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EVALUATION OF PERFORMANCE, PAY AND PROMOTABILITY OF  
GAY AND STRAIGHT MEN AND WOMEN:  
RATING VARIATIONS BY RATER GENDER AND PERFORMANCE LEVEL

A Thesis in

Psychology

by

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## ABSTRACT

It is estimated that between 25 and 66 percent of gay and lesbian employees experience workplace discrimination. Yet sexual orientation bias may be more complex than simply lower ratings for gays generally. Using a 2X2X2X3 mixed model repeated measures experimental design with undergraduate students as raters, hypothetical male and female gay and straight targets were rated by both male and female participants on performance, pay recommendations, and promotion recommendations as well as on ratings of liking. Further, the information on target performance level (high, average, and low) was manipulated to determine whether there are differential effects by performance level. Results showed that target sexual orientation was a significant predictor of ratings on all four dependent variables, although effect sizes were small. An interaction effect was found between target sexual orientation and performance level on pay raise recommendations, promotion recommendations, and liking ratings, with gay people being penalized more for their sexual orientation at higher performance levels, but again the effect sizes were small. Also, an interaction effect between target sex and rater sex was found for job performance ratings, pay raise recommendations, and liking ratings, with male raters giving higher ratings to male targets than female. Differences in findings compared to previous studies are discussed.

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## INTRODUCTION

It is estimated that gay and lesbian employees constitute between 4 and 17 percent of the U.S. workforce (Gonsiorek & Weinrich, 1991). Between 25 and 66 percent of gay and lesbian employees experience workplace discrimination (Croteau, 1996). This represents a conservative estimate, because many gay and lesbian employees do not reveal their sexual orientation at work. Research estimates that more than half of homosexuals who disclose their sexual orientation at work are discriminated against (Croteau, 1996; Ragins & Cornwell, 2001). Moreover, the victims of sexual orientation discrimination are not limited to homosexuals. Because sexual orientation, unlike other common grounds for discrimination, such as race and gender, is not obvious from a person's appearance, anyone can face sexual orientation discrimination – not only people who are homosexual, but also anyone who is thought or said to be homosexual. In fact, research indicates that a majority of the population has experienced sexual orientation harassment at some point (Bruce & Buchanan, 2006).

### *The Present Study*

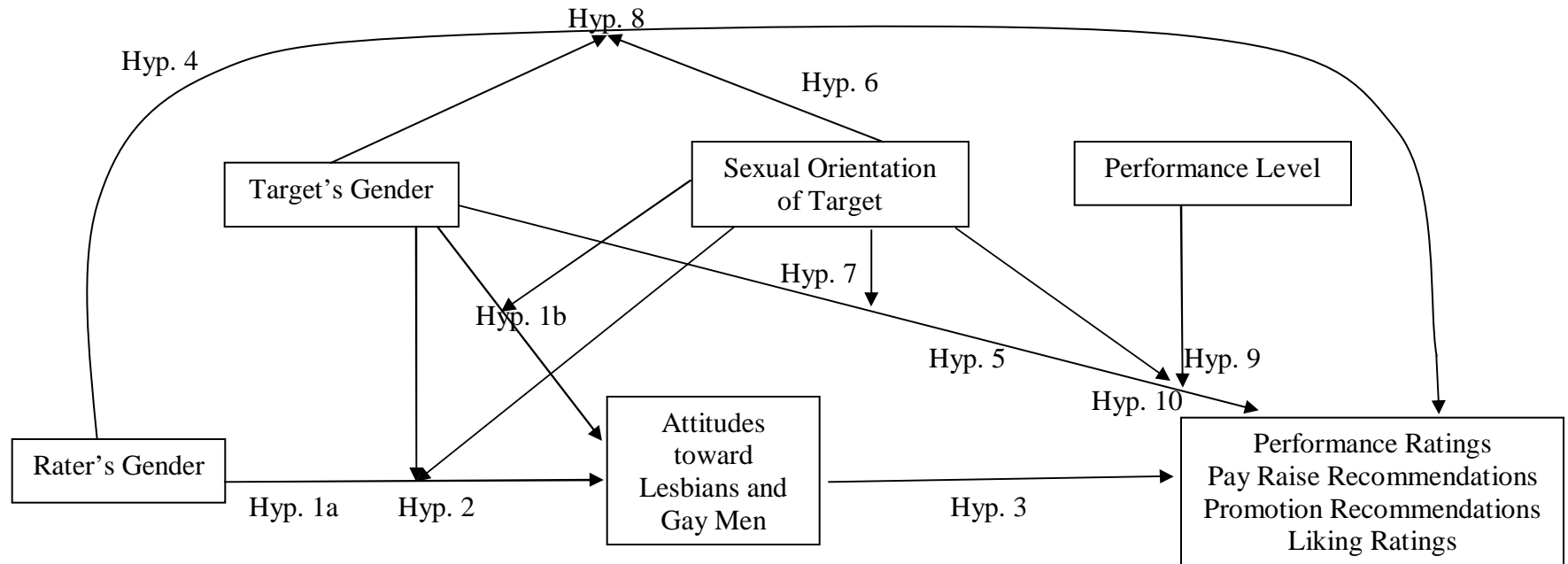
One basis for differences in promotion and salary decisions between straight and gay employees may be performance appraisal ratings. As will be discussed in more detail below, it seems that gay men do worse than straight men in the workplace, but lesbians do better than straight women (Badgett, 1995, Black, Makar, Sanders, & Taylor, 2003, Clain & Leppel, 2001). It is possible that this is due to a difference in people's bias against gay men and lesbians. The present study investigated differences in performance appraisal ratings based on the target's sexual orientation and sex. There is little research that investigates the linkages among sexual orientation, target and rater sex, liking and

performance ratings to such personnel decisions as promotion and pay raises. Further, we do not know whether the potential bias against gays varies depending on their performance level. The present study fills this gap.

