median age of the labor force from 39.4 years of age in 1988 to a projected median age of 44.6 years in 2008 (Fullerton, 1999).

This aging of the workforce is furthered by other factors, including the increase in the normal retirement age required for receiving Social Security benefits from 65 years to 67 years over the next 20 years or so. Because the amount of money received from Social Security is lowered for each month a recipient is younger than the required retirement age, many workers may opt to continue working into their late 60's and early 70's (Fullerton, 1999).

This phenomenon presents unique challenges for researchers in many areas. Workplace issues such as pay, promotion, training and development opportunities, and selection stand to be affected by this demographic shift. This study focused on two points relevant to personnel decisions involving aging workers. First, it examined the potential effects of negative age stereotypes in workplace decisions and judgments. Second, the role of the decision-maker's view of the malleability or fixedness of specific traits will be studied as a potential contributor to negative age stereotyping and discrimination.

#### Stereotypes of Older Workers

The presence of negative views of the capabilities and characteristics of older adults in the workplace is a common finding in research over the last twenty-five years. Rosen and Jerdee (1976a) investigated participants' perceptions of the characteristics of an older target person compared with a younger target person on four work-related dimensions. The older target was perceived as having a significant deficit in the areas of performance capacity and potential for development when compared with the younger target.

Other studies throughout the 1980's offered corroborating evidence, demonstrating that older workers are perceived as being slower, less creative, less flexible, more resistant to change, disinterested in training, and prone to illness and accidents when compared to their younger counterparts (Doering, Rhodes, and Schuster, 1983; Rhodes, 1983; Stagner, 1985).

More recent evidence has also supported the existence of these widespread views. In a 1995 meta-analysis, Finkelstein, Burke, and Raju reported that raters age 17-29 rated younger targets as being more qualified for jobs and as having more potential for development than older targets. The American Association of Retired Persons (2000) surveyed 400 senior-

level human resources executives by telephone. They found that older employees (employees over 50 years of age) were viewed by HR executives as being loyal, committed, reliable, having good performance records, basic skills in reading, writing, and math, solid experience in their job or industry, and good interpersonal skills, but they were also viewed as having the negative traits so commonly attributed to older workers, like being willing to be flexible about doing different tasks, trying new approaches, learning new technologies, and having up-to-date job skills.

These studies provide evidence for a pattern of views about characteristics of older workers that has been stable across many years and numerous studies. Older people in the work force are reliably viewed as being slower, less flexible, and more resistant to change than their younger coworkers.

#### Discrimination Against Older Workers

Given such a substantial body of evidence, one would be hard-pressed to dispute the existence of negative age stereotypes in the workplace. However, the question of whether people actually *use* this stereotype-based information in decision-making remains. This distinction between the existence of a stereotype and discrimination against a group is such that the inference of discrimination from stereotyping is invalid. One could be said to have a stereotype when they hold a set of beliefs about a social group that is consistent across many people. Discrimination, on the other hand, is *acting* in a biased fashion towards members of a group because of their group membership. The difference between the two concepts is action. Stereotyping does not necessarily include acting upon beliefs, but discrimination does.

One study of note empirically examines the key question of whether age discrimination occurs in the work place. In a follow-up to Rosen and Jerdee (1976a), these

same researchers gave participants a six item in-basket task in which they were required to make a variety of determinations regarding job transfers, training opportunities, and poor on-the-job performance. Each subject was given an assortment of tasks involving either a younger or an older employee. Each of the six tasks focused on one belief commonly held about older workers. Younger workers were consistently favored for promotions, trainings, and job transfers. Older workers were rated as being more difficult to persuade to change negative job behaviors, and respondents were more likely to recommend replacing the older employee rather than speaking with him about the behavior. Older workers were rated as less suitable for promotion to a job requiring creativity, less desirable for a financial position involving quick judgments and high risk, and less able to handle a physically demanding position. Participants believed an older applicant to be less motivated to keep up to date with technology, and replacing an older computer programmer with obsolete technical skills was preferred over retraining him.

This same pattern of results was replicated in 1977 (Rosen and Jerdee, 1977) using a sample of Harvard Business Review readers. This study alleviated some of the potential criticisms of the first study, namely that the sample was too young and inexperienced in the work arena to provide an adequate assessment of the views that were actually shaping workplace occurrences.

These two studies suggest the far-reaching potential for negative effects of the stereotype of older workers. With issues of training and technology particularly salient in the minds of today's human resource executives (AARP, 2000), a critical disjoint is created between the skills and abilities considered important for employees to have and the skills and abilities that older workers are perceived as having.

According to the Age Discrimination in Employment Act (1967, amended in 1978 and 1986), it is illegal for an employer to “fail or refuse to hire or to discharge” a worker because of his or her age or to “otherwise discriminate against any individual with regard to his compensation, terms, conditions, or privileges of employment; or to limit, segregate or classify employees in any way which would tend to deprive any individual or employment opportunities or otherwise adversely affect status as an employee because of an individual’s age.” The ADEA covers a broad range of workplace occurrences, including hiring and dismissal, the most obvious implications, and also has the potential to extend to areas of employer-provided training and professional development opportunities (Maurer and Rafuse, 2000).

Despite the potential legal consequences of discrimination, the numerous complaints that are filed each year with the Equal Employment Opportunity Commission provide solid evidence that it is still a comparatively frequent occurrence (EEOC, 2000; American Association of Retired Persons, 1992). It is important, then, to explore reasons for this prevalence of discrimination against older persons in the workplace. If we can adequately understand the reasons discrimination occurs, steps can be taken to avoid it.

### Implicit Theory

One possible contributor to the occurrence of discrimination is the decision-maker’s view of the malleability or fixedness of specific work-related traits. This perspective may play a role in determining whether or not one uses age stereotypes when making judgments about others. Dweck, Hong, and Chiu (1993) have named one’s overall inherent view of people’s ability to change things about themselves “implicit theory.” They identify two broad implicit theories, entity theory and incremental theory. Individuals who hold an

entity theory have the belief that personal traits are nonmalleable and will make strong, global inferences about a person's disposition or characteristics. Entity theorists will make these global inferences even in the face of contradictory or limited information. In contrast, individuals holding an incremental theory have the belief that traits are malleable and change over time and situations. They therefore make fewer dispositional inferences and those that are made are more specific and context dependent (Dweck, Hong, and Chiu, 1993).

Implicit theory has been shown to be a unique predictor of social stereotyping (Levy, Stroessner, and Dweck, 1998), offering unique predictive power over and above other individual difference variables, such as right-wing authoritarianism, attributional complexity, personal need for structure, need for cognition, and need for closure. It seems reasonable, therefore, to propose that implicit theory may have an impact on peoples' tendency to stereotype and perhaps to discriminate against others on the basis of age.

#### Implicit Theory and Age Discrimination in the Workplace

The implicit person theory is a global measure of implicit theory, and consists of broad items such as "The kind of person someone is is something basic about them and it can't be changed very much (Dweck, Hong, and Chiu, 1989; Levy, Stroessner, and Dweck, 1998)." Levy, Stroessner, and Dweck (1998) found that people holding an entity person theory made more stereotypical trait judgments of ethnic and occupational groups and formed more extreme trait judgments of novel groups than did those with an incremental person theory.

The literature on the use of stereotype-based information versus individuating information in person perception offers support for this finding. Individuals with high prejudice levels seem to lack the ability to inhibit stereotypical thoughts that have been

activated automatically (Devine, 1989). The finding that entity theorists make more stereotypical judgments may mean that they are using stereotype consistent information more than incremental theorists.

Another piece of supporting evidence is the use of stereotypes as a sort of “cognitive shortcut.” People encode less perceptual information when they can use stereotypes to fill in relevant details (von Hippel et al., 1993), often skim over stereotype-discrepant information, and attend longer to stereotype-confirming information (Erber and Fiske, 1984; Neuberg and Fiske, 1987; Ruscher and Fiske, 1990). Stereotype-congruent information is also favored in recall, especially in the complex environments of everyday social interaction (Macrae, Hewstone, and Griffiths, 1993). The fact that entity theorists continue to make stable, global judgments about others when presented with incomplete and/or inconsistent information suggests that they may be using these “cognitive shortcuts” more than incremental theorists.

Research on stereotyping has shown that while stereotype-based processing could be considered a default, this default can be overcome by motivating circumstances, even in situations involving person judgments (Bodenhausen, 1990; Macrae, Hewstone, and Griffiths, 1993; Brewer, 1988; Fiske and Neuberg, 1990). It is possible that holding an incremental implicit theory could provide this necessary motivation to move beyond stereotype-based information to individuating information when making judgments.

### Goals of the Current Study

The goals of this study were twofold. First, it served as an attempt to conceptually replicate the Rosen and Jerdee (1976b) study on age discrimination in the workplace. While the Rosen and Jerdee (1976b) study has been cited in more than 80 studies since it's

completion (ISI, 2000), it was completed nearly 25 years ago. During the intervening years, society has changed greatly with regard to older people in the workplace. Changing legislation and social attitudes may affect the results of this replication in ways that were not present when the original study was conducted. If the original study is to be used in the present day as empirical evidence for the occurrence of age discrimination, it would be beneficial to confirm the validity of the findings in the current social environment.

The second goal of this study was to improve our understanding of implicit theory as an individual difference variable by extending Levy, Stroessner, and Dweck's (1998) work on the role of implicit theory in social stereotyping. Their work was extended in three ways. First, while Levy, Stroessner, and Dweck (1998) used a global person measure of implicit theory, we supplemented the global person theory measure with measures of more domain-specific implicit theory. This development is consistent with expectancy-value models of behavior (Triandis, 1979; Fishbein, 1979), which posit that behavior is best predicted by attitudes when both the attitudes and the behavior to be predicted are specific. Thus, by measuring specific facets of participants' implicit theories to predict a specific behavior, the predictive power of implicit theory was hypothesized to increase.

Next, we extended the application of one's implicit theories from the identification and endorsement of group stereotypes to actual discriminatory behavior based on stereotypical beliefs in personnel decisions. This extension provided the potential to explore paths from the holding of a set of beliefs to the application of those beliefs to a decision depending on one's implicit theory.

Finally, this study examined implicit theory's role in workplace situations, rather than in the more general areas of intelligence or morality. By zeroing in on a more specific

area, we hoped to be better able to gauge implicit theory's usefulness as an individual difference variable.

In this study, Rosen and Jerdee's (1976b) study of age stereotypes' role in managerial decision making was partially replicated. The study was extended to include implicit theories of specific work- and task-relevant attributes as possible moderators of the predicted relationship between age of the target and ratings of personnel-related administrative alternatives.

The first hypothesis (H1) was that the overall findings of the Rosen and Jerdee (1976b) study would be replicated in this study. Age was expected to have a significant effect on responses, with older targets rated significantly less favorably than younger targets in the same scenario.

Support was also expected for the second hypothesis (H2), that implicit theory will moderate the relationship between target age and evaluation. Incremental theorists were expected to exhibit a much smaller difference in ratings of the administrative alternatives for the two age groups because they may rely less on stereotype-based information and will focus more on the individual information provided about the target. As this information will be identical for older and younger targets, the difference between these two ratings should be minimal.

## CHAPTER II

### STUDY I - PILOT STUDY

A pilot study was conducted to ensure the relevance and appropriateness of the stimulus materials in the main study.

#### Participants.

Participants (n=30) were undergraduate students. They ranged in age from 18 to 23 with an average age of 19.83. There were 13 females and 17 males. They were given one unit of course credit for their participation.

#### Materials

Attribute – Scenario Correspondence. Participants were given a list of 48 attributes for each of the scenarios to be used in the main study. Participants were given a brief description of the issue in question in each scenario and were asked to rate how important they feel each ability would be to be successful in that situation. The response scale ranged from 1 (not at all important) to 5 (very important).

Photograph-Age Congruence. Participants were shown a set of pictures that could potentially be used in this study, and were asked to give their impressions of the age of the person in the picture. Respondents simply wrote down the age they believed the person to be rather than responding on a scale.

Word Generation Task. Participants were given the same job and situational scenarios as previously, and were asked to generate words or short phrases describing the skills or characteristics of a person who would be successful in each job or situation. They were also asked to rate the importance of that adjective to the person's qualification on a scale of 1-5 (1=helpful, but not necessary; 5=absolutely crucial for adequate performance).

#### Analysis and Results

Attribute-Scenario Correspondence. Attribute-scenario correspondence was determined following a procedure similar to that used by Andrews (2000), while adopting a somewhat more stringent cutoff for inclusion in the measure. Abilities that were rated as "important" or "very important" by at least 80% of the respondents will be included in the implicit theory measure for that scenario. In this particular sample, that means that 24 of the 30 respondents needed to rate an attribute at a level of either 4 or 5 for it to be included. Attributes meeting this cutoff were converted into a list of scenario-relevant abilities and skills to be included in the implicit theory and qualification measures for the in-basket task.

Photographs. Mean age ratings were computed for each photograph. Ages were rounded to the nearest whole year. Photos coming closest to the desired age for the scenario were selected for use as stimuli. Three photos were selected for each age group in each scenario to avoid observing effects resulting from a specific picture.

Word Generation Task. For the word generation task, words that were redundant with the attributes and skills in the Job Skills task were eliminated from consideration. Unique words or ideas that were generated by more than two participants and received an average importance rating of 4 or 5 were included in the implicit theory and qualification measure.

## CHAPTER III

### STUDY I – METHODS

#### Participants.

Participants were 190 (101 male, 89 female) undergraduate students at a southeastern technical university. Their ages ranged from 17 to 26 years of age ( $M=19.42$ ,  $SD = 1.39$ ), and they had been in college from 0 to 14 semesters ( $M=3.97$ ,  $SD = 2.60$ ). One hundred seventy eight participants had worked at a paid job before, 103 had had a full time job before, and the longest time spent at one job ranged from .08 to 7 years ( $M=1.43$ ,  $SD = 1.20$ ). Most recently, 120 had had a part time job, while 63 had a full time job. Seven did not respond to this question.

#### Materials

Participants completed a demographic questionnaire asking them to report their age, gender, major area of study, year in school, and a brief work history.

In-Basket Task. Participants were given an in-basket exercise containing eight memos and letters requiring administrative decisions or authorizations (see Appendix A). The textual material was identical to the items used by Rosen and Jerdee (1976b). Materials were not available for one scenario, lower physical capacity, and so it was eliminated from the analysis rather than risk a less-than-adequate reproduction of the material. Five scenarios each represented a different job-performance related belief associated with older adults: resistance to change, lack of creativity, cautiousness and slowness of judgment, disinterest in

technological change, and untrainability. Brief descriptions of the situations in each scenario, as quoted from Rosen and Jerdee (1976b, p. 429) are:

*Resistance to Change:* The ... incident was concerned with the stereotype that older workers are rigid in their work attitudes and resistant to change. This incident was in the form of a memo from a foreman about a shipping room employee who appeared unresponsive to customer calls for service. The employee was described as either a younger or an older employee, in either case with only 3 months' experience in his present position. Participants indicated the difficulty anticipated in getting the employee to change his behavior and selected one of five possible alternatives for resolving the problem.

*Lack of Creativity:* In this incident, participants evaluated a candidate for promotion to a marketing position that required "fresh solutions to challenging problems" and "a high degree of creative and innovative behavior." Participants made a promotion decision for a 61-year-old or a 32-year-old candidate with identical qualifications.

*Cautiousness and Slowness of Judgment:* This position was described as requiring a person "who not only knows the field of finance, but who is capable of making quick judgments under high risk." Subjects evaluated either a 29-year-old or a 58-year-old applicant with identical backgrounds and experience.

*Disinterest in Technological Change:* The ... case concerned perceptions about older employees' desire and ability to keep up with technical change. Participants evaluated a request from a production staff employee asking permission and financial support to attend a conference devoted to "new theories and research relevant to production systems." The employee was described as either 62 years old or 34 years old with 10 years of production experience. Participants evaluated the employee's motives and the desirability of approving the request.

*Untrainability:* This item depicted a computer programmer whose technical skills had become obsolete as a result of changes in computer operations. The programmer was described as either 30 years old or 60 years old and of average ability. Participants evaluated the desirability of terminating the programmer and the desirability of retraining him.

Two more scenarios were included as filler and one additional scenario includes a general survey of attitudes toward business practices and policies. The business practices

survey was included in the original Rosen and Jerdee (1976b) study and was used partially as a camouflage for the true hypothesis. By including questions about other groups of workers (women, minorities, etc.) and other issues (pensions, benefits, etc.), the true focus on age was hoped to be obscured.