In contrast to most of the previous studies on workplace discrimination against homosexuals, which have been conducted as survey studies of self-identified lesbians and gay men or as correlational studies using archival data (e.g. Badgett, 1995, 2001; Black, Makar, Sanders, & Taylor, 2003, Clain & Leppel, 2001, Fassinger, 1996; Ragins & Cornwell, 2001; Ragins, Cornwell & Miller, 2003), the present study used a laboratory design, thereby better controlling for third variables. Another contribution of the present study is that the variables rater sex, target sex, target sexual orientation and attitudes toward lesbians and gay men and their effect on performance appraisal ratings, promotion recommendations, salary recommendations and liking ratings are investigated jointly, as well as any interaction effects between them.

A model of the hypotheses is presented in Figure 1. In this model, raters' gender is a predictor of their level of negative attitudes toward lesbians and gay men, which in turn predicts performance appraisal ratings. Three other variables are hypothesized to influence performance appraisal ratings: target gender, sexual orientation of the target, and target's performance level. Theoretical explanations and rationale for the hypotheses based on previous research is developed below. In order to provide a rationale for the present study, the following literatures will be reviewed: categorization of discrimination, workplace outcomes based on sexual orientation, actual differences in job performance, intelligence profile and personality profile based on sexual orientation, attitudes toward homosexuals, gender role theory, the relationship between liking and performance

Figure 1. A model of the relationships<sup>1</sup>



<sup>1</sup> A note on Figure 1 may be in order. The box for the variable “target’s gender” and its associated arrows may be a bit confusing. In predicting attitudes toward lesbians and gay men, it is target gender in general that is used, not the specific targets used in this study. To test hypothesis 2, I examined whether there was a difference between the Attitudes Toward Lesbians scale and the Attitudes Toward Gay Men scale. Thus, the specific target persons of this study were not included in these analyses at all. In testing all other hypotheses where target gender was a predictor, it was the target persons created specifically for this study that were used.

appraisal and finally the relationship between performance level and gender differences in performance ratings.

### *Categorization of Discrimination*

Discrimination can take three forms: disparate treatment, adverse impact or social discrimination (Twomey, 1994). Disparate treatment occurs when people from different groups are intentionally treated differently. Adverse impact occurs when a seemingly neutral employment practice has different effects on different groups. The differences in effects can be intentional or unintentional. Social discrimination involves less access to social networks, relationships, and activities that could improve a person's job performance and promote his or her career (Ragins, 2004). Unlike discrimination based on many other characteristics, such as gender and ethnicity, discrimination based on sexual orientation is not prohibited in most workplaces in the United States (Herrschaft & Mills, 2002). Homosexuals are not afforded protection from discrimination in the workplace by federal law. A number of states have anti-discrimination laws in place however; fourteen states plus the District of Columbia as of February 2005 (DeIpo, 2005). Many cities and counties have also passed ordinances banning sexual orientation discrimination in the workplace; this includes 119 cities and 23 counties as of 2005 (Ragins & Wiethoff, 2005). According to the National Gay and Lesbian Taskforce, 47% of the U.S. population now lives in a jurisdiction that bans discrimination on the basis of sexual orientation.

### *Workplace Outcomes Based on Sexual Orientation*

To date, the research on workplace discrimination against homosexuals is limited (Ragins & Wiethoff, 2005). However, existing reports show that it is fierce; sometimes it can go as far as termination (Ragins & Wiethoff, 2005). Sexual orientation discrimination can hamper career success for homosexuals (Friskopp & Silverstein, 1996). Ragins and Cornwell (2001) found that greater heterosexism in the workplace was associated with fewer promotions for homosexual employees over a 10-year period. Badgett (1995) found that gay men earned less than straight men. There was also a tendency for lesbian women to earn less than straight women, but this result was not consistently statistically significant. Both Black, Makar, Sanders, & Taylor (2003) and Clain & Leppel (2001) found that homosexual men earned less than straight men, whereas the opposite was true for women, with homosexual women earning more than straight women. Thus, previous research consistently shows a sexual orientation discrimination against homosexual men, but no such discrimination against homosexual women. Although previous research is inconsistent for women, on balance, it seems that lesbians do at least as well as straight women.

Some mechanisms by which homosexuals' success is hindered have been identified. Fassinger (1996) found that lesbians limited their job and career choices to avoid heterosexist workplaces. Heterosexism also has a negative effect on lesbians' and gays' workplace productivity (Powers, 1996). In the Ragins and Cornwell (2001) study, heterosexism was negatively correlated with homosexuals' job satisfaction, organizational commitment, career commitment, organization-based self-esteem, and

satisfaction with opportunities for promotion, and positively correlated with intentions to leave the job.