Each of the scenarios had two versions, one with a young target and one with an older target. Age was manipulated by including the target's age in the memo or letter, or describing him as "older" or "younger." To decrease the obtrusiveness of the age manipulation, participants received only one randomly selected version of each task. Additionally, the salience of the age manipulation was enhanced by including photos in the personnel files of four of the six targets. Original photographs were not available from the Rosen and Jerdee (1976b) study, so replacement photographs were installed per the results of the pilot study. All photos were of men dressed in normal business attire. Each scenario had three possible young photos and three possible older photos which were randomly distributed to avoid effects stemming from a specific picture. All targets in scenarios to be analyzed were male to avoid effects coming from unaccounted for gender stereotypes or beliefs. One filler scenario included a female as a target.

Five of the scenarios (cautiousness and slowness of judgment, resistance to change, lack of creativity, disinterest in technological change, and untrainability) included the qualifications/changeability measure. Responses to the original questions posed by Rosen and Jerdee (1976b) were recorded using five and six point scales, and binary decision items (e.g. accept/reject).

The scenarios were spaced such that items not requiring completion of the qualifications/changeability scale were evenly dispersed among those that do. While this

deviated slightly from Rosen and Jerdee's study, it was deemed necessary by the author after receiving feedback from a pilot study indicating that completing the measure more than once or twice consecutively resulted in fatigue and a lack of motivation to provide accurate response. Therefore, the filler scenarios and the business practice survey occupied positions between the more lengthy scenarios.

Qualifications and Changeability. Using data from the pilot study, a subset of abilities and skills were included in the qualification/changeability measure for each scenario (see Appendix A). For qualifications, participants rated the probability that the person in the scenario has that attribute by responding to the question "How likely is this person to have enough of this characteristic to allow them to succeed?" on a five point scale ranging from 1 (not at all likely) to 5 (very likely). For each changeability item, participants were asked to rate the difficulty with which they believe the person in the scenario could improve each attribute or ability. Responses to the phrase "How difficult would it be for this person to improve this about themselves?" were made on a five point scale from 1 (not at all difficult) to 5 (very difficult).

Recognition Task. The structure of the recognition task was based largely on Wyer, Bodenhausen, and Srull (1984). The task was constructed by presenting factual (true) information about each of the first two scenarios mixed with an equal number of false items consistent with the stereotype of older people and an equal number of false items that are inconsistent with the stereotype (see Appendix B). Participants made a dichotomous judgment about whether or not the item was present in the scenario, and then rated how confident they were of their judgment on a scale of 0 (not at all) to 10 (extremely).

Implicit Theory (General). The three-item implicit person theory measure used by Dweck in previous studies was used for the general measure of implicit theory in this study (see Appendix C). The three items were “The kind of person someone is is something basic about them and it can’t be changed very much,” “People can do things differently, but the important parts of who they are can’t really be changed,” and “Everyone is a certain kind of person, and there is not much that they can do to really change that.” Participants responded to each item on a six point scale (1 “strongly agree” to 6 “strongly disagree”).

Implicit Theory (Specific). The specific implicit theory measure was constructed using the list of 51 items rated as relevant for or created for the in-basket scenarios (see Appendix D). Participants will respond to the phrase “People can improve their (attribute)” for each of the 51 items on a five point scale from 1 (strongly disagree) to 5 (strongly agree). This format has been used previously by Andrews and Maurer (2000) for measuring the perceived changeability of different attributes.

Awareness of Hypothesis. The first group of participants to complete the study (N=10) completed the awareness measure. This procedure functioned as a modified pilot study. Similarly to methods used by Feldman and Hilterman (1975), participants responded to a free-response questionnaire that asked about their perceptions of the purpose of the study, the purpose of each questionnaire, whether they thought there was anything in particular that the experimenter wanted them to do, how much they wanted to comply with the experimenter’s wishes, and whether or not they had tried to follow a consistent strategy throughout the task (see Appendix E). Replies to these questions were textual in nature, rather than dichotomous ratings. For example, participants were asked “What were your perceptions

about the purpose of this study?” and “Did you think there was anything in particular that the experimenter wanted you to do? If so, what was it?” These kinds of questions were designed to promote qualitatively richer responses than a simple dichotomous yes or no.

### Procedure

Upon arrival, participants were seated at desks and completed the informed consent form. Following completion of the consent form, they were given the short demographic form and the in-basket task. When all participants had completed the in-basket task, recall and recognition tasks were distributed in varying order, followed by implicit theory measures. All materials had a subject number that was used to match the in-basket task with recall tasks, and implicit theory scales. Participants were instructed not to put their name or identifying information on any papers they complete after signing the informed consent form. Following completion of the materials, the experimenter gave the participants a verbal debriefing and answered any questions that were asked.

## CHAPTER IV

### STUDY I - ANALYSIS AND RESULTS

#### Replication

Analyses are reported according to the scenario for which they are relevant. For a table containing statistical values and significance levels from these analyses and from Rosen and Jerdee (1976b), see Table 1.

Cautiousness and slowness of judgment. 42% of participants viewing the young scenario and 34% of those viewing the old scenario chose to accept the candidate. This difference is not significant (chi square = 1.663,  $p > .05$ ). Older and younger candidates were also rated as similarly suited for the job ( $t = 1.269$ ,  $p > .05$ ).

Disinterest in Technological Change. There were no differences in decisions to decline the request ( $t = .770$ ,  $p > .05$ ), suggest attendance during vacation ( $t = .679$ ,  $p > .05$ ), or to allocate funding for attendance ( $t = -.318$ ,  $p > .05$ ) based on age. Young and old candidates were also judged to be equally likely to be genuinely interested in production systems ( $t = -.981$ ,  $p > .05$ ) and to be in search of their share of the training budget ( $t = 1.330$ ,  $p > .05$ ).

Untrainability. Participants rating older and younger targets rated additional training at company expense ( $t = 1.383$ ,  $p > .05$ ), a leave of absence for retraining ( $t = 1.626$ ,  $p > .05$ ), and terminating the obsolete programmer and rehiring ( $t = .374$ ,  $p > .05$ ) as being equally desirable for older and younger targets.

Lack of Creativity. Participants opted to promote the younger candidate to a position requiring a high degree of creativity significantly more often than the older candidate (chi square = 5.625,  $p < .05$ ), and also rated the potential for successful performance more highly for younger candidates than older ones ( $t = 2.191$ ,  $p < .05$ ).

Resistance to Change. Participants expected significantly more difficulty in getting an older target to change his behavior than in getting a younger target to do the same (chi square = 20.215,  $p < .001$ ). They also recommended different strategies for dealing with the problem for older and younger workers. For younger targets, the favored method was “an ultimatum: change or else”, while for older targets, simply having someone else handle customer service calls was preferred (chi square = 15.581,  $p < .001$ ).

Perceived Age of Target. In response to the lack of effects for so many of the scenarios, a manipulation check was performed to ensure that participants perceived targets as either younger or older. Using four questions from the recognition recall, an index of age awareness was computed. For each of the two recognition recall exercises, there were two items that asked about the age of the target in that scenario. An index was created by coding the number of correct responses to these questions. Forty-three participants not answering all four questions correctly were removed from the data analysis and replication analyses were redone. No additional significant effects were found.

Qualification of Target. For scenarios with significant differences between target ages, the possibility that differences in ratings of old and young targets were due to differences in perceived qualifications rather than age independently was examined in hierarchical regression.

Qualification scales for each scenario were created by factor analyzing likelihood items using principal axis factoring and a direct oblimin rotation. For “Lack of Creativity,” a six factor solution was retained based on percent variance accounted for, scree plot evidence, and interpretability of factors. The factors were “Leadership and Decision Making,” “Creativity and Fluency,” “Interpersonal Skills,” “Persistence,” “Verbal Skills,” and “Written Communication.” See Table 2 for a listing of the factors, their corresponding items, factor loadings, and reliabilities.

For “Resistance to Change,” likelihood items were factor analyzed using principal axis factoring and direct oblimin rotation. A one factor solution was retained for these items based on a particularly large first eigen value, interpretation of the scree plot, and interpretability of the factor. This factor was called “Personal Attributes.” See Table 3 for the items, factor loadings, and reliability of this factor.

Qualification of the target was operationalized using ratings of the target’s likelihood of having relevant skills and abilities. Composite scores on likelihood scales were entered into block one of a hierarchical regression and used to control for qualification. Age of the target was then entered into block two.

In both significant scenarios, age of the target was a significant predictor of outcome decisions after perceived qualifications were accounted for (Lack of Creativity (promotion decision),  $p < .05$ ; Lack of Creativity (outlook for success),  $p < .05$ ; Resistance to Change (anticipated difficulty getting Garfield to change),  $p < .001$ ; Resistance to Change (best solution),  $p < .001$ ). See Tables 4 and 5 for a more detailed presentation of the results of these analyses.

### Implicit Theory

For this study, a moderation model is assumed in which implicit theory and perceived qualification function as moderators of the relationship between target age and ratings (James and Brett, 1984).

General Implicit Theory. Reliability for the three general implicit theory items was .80. The items were averaged to form a single implicit theory score, according to methods used by Levy, Stroessner, and Dweck (1998). In contrast to Levy, Stroessner, and Dweck (1998), we elected not to dichotomize implicit theory scores to either entity or incremental theory. In the Levy et al. (1998) study, participants scoring between 3.0 and 4.0 were eliminated from the analyses under the assertion that they had an “undifferentiated” theory. It was reported that these eliminations only involved between 10 and 15% of the total sample, thus preventing an extreme groups design. In our sample, eliminating participants scoring between 3 and 4 would have required eliminating 24% of the sample. This was judged as unacceptable, and data were kept intact for purposes of this study.

General implicit theory was tested as a moderator of the relationship between target age and outcome decisions by including the target age for the relevant scenario and general implicit theory in block one of a hierarchical regression and the interaction between general implicit theory and target age in block two. No significant effects for general implicit theory were found (see Table 6).

Specific Implicit Theory. Factor analysis was done to reduce the 51 specific implicit theory items into conceptual scales. Items from the specific implicit theory measure were factored using principal axis factoring and a direct oblimin rotation. A six factor solution

was retained based on interpretation of the scree plot and interpretability of factors. See Table 7 for a listing of factors, items, loadings, and reliabilities.

Specific implicit theory was tested as a moderator of the relationship between target age and outcome decisions by placing the specific IT variables and the target age for the relevant scenario in block 1 of a hierarchical regression and the interactions between the specific IT variables and target age in block 2. No significant effects of the interaction were found (see Table 8).

Implicit Theory and Changeability Ratings. In Levy et al. (1993), implicit theory predicted attitudes, but actions were not investigated. It is possible that in our sample, implicit theory may predict participants' views of the targets' ability to change a skill or ability related to the job or situation at hand.

Using multivariate multiple regression and standard regression techniques as appropriate, both general and specific implicit theory were examined as predictors of changeability ratings for each scenario (see Table 9 for a complete listing of test values and significance levels). General implicit theory predicted changeability ratings for the "Resistance to Change" scenario ( $R^2 = .021, p < .05$ ).

Three specific implicit theory scales predicted changeability ratings in the "Untrainability" and "Resistance to change" scenarios. In "Untrainability," implicit theory of personal attributes ( $r = .949, p < .05$ ) predicted changeability ratings for persistence ( $p < .05$ ) and for development orientation ( $p < .01$ ). Implicit theory of written communication ( $r = .951, p < .05$ ) predicted changeability ratings for computer and technical skills ( $p < .05$ ) and development orientation ( $p < .05$ ). Implicit theory of oral skills ( $r = .953, p < .05$ ) predicted changeability ratings for computer and technical skills ( $p < .05$ ).

In the “Resistance to Change” scenario, the specific implicit theory variables predicted the single changeability rating made for that scenario, personal attributes ( $R^2 = .077$ ,  $p < .05$ ).

In all cases, entity theorists predicted more difficulty for targets to change attributes than did incremental theorists.

Entity  
Theorists  
Predicted  
More  
Difficulty  
for  
Targets  
to  
Change  
Attributes  
than  
did  
Incremental  
Theorists.

## CHAPTER V

### STUDY II - INTRODUCTION

In the previous study, Rosen and Jerdee's (1976b) findings that older workers were consistently rated more poorly than younger workers were not replicated. Only two out of the five scenarios in the present study revealed significant differences in outcome according to the age of the employee in the scenario.

A possible explanation for this is that the differences in the measures used by Rosen and Jerdee (1976b) and the present study contributed to the discordance of the results. In the present study, participants completed the original measures, but were also asked to make ratings of each target on a set of skills or abilities in terms of the target's likelihood of possessing that skill or ability and of the difficulty with which he could change it. It would be reasonable to argue that completing these additional items sensitized them to the true qualifications and characteristics of the person and inhibited the "knee-jerk" stereotypical judgment that may have produced Rosen and Jerdee's (1976b) effects.

The second study in this line of research eliminated the additional measures included in the first study and returned the stimulus materials as closely as possible to the format used in the original study. Whether or not the stimulus materials included pictures was also varied in order to investigate the possibility that the pictures somehow affected the results.

CHAPTER VI  
STUDY II - METHODS

Participants

Participants (N=135) were undergraduate students at a southeastern university. The sample was comprised of 82 males and 51 females. Participants' ages ranged from 17 to 30 years of age (M=19.5, SD=1.67), and they had completed an average of 4 semesters in college. One hundred and twenty-five had worked at a paid job before, and 73 had held a full time position in the past. Eighty-one had part time jobs most recently.

Materials

In-Basket Task. The in-basket task used in this study contained the same scenarios as in the first study. The scenarios were returned to the original order of presentation, and measures of qualification, changeability, implicit theory, and recognition were removed.

Two versions of the task were presented, one containing pictures of the targets to be evaluated (see Appendix F) and one containing no pictures at all (see Appendix G). In the pictured version, the pictures used in the first study were retained, and were randomly assigned to each scenario.

Each participant received one randomly assigned version of the task to complete.

## CHAPTER VII

### STUDY II - ANALYSIS AND RESULTS

#### Replication

Significant differences between ratings of old and young targets were found on only one rating in one scenario. For resistance to change, the perceived difficulty encountered in trying to convince an older employee to change his behavior was rated higher for older targets ( $M=3.33$ ) than for younger targets ( $M=2.84$ ) ( $t=-3.238$ ,  $p<.01$ ). Participants also recommended different strategies for dealing with the problem, depending on the age of the target ( $\text{chi-square} = 14.632$ ,  $p<.001$ ). For older targets, having someone else handle the calls was preferred, while a conversation to convince Garfield to change was preferred for younger targets. For a complete listing of means and significance levels, see Table 10.

## CHAPTER VIII

### STUDY II – DISCUSSION

The results of this study replicated those found in Study I. That is, there was very little evidence for systematic discrimination against older workers. Finding this result a second time lends strength to the finding. The implications of the results of Studies I and II will be in the following section.

## CHAPTER XIII

### GENERAL CONCLUSIONS AND RECOMMENDATIONS

While the original hypotheses put forward for the first study were not supported, there is surely something to learn from the results that were obtained. In both studies, there was limited evidence for the widespread age discrimination reported in the original Rosen and Jerdee (1976b) study. The fact that there were so few significant differences in participants' treatment of older and younger job candidates and in their ratings of peoples' ability to change things about themselves at both young and old ages is supportive of a more "ageless" view of working people.

A possible explanation for the results is that there simply is not as much age discrimination now as there was in the mid 1970's. Since the 1976 study was done, two amendments have been made to the ADEA, as well as substantial precedence set in case law that makes overt, intentional age discrimination an undesirable practice in industry. Medical advances have also been made, making it possible for older people to feel healthier and possibly retain the same level of functioning they had when they were younger for a longer period of time. Finally, the fact that the baby boomers are entering the age group in question means that there are more older people in organizations. Societal attitudes may have changed in order to accommodate this national demographic shift. As a result of some or all of these factors, society may have become less tolerant of age discrimination and today's college students are less discriminatory than those of twenty-five years ago.

Despite the nature of the general findings, one specific finding did appear consistently throughout both studies. In both cases, older adults were perceived as being more resistant to change than younger adults. Interestingly, “Resistance to Change” was also one of the few scenarios in which implicit theory predicted changeability ratings, and the only one in which general implicit theory was a predictor of changeability ratings. A possible reason for this finding becomes apparent upon examination of the scenarios themselves. The “Resistance to Change” scenario was the only one that did not include a personnel file containing information about the individual in question. In all the other scenarios, information about the target of the memo was given, including birth place, marital status, work experience, and comments from previous reviews or reports. The only information available in the “Resistance to Change” scenario was that the target was “older” or “younger” and how long he had been with the company and in the current position. The wording of the scenario placed the target into the “older” or “younger” group, thus framing them as a group member rather than as an individual. So, in this situation, participants may have simply relied on stereotype-based information because it was most diagnostic. In other situations where individuating information was available, there was no need to rely on a stereotype because other, more useful information was available.

This possibility has interesting implications. It would suggest that in personnel decisions, it is important to give decision makers as much relevant information as possible. In doing so, the probability of making a decision based on stereotypical information is lessened because information about the individual is available. The fact that participants rated older and younger targets the same when individuating information was available supports the notion that people are less likely to succumb to stereotypes when information about a specific

individual is available (Bodenhausen, 1990; Macrae, Hewstone, and Griffiths, 1993; Brewer, 1988; Fiske and Neuberg, 1990).

### Implicit Theory

The hypothesis that implicit theory would serve as a moderator of the relationship between target age and outcome ratings was also not supported. However, implicit theory, particularly specific implicit theory, did predict perceptions of the targets' difficulty changing job-relevant qualities about themselves in certain scenarios. One possible explanation is that, while implicit theory is useful for predicting attitudes, it is not as useful for predicting actions. Entity theorists reported that targets would have a more difficult time changing things about themselves than did incremental theorists. However, this difference in ratings did not change with age and did not affect outcome ratings. That is, despite believing that the target individual would have more difficulty changing things about himself, these beliefs did not relate to the decision to send the individual to training or to give him a new position, both of which are situations requiring the learning of new things.

One might conclude from this, then, that while implicit theory does reflect an individual's attitudes, it does not necessarily manifest itself in terms of actions. This conclusion suggests an answer to the question raised initially about implicit theory and stereotypes. That is, does implicit theory only predict *having* a stereotype, or does it also predict *using* stereotypical beliefs in decision-making? Though we did not have an explicit measure of stereotype endorsement present in this study, work by Levy, Stroessner, and Dweck (1998) has shown implicit theory to be a reliable and unique predictor of the endorsement of stereotypical views. Though operating on assumption, we may suggest that

there are some motivating factors that cause entity theorists to move beyond stereotype-based information to individuating information when actually making a personnel decision.

In the workplace, a motivating factor may be accountability for the outcome of one's decisions. Being accountable to specific others can cause people to adjust their decision-making strategy accordingly (Tetlock, 1992). Decision-makers shape their judgment strategies based on the opinion of the audience to which they are accountable (Tetlock, Skitka, & Boettiger, 1989). In the workplace, where decisions based on stereotypical information can result in great expense on the legal, interpersonal, and public relations fronts, the norm is likely to be geared toward fair, objective decision making. The knowledge of the damage that stereotype-based decision making can do to both the individual and the organization may motivate even those with active stereotypes to make personnel decisions based on individuating information.

Another possible explanation for this result is a lack of correspondence between the implicit theory measures and the outcomes the researcher wished to predict. In the implicit theory measure used in the present study, participants were asked to agree or disagree with the statement that "people can change their (skill or ability)." This very general question may have led participants to answer the question with regard to themselves or to people in their everyday lives, which were in all probability from a demographic similar to theirs. This presents a problem because this measure was used to predict beliefs and outcomes of people older than the participants in this study.

Further research may consider tailoring implicit theory measures to different age groups and testing the predictive power of an implicit theory measure targeted specifically to the age of the person to be rated. This modification should address any potential mismatch

between the age of the individual being rated in the implicit theory measure and the age of the individual in the personnel decision. Research by Heckhausen, Dixon, and Baltes (1989) has shown that people view different abilities as peaking and declining, and the declines has having differing rates of controllability at different ages. This suggests that if individuals were given a specific age or age group to consider when completing an implicit theory measure, they may report different implicit theories for different age groups.

A final possible contributor to the lack of moderation by implicit theory is the question of levels of measurement. Implicit theory was measured on a general scale. Even in the specific implicit theory measure, participants were asked to consider people in general and were not given a situational context. In contrast, the relationship that implicit theory was expected to moderate was one of a specific nature, dealing with appropriate actions in a situation involving a specific person. Expectancy-value models of behavior (cf. Fishbein, 1979, Triandis, 1979) posit that attitudes best predict behavior when both are specific. Future research may address this concern by attempting to predict more general classes of actions, or by making the implicit theory measure more specific.

This study suffers from the same limitation that the original (Rosen and Jerdee, 1976a) study did: sample. In both studies, the sample was made up of college students from a technical university. It would be helpful to replicate the findings of this set of studies with alternate samples. A sample from the actual working population would be especially beneficial, as corporate attitudes and culture, as well as personal experience with older workers may produce different responses than those obtained in the present studies. Also worth examining would be a college sample from a liberal arts institution. It is possible that,

due to the extensive technical training at the university providing the present samples, participants took an exceptionally analytic view when making their decisions.

An additional limitation is the contrived nature of the task. Even though effort was made to make the task as true to life as possible, it was still performed in a laboratory setting, and participants had full knowledge that their decisions would not be implemented. In actual organizations, personnel decisions have the potential to affect both the decision maker and the employees for whom the decision is relevant. The considerations weighed when making a personnel decision in a real organization are very likely different from those weighed when making decisions in this task. In general, the context of the decision is different and may produce a different pattern of results. Further research should be undertaken to examine the role of organizational context in personnel decision-making.

## CHAPTER XIV

### REFERENCES

Age Discrimination in Employment Act of 1967 (as amended in 1978 and 1986), 29 U.S.C., 621.

American Association of Retired Persons (2000). American Business and Older Employees. Washington, DC: Author.

American Association of Retired Person. (1992). Age discrimination on the job [Brochure]. Washington, DC: Author.

Andrews, K. & Maurer, T. (2000). Beliefs about the ability and inclination of older workers to develop their career-relevant skills: Relationships with implicit theories, beliefs about decline of abilities and observer goal orientation. Unpublished Master's Thesis.

Avolio, B. & Waldman, D. (1990). An examination of age and cognitive test performance across job complexity and occupational types. Journal of Applied Psychology, 75(1), 43-50.

Avolio, B., Waldman, D., & McDaniel, M. (1990). Age and work performance in nonmanagerial jobs: The effects of experience and occupational type. Academy of Management Journal, 33(2), 407-422.

Bellezza, F.S. & Bower, G.H. (1981). Person stereotypes and memory for people. Journal of Personality and Social Psychology, 41(5), 856-865.

Bergen, R. (1991). Beliefs about intelligence and achievement-related behaviors. Unpublished doctoral dissertation. University of Illinois, Champaign-Urbana.

Bodenhausen, G. (1990). Stereotypes as judgmental heuristics: Evidence of circadian variations in discrimination. Psychological Science, 1(5), 319-322.

Brewer, M. (1988). A dual process model of impression formation. In R. Wyer & T. Srull (Eds.), Advances in social cognition (Vol. 1, pp.1-36). Hillsdale, NJ: Erlbaum.

Cantor, N. & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. Journal of Personality and Social Psychology, 35, 38-48.

Cohen, C.E. (1981). Person categories and social perception: Testing some boundaries of the processing effects of prior knowledge. Journal of Personality and Social Psychology, 40, 441-452.

Cleveland, J.N., Festa, R.M., & Montgomery, L. (1988). Applicant pool composition and job perceptions: Impact on decisions regarding an older applicant. Journal of Vocational Behavior, 32, 112-125.

Devine, P.G. (1989). Stereotypes and prejudice: Their automatic and controlled components. Journal of Personality and Social Psychology, 56(1), 5-18.

Doering, M., Rhodes, S.R., & Schuster, M. (1983). The aging worker. Sage: Beverly Hills, CA.

Dweck, C., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. Psychological Inquiry, 6(4), 267-285.

Dweck, C., Hong, Y., & Chiu, C. (1993). Implicit theories: Individual differences in the likelihood and meaning of dispositional inference. Personality and Social Psychology Bulletin, 19(5), 644-656.

Equal Employment Opportunity Commission Online Statistics Database. Available: <http://www.eeoc.org>.

Erber, R., & Fiske, S. (1984). Outcome dependency and attention to inconsistent information. Journal of Personality and Social Psychology, 47(4), 709-726.

Erber, J.T. & Prager, I.G. (1997). Age and forgetfulness: Absolute versus comparison decisions about capability. Experimental Aging Research, 23(4), 355-367.

Feldman, J.M. (1972). Stimulus characteristics and subject prejudice as determinants of stereotype attribution. Journal of Personality and Social Psychology, 21(3), 333-340.

Feldman, J.M. & Hilterman, R.J. (1975). Stereotype attribution revisited: The role of stimulus characteristics, racial attitude, and cognitive differentiation. Journal of Personality and Social Psychology, 31(6), 1177-1188.

Finkelstein, L.M., Burke, M.J., and Raju, N.S. (1995). Age discrimination in simulated employment contexts: An integrative analysis. Journal of Applied Psychology, 80(6), 652-663.

Fishbein, M. (1979). A theory of reasoned action: Some applications and implications. In H.E. Howe, Jr. (Ed.), Nebraska Symposium on Motivation. Lincoln, NE: University of Nebraska Press, pp. 65-116.

Fiske, S. (1998). Stereotyping, prejudice, and discrimination. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), The handbook of social psychology (pp. 357-411). New York, NY: McGraw-Hill.

Fiske, S. & Neuberg, S. (1990). A continuum model of impression formation: From category-based to individuating processes as a function of information, motivation, and attention. In M.P. Zanna (Ed.), Advances in experimental psychology (Vol. 23, pp. 1-108). San Diego, CA: Academic Press.

Forteza, J., & Prieto, J. (1994). Aging and work behavior. Handbook of Industrial and Organizational Psychology Vol. 4, 2<sup>nd</sup> ed. Consulting Psychologists Press, Inc: Palo Alto, CA.

Fullerton, H.N. (1999, November). Labor force projections to 2008: Steady growth and changing composition. Monthly Labor Review, 19-32.

Fyock, J. & Stangor, C. (1994). The role of memory biases in stereotype maintenance. British Journal of Social Psychology, 33, 331-343.

Hassel, B.L., & Perrewe, P.L. (1995). An examination of beliefs about older workers: do stereotypes still exist? Journal of Organizational Behavior, 47, 269-289.

Heckhausen, J. & Baltes, P.B. (1991). Perceived controllability of expected psychological change across adulthood and old age. Journals of Gerontology, 46 (4), 165-173.

Heckhausen, J., Dixon, R.A., & Baltes, P.B. (1989). Gains and losses in development throughout adulthood as perceived by different age groups. Developmental Psychology, 25, 109-121.

Hunter, J.E. & Hunter, R.F. (1984). Validity and utility of alternative predictors of job performance. Psychological Bulletin, 96(1), 72-98.

Institute for Scientific Information Citation Database (2000) online database. Available: [http://www.library.gatech.edu/databases\\_frame.htm](http://www.library.gatech.edu/databases_frame.htm).

James, L.R. & Brett, J.M. (1984). Mediators, moderators, and tests for mediation. Journal of Applied Psychology, 69(2), 307-321.

Johnston, W.B. & Packer, A.H. (1987). Workforce 2000: Work and workers for the twenty-first century. Indianapolis, IN: Hudson Institute.

Lawrence, B.S. (1987). An organizational theory of age effects. In S. Bacharach & N. DiTomaso (Eds.), Research in the sociology of organizations (Vol. 5, pp. 37-71). Greenwich, CT: JAI Press.

Lawrence, B.S. (1988). New wrinkles in the theory of age: Demography, norms, and performance ratings. Academy of Management Journal, 31, 309-327.

Lee, J.A. & Clemons, T. (1985). Factors affecting employment decisions about older workers. Journal of Applied Psychology, 70(4), 785-788.

Levy, S.R., Stroessner, S.J., & Dweck, C.S. (1998). Stereotype formation and endorsement: The role of implicit theories. Journal of Personality and Social Psychology, 74(6), 1421-1436.

Locksley, Stangor, Hepburn, Groszky, and Hochstrasser (1984). The ambiguity of recognition memory tests of schema theories. Cognitive Psychology, 16(4), 421-448.

Macrae, C., Hewstone, M., & Griffiths, R. (1993). Processing load and memory for stereotype-based information. European Journal of Social Psychology, 23(1), 77-87.

Maurer, T. (2000). Career-relevant learning and development, worker age, and beliefs about development capability. Manuscript in preparation.

Maurer, T., & Andrews, K. (1999). A model of stereotypes and beliefs about the learning and development capabilities of older workers. Manuscript in preparation.

Maurer, T., Andrews, K., & Pierce, H. (2000). Toward an understanding of beliefs about the "improvability" of career-relevant skills : Integrating job/competency analysis with employee development. Paper in preparation.

Maurer, T. & Rafuse, N. (2000). Age differences in training and development opportunities at work: Legal and behavioral concerns within a changing workplace. Manuscript in preparation.

Maurer, T. & Taylor, M.A. (1994). Is sex by itself enough? An exploration of gender bias issues in performance appraisal. Organizational Behavior and Human Decision Processes, 60, 231-251.

McEvoy, G., & Cascio, W. (1989). Cumulative evidence of the relationship between employee age and job performance. Journal of Applied Psychology, 74(1), 11-17.

Neuberg, S., & Fiske, S. (1987). Motivational influences on impression formation: Outcome dependency, accuracy-driven attention, and individuating processes. Journal of Personality and Social Psychology, 53(3), 431-444.

Neugarten, B.L., & Danan, N. (1973). Sociological perspectives on the life cycle. In P.O. Baltes and K.W. Schaie (Eds.), Lifespan developmental psychology: Personality and socialization (pp. 53-69). New York: Academic Press.

Packer, M. (1987). Social interaction as practical activity: Implications for the study of social and moral development. Moral Development Through Social Interaction. John Wiley and Sons: New York, NY.

Rhodes, S.R. (1983). Age-related differences in work attitudes and behavior. A review and conceptual analysis. Psychological Bulletin, *93*, 328-367.

Rhodes, S., & Doering, M. (1983). An integrated model of career change. Academy of Management Review, *8*(4), 631-639.

Rosen, B. & Jerdee, T. (1976a). The nature of job-related age stereotypes. Journal of Applied Psychology, *61*(2), 180-183.

Rosen, B. & Jerdee, T. (1976b). The influence of age stereotypes on managerial decisions. Journal of Applied Psychology, *61*(4), 428-432.

Rothbart, M., Evans, M., & Fulero, S. (1979). Recall for confirming events: Memory processes and the maintenance of social stereotypes. Journal of Experimental Social Psychology, *15*, 342-355.

Ruscher, J., & Fiske, S. (1990). Interpersonal competition can cause individuating processes. Journal of Personality and Social Psychology, *58*(5), 832-843.

Schmidt, F.L. & Hunter, J.E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological Bulletin, *124*(2), 262-274.

Srull, T.K., Lichtenstein, M., & Rothbart, M. (1985). Associative storage and retrieval processes in person memory. Journal of Experimental Psychology, *11*, 316-345.

Stagner, R. (1985). Aging in industry. Handbook of the Psychology of Aging. Van Nostrand Reinhold Co., Inc.: New York, NY.

Tetlock, P.E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol.23, pp. 331-376). San Diego, CA: Academic Press.

Tetlock, P.E., Skitka, L., & Boettger, R. (1989). Social and cognitive strategies for coping with accountability: Conformity, complexity, and bolstering. Journal of Personality and Social Psychology, *57*, 632-640.

Triandis, H.C. (1979). Values, attitudes, and interpersonal behavior. In H.E. Howe, Jr. (Ed.), Nebraska Symposium on Motivation. Lincoln, NE: University of Nebraska Press, pp. 195-258.

Upshaw, H.S. (1962). Own attitude as an anchor in equal-appearing intervals. Journal of Abnormal and Social Psychology, 64(2), 85-96.

Von Hippel, W., Jonides, J., Hilton, J., Narayan, S. (1993). Inhibitory effect of schematic processing on perceptual encoding. Journal of Personality and Social Psychology, 64(6), 921-935.

Waldman, D., & Avolio, B. (1986). A meta-analysis of age differences in job performance. Journal of Applied Psychology, 71(1), 33-38.