### *Actual Differences Based on Sexual Orientation*

Before concluding that the negative workplace outcomes experienced by homosexuals as compared with heterosexuals are due to discrimination, it is necessary to rule out that such outcomes are due to actual differences in performance between homosexuals and heterosexuals. The research in this area is very limited. However, the existing studies show no differences in job performance between homosexual and heterosexual employees. Hiatt and Hargrave (1994) examined law enforcement officers and found no differences between lesbians, gay men and heterosexuals in either selection rates or ratings of job performance. Jones and Koshes (1995) found no evidence of poor work performance of homosexuals in the military. Because studies on job performance of homosexual individuals are limited, one possible approach that may shed more light on this matter is to examine individual differences that are known to affect job performance. Paramount among these differences is intelligence or cognitive ability (Schmidt & Hunter, 1998).

There have been a number of studies examining differences in intelligence between homosexuals and heterosexuals. Most studies show no average differences in general intelligence between homosexuals and heterosexuals, but there seems to be differences in the specific domains of intelligence, with gay men being similar to women in their profiles rather than to heterosexual men. Studies often show no significant differences between lesbians and straight women, however. For example, Sanders and Wright (1997) found that gay men scored similar to heterosexual women, and different



from heterosexual men on the following tasks: a dot detection test measuring cerebral asymmetry, verbal and performance subscales of the WAIS, a pegboard task measuring manual dexterity and a targeted throwing task. Willmott and Brierley (1984) found significant differences between homosexual and heterosexual males on the verbal and performance subscale of the WAIS, with homosexual males scoring more similar to females. Rahman, Andersson, and Govier (2005) found that gay men tend to use the same navigation strategies as women, and different from heterosexual men. Rahman, Wilson, and Abrahams (2004) found that women and homosexual men outperformed heterosexual men on the digit-symbol substitution test of the WAIS, but there were no significant differences between heterosexual and homosexual women. Rahman, Wilson, and Abrahams (2003) found that heterosexual females and homosexual males performed better than heterosexual males on a spatial memory task, and no different from each other. There were no differences between lesbians and straight women. Wegesin (1998) examined verbal ability and mental rotation as well as the so-called water-level task. Gay men performed similar to heterosexual women on the verbal ability task and the mental rotation tasks, but not in the water-level task. Lesbians performed similarly to heterosexual women.

Another possible predictor of job performance is personality. A recent meta-analysis (Lippa, 2005) found significant differences in personality traits based on sexual orientation. As a starting point for the analysis, the study found significant differences in all five of the Big Five personality traits between heterosexual men and heterosexual women. There were significant differences between gay and straight men on four of the five Big Five traits – agreeableness, conscientiousness, neuroticism, and openness to

experience. Gay men scored higher than straight men on all of these four traits. There were significant differences between lesbians and straight women on two of the Big Five traits – neuroticism and openness to experience. Straight women scored higher than lesbians on neuroticism, whereas lesbians scored higher than straight women on openness to experience. Thus, on personality measures as well as intellectual measures, it seems that gay men differ more from straight men than lesbians differ from straight women. The meta-analysis showed that gay men's traits tend to be somewhat feminized and lesbians' traits tend to be somewhat masculinized.

To summarize the research on actual differences, there is no evidence that shows any actual job performance differences between homosexual and heterosexual workers. However, there are differences between homosexuals and heterosexuals in both intelligence profiles and personality profiles, such that homosexual individuals tend to be more similar to the other sex, and this effect is stronger for gay men than it is for lesbians. Whether these differences are large enough to have measurable practical effects in real jobs is another question. But insofar as specific subscales of intelligence and personality affect job performance on particular jobs, the possibility that any work-related outcome differences between homosexuals and heterosexuals are due to actual performance differences cannot be ruled out. On the other hand, the possibility that work-related outcome differences are due to actual discrimination cannot be ruled out either, of course.

### *Attitudes toward Homosexuals*

The negative views of homosexuals held by many heterosexuals have been given different terms. Two of the most common are homophobia and heterosexism.<sup>2</sup> Exactly

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<sup>2</sup> The term homophobia relates to a person's feelings. It is "the fear and aversion associated with homosexuality" (Weinberg, 1972). Homophobia involves irrational and deep-seated fears of homosexuals

*what* about homosexuals that some heterosexuals are prejudiced against has not been extensively studied, but some categorizations have been made. Plasek and Allard (1984) describe six recurring foci of investigation of homophobia: person, trait, characteristic of collectivities and cultures, cognitive stereotypes, perceptions of threat to others and to valued aspects of society and culture, and finally management of homosexuality. In a meta-analysis, Kite and Whitley (1996) grouped the target negative attitudes into three categories: attitudes toward homosexual persons, attitudes toward homosexual behavior, and attitudes toward gay and lesbian civil rights. Homosexual behavior is meant to be interpreted in a narrow sense, as homosexual activity of a sexual nature, and items intended to measure these attitudes dealt with the moral reprehensibility of homosexuality. Measures classified as pertaining to gay and lesbian civil rights dealt with issues such as free speech, parental rights, and other legal and constitutional issues. The last category, then, attitudes toward homosexual persons, dealt with a broader range of themes, such as stereotypes, homosexuality as a threat to the respondent, to people close to the respondent, and the management of homosexuality by means of social restrictions.