Warr, P. (1994). Age and employment. Handbook of Industrial and Organizational Psychology Vol. 4, 2<sup>nd</sup> ed. Consulting Psychologists Press, Inc: Palo Alto, CA.

Wyer, R.S. & Martin, L.L. (1986). Person memory: The role of traits, group stereotypes and specific behaviors in the cognitive representation of persons. Journal of Personality and Social Psychology, 50, 611-675.

Wyer, R.S., Bodenhausen, G.V., & Srull, T.K. (1984). The cognitive representation of persons and groups and its effect on recall and recognition memory. Journal of Experimental Social Psychology, 20, 445-469.

Table 1: Means, test values, and significance levels for replication analyses in present study (Study 1) and Rosen and Jerdee (1976b)

	Present study		1976b		
	N=197		N=142		
<u>Cautiousness, Slowness of Judgment</u>					
Accept-Reject	$\chi^2 = 1.663$	accept (young) Accept (old)	42% 34%	$\chi^2 = 3.48^*$	25% 13%
Suitability for the job	$t = 1.269$	M (young) M (old)	3.78 3.58	$t = 2.91^{**}$	3.46 2.97
<u>Resistance to Change</u>					
Difficulty to change	$\chi^2 = 20.215^{***}$	M (young) M (old)	3.37 3.96	$t = 2.41^*$	2.76 3.13
Best option	$\chi^2 = 15.581^{***}$	Ultimatum (young) Ultimatum (old) Talk (young) Talk (old) Else do calls (young) Else do calls (old)	42 25 39 31 14 37	$\chi^2 = 9.84^*$	NR NR 65% 42% 32% 55%
<u>Untrainability</u>					
Train at company expense	$t = 1.383$	M (young) M (old)	3.24 2.95	$t = 2.52^*$	3.63 2.95
Train at own expense	$t = 1.626$	M (young) M (old)	4.02 3.68		NR NR
Fire and rehire	$t = .374$	M (young) M (old)	3.74 3.66	$t = 2.40^*$	2.53 3.21
<u>Lack of Creativity</u>					
Would you promote?	$\chi^2 = 5.625^*$	Yes (young) Yes (old)	75 62	$\chi^2 = 9.75^{**}$	54% 25%
Outlook for success	$t = 2.191^*$	M (young) M (old)	4.54 4.22		NR NR

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Disinterest in Technological Change

Do not grant request	t = .770	M (young) M (old)	3.46 3.30	t = 5.01**	2.38 3.49
Attend at own expense	t = .679	M (young) M (old)	3.23 3.07		NR NR
Allocate funds	t = -.318	M (young) M (old)	3.69 3.76		NR NR
Share of budget	t = 1.330	M (young) M (old)	3.86 3.59		NR NR
Keep up to date	t = -.981	M (young) M (old)	4.37 4.54	t = 3.79**	4.97 4.35

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Total Significant Effects

4

9

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\* p<.05

\*\*p<.01

\*\*\*p<.001

NR: value not reported

Table 2: Factors, representative items, factor loadings, and reliabilities for qualification in “Lack of Creativity”

<b>Factor, Items</b>	<b>Factor Loadings</b>	<b>Alpha Reliability</b>
<b>LEADERSHIP AND DECISION MAKING</b>		.76
decision making	.577	
leadership	.546	
<b>CREATIVITY AND FLUENCY</b>		.80
current ideas, trendy	-.785	
innovation	-.669	
<b>INTERPERSONAL SKILLS</b>		.57
interpersonal skills	.755	
integrity	.500	
<b>PERSISTENCE</b>		.62
persistence	.641	
energy	.468	
<b>VERBAL SKILLS</b>		.75
oral communication	-.694	
oral defense	-.532	
<b>WRITTEN COMMUNICATION</b>		
written communication	.637	

Table 3: Factors, representative items, factor loadings, and reliabilities for qualification in “Resistance to Change”

<b>Factor, Items</b>	<b>Factor Loadings</b>	<b>Alpha Reliability</b>
<b>PERSONAL ATTRIBUTES</b>		.80
kindness, friendliness	.770	
positive attitude	.760	

Table 4: Predictive power of age on outcomes for “Lack of Creativity” scenario, controlled for perceived qualification of target

Dependent Variable	Model	R <sup>2</sup> overall	p	R <sup>2</sup> change	p
Favorability of outlook for success	1*	.305	.000	.018	.029
	2**	.323	.000		
Would you promote this candidate?	1	.209	.000	.020	.029
	2	.229	.000		

\*Model 1 = perceived qualification composite variables as predictors

\*\*Model 2 = perceived qualification composite variables AND age of target as predictors

Table 5: Predictive power of age on outcomes for “Resistance to Change” scenario, controlled for perceived qualification of target

Dependent Variable	Model	R <sup>2</sup> overall	p	R <sup>2</sup> change	p
How much difficulty would you expect in getting Garfield to change his behavior?	1	.078	.000		
	2	.179	.000	.101	.000
Which of the following solutions is best?	1	.018	.068		
	2	.087	.000	.070	.000

\*Model 1 = perceived qualification composite variables as predictors

\*\*Model 2 = perceived qualification composite variables AND age of target as predictors

Table 6: Hierarchical regressions of age as a moderator of the general implicit theory/outcome relationship

Scenario	Dependent variable	Model	R <sup>2</sup> overall	p	R <sup>2</sup> change	p	
Cautiousness and slowness of judgment	Accept/Reject recommendation	1*	.012	.330			
		2**	.012	.529	.000	.931	
	Suitability for the job	1	.013	.307			
		2	.015	.435	.002	.541	
Disinterest in Technological Change	Do not grant Ralph Adams' request	1	.010	.400			
		2	.016	.393	.006	.282	
	Suggest Ralph attend at own expense during vacation	1	.003	.778			
		2	.008	.680	.005	.316	
	Allocate funds so Ralph can attend	1	.002	.842			
		2	.003	.914	.001	.674	
	Ralph wants to get his share of training budget	1	.010	.408			
		2	.010	.603	.000	.793	
	Ralph wants to keep up to date	1	.011	.346			
		2	.014	.453	.003	.477	
	Untrainability	Send Ronald for additional training at company expense	1	.013	.293		
			2	.014	.462	.001	.728
Suggest Ronald take a leave of absence and get the training at his own expense		1	.019	.168			
		2	.020	.291	.001	.671	

---

	Terminate Ronald and rehire a fully trained programmer	1	.005	.617		
		2	.006	.794	.000	.793
Lack of Creativity	Would you promote this candidate?	1	.030	.060		
		2	.041	.054	.011	.154
	How favorable is the outlook for successful performance if hired?	1	.027	.078		
2		.037	.076	.010	.180	
Resistance to Change	How much difficulty would you anticipate in getting Garfield to change his behavior?	1	.084	.000		
		2	.086	.001	.002	.514
	Which of the following solutions is best?	1	.084	.000		
2		.094	.000	.011	.144	

---

\*Model 1 = general implicit theory composites, age of target

\*\*Model 2 = interaction between general implicit theory composites and age of target

Table 7: Factors, items, factor loadings, and reliabilities for Specific Implicit Theory scales

<b>Factor, Items</b>	<b>Factor Loading</b>	<b>Alpha Reliability</b>
<b>PERSONAL ATTRIBUTES</b>		.89
persistence	.712	
patience	.609	
<b>TECHNICAL/MATHEMATICAL</b>		.76
data analysis	.559	
professional/technical knowledge	.555	
<b>ENTREPRENEURIAL</b>		.86
innovation	.594	
initiative	.593	
<b>WRITTEN COMMUNICATION</b>		.74
written communication	-.657	
written fact finding	-.516	
<b>DEVELOPMENT ORIENTATION</b>		.57
scholastic aptitude	-.542	
personal interest in learning	-.445	
<b>ORAL SKILLS</b>		.79
oral defense	-.655	
oral fact finding	-.619	

Table 8: Hierarchical regressions of age as a moderator of the specific implicit theory/outcome relationship

Scenario	Dependent variable	Model	R <sup>2</sup> overall	p	R <sup>2</sup> change	p	
Cautiousness and slowness of judgment	Accept/Reject recommendation	1*	.089	.016			
		2**	.111	.066	.022	.628	
	Suitability for the job	1	.044	.304			
		2	.077	.349	.032	.418	
Disinterest in Technological Change	Do not grant Ralph Adams' request	1	.021	.786			
		2	.042	.857	.021	.700	
	Suggest Ralph attend at own expense during vacation	1	.027	.655			
		2	.036	.919	.009	.948	
	Allocate funds so Ralph can attend	1	.062	.108			
		2	.096	.148	.034	.365	
	Ralph wants to get his share of training budget	1	.052	.195			
		2	.069	.446	.017	.777	
	Ralph wants to keep up to date	1	.029	.606			
		2	.055	.667	.026	.559	
	Untrainability	Send Ronald for additional training at company expense	1	.025	.705		
			2	.060	.593	.035	.367
Suggest Ronald take a leave of absence and get the training at his own expense		1	.055	.161			
		2	.099	.123	.044	.204	

---

	Terminate Ronald and rehire a fully trained programmer	1	.024	.728		
		2	.088	.218	.064	.062
Lack of Creativity	Would you promote this candidate?	1	.093	.013		
		2	.116	.055	.023	.612
	How favorable is the outlook for successful performance if hired?	1	.142	.000		
		2	.152	.000	.010	.908
Resistance to Change	How much difficulty would you anticipate in getting Garfield to change his behavior?	1	.143	.000		
		2	.155	.004	.012	.863
	Which of the following solutions is best?	1	.121	.001		
		2	.140	.012	.019	.703

---

\*Model 1 = specific implicit theory composites, age of target

\*\*Model 2 = interaction between specific implicit theory composites and age of target

Table 9: Implicit theory predicting ratings of targets' ability to change relevant attributes (multivariate multiple regression, Wilks' Lambda scores reported)

<u>Scenario</u>	<u>General IT</u>		<u>Specific Implicit Theory</u>		
	<u>Δ</u>	<u>p</u>	<u>Specific IT dimension</u>	<u>Δ</u>	<u>p</u>
Cautiousness and Slowness of Judgment	.991	.619	Personal attributes	.971	.132
			Technology	.996	.877
			Entrepreneurial	.979	.266
			Written communication	.982	.335
			Development orientation	.994	.764
			Oral skills	.988	.507
Disinterest in Technological Change	.986	.275	Personal attributes	.972	.081
			Technology	.974	.096
			Entrepreneurial	.989	.385
			Written communication	.993	.545
			Development orientation	.997	.782
			Oral skills	.993	.553
Untrainability	.983	.359	Personal attributes	.949	.021* persistence (.039) development orientation (.002)
			Technology	.997	.899
			Entrepreneurial	.992	.697
			Written communication	.951	.024* computer and technical skills (.032) development orientation (.011)
			Development orientation	.964	.079
			Oral skills	.953	.029* computer and technical skills
			Lack of creativity	.983	.859

			Technology	.950	.232
			Entrepreneurial	.962	.414
			Written communication	.919	.031* (no specific variable)
			Development orientation	.959	.372
			Oral skills	.952	.249
Resistance to change	$R^2 = .021$	.045*	Personal attributes	$R^2 = .077$	.019*
			Technology		
			Entrepreneurial		
			Written communication		
			Development orientation		
			Oral skills		

Table 10: Means and significance levels for each scenario in replication, Study II.

<b>Cautiousness, Slowness of Judgment</b>		
Accept-Reject	accept (young)	32
	Accept (old)	29
	Reject (young)	73
	Reject (old)	75
	Sig (p)	NS
Suitability for the job	M (young)	3.65
	M (old)	3.47
	Sig (p)	NS
<b>Resistance to Change</b>		
Difficulty to change	M (young)	2.93
	M (old)	3.33
	Sig (p)	.001***
Best option	Ultimatum (young)	19
	Ultimatum (old)	16
	Talk (young)	55
	Talk (old)	31
	Else do calls (young)	31
	Else do calls (old)	57
	Sig (p)	.001***
<b>Untrainability</b>		
Train at company expense	M (young)	3.83
	M (old)	3.61
	Sig (p)	NS
Train at own expense	M (young)	3.40
	M (old)	3.38
	Sig (p)	NS
Fire and rehire	M (young)	2.94
	M (old)	3.02
	Sig (p)	NS
<b>Lack of Creativity</b>		
Would you promote?	Yes (young)	64
	Yes (old)	54
	No (young)	41
	No (old)	51

	Sig (p)	NS
Outlook for success	M (young)	3.95
	M (old)	3.86
	Sig (p)	NS
<b>Disinterest in Technological Change</b>		
Do not grant request	M (young)	2.88
	M (old)	3.05
	Sig (p)	NS
Attend at own expense	M (young)	2.80
	M (old)	2.92
	Sig (p)	NS
Allocate funds	M (young)	4.25
	M (old)	4.08
	Sig (p)	NS
Share of budget	M (young)	3.70
	M (old)	3.61
	Sig (p)	NS
Keep up to date	M (young)	4.60
	M (old)	4.68
	Sig (p)	NS

APPENDIX A  
IN-BASKET TASK, STUDY I

*Please answer the following demographic questions. For each question, fill in the blank or circle your response choice. Circle only one choice for each item.*

What is your age? \_\_\_\_\_ years

How many semesters of college have you completed (including this one)?

\_\_\_\_\_ semesters

What is your major area of study?

\_\_\_\_\_

What is your gender (circle one):                      1. Male              2. Female

Have you ever worked at a paid job?                      1. Yes              2. No

Have you ever worked at a full time position?                      1. Yes              2. No

Your most recent job was:                      1. Full time              2. Part time

What was the longest time you worked at one place? \_\_\_\_\_ years \_\_\_\_\_ months

*If you are currently working at a full or part time job, either on or off campus, please fill out the rest of this page. If not, skip the rest of this page.*

*In the list below, check off all the responsibilities that apply to your current job. ALSO circle the one responsibility that best describes your current job.*

- Clerical
- Customer Service
- Food service
- Sales
- Marketing or merchandising
- Managerial
- Accounting or financial
- Personnel/Human resources
- Health or safety
- Production, manufacturing, building, or construction
- Engineering or design
- Maintenance
- Teaching or training
- Research

## **In-Basket Task**

### **Aim of this survey**

In the course of a busy workday, the typical manager is faced with a variety of decisions involving the behavior of other people. Some of these decisions involve personnel actions such as selection, promotion, and discipline. Other decisions involve more subtle questions, such as the choice of leadership style or a motivational approach. The aim of this exercise is to explore the ways in which managers form impressions, digest facts, size up situations, and determine appropriate administrative actions.

The exercise is in the form of a series of “in-basket” organizational problems that could arise during the course of a normal workday, along with a short questionnaire about business practices. The background information at the end is for our use in tabulating the responses.

### **The Situation**

Try to put yourself in the following situation: For several years you have been employed in various managerial jobs at FEDCO, an organization employing about 5,000 people. Recently the decision was made to add a new division, to be called METRO, and you have just been put in charge of this new division. As METRO’s manager, your responsibility is to act as trouble-shooter, resolving the daily problems and conflicts that come up. Your boss has asked you to take complete charge and make your own decisions. He has said, “Be decisive and I’ll back you to the hilt – as long as you are right.”

Currently, you are faced with a number of decisions and tasks represented by the attached in-basket items. For various reasons, you must act on these items yourself and cannot delegate them to others. Please indicate how you would react to each memorandum.

**Memorandum To:** Director, METRO Division

**From:** FEDCO

We have decided to hire a new Corporate Finance Officer to manage our substantial capital surplus, and I would like to get your opinion on a candidate for this position. The job requires an individual with a good knowledge of tax law and of finance and accounting, but this is more than a routine finance job. Our major stockholders have advised me that they want us to follow an aggressive, high-risk strategy with these surplus funds. Accordingly, we want a person who not only knows the field of finance, but also is capable of making quick judgments involving high risks, a person who can operate effectively under the pressures associated with high finance.

Our consultants have located a person who they think can handle the job, but I'm not sure. Therefore, I am checking it out with you and other key executives. There won't be time for you to meet the candidate, but I would like to get your reaction on the basis of the attached resume. Please get this back to me right away.

NAME: John Watkins  
POSITION APPLIED FOR: Finance Officer  
AGE: 29  
PLACE OF BIRTH: Chicago, Illinois  
MARITAL STATUS: Married, one daughter  
EDUCATION: Two years of college



**RELEVANT WORK EXPERIENCE:**

Assistant Vice President, Trust Department, First National Bank. Five years' experience in all phases of the trust department operation. Prior to that, family business.