### *Gender Differences in Negative Attitudes toward Homosexuals*

Studies of the relationship between a person's gender and his or her attitudes toward homosexuals have showed inconsistent results. Some have found no such

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and a cultural belief system that supports negative stereotypes against them (Morin & Garfinkle, 1978). The term homophobia has been criticized as unfortunate for several reasons, including the facts that it literally means fear of sameness, even though the negative view that many heterosexual people hold of homosexuals is due to the fact that homosexuals differ from heterosexuals, and that elsewhere in psychology, phobia has a very specific meaning, denoting an intense and different kind of fear than that which heterosexuals usually experience in relation to homosexuals (Herek, 1984; Herek, 1986b). Another commonly used term is heterosexism. Heterosexism is defined as "an ideological system that denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community" (Herek, 1993, p. 89). Heterosexism and homophobia may or may not accompany each other in a certain individual (Ragins, 2004). For example, a person may behave discriminatory toward a lesbian employee without aversion or fear of him or her sexual orientation. Conversely, a person may have homophobic feelings without displaying heterosexist behaviors (Jung & Smith, 1993).

significant relationship (e.g. Berkman & Zinberg, 1997; Cotten-Huston & Waite, 2000), but more often studies have found that females have less negative attitudes toward homosexuals than do males (e.g. Herek, 1987; Johnson, Brems & Alford-Keating, 1997; Kurdek, 1988; Schellenberg, Hirt, & Sears, 1999; Whitley & Aegisdottir, 2000). When the gender of the target is taken into account, however, the situation is more complex. Some studies have found that participant gender was correlated with attitudes toward gay men but not toward lesbians (Herek, 1988; Kite & Whitley, 1996; Levina, Waldo & Fitzgerald, 2000; Whitley, 1988). Others have found that male participants have more negative attitudes toward gay men than toward lesbians, but that there is no such relationship for female participants (Louderback & Whitley, 1997; Smith & Gordon, 1998). Possible theoretical explanations for this relationship will be discussed in the following section. Finally, some studies have found that participants have more negative attitudes toward homosexuals of their own gender than toward homosexuals of the opposite gender (Baker & Fishbein, 1998; LaMar & Kite, 1998). A meta-analysis (Kite & Whitley, 1996) found that men held more negative attitudes toward homosexuals than did women. Men's attitudes were particularly negative toward gay men, women held slightly more negative attitudes toward lesbians than gay men, but men's and women's attitudes toward lesbians did not differ.

Consistent with previous research, it is expected that there will be gender differences in rater attitudes toward homosexuals, and furthermore, that there will be interactive effects with target gender. (For a model of the relationships, see Figure 1.)

*Hypothesis 1a:* Male raters will show more negative attitudes toward lesbians and gay men than will female raters.

*Hypothesis 1b:* Attitudes will be more negative toward gay males than lesbians.

*Hypothesis 2:* Male raters will show more negative attitudes toward gay men than toward lesbians, and female raters will show more negative attitudes toward lesbians than toward gay men.

### *Theoretical Explanations for Negative Attitudes toward Homosexuals*

Research has shown that there are a number of correlates of negative attitudes toward lesbians and gay men. Individuals who hold a negative view are typically high in authoritarianism, hold traditional gender roles, have relatively low levels of education, have negative attitudes toward other minority groups, and are male (e.g. Herek, 1984b; Herek, 1991; Kite & Whitley, 1996). These correlations do not provide a theoretical explanation for negative attitudes toward homosexuals, however.

One explanation that has been proposed is based on gender roles (Kite & Whitley, 1996; Kite & Whitley, 1998; Whitley & Kite, 1995). Bem (1993) says that Western society has three main beliefs about men and women: "That they have fundamentally different psychological and sexual natures, that men are inherently the dominant or superior sex, and that both male-female difference and male dominance are natural." (p. 1) Society is "androcentric", meaning that men's experiences are seen as the norm, whereas women's experiences are not the norm. Society is also "gender polarized", which means that differences between men and women are used to structure society. The masculine way of doing things is generally seen as the right way. This theory can be seen as having parallels in terms of sexual orientation. Just as men's experiences are seen as the norm, and women's are not, heterosexual people's experiences are seen as the norm, whereas homosexual people's experiences are not. And just like the masculine way of

doing things is seen as the right way, homosexual people's way of doing things are seen as the right way, and homosexual people's way is not.

Another theory that can enlighten the discussion about views of homosexual people is Eagley and Karau's (2002) role congruity theory. This theory addresses the "injunctive norms of gender roles"; not only are gender roles descriptive, that is consensual expectations about what members of a group actually do, but they are also injunctive, that is consensual expectations about what a group of people ought to do or ideally would do. Eagley and Karau's (2002) theory focuses on the difference between two roles, female gender roles and leadership roles. Because men are thought to possess the skills and attributes suitable for leadership roles, females in leadership roles are targets of potential prejudice. "Prejudice toward female leaders follows from the incongruity that many people perceive between the characteristics of women and the requirements of leader roles. (p. 574)" Although norms about homosexual people may not be as strong as gender roles, there is certainly commonly held beliefs about what gay men and lesbian women are like. Herek (1996) found that the notion that homosexual orientation is associated with gender role non-conformity is one of the most widespread stereotypes of homosexuality. And in fact, as discussed above, this stereotype has a great amount of truth to it. So when gay men are seen as more feminine than straight men, they violate a gender role associated with competence and power. And when lesbians are seen as more masculine than straight women, they violate a gender role that is associated with lower power and status. Therefore, when violating the gender roles associated with their gender, gay men may be seen as less competent and powerful, whereas the opposite is true for lesbians.