**INTERVIEWER'S REMARKS:**

He is a ready conversationalist with a good sense of humor.  
Acceptable personal appearance.  
I'm impressed by his references. The people at First National seem to regard him quite favorably.

Excerpts from Consultant's report: This candidate has a good record of steady progress in the Trust Department of the First National Bank. On the other hand, he has little experience with high-risk, high-pressure situations.

For each skill, ability, or characteristic, please indicate how likely it is that this employee has this characteristic and how difficult you think it would be for them to change this about themselves. For example, if one of the words were "smart" you might circle "somewhat likely" to indicate that the person is somewhat likely to be smart and then circle "very difficult" because you believe that it would be very hard for this person to become any smarter than they are now.

	How likely is this person to have enough of this characteristic to allow them to succeed?					How difficult would it be for this person to improve this about themselves?				
	1	2	3	4	5	1	2	3	4	5
	not at all likely		somewhat likely		very likely	not at all difficult		somewhat difficult		very difficult
<b>Written Fact Finding:</b> Obtaining information from written materials	1	2	3	4	5	1	2	3	4	5
<b>Decisiveness:</b> Making decisions or taking action	1	2	3	4	5	1	2	3	4	5
<b>Energy:</b> Maintaining a high level of effort or activity	1	2	3	4	5	1	2	3	4	5
<b>Discipline:</b> Keeping yourself and others focused on accomplishing objectives	1	2	3	4	5	1	2	3	4	5
<b>Resistance to Stress:</b> Maintaining stable performance under circumstances such as time pressure, personal problems, or frequent deadlines	1	2	3	4	5	1	2	3	4	5
<b>Decision Making:</b> Developing and evaluating alternative solutions to problems, considering their short and long-range implications	1	2	3	4	5	1	2	3	4	5
<b>Planning:</b> Anticipating the future, establishing objectives, and developing means to achieve those objectives	1	2	3	4	5	1	2	3	4	5
<b>Data Analysis:</b> Performing arithmetic analyses and extracting relevant information from the data	1	2	3	4	5	1	2	3	4	5
<b>Interpreting Information:</b> Considering, integrating, and logically using information from a variety of sources	1	2	3	4	5	1	2	3	4	5
<b>Risk Taking:</b> Taking action when the consequences are difficult to measure or Predict	1	2	3	4	5	1	2	3	4	5

<b>Initiative:</b> Recognizing what should be done and pursuing the goal or task with minimal or no prodding or direction	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Problem Sensitivity:</b> Recognizing when a problem exists or is about to occur	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Mathematical Reasoning:</b> Defining a problem and then selecting a mathematical method or formula to address it	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Number Facility:</b> Adding, subtracting, multiplying, and dividing quickly and Correctly	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Inner Work Standards:</b> Striving to do your best, even when you could get by with Less	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Impact:</b> Making an impression on others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Integrity:</b> Observing ethical and professional standards in relationships with others (subordinates, peers, clients, customers, etc.)	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Relevant experience:</b> Has experience relevant to the job or situation at hand	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Aggressive:</b> Is forward and aggressive in working toward his/her goals	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Generally intelligent and knowledgeable:</b> Has a large base of knowledge gained from life experiences and basic schooling	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Quick thinking:</b> able to think of solutions to problems and come up with information quickly	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Confident:</b> confident in his/her ability to perform the necessary tasks to achieve specific goals.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

*Please make your accept-reject recommendation and your appraisal of the applicant's potential, on the basis of the information given. Since the information is quite limited, you will have to rely on your own immediate reaction to the candidate, recognizing of course that you might want to change it if you had more information.*

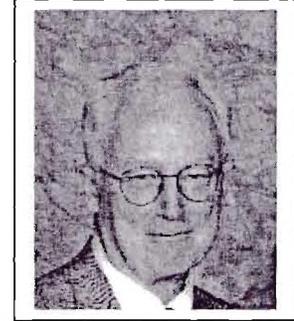
1. Accept-reject recommendation (check one): \_\_\_\_\_Accept \_\_\_\_\_Reject

2. Rating of suitability for the job (check one):

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

Background Information:

Ralph Adams, 63, has a two-year certificate in industrial technology. He has been a member of the production staff for ten years. With the recent expansion, he was reassigned from FEDCO main offices to the new METRO division. He has worked on routine assignments in time study and production scheduling. His performance evaluations have been "satisfactory."



**Memorandum To:** Director, METRO Division

**From:** Ralph Adams

**Subject:** Production Seminar in Atlanta

I would like to attend the production seminar later this month in Atlanta. Several other members of the production staff, including one new employee have attended similar seminars during the last few years. I feel that participants can learn about new theories and research relevant to production systems at these conferences. The conference is scheduled for two weeks, October 6-17. Please let me know as soon as possible.

Note: The company policy has been to pay full salary and all expenses for employees who are selected to attend conferences. Since the budget for such activities is limited and many requests come in each year, division directors must be very careful who they select.

Please evaluate the following managerial actions.

1. Do not grant Ralph Adams's request to attend the two week conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ralph attend at his own expense during his vacation.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Allocate funds so that Ralph can attend the conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

How would you size up Ralph's motives for wanting to attend the conference?

1. Ralph wants to get his share of the training budget.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

2. Ralph wants to keep up to date on production systems.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

*For each skill, ability, or characteristic, please indicate how likely it is that this employee has this characteristic and how difficult you think it would be for them to change this about themselves. For example, if one of the words were "smart" you might circle "somewhat likely" to indicate that the person is somewhat likely to be smart and then circle "very difficult" because you believe that it would be very hard for this person to become any smarter than they are now.*

	How likely is this person to have enough of this characteristic to allow them to succeed?					How difficult would it be for this person to improve this about themselves?				
	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Oral Communication:</b> Expressing ideas or viewpoints orally	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Oral Fact Finding:</b> Obtaining information from individuals by interviewing, probing, or asking questions	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Persistence:</b> Pursuing objectives despite such factors as fatigue, distractions, boredom, and resistance	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Interpreting Information:</b> Considering, integrating, and logically using information from a variety of sources	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Professional/Technical Knowledge:</b> Having an understanding of advanced principles, theories, and concepts in a specialized field	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Memorization:</b> Remembering a large amount of information over a long period of time	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Oral Comprehension:</b> Listening and understanding others when they speak	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Behavior Flexibility:</b> Adapting your behavior to different people or changing situations when motivated to reach a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Patience:</b> Able to continue trying or doing something for a long period of time without becoming frustrated	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Attentive:</b> listening and paying attention without losing focus.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Motivation:</b> a strong drive; willingness to work hard to accomplish a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

<b>Good listener:</b> ability to listen to someone and comprehend what they are saying without interrupting or losing focus	<b>1</b> not at all likely	<b>2</b>	<b>3</b> somewhat likely	<b>4</b>	<b>5</b> very likely	<b>1</b> not at all difficult	<b>2</b>	<b>3</b> somewhat difficult	<b>4</b>	<b>5</b> very difficult
<b>Committed to learning:</b> having a personal desire and motivation to learn something new	<b>1</b> not at all likely	<b>2</b>	<b>3</b> somewhat likely	<b>4</b>	<b>5</b> very likely	<b>1</b> not at all difficult	<b>2</b>	<b>3</b> somewhat difficult	<b>4</b>	<b>5</b> very difficult

**Memorandum To:** Director, METRO Division

**From:** Personnel Director

**Re:** Salary Review for Dan Hopkins

It is now time to make a decision on Dan Hopkins' salary, under our policy of annual reviews. Relevant information from his personnel file and our current compensation summary are attached. I have also attached a memo from Hopkins. Money is tight this year, but some adjustment may be in order, if we want to keep him.

Current Compensation Summary For Branch Managers:

Manager	Performance	Years in Position	Monthly Salary
Lambert	Satisfactory	Four	\$1900
Miller	Outstanding	Four	2200
Overstreet	Satisfactory	Two	1750
Pearce	Acceptable	Two	1700
Hastings	Satisfactory	Six	2200
Hopkins	Satisfactory	Five	1900

Performance Appraisal for Dan Hopkins:

Current Position: Northwest Branch Manager  
Years in Position: Five  
Current Monthly Salary: \$1900  
Prior to 1995: Partner in a family-owned store

Performance Appraisal for Current Year:

Operating efficiency: Satisfactory  
Creative Performance: Acceptable  
Technical Performance: Satisfactory  
Administrative Performance: Very good  
Overall Rating: Satisfactory

Summary comparison with others in similar positions: Satisfactory

Potential for development: Can handle present job well. Hopkins is a younger man who may be able to perform at a higher level, but prospects are not overly bright.

Personal Information: Age 30, married, two years of college

**Memorandum To:** Personnel Director

**From:** Dan Hopkins

I believe that a favorable decision should be made on a salary increase for me. My performance has been good and I feel that I deserve a substantial salary increase this year. To be more forthright about it, I feel that I am greatly underpaid at present and to continue on this basis would put an increasing strain on my relationship with METRO.

---

1. How concerned would you be about keeping Hopkins?

- |                          |                           |                          |                          |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1                        | 2                         | 3                        | 4                        | 5                        | 6                        |
| very<br>unconcerned      | moderately<br>unconcerned | slightly<br>unconcerned  | slightly<br>concerned    | moderately<br>concerned  | very<br>concerned        |

2. What is the absolute minimum monthly salary increase you think you could give him and still expect to keep him?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

3. How large a monthly increase do you recommend for Hopkins?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

**Memorandum To:** Director, METRO Division

**From:** Operations Officer

**Subject:** Creation and Staffing of Another Supervisory Position for Sales Information Unit

We now have 30 women working under the supervision of just one person in the sales information unit. As you know, the sales information clerks receive phone calls from our sales people in the field regarding prices, availability, replacement components, and delivery dates. Each information clerk works at a computer console which has been programmed to display current data on our inventory. The system is designed so that the clerk can give sales representatives information almost instantly.

Lately, our sales representatives have complained that they have been getting busy signals and when they finally do get through to a clerk, they often experience long delays. What is worse, they have complained about excessive mistakes by the sales information clerks.

I have discussed the problem with Ruth Farrell, the information unit supervisor, and she is quite eager to get some supervisory help. She feels that the addition of a second information unit supervisor would go a long way to remedy many of the problems in the units. In fact she has made some good suggestions on how we could split the unit into two units based on sales territories.

The supervisor of the new unit would have complete responsibility for monitoring the clerks' calls, checking on accuracy, and helping implement our manual operations when the computer is "down."

Turnover among our present staff of information clerks has been quite high. However, we do have one clerk, Ida Carson, who might be considered for the new supervisory position. Her file is enclosed. I'd be interested in your reactions. Please keep in mind that we need a person who is mentally alert, adaptable, and able to remain calm in crises caused by computer malfunctions.

NAME: Ida Carson

AGE: 28

MARITAL STATUS: married

EDUCATION: High School Graduate  
One semester junior college



PRIOR WORK EXPERIENCE:

Housewife, part-time secretary

SUPERVISORY COMMENTS:

Mrs. Carson has worked for FEDCO as an information clerk for three years. She appears to be a quiet person who follows orders well. Last year she missed about three weeks' work as a result of a gall bladder illness. She appears to be fully recovered now.

---

1. If the new supervisory position is created, how would you rate Mrs. Carson's suitability for the job?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

2. Accept-reject recommendation (check one): \_\_\_\_\_accept \_\_\_\_\_reject

3. How would you evaluate the idea of creating a second supervisory position for the sales information unit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

**Memorandum To:** Director, METRO Division

**From:** Carl Warren, Chief of Computer Operations

**Subject:** Programmer Efficiency

As you know, the new computers have been installed and we have now completely switched over to a new computer language for all of our control procedures. One of our programmers, Ronald Woodcock, is completely unfamiliar with the new language and has made several costly programming mistakes. Ronald was never exposed to the new language when he attended computer programming school five years ago.

Ronald would have to be retrained in order to be of much use to us in the future. The training could cost us over \$2000 in expenses and lost time. On the other hand, we could terminate Woodcock and hire a newly trained programmer in a matter of days.

I've attached Woodcock's personnel file. How do you think we should handle this problem?

NAME: Ronald Woodcock

AGE: 31

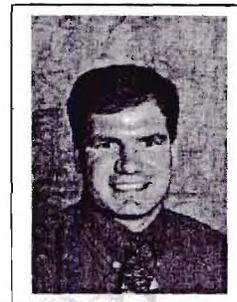
PLACE OF BIRTH: Burlington, VT

MARITAL STATUS: Married, two children

RELEVANT WORK EXPERIENCE:

MILITARY EXPERIENCE:

PERFORMANCE APPRAISAL:



Computer Programmer, First Federal Bank of Vermont. Sales clerk in a medium size firm in Burlington.

Army

“Seems to prefer routine assignments – probability of promotion indeterminate at this time.”

---

Please evaluate the following administrative actions:

1. Send Ronald for additional training at company expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ronald take a leave of absence and get the additional training at his own expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Terminate Ronald and hire a new fully-trained computer programmer.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

*For each skill, ability, or characteristic, please indicate how likely it is that this employee has this characteristic and how difficult you think it would be for them to change this about themselves. For example, if one of the words were "smart" you might circle "somewhat likely" to indicate that the person is somewhat likely to be smart and then circle "very difficult" because you believe that it would be very hard for this person to become any smarter than they are now.*

	How likely is this person to have enough of this characteristic to allow them to succeed?					How difficult would it be for this person to improve this about themselves?				
<b>Persistence:</b> Pursuing objectives despite such factors as fatigue, distractions, boredom, and resistance	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Discipline:</b> Keeping yourself and others focused on accomplishing objectives	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Resistance to Stress:</b> Maintaining stable performance under circumstances such as time pressure, personal problems, or frequent deadlines	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Interpreting Information:</b> Considering, integrating, and logically using information from a variety of sources	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Computer Skills:</b> Having knowledge of computer usage and applications including data entry, programming, operating systems, software, hardware, etc.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Professional/Technical Knowledge:</b> Having an understanding of advanced principles, theories, and concepts in a specialized field	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Memorization:</b> Remembering a large amount of information over a long period of time	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Scholastic Aptitude:</b> Learning new things readily	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Behavior Flexibility:</b> Adapting your behavior to different people or changing situations when motivated to reach a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Patience:</b> Able to continue trying or doing something for a long period of time without becoming frustrated	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

<b>Good listening skills:</b> ability to listen to someone and comprehend what they are saying without interrupting or losing focus	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Open minded:</b> open to new ideas; ability to listen to alternative suggestions without being judgmental.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Personal interest in learning:</b> having a personal desire and motivation to learn something new	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Attentiveness, alertness:</b> listening and paying attention without losing focus.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

**Memorandum To:** Director, METRO Division

**From:** Assistant Director of Marketing, Corporate Office

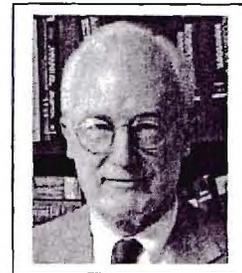
I have followed up on your suggestion that we see if any of our marketing representatives are qualified for promotion to the Marketing Director's job at METRO. There is one candidate, Lawrence Evans, who might be suitable for this position. He has been with FEDCO for about six years and during that time he has done a good job on somewhat routine assignments.

Would you please review this information and give us a verdict as soon as possible? If we have to go outside to fill this position, it might take us quite a while to find suitable recruits.

Please bear in mind that this is a responsible position that calls for a high degree of creativity and innovative thinking. We need a person who can develop fresh solutions to challenging problems involving buyers, designers, and our own marketing staff. Moreover, we need a farsighted person who can predict consumer tastes. A summary of Lawrence Evans's record is attached.

Lawrence Evans

Evans has been a member of our Central Division staff for about six years and his performance appraisals during that time have been favorable. His supervisor reports that he is a competent, methodical person. Before joining our company, Evans's experience was in retail sales, preceded by a civilian job on a Navy base. He is 61 years old, married with a son and a daughter.



1. Would you promote this candidate? \_\_\_\_\_yes \_\_\_\_\_no
2. How favorable is the outlook for successful performance by Evans in the new position if he's promoted?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

*For each skill, ability, or characteristic, please indicate how likely it is that this employee has this characteristic and how difficult you think it would be for them to change this about themselves. For example, if one of the words were "smart" you might circle "somewhat likely" to indicate that the person is somewhat likely to be smart and then circle "very difficult" because you believe that it would be very hard for this person to become any smarter than they are now.*

	How likely is this person to have enough of this characteristic to allow them to succeed?					How difficult would it be for this person to improve this about themselves?				
<b>Oral Communication:</b> Expressing ideas or viewpoints orally	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Written Communication:</b> Expressing ideas or viewpoints in writing	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Oral Fact Finding:</b> Obtaining information from individuals by interviewing, probing, or asking questions	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Written Fact Finding:</b> Obtaining information from written materials <b>Oral Presentation:</b> Making formal oral presentations	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Oral Defense:</b> Answering questions and responding to challenges	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Persistence:</b> Pursuing objectives despite such factors as fatigue, distractions, boredom, and resistance	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Social Awareness:</b> Perceiving subtle cues in the behavior of individuals or groups	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

<b>Behavior Flexibility:</b> Adapting your behavior to different people or changing situations when motivated to reach a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Decisiveness:</b> Making decisions or taking action	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Energy:</b> Maintaining a high level of effort or activity	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Resistance to Stress:</b> Maintaining stable performance under circumstances such as time pressure, personal problems, or frequent deadlines	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Innovation:</b> Producing unusual or clever ideas about a given topic or situation	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Persuasion:</b> Presenting information in order to influence the opinions or actions of others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Decision Making:</b> Developing and evaluating alternative solutions to problems, considering their short and long-range implications	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Organizing:</b> Systematically arranging your own work or the work of others for the most efficient accomplishment of a task	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Planning:</b> Anticipating the future, establishing objectives, and developing means to achieve those objectives	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Interpreting Information:</b> Considering, integrating, and logically using information from a variety of sources	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Risk Taking:</b> Taking action when the consequences are difficult to measure or predict	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Initiative:</b> Recognizing what should be done and pursuing the goal or task with minimal or no prodding or direction	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Leadership:</b> Getting others to perform a task or accomplish a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

<b>Oral Comprehension:</b> Listening and understanding others when they speak	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Fluency of Ideas:</b> Producing a number of ideas about a given topic	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Impact:</b> Making an impression on other	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Integrity:</b> Observing ethical and professional standards in relationships with others (subordinates, peers, clients, customers, etc.)	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Interpersonal Skills:</b> Maintaining productive working relationships with others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Good problem solver:</b> able to think of useful, practical solutions to problems	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Good listener:</b> ability to listen to someone and comprehend what they are saying without interrupting or losing focus	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Able to interpret statistics, data analysis:</b> able to read statistical information and explain it to others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>College or academic experience:</b> holds a college degree or has some formal schooling	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Current ideas, trendy:</b> Ideas are up to date, knows what is popular	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Sense of style, artistic:</b> the ability to put things together so that they look good as a unit	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Insightful:</b> able to see potential problems, to see parts of an issue or argument that others may miss.	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

Director, METRO Division  
FEDCO Corporate Headquarters  
METROpolis, USA

Dear Director:

I am writing you on behalf of the 2000 Panel of Advisors of the National Director's Conference Board. As you know, each of us on the Panel has agreed to contribute his views on a number of policy issues during the current year. Our research subcommittee has approved the attached questionnaire as an efficient means of gathering your views. Your response will be appreciated.

Sincerely,

Robert Hudson  
Chairman

---

#### NATIONAL DIRECTOR'S CONFERENCE OPINION SURVEY

1. How adequate are current business practices in regard to the following topics?

Health and Safety of Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

Treatment of Older Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

Treatment of Female Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

2. To what extent do you oppose or favor each of the following?

a.) Flexible work schedules for hourly paid employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

b.) Elimination of mandatory retirement ages (at age 65 or earlier)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

c.) Complete vesting of pension plans (employees get accumulated pension funds if they quit or are terminated before retirement)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

d.) Profit sharing for all employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

e.) Greater emphasis on Affirmative Action for...

Blacks

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Females

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Older Workers

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

f.) Company-provided day care facilities for pre-school children of employees

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

**Memo To:** Director, METRO Division

**From:** Sales Manager

**Subject:** Customer Complaints

I am sure you will recall that when you appointed me as sales manager you also emphasized to me that this was a sales-oriented, customer-oriented business and you advised me to come straight to you whenever I felt that other departments were not giving sufficient support to our sales staff. We now have encountered such a situation, and it seems to be centered on one individual, namely Alan Garfield, supervisor of our shipping department.

Basically what it amounts to is that our customers cannot get their inquiries about shipments answered satisfactorily. We have followed the practice of establishing a direct link between customers and the shipping department, so that customers can get the fastest and most accurate information possible on the status of their shipments. This has always worked well, until Garfield took over the department. Now, when anybody calls in with a question or complaint about a shipment, the people on Garfield's staff always switch the call to him, after which there is an annoyingly long wait. Then Garfield finally gets on the line and gives a complex, detailed explanation of shipping department problems, ending with a lecture on customer patience.

As you may know, Garfield is an older employee, with many years of service in this company but with only three months' experience in the shipping department job. His previous experience was in the credit department, purchasing department, and mail room.

When we promoted him to the job last fall, I attempted to impress on him the importance of being tactful with complaining customers, but it doesn't seem to have done any good. I would appreciate it if you would get this situation remedied as soon as possible, in order to ensure that our customers obtain satisfactory services from the shipping department.

---

1. How much difficulty would you anticipate in getting Garfield to change his behavior?

- No difficulty whatsoever
- Possibility of slight difficulty
- Moderate difficulty
- Fairly great difficulty
- Extreme difficulty

2. Which of the following solutions is best?

- An ultimatum: change or else
- A talk in which you encourage Garfield to change
- Suggest that he have someone else handle the calls
- Do nothing
- Tell the sales manager he must learn to live with complaints

*For each skill, ability, or characteristic, please indicate how likely it is that this employee has this characteristic and how difficult you think it would be for them to change this about themselves. For example, if one of the words were "smart" you might circle "somewhat likely" to indicate that the person is somewhat likely to be smart and then circle "very difficult" because you believe that it would be very hard for this person to become any smarter than they are now.*

	How likely is this person to have enough of this characteristic to allow them to succeed?					How difficult would it be for this person to improve this about themselves?				
<b>Oral Communication:</b> Expressing ideas or viewpoints orally	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Social Awareness:</b> Perceiving subtle cues in the behavior of individuals or groups	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Behavior Flexibility:</b> Adapting your behavior to different people or changing situations when motivated to reach a goal	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Discipline:</b> Keeping yourself and others focused on accomplishing objectives	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Resistance to Stress:</b> Maintaining stable performance under circumstances such as time pressure, personal problems, or frequent deadlines	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

<b>Oral Comprehension:</b> Listening and understanding others when they speak	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Resistance to Premature Judgment:</b> Withholding making final decisions until the important facts have been collected and evaluated	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Problem Sensitivity:</b> Recognizing when a problem exists or is about to occur	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Integrity:</b> Observing ethical and professional standards in relationships with others (subordinates, peers, clients, customers, etc.)	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Interpersonal Skills:</b> Maintaining productive working relationships with others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Objectivity:</b> Approaching situations without allowing personal biases to influence decisions	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Impact:</b> Making an impression on others	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Kindness, friendliness:</b> general kindness toward other (coworkers, superiors, subordinates, customers, etc.)	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Patient:</b> Able to continue trying or doing something for a long period of time without becoming frustrated	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult
<b>Positive attitude:</b> overall general upbeat attitude toward the particular task	1 not at all likely	2	3 somewhat likely	4	5 very likely	1 not at all difficult	2	3 somewhat difficult	4	5 very difficult

APPENDIX B  
RECOGNITION TASK

The following are all statements about **John Watkins, the candidate for the Corporate Finance Officer position**. Some of these statements are true, and were mentioned in the memo and personnel profile associated with him. Some of them are not. Please indicate whether each statement is true or false, and circle the number that best corresponds to how sure you are of the correctness of your answer.

	Is this statement true or false?		How sure are you that your response is correct?						
	True	False	Not sure at all	1	2	Moderately sure	3	4	5
He has had prior experience in finance	True	False	1	2	3	4	5		
He was a young man	True	False	1	2	3	4	5		
The consultant felt that he would have trouble following an aggressive strategy	True	False	1	2	3	4	5		
He has not had much on the job experience in financial jobs	True	False	1	2	3	4	5		
He had worked in a family business before	True	False	1	2	3	4	5		
The company was afraid he would switch jobs soon, making promotion not worthwhile	True	False	1	2	3	4	5		
He was married	True	False	1	2	3	4	5		
The company thought he was likely to make safe decisions.	True	False	1	2	3	4	5		
The company was concerned that he would retire too soon to make promoting him worthwhile	True	False	1	2	3	4	5		
The interviewer remarked that he would likely function well under the high demands of the job	True	False	1	2	3	4	5		
The interviewer rated his personal appearance as "acceptable"	True	False	1	2	3	4	5		
He had two years of college education	True	False	1	2	3	4	5		
The interviewer remarked that Watkins might have trouble keeping up with the pace of the job.	True	False	1	2	3	4	5		
He has spent time at many different jobs	True	False	1	2	3	4	5		
He was an older man	True	False	1	2	3	4	5		

The interviewer noted that Watkins was dressed in fashionable clothing	True	False	1	2	3	4	5
The interviewer reported that Watkins was dressed in clothing that was somewhat dated.	True	False	1	2	3	4	5
A concern for the company was that his knowledge may be obsolete	True	False	1	2	3	4	5
The interviewer said he had a good sense of humor	True	False	1	2	3	4	5
Watkins has an impressive attendance record.	True	False	1	2	3	4	5
Watkins seemed confident and motivated in the interview.	True	False	1	2	3	4	5
The references from his previous job were positive	True	False	1	2	3	4	5
He has the most recent knowledge in the field of finance.	True	False	1	2	3	4	5
He was previously employed at a bank	True	False	1	2	3	4	5
He had little experience with high-risk, high-pressure situations	True	False	1	2	3	4	5
He had one child	True	False	1	2	3	4	5

The following are all statements about **Alan Garfield, the shipping employee with customer service difficulties**. Some of these statements are true, and were mentioned in the memo and personnel profile associated with him. Some of them are not. Please indicate whether each statement is true or false, and circle the number that best corresponds to how sure you are of the correctness of your answer.

	Is this statement true or false?		How sure are you that your response is correct?				
			Not sure at all		Moderately sure		Completely sure
He had worked in the shipping department only a little while	True	False	1	2	3	4	5
He was described as "a young employee"	True	False	1	2	3	4	5
Garfield had been a very reliable and dependable employee in the past.	True	False	1	2	3	4	5
Garfield's attendance at work had been sporadic	True	False	1	2	3	4	5
There were customer service problems before Garfield took over the department	True	False	1	2	3	4	5
The manager writing the memo expected a lot of trouble getting Garfield to change his behavior	True	False	1	2	3	4	5
The customer service problems didn't begin until Garfield took over the department	True	False	1	2	3	4	5
The manager suggests that Garfield may be too grouchy to handle the job	True	False	1	2	3	4	5
He was described as otherwise friendly and outgoing with his coworkers	True	False	1	2	3	4	5
Garfield is pretty flexible, he likely will be able to change the way he does his job.	True	False	1	2	3	4	5
The manager writing the memo wanted you to fire Garfield	True	False	1	2	3	4	5
Garfield might be too used to doing things one way to change his behavior too easily	True	False	1	2	3	4	5

The manager thinks Garfield is under too much stress from dealing with family issues at home	True	False	1	2	3	4	5
The manager writing the memo wanted you to have a talk with Garfield	True	False	1	2	3	4	5
The manager thought it would be relatively easy to convince Garfield to change his behavior	True	False	1	2	3	4	5
He was described as "an older employee"	True	False	1	2	3	4	5
He had a habit of lecturing customers about patience	True	False	1	2	3	4	5
It was suggested that Garfield was just getting too slow to be able to handle the demands of the job.	True	False	1	2	3	4	5
The manager had previously spoken with Garfield about the importance of being tactful with customers	True	False	1	2	3	4	5
He had worked in the shipping department for a long time	True	False	1	2	3	4	5

APPENDIX C  
GENERAL IMPLICIT THEORY

**Please circle the number that you feel best describes your feelings about each statement.**

*1. The kind of person someone is is something basic about them and it can't be changed very much.*

1	2	3	4	5	6
strongly agree	agree	mostly agree	mostly disagree	disagree	strongly disagree

*2. People can do things differently, but the important parts of who they are can't really be changed.*

1	2	3	4	5	6
strongly agree	agree	mostly agree	mostly disagree	disagree	strongly disagree

*3. Everyone is a certain kind of person, and there is not much that they can do to really change that.*

1	2	3	4	5	6
strongly agree	agree	mostly agree	mostly disagree	disagree	strongly disagree

APPENDIX D  
SPECIFIC IMPLICIT THEORY

We are interested in your thoughts about whether people can change or improve certain things about themselves if they try. There may be some personal qualities which you feel people can definitely improve if they try. There may be other personal qualities which you feel are more difficult or impossible for people to change. There are no right or wrong answers. For each of the following personal characteristics, please indicate how much you agree or disagree with the idea that "People can improve their \_\_\_\_\_".

		Disagree strongly		Neither agree nor disagree		Agree strongly
1	People can improve their <b>Behavioral Flexibility</b> (Adapting your behavior to different people or changing situations when motivated to reach a goal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	People can improve their <b>Computer Skills</b> (Having knowledge of computer usage and applications including data entry, programming, operating systems, software, hardware, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	People can improve their <b>Data Analysis Skills</b> (Performing arithmetic analyses and extracting relevant information from the data)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	People can improve their <b>Decision Making skills</b> (Developing and evaluating alternative solutions to problems, considering their short and long-range implications)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	People can improve their <b>Decisiveness</b> (Making decisions or taking action)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	People can improve their <b>Discipline</b> (Keeping yourself and others focused on accomplishing objectives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	People can improve their <b>Energy</b> (Maintaining a high level of effort or activity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	People can improve their <b>Fluency of Ideas</b> (Producing a number of ideas about a given topic)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	People can improve their <b>Impact</b> (Making an impression on other)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	People can improve their <b>Initiative</b> (Recognizing what should be done and pursuing the goal or task with minimal or no prodding or direction)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	People can improve their <b>Inner Work Standards</b> (Striving to do your best, even when you could get by with less)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Disagree strongly		Neither agree nor disagree		Agree strongly
12	People can improve their <b>Innovation</b> (Producing unusual or clever ideas about a given topic or situation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	People can improve their <b>Insightfulness</b> (able to see potential problems, to see parts of an issue or argument that others may miss.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	People can improve their <b>Integrity</b> (Observing ethical and professional standards in relationships with others (subordinates, peers, clients, customers, etc.))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	People can improve their <b>Interpersonal Skills</b> (Maintaining productive working relationships with others)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	People can improve their skills in <b>Interpreting Information</b> (Considering, integrating, and logically using information from a variety of sources)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	People can improve their Leadership: Getting others to perform a task or accomplish a goal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	People can improve their <b>Mathematical Reasoning</b> (Defining a problem and then selecting a mathematical method or formula to address it)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	People can improve their <b>Memorization</b> skills (Remembering a large amount of information over a long period of time)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	People can improve their <b>Motivation level</b> (a strong drive; willingness to work hard to accomplish a goal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	People can improve their <b>Number Facility</b> (Adding, subtracting, multiplying, and dividing quickly and correctly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	People can improve their <b>Objectivity</b> (Approaching situations without allowing personal biases to influence decisions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	People can improve their <b>Oral Comprehension</b> (Listening and understanding others when they speak)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	People can improve their <b>Oral Defense</b> (Answering questions and responding to challenges)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	People can improve their <b>Oral Fact Finding</b> (Obtaining information from individuals by interviewing, probing, or asking questions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	People can improve their <b>Oral Presentation</b> (Making formal oral presentations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Disagree strongly		Neither agree nor disagree		Agree strongly
27	People can improve their <b>Organization</b> (Systematically arranging your own work or the work of others for the most efficient accomplishment of a task)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	People can improve their <b>Patience</b> (Able to continue trying or doing something for a long period of time without becoming frustrated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	People can improve their <b>Persistence</b> (Pursuing objectives despite such factors as fatigue, distractions, boredom, and resistance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	People can improve their <b>Persuasiveness</b> (Presenting information in order to influence the opinions or actions of others)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	People can improve their <b>Planning</b> skills (Anticipating the future, establishing objectives, and developing means to achieve those objectives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	People can improve their <b>Problem Sensitivity</b> (Recognizing when a problem exists or is about to occur)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	People can improve their <b>Professional/Technical Knowledge</b> (Having an understanding of advanced principles, theories, and concepts in a specialized field)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	People can improve their <b>Resistance to Premature Judgment</b> (Withholding making final decisions until the important facts have been collected and evaluated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	People can improve their <b>Resistance to Stress</b> (Maintaining stable performance under circumstances such as time pressure, personal problems, or frequent deadlines)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	People can improve their <b>Risk Taking</b> (Taking action when the consequences are difficult to measure or predict)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37	People can improve their <b>Scholastic Aptitude</b> (Learning new things readily)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	People can improve their <b>Social Awareness</b> (Perceiving subtle cues in the behavior of individuals or groups)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	People can improve their <b>Written Communication</b> (Expressing ideas or viewpoints in writing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	People can improve their <b>Written Fact Finding</b> (Obtaining information from written materials)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Disagree strongly		Neither agree nor disagree		Agree strongly
41	People can improve their <b>listening</b> skills (ability to listen to someone and comprehend what they are saying without interrupting or losing focus)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	People can improve their <b>problem solving</b> skills (able to think of useful, practical solutions to problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	People can improve their <b>Kindness or friendliness</b> (general kindness toward others (coworkers, superiors, subordinates, customers, etc.))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	People can improve their <b>Open mindedness</b> (open to new ideas; ability to listen to alternative suggestions without being judgmental.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	People can improve their <b>Personal interest in learning</b> (having a personal desire and motivation to learn something new)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46	People can improve their <b>Sense of style, artistic ability</b> (the ability to put things together so that they look good as a unit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47	People can improve their <b>Commitment to learning</b> (having a personal desire and motivation to learn something new)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48	People can improve their <b>Aggressiveness</b> (Is forward and aggressive in working toward his/her goals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49	People can improve their <b>Attentiveness</b> (listening and paying attention without losing focus.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50	People can improve their amount of <b>Relevant experience</b> (Has experience relevant to the job or situation at hand)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51	People can improve their <b>trendiness</b> (Ideas are up to date, knows what is popular)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E

AWARENESS

2025.11.10



APPENDIX F

IN-BASKET TASK, WITH PICTURES, STUDY II

Please answer the following demographic questions. For each question, fill in the blank or circle your response choice. Circle only one choice for each item.