Masculinity has a higher status than femininity, and traits associated with males are perceived as more desirable than those associated with females. Regarding achievement-oriented traits, men are thought to be competent, strong, independent, active and ambitious, and women thought to be incompetent, weak, dependent, passive and unambitious (Heilman, 1983). Thus, it seems logical that people should react more strongly against men's non-conformity to the more highly valued male gender role than against women's non-conformity to the less valued female gender norm (Bem, 1993; Hogg & Turner, 1987; Lewin & Tragos, 1987). Although both men and women are expected to conform to gender roles, violating gender roles is probably viewed as more serious when done by men than by women (Herek, 1986; Stockard & Johnson, 1979). The tendency to view homosexuals as different from "normal, healthy adults" is also greater for gay men than for lesbians (Page & Yee, 1985). Moreover, since males experience a stronger pressure to conform to gender roles than females, they are likely to judge those who fail to conform more harshly than do women (Herek, 1986; Whitley & Kite, 1995).

Returning to the findings of workplace discrimination of homosexual people described above, the combination of violation of gender roles and liking could explain those findings. Gay men are unequivocally discriminated against. They both violate a positive gender role and are liked less. The more complex and inconsistent findings regarding lesbian women may be explained by the more ambiguous effect of the perceptions of lesbians. On the one hand, lesbians violate gender roles, which presumably should result in lower liking of lesbians than of straight women. On the other hand, the gender role that lesbians violate is one that has lower status than the male role. The

female role has been said to be associated with incompetence (Heilman, 1983). Thus, when lesbians violate the female gender role, they may be liked less, but perceived as more competent. Lesbians' violation of gender roles could result in two different effects, in opposite directions. This would explain the inconsistent findings in regards to discrimination of lesbians.

### *Experimental Manipulation of Sexual Orientation*

Researchers trying to manipulate homosexuality/heterosexuality in studies face somewhat of a problem, because homosexuality, unlike some other grounds for possible discrimination, such as sex and race, is not obvious from a person's appearance. It's "invisible". Also, no simple cues can be given in writing, in contrast to the use of a male or female name to indicate gender. When trying to manipulate the homosexuality/heterosexuality of target persons, using the categorization of Kite and Whitley (1996), it's predominantly the categories of attitudes toward homosexual persons that can be used, but also to some extent attitudes toward homosexual behavior. Of course, homosexual activities cannot be named or described explicitly in most studies, including studies of workplace outcomes of homosexuality, but they can be implied, for instance by describing a same-sex person as significant other.

The notion that homosexual orientation is associated with gender role non-conformity is one of the most widespread stereotypes of homosexuality (Herek, 1996). In fact, this stereotype has a great amount of truth to it. As described above, on average lesbians and gay men tend to resemble the other sex more, both in terms of their personality profiles and intellectual ability profiles, than do straight people. Also, childhood behaviors that are not strongly sex-typed tend to predict adult homosexual



orientation (Bailey & Zucker, 1995). Thus, boys who grow up to be gay men are more likely to display feminine behaviors as children, and girls who grow up to be lesbians are more likely to display masculine behaviors as children. Of course, this fact and accompanying stereotype is the basis for using descriptions of gender-atypical traits and behaviors to manipulate gender orientation. In terms of attitudes toward homosexual persons, a number of personal characteristics can be described, such as gender-atypical interests, personality traits, and jobs-occupations, and involvement in LGBT interest groups.

### *Liking and Performance Ratings*

As conceptualized by Fishbein and Ajzen (1975), two of the three fundamental features of an attitude are that it predisposes action, and such actions are consistently favorable or unfavorable toward the object.<sup>3</sup> Consistent with this, a rater's liking of the target has been shown to correlate positively with performance evaluation ratings in a number of studies (e.g. Heilman, Wallen, Fuchs & Tamkins, 2004; Robbins & DeNisi, 1994; Varma, DeNisi & Peters, 1996). Early studies focused how liking influenced performance ratings (Cardy & Dobbins, 1986; Robbins & DeNisi, 1994; Tsui & Barry, 1986), considering liking to have effects on rating errors or rating accuracy (Cardy & Dobbins, 1986; Robbins & DeNisi, 1994; Tsui & Barry, 1986). This view was questioned by Varma, DeNisi and Peters (1996). They suggested an influence in the opposite

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<sup>3</sup> There is no universally agreed upon definition of attitude. A large number of definitions have been proposed. For example, Murphy, Murphy, and Newcomb (1937) believe that "Attitude is primarily a way of being 'set toward' or against certain things" (p. 889). Rosenberg (1956) explains an attitude as a "relatively stable affective response to an object" (p. 367). And Katz and Stotland (1959) define an attitude as a "tendency or disposition to evaluate an object or the symbol of that object in a certain way" (p. 428). In fact, Fishbein and Ajzen (1975) state that the attitude concept "is characterized by an embarrassing degree of ambiguity and confusion" (p.1). In an attempt to clarify the concept, Fishbein and Ajzen (1975) conclude that there are three basic features to an attitude: (a) it is learned, (b) it predisposes action, and (c) such actions are consistently favorable or unfavorable toward the object. They also state that "attitude may be conceptualized as the amount of affect for or against some object" (p. 11).

direction: raters developing positive or negative affect from observing a target's performance. As Varma et al. (1996) say, this view was demonstrated in the study by Lowin and Craig (1968), and it has also been supported in the leader-member exchange literature (e.g. Liden, Wayne, & Stilwell, 1993). Consistent with this view, Lefkowitz (2000) hypothesize a bidirectional influence; liking influencing performance ratings and performance ratings influencing ratings. (This was not tested, because Lefkowitz (2000) is a theoretical paper.) In this study, consistent with the view of Cardy and Dobbins (1986), Lefkowitz (2000), and Varma et al. (1996), liking will be considered as an integral part of or a correlate of performance ratings, not as solely influencing performance ratings, but as being influenced by performance ratings as well.