What is your age? \_\_\_\_\_ years

How many semesters of college have you completed (including this one)?

\_\_\_\_\_ semesters

What is your major area of study?

\_\_\_\_\_

What is your gender (circle one):                      1. Male              2. Female

Have you ever worked at a paid job?                      1. Yes              2. No

Have you ever worked at a full time position?                      1. Yes              2. No

Your most recent job was:                      1. Full time              2. Part time

What was the longest time you worked at one place? \_\_\_\_\_ years \_\_\_\_\_ months

*If you are currently working at a full or part time job, either on or off campus, please fill out the rest of this page. If not, skip the rest of this page.*

*In the list below, check off all the responsibilities that apply to your current job. ALSO circle the one responsibility that best describes your current job.*

- Clerical
- Customer Service
- Food service
- Sales
- Marketing or merchandising
- Managerial
- Accounting or financial
- Personnel/Human resources
- Health or safety
- Production, manufacturing, building, or construction
- Engineering or design
- Maintenance
- Teaching or training
- Research

## **In-Basket Task**

### **Aim of this survey**

In the course of a busy workday, the typical manager is faced with a variety of decisions involving the behavior of other people. Some of these decisions involve personnel actions such as selection, promotion, and discipline. Other decisions involve more subtle questions, such as the choice of leadership style or a motivational approach. The aim of this exercise is to explore the ways in which managers form impressions, digest facts, size up situations, and determine appropriate administrative actions.

The exercise is in the form of a series of “in-basket” organizational problems that could arise during the course of a normal workday, along with a short questionnaire about business practices. The background information at the end is for our use in tabulating the responses.

### **The Situation**

Try to put yourself in the following situation: For several years you have been employed in various managerial jobs at FEDCO, an organization employing about 5,000 people. Recently the decision was made to add a new division, to be called METRO, and you have just been put in charge of this new division. As METRO’s manager, your responsibility is to act as trouble-shooter, resolving the daily problems and conflicts that come up. Your boss has asked you to take complete charge and make your own decisions. He has said, “Be decisive and I’ll back you to the hilt – as long as you are right.”

Currently, you are faced with a number of decisions and tasks represented by the attached in-basket items. For various reasons, you must act on these items yourself and cannot delegate them to others. Please indicate how you would react to each memorandum.

**Memorandum To:** Director, METRO Division

**From:** FEDCO

We have decided to hire a new Corporate Finance Officer to manage our substantial capital surplus, and I would like to get your opinion on a candidate for this position. The job requires an individual with a good knowledge of tax law and of finance and accounting, but this is more than a routine finance job. Our major stockholders have advised me that they want us to follow an aggressive, high-risk strategy with these surplus funds. Accordingly, we want a person who not only knows the field of finance, but also is capable of making quick judgments involving high risks, a person who can operate effectively under the pressures associated with high finance.

Our consultants have located a person who they think can handle the job, but I'm not sure. Therefore, I am checking it out with you and other key executives. There won't be time for you to meet the candidate, but I would like to get your reaction on the basis of the attached resume. Please get this back to me right away.

NAME: John Watkins

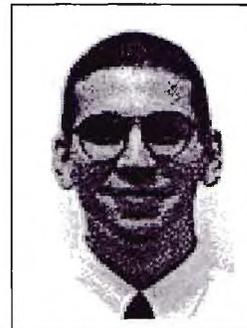
POSITION APPLIED FOR: Finance Officer

AGE: 29

PLACE OF BIRTH: Chicago, Illinois

MARITAL STATUS: Married, one daughter

EDUCATION: Two years of college



RELEVANT WORK EXPERIENCE:

Assistant Vice President, Trust Department, First National Bank. Five years' experience in all phases of the trust department operation. Prior to that, family business.

INTERVIEWER'S REMARKS:

He is a ready conversationalist with a good sense of humor.  
Acceptable personal appearance.  
I'm impressed by his references. The people at First National seem to regard him quite favorably.

Excerpts from Consultant's report: This candidate has a good record of steady progress in the Trust Department of the First National Bank. On the other hand, he has little experience with high-risk, high-pressure situations.

*Please make your accept-reject recommendation and your appraisal of the applicant's potential, on the basis of the information given. Since the information is quite limited, you will have to rely on your own immediate reaction to the candidate, recognizing of course that you might want to change it if you had more information.*

1. Accept-reject recommendation (check one): \_\_\_\_\_Accept \_\_\_\_\_Reject

2. Rating of suitability for the job (check one):

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

**Memo To:** Director, METRO Division

**From:** Sales Manager

**Subject:** Customer Complaints

I am sure you will recall that when you appointed me as sales manager you also emphasized to me that this was a sales-oriented, customer-oriented business and you advised me to come straight to you whenever I felt that other departments were not giving sufficient support to our sales staff. We now have encountered such a situation, and it seems to be centered on one individual, namely Alan Garfield, supervisor of our shipping department.

Basically what it amounts to is that our customers cannot get their inquiries about shipments answered satisfactorily. We have followed the practice of establishing a direct link between customers and the shipping department, so that customers can get the fastest and most accurate information possible on the status of their shipments. This has always worked well, until Garfield took over the department. Now, when anybody calls in with a question or complaint about a shipment, the people on Garfield's staff always switch the call to him, after which there is an annoyingly long wait. Then Garfield finally gets on the line and gives a complex, detailed explanation of shipping department problems, ending with a lecture on customer patience.

As you may know, Garfield is an older employee, with many years of service in this company but with only three months' experience in the shipping department job. His previous experience was in the credit department, purchasing department, and mail room.

When we promoted him to the job last fall, I attempted to impress on him the importance of being tactful with complaining customers, but it doesn't seem to have done any good. I would appreciate it if you would get this situation remedied as soon as possible, in order to ensure that our customers obtain satisfactory services from the shipping department.

---

3. How much difficulty would you anticipate in getting Garfield to change his behavior?

- No difficulty whatsoever
- Possibility of slight difficulty
- Moderate difficulty
- Fairly great difficulty
- Extreme difficulty

4. Which of the following solutions is best?

- An ultimatum: change or else
- A talk in which you encourage Garfield to change
- Suggest that he have someone else handle the calls
- Do nothing
- Tell the sales manager he must learn to live with complaints

**Memorandum To:** Director, METRO Division

**From:** Carl Warren, Chief of Computer Operations

**Subject:** Programmer Efficiency

As you know, the new computers have been installed and we have now completely switched over to a new computer language for all of our control procedures. One of our programmers, Ronald Woodcock, is completely unfamiliar with the new language and has made several costly programming mistakes. Ronald was never exposed to the new language when he attended computer programming school five years ago.

Ronald would have to be retrained in order to be of much use to us in the future. The training could cost us over \$2000 in expenses and lost time. On the other hand, we could terminate Woodcock and hire a newly trained programmer in a matter of days.

I've attached Woodcock's personnel file. How do you think we should handle this problem?

NAME: Ronald Woodcock

AGE: 60

PLACE OF BIRTH: Burlington, VT

MARITAL STATUS: Married, two children

RELEVANT WORK EXPERIENCE:

Computer Programmer, First Federal Bank of Vermont. Sales clerk in a medium size firm in Burlington.

MILITARY EXPERIENCE:

Army

PERFORMANCE APPRAISAL:

"Seems to prefer routine assignments – probability of promotion indeterminate at this time."



---

Please evaluate the following administrative actions:

1. Send Ronald for additional training at company expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ronald take a leave of absence and get the additional training at his own expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Terminate Ronald and hire a new fully-trained computer programmer.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

**Memorandum To:** Director, METRO Division

**From:** Assistant Director of Marketing, Corporate Office

I have followed up on your suggestion that we see if any of our marketing representatives are qualified for promotion to the Marketing Director's job at METRO. There is one candidate, Lawrence Evans, who might be suitable for this position. He has been with FEDCO for about six years and during that time he has done a good job on somewhat routine assignments.

Would you please review this information and give us a verdict as soon as possible? If we have to go outside to fill this position, it might take us quite a while to find suitable recruits.

Please bear in mind that this is a responsible position that calls for a high degree of creativity and innovative thinking. We need a person who can develop fresh solutions to challenging problems involving buyers, designers, and our own marketing staff. Moreover, we need a farsighted person who can predict consumer tastes. A summary of Lawrence Evans's record is attached.

Lawrence Evans

Evans has been a member of our Central Division staff for about six years and his performance appraisals during that time have been favorable. His supervisor reports that he is a competent, methodical person. Before joining our company, Evans's experience was in retail sales, preceded by a civilian job on a Navy base. He is 32 years old, married with a son and a daughter.



1. Would you promote this candidate? \_\_\_\_\_yes \_\_\_\_\_no

2. How favorable is the outlook for successful performance by Evans in the new position If he's promoted?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

**Memorandum To:** Director, METRO Division

**From:** Operations Officer

**Subject:** Creation and Staffing of Another Supervisory Position for Sales Information Unit

We now have 30 women working under the supervision of just one person in the sales information unit. As you know, the sales information clerks receive phone calls from our sales people in the field regarding prices, availability, replacement components, and delivery dates. Each information clerk works at a computer console which has been programmed to display current data on our inventory. The system is designed so that the clerk can give sales representatives information almost instantly.

Lately, our sales representatives have complained that they have been getting busy signals and when they finally do get through to a clerk, they often experience long delays. What is worse, they have complained about excessive mistakes by the sales information clerks.

I have discussed the problem with Ruth Farrell, the information unit supervisor, and she is quite eager to get some supervisory help. She feels that the addition of a second information unit supervisor would go a long way to remedy many of the problems in the units. In fact she has made some good suggestions on how we could split the unit into two units based on sales territories.

The supervisor of the new unit would have complete responsibility for monitoring the clerks' calls, checking on accuracy, and helping implement our manual operations when the computer is "down."

Turnover among our present staff of information clerks has been quite high. However, we do have one clerk, Ida Carson, who might be considered for the new supervisory position. Her file is enclosed. I'd be interested in your reactions. Please keep in mind that we need a person who is mentally alert, adaptable, and able to remain calm in crises caused by computer malfunctions.

NAME: Ida Carson

AGE: 60

MARITAL STATUS: married

EDUCATION: High School Graduate  
One semester junior college



PRIOR WORK EXPERIENCE:

Housewife, part-time secretary

SUPERVISORY COMMENTS:

Mrs. Carson has worked for FEDCO as an information clerk for three years. She appears to be a quiet person who follows orders well. Last year she missed about three weeks' work as a result of a gall bladder illness. She appears to be fully recovered now.

- 
1. If the new supervisory position is created, how would you rate Mrs. Carson's suitability for the job?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

2. Accept-reject recommendation (check one): \_\_\_\_\_accept \_\_\_\_\_reject

3. How would you evaluate the idea of creating a second supervisory position for the sales information unit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

Background Information:

Ralph Adams, 34, has a two-year certificate in industrial technology. He has been a member of the production staff for ten years. With the recent expansion, he was reassigned from FEDCO main offices to the new METRO division. He has worked on routine assignments in time study and production scheduling. His performance evaluations have been "satisfactory."



**Memorandum To:** Director, METRO Division

**From:** Ralph Adams

**Subject:** Production Seminar in Atlanta

I would like to attend the production seminar later this month in Atlanta. Several other members of the production staff, including one new employee have attended similar seminars during the last few years. I feel that participants can learn about new theories and research relevant to production systems at these conferences. The conference is scheduled for two weeks, October 6-17. Please let me know as soon as possible.

Note: The company policy has been to pay full salary and all expenses for employees who are selected to attend conferences. Since the budget for such activities is limited and many requests come in each year, division directors must be very careful who they select.

Please evaluate the following managerial actions.

1. Do not grant Ralph Adams's request to attend the two week conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ralph attend at his own expense during his vacation.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Allocate funds so that Ralph can attend the conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

How would you size up Ralph's motives for wanting to attend the conference?

4. Ralph wants to get his share of the training budget.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

5. Ralph wants to keep up to date on production systems.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

**Memorandum To:** Director, METRO Division

**From:** Personnel Director

**Re:** Salary Review for Dan Hopkins

It is now time to make a decision on Dan Hopkins' salary, under our policy of annual reviews. Relevant information from his personnel file and our current compensation summary are attached. I have also attached a memo from Hopkins. Money is tight this year, but some adjustment may be in order, if we want to keep him.

Current Compensation Summary For Branch Managers:

Manager	Performance	Years in Position	Monthly Salary
Lambert	Satisfactory	Four	\$1900
Miller	Outstanding	Four	2200
Overstreet	Satisfactory	Two	1750
Pearce	Acceptable	Two	1700
Hastings	Satisfactory	Six	2200
Hopkins	Satisfactory	Five	1900

Performance Appraisal for Dan Hopkins:

Current Position: Northwest Branch Manager  
Years in Position: Five  
Current Monthly Salary: \$1900  
Prior to 1995: Partner in a family-owned store

Performance Appraisal for Current Year:

Operating efficiency: Satisfactory  
Creative Performance: Acceptable  
Technical Performance: Satisfactory  
Administrative Performance: Very good  
Overall Rating: Satisfactory

Summary comparison with others in similar positions: Satisfactory

Potential for development: Can handle present job well. Hopkins is an older man who may be able to perform at a higher level, but prospects are not overly bright.

Personal Information: Age 59, married, two years of college

**Memorandum To:** Personnel Director

**From:** Dan Hopkins

I believe that a favorable decision should be made on a salary increase for me. My performance has been good and I feel that I deserve a substantial salary increase this year. To be more forthright about it, I feel that I am greatly underpaid at present and to continue on this basis would put an increasing strain on my relationship with METRO.

---

1. How concerned would you be about keeping Hopkins?

- |                          |                           |                          |                          |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1                        | 2                         | 3                        | 4                        | 5                        | 6                        |
| very<br>unconcerned      | moderately<br>unconcerned | slightly<br>unconcerned  | slightly<br>concerned    | moderately<br>concerned  | very<br>concerned        |

2. What is the absolute minimum monthly salary increase you think you could give him and still expect to keep him?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

3. How large a monthly increase do you recommend for Hopkins?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

Director, METRO Division  
FEDCO Corporate Headquarters  
METROpolis, USA

Dear Director:

I am writing you on behalf of the 2000 Panel of Advisors of the National Director's Conference Board. As you know, each of us on the Panel has agreed to contribute his views on a number of policy issues during the current year. Our research subcommittee has approved the attached questionnaire as an efficient means of gathering your views. Your response will be appreciated.

Sincerely,

Robert Hudson  
Chairman

---

### NATIONAL DIRECTOR'S CONFERENCE OPINION SURVEY

1. How adequate are current business practices in regard to the following topics?

#### Health and Safety of Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

#### Treatment of Older Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

#### Treatment of Female Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

2. To what extent do you oppose or favor each of the following?

a.) Flexible work schedules for hourly paid employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

b.) Elimination of mandatory retirement ages (at age 65 or earlier)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

c.) Complete vesting of pension plans (employees get accumulated pension funds if they quit or are terminated before retirement)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

d.) Profit sharing for all employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

e.) Greater emphasis on Affirmative Action for...

Blacks

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Females

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Older Workers

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

f.) Company-provided day care facilities for pre-school children of employees

<input type="checkbox"/>					
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

APPENDIX G

IN-BASKET TASK, WITHOUT PICTURES, STUDY II



## **In-Basket Task**

### **Aim of this survey**

In the course of a busy workday, the typical manager is faced with a variety of decisions involving the behavior of other people. Some of these decisions involve personnel actions such as selection, promotion, and discipline. Other decisions involve more subtle questions, such as the choice of leadership style or a motivational approach. The aim of this exercise is to explore the ways in which managers form impressions, digest facts, size up situations, and determine appropriate administrative actions.

The exercise is in the form of a series of “in-basket” organizational problems that could arise during the course of a normal workday, along with a short questionnaire about business practices. The background information at the end is for our use in tabulating the responses.

### **The Situation**

Try to put yourself in the following situation: For several years you have been employed in various managerial jobs at FEDCO, an organization employing about 5,000 people. Recently the decision was made to add a new division, to be called METRO, and you have just been put in charge of this new division. As METRO’s manager, your responsibility is to act as trouble-shooter, resolving the daily problems and conflicts that come up. Your boss has asked you to take complete charge and make your own decisions. He has said, “Be decisive and I’ll back you to the hilt – as long as you are right.”

Currently, you are faced with a number of decisions and tasks represented by the attached in-basket items. For various reasons, you must act on these items yourself and cannot delegate them to others. Please indicate how you would react to each memorandum.

**Memorandum To:** Director, METRO Division

**From:** FEDCO

We have decided to hire a new Corporate Finance Officer to manage our substantial capital surplus, and I would like to get your opinion on a candidate for this position. The job requires an individual with a good knowledge of tax law and of finance and accounting, but this is more than a routine finance job. Our major stockholders have advised me that they want us to follow an aggressive, high-risk strategy with these surplus funds. Accordingly, we want a person who not only knows the field of finance, but also is capable of making quick judgments involving high risks, a person who can operate effectively under the pressures associated with high finance.

Our consultants have located a person who they think can handle the job, but I'm not sure. Therefore, I am checking it out with you and other key executives. There won't be time for you to meet the candidate, but I would like to get your reaction on the basis of the attached resume. Please get this back to me right away.

NAME: John Watkins	PLACE OF BIRTH: Chicago, Illinois
POSITION APPLIED FOR: Finance Officer daughter	MARITAL STATUS: Married, one daughter
AGE: 29	EDUCATION: Two years of college
RELEVANT WORK EXPERIENCE:	Assistant Vice President, Trust Department, First National Bank. Five years' experience in all phases of the trust department operation. Prior to that, family business.
INTERVIEWER'S REMARKS:	He is a ready conversationalist with a good sense of humor. Acceptable personal appearance. I'm impressed by his references. The people at First National seem to regard him quite favorably.
Excerpts from Consultant's report: This candidate has a good record of steady progress in the Trust Department of the First National Bank. On the other hand, he has little experience with high-risk, high-pressure situations.	

*Please make your accept-reject recommendation and your appraisal of the applicant's potential, on the basis of the information given. Since the information is quite limited, you will have to rely on your own immediate reaction to the candidate, recognizing of course that you might want to change it if you had more information.*

1. Accept-reject recommendation (check one): \_\_\_\_\_Accept \_\_\_\_\_Reject

2. Rating of suitability for the job (check one):

- |                          |                           |                          |                          |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1                        | 2                         | 3                        | 4                        | 5                        | 6                        |
| extremely<br>unfavorable | moderately<br>unfavorable | slightly<br>unfavorable  | slightly<br>favorable    | moderately<br>favorable  | extremely<br>favorable   |

**Memo To:** Director, METRO Division

**From:** Sales Manager

**Subject:** Customer Complaints

I am sure you will recall that when you appointed me as sales manager you also emphasized to me that this was a sales-oriented, customer-oriented business and you advised me to come straight to you whenever I felt that other departments were not giving sufficient support to our sales staff. We now have encountered such a situation, and it seems to be centered on one individual, namely Alan Garfield, supervisor of our shipping department.

Basically what it amounts to is that our customers cannot get their inquiries about shipments answered satisfactorily. We have followed the practice of establishing a direct link between customers and the shipping department, so that customers can get the fastest and most accurate information possible on the status of their shipments. This has always worked well, until Garfield took over the department. Now, when anybody calls in with a question or complaint about a shipment, the people on Garfield's staff always switch the call to him, after which there is an annoyingly long wait. Then Garfield finally gets on the line and gives a complex, detailed explanation of shipping department problems, ending with a lecture on customer patience.

As you may know, Garfield is an older employee, with many years of service in this company but with only three months' experience in the shipping department job. His previous experience was in the credit department, purchasing department, and mail room.

When we promoted him to the job last fall, I attempted to impress on him the importance of being tactful with complaining customers, but it doesn't seem to have done any good. I would appreciate it if you would get this situation remedied as soon as possible, in order to ensure that our customers obtain satisfactory services from the shipping department.

---

1. How much difficulty would you anticipate in getting Garfield to change his behavior?

- No difficulty whatsoever
- Possibility of slight difficulty
- Moderate difficulty
- Fairly great difficulty
- Extreme difficulty

2. Which of the following solutions is best?

- An ultimatum: change or else
- A talk in which you encourage Garfield to change
- Suggest that he have someone else handle the calls
- Do nothing
- Tell the sales manager he must learn to live with complaints

**Memorandum To:** Director, METRO Division

**From:** Carl Warren, Chief of Computer Operations

**Subject:** Programmer Efficiency

As you know, the new computers have been installed and we have now completely switched over to a new computer language for all of our control procedures. One of our programmers, Ronald Woodcock, is completely unfamiliar with the new language and has made several costly programming mistakes. Ronald was never exposed to the new language when he attended computer programming school five years ago.

Ronald would have to be retrained in order to be of much use to us in the future. *The training could cost us over \$2000 in expenses and lost time.* On the other hand, we could terminate Woodcock and hire a newly trained programmer in a matter of days.

I've attached Woodcock's personnel file. How do you think we should handle this problem?

NAME: Ronald Woodcock

PLACE OF BIRTH: Burlington, VT

AGE: 60

MARITAL STATUS: Married, two Children

RELEVANT WORK EXPERIENCE:

Computer Programmer, First Federal Bank of Vermont. Sales clerk in a medium size firm in Burlington.

MILITARY EXPERIENCE:

Army

PERFORMANCE APPRAISAL:

"Seems to prefer routine assignments – probability of promotion indeterminate at this time."

---

Please evaluate the following administrative actions:

1. Send Ronald for additional training at company expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ronald take a leave of absence and get the additional training at his own expense.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Terminate Ronald and hire a new fully-trained computer programmer.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

**Memorandum To:** Director, METRO Division

**From:** Assistant Director of Marketing, Corporate Office

I have followed up on your suggestion that we see if any of our marketing representatives are qualified for promotion to the Marketing Director's job at METRO. There is one candidate, Lawrence Evans, who might be suitable for this position. He has been with FEDCO for about six years and during that time he has done a good job on somewhat routine assignments.

Would you please review this information and give us a verdict as soon as possible? If we have to go outside to fill this position, it might take us quite a while to find suitable recruits.

Please bear in mind that this is a responsible position that calls for a high degree of creativity and innovative thinking. We need a person who can develop fresh solutions to challenging problems involving buyers, designers, and our own marketing staff. Moreover, we need a farsighted person who can predict consumer tastes. A summary of Lawrence Evans's record is attached.

Lawrence Evans

Evans has been a member of our Central Division staff for about six years and his performance appraisals during that time have been favorable. His supervisor reports that he is a competent, methodical person. Before joining our company, Evans's experience was in retail sales, preceded by a civilian job on a Navy base. He is 32 years old, married with a son and a daughter.

1. Would you promote this candidate? \_\_\_\_\_yes \_\_\_\_\_no

2. How favorable is the outlook for successful performance by Evans in the new position If he's promoted?

- |                          |                           |                          |                          |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1                        | 2                         | 3                        | 4                        | 5                        | 6                        |
| extremely<br>unfavorable | moderately<br>unfavorable | slightly<br>unfavorable  | slightly<br>favorable    | moderately<br>favorable  | extremely<br>favorable   |

**Memorandum To:** Director, METRO Division

**From:** Operations Officer

**Subject:** Creation and Staffing of Another Supervisory Position for Sales Information Unit

We now have 30 women working under the supervision of just one person in the sales information unit. As you know, the sales information clerks receive phone calls from our sales people in the field regarding prices, availability, replacement components, and delivery dates. Each information clerk works at a computer console which has been programmed to display current data on our inventory. The system is designed so that the clerk can give sales representatives information almost instantly.

Lately, our sales representatives have complained that they have been getting busy signals and when they finally do get through to a clerk, they often experience long delays. What is worse, they have complained about excessive mistakes by the sales information clerks.

I have discussed the problem with Ruth Farrell, the information unit supervisor, and she is quite eager to get some supervisory help. She feels that the addition of a second information unit supervisor would go a long way to remedy many of the problems in the units. In fact she has made some good suggestions on how we could split the unit into two units based on sales territories.

The supervisor of the new unit would have complete responsibility for monitoring the clerks' calls, checking on accuracy, and helping implement our manual operations when the computer is "down."

Turnover among our present staff of information clerks has been quite high. However, we do have one clerk, Ida Carson, who might be considered for the new supervisory position. Her file is enclosed. I'd be interested in your reactions. Please keep in mind that we need a person who is mentally alert, adaptable, and able to remain calm in crises caused by computer malfunctions.

NAME: Ida Carson

MARITAL STATUS: married

AGE: 60

EDUCATION: High School Graduate  
One semester junior college

PRIOR WORK EXPERIENCE:

Housewife, part-time secretary

SUPERVISORY COMMENTS:

Mrs. Carson has worked for FEDCO as an information clerk for three years. She appears to be a quiet person who follows orders well. Last year she missed about three weeks' work as a result of a gall bladder illness. She appears to be fully recovered now.

---

1. If the new supervisory position is created, how would you rate Mrs. Carson's suitability for the job?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
extremely unfavorable	moderately unfavorable	slightly unfavorable	slightly favorable	moderately favorable	extremely favorable

2. Accept-reject recommendation (check one): \_\_\_\_\_accept \_\_\_\_\_reject

3. How would you evaluate the idea of creating a second supervisory position for the sales information unit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

**Background Information:**

Ralph Adams, 34, has a two-year certificate in industrial technology. He has been a member of the production staff for ten years. With the recent expansion, he was reassigned from FEDCO main offices to the new METRO division. He has worked on routine assignments in time study and production scheduling. His performance evaluations have been "satisfactory."

**Memorandum To:** Director, METRO Division

**From:** Ralph Adams

**Subject:** Production Seminar in Atlanta

I would like to attend the production seminar later this month in Atlanta. Several other members of the production staff, including one new employee have attended similar seminars during the last few years. I feel that participants can learn about new theories and research relevant to production systems at these conferences. The conference is scheduled for two weeks, October 6-17. Please let me know as soon as possible.

Note: The company policy has been to pay full salary and all expenses for employees who are selected to attend conferences. Since the budget for such activities is limited and many requests come in each year, division directors must be very careful who they select.

Please evaluate the following managerial actions.

1. Do not grant Ralph Adams's request to attend the two week conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

2. Suggest Ralph attend at his own expense during his vacation.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

3. Allocate funds so that Ralph can attend the conference.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
strongly undesirable	moderately undesirable	slightly undesirable	slightly desirable	moderately desirable	strongly desirable

How would you size up Ralph's motives for wanting to attend the conference?

4. Ralph wants to get his share of the training budget.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

5. Ralph wants to keep up to date on production systems.

<input type="checkbox"/>					
1	2	3	4	5	6
very unlikely	moderately unlikely	slightly unlikely	slightly likely	moderately likely	very likely

**Memorandum To:** Director, METRO Division

**From:** Personnel Director

**Re:** Salary Review for Dan Hopkins

It is now time to make a decision on Dan Hopkins' salary, under our policy of annual reviews. Relevant information from his personnel file and our current compensation summary are attached. I have also attached a memo from Hopkins. Money is tight this year, but some adjustment may be in order, if we want to keep him.

Current Compensation Summary For Branch Managers:

Manager	Performance	Years in Position	Monthly Salary
Lambert	Satisfactory	Four	\$1900
Miller	Outstanding	Four	2200
Overstreet	Satisfactory	Two	1750
Pearce	Acceptable	Two	1700
Hastings	Satisfactory	Six	2200
Hopkins	Satisfactory	Five	1900

Performance Appraisal for Dan Hopkins:

Current Position: Northwest Branch Manager  
Years in Position: Five  
Current Monthly Salary: \$1900  
Prior to 1995: Partner in a family-owned store

Performance Appraisal for Current Year:

Operating efficiency: Satisfactory  
Creative Performance: Acceptable  
Technical Performance: Satisfactory  
Administrative Performance: Very good  
Overall Rating: Satisfactory

Summary comparison with others in similar positions: Satisfactory

Potential for development: Can handle present job well. Hopkins is a younger man who may be able to perform at a higher level, but prospects are not overly bright.

Personal Information: Age 30, married, two years of college

**Memorandum To:** Personnel Director

**From:** Dan Hopkins

I believe that a favorable decision should be made on a salary increase for me. My performance has been good and I feel that I deserve a substantial salary increase this year. To be more forthright about it, I feel that I am greatly underpaid at present and to continue on this basis would put an increasing strain on my relationship with METRO.

---

1. How concerned would you be about keeping Hopkins?

- |                          |                           |                          |                          |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1                        | 2                         | 3                        | 4                        | 5                        | 6                        |
| very<br>unconcerned      | moderately<br>unconcerned | slightly<br>unconcerned  | slightly<br>concerned    | moderately<br>concerned  | very<br>concerned        |

2. What is the absolute minimum monthly salary increase you think you could give him and still expect to keep him?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

3. How large a monthly increase do you recommend for Hopkins?

- \$0
- \$25
- \$50
- \$75
- \$100
- \$125
- \$150
- \$175
- \$200
- \$225

Director, METRO Division  
FEDCO Corporate Headquarters  
METROpolis, USA

Dear Director:

I am writing you on behalf of the 2000 Panel of Advisors of the National Director's Conference Board. As you know, each of us on the Panel has agreed to contribute his views on a number of policy issues during the current year. Our research subcommittee has approved the attached questionnaire as an efficient means of gathering your views. Your response will be appreciated.

Sincerely,

Robert Hudson  
Chairman

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#### NATIONAL DIRECTOR'S CONFERENCE OPINION SURVEY

1. How adequate are current business practices in regard to the following topics?

Health and Safety of Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

Treatment of Older Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

Treatment of Female Employees

<input type="checkbox"/>					
1	2	3	4	5	6
completely inadequate	moderately inadequate	slightly inadequate	slightly adequate	moderately adequate	completely adequate

2. To what extent do you oppose or favor each of the following?

a.) Flexible work schedules for hourly paid employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

b.) Elimination of mandatory retirement ages (at age 65 or earlier)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

c.) Complete vesting of pension plans (employees get accumulated pension funds if they quit or are terminated before retirement)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

d.) Profit sharing for all employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

e.) Greater emphasis on Affirmative Action for...

Blacks

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Females

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

Older Workers

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor

f.) Company-provided day care facilities for pre-school children of employees

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6
very strongly oppose	strongly oppose	mildly oppose	mildly favor	strongly favor	very strongly favor