*Hypothesis 3:* There will be a main effect of negative attitudes toward lesbians and gay men on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that raters with more negative attitudes toward lesbians and gay men will give lower performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings.

#### *Performance Ratings and Level of Performance*

The effects of target gender in performance appraisals have been studied in numerous studies, with different outcomes. Early studies suggested that the level of the target's performance may affect how males and females are rated. Nieva and Gutek (1980) asserted that "while females are evaluated less favorably than males when they are highly qualified or perform well, females are evaluated more favorably than males when both are not well qualified or are unsuccessful performers". However, a quantitative review (Swim, Borgida, Maruyama, & Myers, 1989) found no effect of target's

performance level on the ratings of males versus females. This study also found no interaction effect of rater gender and target gender on performance ratings. There were main effects of rater gender and target gender, with men giving lower ratings than women and women receiving lower ratings than men, but these effects were very small. One meta-analysis (Olian & Schwab, 1988) found a main effect for target gender, such that males were preferred over females, but the effect was very small. Similar results were found in a study by Pulakos, White, Oppler and Borman (1989). They found main effects for both rater sex and ratee sex. Males were rated higher than females, and female raters gave higher ratings than male raters, but again the variance accounted for by these differences was small. Moreover, there was an interaction effect of rater sex and ratee sex (but the exact nature of this interaction is not described). A more recent meta-analysis (Davison & Burke, 2000) found that females were rated higher in female sex-typed job and males rated higher in male sex-typed jobs. It should be noted, however, that this study examined ratings of fictitious job applicants rather than the performance of fictitious employees, so results may not be directly comparable. Davison and Burke found limited support for the notion that males would rate male targets higher and females rate female targets higher. To summarize, there is an effect of gender on performance ratings, but it does not seem to be strong. Cleveland, Vescio & Barnes-Farrell (2005) have reached the same conclusion. They state that performance ratings received by women are highly similar to those received by men, and male raters give ratees very similar ratings to those given by female raters.

Consistent with previous research (Olian & Schwab, 1988, Pulakos et al., 1989, Swim et al., 1989) it is expected that there will be main effects of rater gender and target

gender, with women giving higher ratings than men and men receiving higher ratings than women.

*Hypothesis 4:* There will be a main effect of rater gender on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that women will give higher ratings than men.

*Hypothesis 5:* There will be a main effect of target gender on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that men will receive higher ratings than women.

Although ratings of men and women are similar, there are other outcomes of job performance that vary between the sexes. Fiske, Cuddy, Glick and Xu (2002) propose that stereotype content is derived from perceptions of the extent to which members of a group are perceived to be in competition with the in-group. Groups get their status by virtue of their competence and their relationship to the in-group by virtue of their warmth. Thus, groups can be perceived as (a) warm and competent, (b) warm but incompetent, (c) not warm, but competent or (d) neither warm nor competent. In this typology, women fall into one of the two ambivalent groups; either warm but incompetent or not warm, but competent.

Results supporting this view were found by Heilman, Wallen, Fuchs and Tamkins (2004). Compared to men performing on a similar level, successful women were liked less. As discussed above, liking can affect performance appraisal ratings. Thus, even though most studies have found minimal differences between performance ratings between men and women, it is possible that in the real world and over the long term, slightly lower performance appraisal ratings of women and the lower liking of women

performing well – resulting in lower performance appraisal ratings in the future - may lead to tangible negative career outcomes for women.

As described above, based on previous research, there seems to be an interaction between sexual orientation of target and gender of target as far as the effects of sexual orientation discrimination. Male homosexuals have consistently been found to be discriminated against, as compared to male heterosexuals, but for women, the findings regarding sexual orientation discrimination are inconsistent. In a laboratory study, investigating a few possible predictors of hiring discrimination based on sexual orientation, such as religiosity, belief in traditional gender roles, previous exposure to homosexuals, belief about the controllability of homosexuality, and attitudes toward lesbians and gay men, Horvath and Ryan (2003) found that heterosexual male applicants received the highest ratings, and heterosexual women received the lowest ratings. There was no significant difference between the ratings received by homosexual women and those received by homosexual men. Thus, among male applicants, heterosexuals were rated higher than homosexuals, whereas the opposite was true for female applicants.

Since male raters are expected to have more negative attitudes toward homosexual people, attitudes are closely linked with liking, and liking have been found to correlate with performance ratings, similar results based on rater sex as for attitudes toward lesbians and gay men are expected to be found in performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings.

*Hypothesis 6:* There will be a two-way interaction effect between rater gender and target sexual orientation on performance appraisal ratings, salary recommendations,

promotion recommendations, and liking ratings, such that male raters will give homosexual targets lower ratings than will female raters.

Consistent with the findings of Horvath and Ryan (2006) it is expected that there will be an interaction effect of target gender and target sexual orientation on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings.

*Hypothesis 7:* There will be a two-way interaction effect between target gender and target sexual orientation on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that heterosexual males will receive the highest ratings and heterosexual females the lowest ratings, with homosexual males and females in between.

Consistent with the described gender differences in attitudes toward lesbians and gay men and the hypothesized effects of attitudes toward lesbians and gay men and non-conformity to sex roles on performance appraisal ratings, it is expected that there will be interaction effects of rater gender, target gender and sexual orientation on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings.

*Hypothesis 8:* There will be a three-way interaction effect between rater gender, target gender and target sexual orientation on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that male raters will show greater differences based on sexual orientation of the targets for male than for female targets, and female raters will show greater differences based on sexual orientation of the targets for female than for male targets.

Although the quantitative review by Swim, Borgida, Maruyama and Myers (1989) found no effect of target's performance level on the ratings of males versus females, it is conceivable that there is such an effect. Only a small part of the studies included in the review had a medium performance level, the majority only had a high and a low level, and therefore, the medium-level was excluded from the analysis. A study by Heilman, Wallen, Fuchs and Tamkins (2004) found that when the performance outcome was unambiguous, there was no difference between the ratings of male and female targets. However, when there was ambiguity about the performance outcome, women were rated as less competent than men. The theoretical explanation for these findings that Heilman, Wallen, Fuchs and Tamkins (2004) present is that raters prefer to maintain gender stereotypes of women as lacking in competence when possible, that is when performance is ambiguous. However, when performance is unambiguous, there is no room for the expression of gender stereotypes. It is not unlikely that similar results can be found for performance appraisal ratings. Thus, when the performance level is clearly high or clearly low, one might assume no difference in performance appraisal ratings between male and female targets, but when the target's performance is more ambiguous, at a medium level, men may be rated higher than women.

*Hypothesis 9:* There will be a two-way interaction effect between target gender and performance level on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings such that target gender will have no effect on ratings at high and low performance levels, but at medium performance levels, male targets will receive higher ratings than will female targets.

Because homosexual people, like women, are targets of stereotypes, it is not unlikely that similar reasoning can be applied to the performance ratings of homosexual targets. When performance level is unambiguous, at a high or low level, the target's sexual orientation and ensuing violation of gender roles by homosexual targets would have no effect on performance appraisal ratings. However, when performance is ambiguous, the effects hypothesized in hypothesis 7 will be present.

*Hypothesis 10:* There will be a three-way interaction effect between target gender, target sexual orientation and performance level on performance appraisal ratings, salary recommendations, promotion recommendations, and liking ratings, such that at a medium level, heterosexual males will receive the highest ratings and heterosexual females the lowest ratings, with homosexual males and females in between, but no such effect will be found at high and low performance levels.

As can be seen in Figure 1, there are a few mediated and moderated mediated relationships in this model.

Because research has shown that rater gender predicts attitudes toward lesbians and gay men, and research has also shown that liking – which can be viewed as a component of attitudes - correlates with performance appraisal ratings, attitudes toward lesbians and gay men are expected to mediate the relationship between rater gender and performance ratings, salary recommendations, promotion recommendations, and liking ratings.

*Hypothesis 11:* The relationship between rater gender and performance ratings, salary recommendations, promotion recommendations, and liking ratings, will be mediated by attitudes toward lesbians and gay men.



Because previous research has shown that attitudes are usually more negative toward gay men than toward lesbians, and attitudes toward lesbians and gay men are expected to predict performance ratings, salary recommendations, promotion recommendations, and liking ratings, attitudes toward lesbians and gay men are expected to mediate the relationship between target gender and target sexual orientation on one hand and performance ratings, salary recommendations, promotion recommendations, and liking ratings on the other hand.

*Hypothesis 12:* The moderated relationship between target gender and sexual orientation of target on one hand and performance ratings, salary recommendations, promotion recommendations, and liking ratings, on the other hand will be mediated by attitudes toward lesbians and gay men.

Finally, putting the two previous hypotheses together, the relationship between the three-way interaction between rater gender, target gender and sexual orientation of target on the one hand and performance ratings, salary recommendations, promotion recommendations, and liking ratings on the other hand is also expected to be mediated by attitudes toward lesbians and gay men.

*Hypothesis 13:* The moderated relationship between rater gender, target gender and sexual orientation of target on one hand and performance ratings, salary recommendations, promotion recommendations, and liking ratings, on the other hand will be mediated by attitudes toward lesbians and gay men.

## METHOD

### *Participants*

Three hundred and fourteen students responded to the rater sex question with a valid response, 137 males (43%) and 177 females (56%). All were undergraduate students at a large state university taking at least one course in psychology.

### *Design*

This was a laboratory study with a 2\*2\*2\*3 (rater gender\*target's gender\*target's sexual orientation\*performance level) mixed-factor design, with rater gender a between-subjects factor, and target gender, target's sexual orientation and performance level within-subjects factors. Also, there was a target marriage status variable, which was nested within target sexual orientation. A laboratory study was selected because conditions in a laboratory study can be standardized, minimizing the impact of extraneous variables, and thus maximizing internal validity. Specifically, when examining differences in performance appraisal ratings, it was important to be able to standardize stimulation materials, so that any observed effect sizes cannot be explained by unwanted differences in the stimulus materials.

### *Procedure*

This section provides a general description of the procedure. More details about each measure are provided under the headings "Measures" and "Distractors" below. The participants were presented with vignettes describing a person's job behaviors, and were asked to rate the job performance of the target on a number of dimensions on 9-point Likert scales. Each participant was presented with six vignettes, describing the behaviors of one homosexual woman, one homosexual man, two heterosexual women, and two

heterosexual men. There were six versions of descriptions of job behaviors representing six levels of performance (two low, two medium, two high), that is two vignettes for each performance level. The job descriptions in the vignettes were taken from the behavioral incidents developed by Sauser, Evans, and Champion (1979).

Each vignette was paired with the background personnel file of one target person, varying which vignette was paired with which background file between participants. The order of the descriptions was also varied randomly. In addition to rating the job performance of the targets, participants were asked to make suggestions on two tangible job performance outcomes: salary and promotions. Specifically, participants were asked to make recommendations about a pay raise and a promotion for the targets. Participants also indicated how well they liked each target using a 7-item scale. These three scales were all 9-point Likert scales. Finally, participants completed an attitudes toward lesbians and gay men scale (ATLG) (Herek, 1988) and were also asked to indicate their gender, age, race and year in school. There were a few distractor scales: the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960), the Self-esteem Scale (Rosenberg, 1965), the Ambivalent Sexism Inventory (Glick and Fiske, 1996) and the short version of the Attitudes toward Women Scale (Spence, Helmreich, & Stapp, 1973). The ATLG items were mixed in with the items from the distractor scales, in scrambled order. All scales were 9-point Likert scales.

As a manipulation check, subjects were asked to indicate the sex and sexual orientation of each target. As distractors, subjects were also asked to indicate their perceptions of several other characteristics of each target, including gender, race and age.

Finally, at the end of the questionnaire, there was an open-ended question asking subjects what they thought was the main focus of the study.

### *Measures*

*Gender of the targets* was varied by giving the targets different names in the vignettes (The answer “Male” had the number 1, and “Female” the number 2.)

*Sexual orientation of the targets* was varied by providing cues to this effect in the vignettes. The cues consisted of “background personnel information” for each target, e.g. major in college, extracurricular activities while in college, previous employment and name of their significant other. The background personnel descriptions are included in Appendix F. In the absence of any hints to the sexual orientation of the target, subjects are presumed to assume that the target is heterosexual. This manipulation of the sexual orientation of the targets is similar to that used by Horvath and Ryan (2003), where the sexual orientation of the targets was manipulated by mentioning memberships in certain organizations (homosexual or not) in the targets’ résumés. The background descriptions of the targets are provided in appendix G. A gay target was coded as 1 while a straight target was coded as 2.

*Performance ratings* were measured by presenting the participants with vignettes, each vignette consisting of 15 critical incidents, asking them to rate the job performance of the targets on a number of performance dimensions: treatment of students, organizing/presenting material, knowledge/interest in course material, amount of workload, and testing/grading policies. The critical incidents have been rated in terms of performance level by 100 judges (Sausser, Evans & Champion, 1979). An example of part of one vignette is: “This professor saw students in his off-campus office only. He will see

students in his office only if they make appointments. This professor continuously referred back to his notes while attempting to lecture. He sometimes loses his place in his notes. He gave details about the material but never elaborated beyond them.” The vignettes are attached in Appendix H. The rating scales were 9-point Likert scales. 1 represented the lowest rating and 9 the highest. The wordings of the anchors differed a bit depending on the wording on the question, but common anchors were “Strongly Disagree” for “1” and “Strongly Agree” for 9. The rating scales are attached in Appendix I (including items for salary recommendations and promotion recommendations, as described just below).

*Salary recommendations* were measured with two 9-point Likert items; one item asking how likely it is that the participant would recommend the target for a salary increase and one item asking how large they think the target’s next pay raise should be. 1 represented the lowest rating and 9 the highest. (For the wording of the anchors, see appendix I.)

*Promotion recommendations* were measured with two 9-point Likert items; one item asked how likely it is that the participant would recommend the target for a promotion and one item asked the participants how soon they would recommend the target for a promotion. One item had 1 as the lowest ratings and 9 as the highest, whereas this was inversed for the other item. (For the wording of the anchors, see appendix I.) This reversal of the scale turned out to be a problem, as described below.

*Liking* was measured using an adapted version of Rubin’s liking scale (Rubin, 1970) as presented in appendix B. Out of the 13 items in the original scale, 9 were chosen mainly based on how appropriate they were to use in a student-professor relationship –

rather than when rating a “friend”, as in the original wording of the scale – but also based on their correlations with other items in the scale. In each item, “friend” was replaced with “this professor”. 1 represented the lowest rating, with the anchor “Disagree completely” and 9 was the highest rating, with the anchor “Agree completely”.

*Attitudes toward lesbians and gay men* was measured with the ATLG scale (Herek, 1988), a 20 item 9-point Likert-scale, which has a coefficient alpha of .95. It is provided in appendix A. In the original scale, the higher a person’s score on the ATLG, the more negative his or her attitudes toward lesbians and gay men. However, in this study, the scores were reversed to make them more intuitive to interpret. Thus, the higher a person’s score on the inversed ATLG scale used in this study, the more positive his or her attitudes toward lesbians and gay men.

*Gender and age of participants* was measured with direct questions about gender and age. The answer alternative “Male” had a number 1 and “Female” a number 2. The question about age had a blank for the student to fill in their age.

*Performance level* was manipulated using vignettes describing different performance levels: high, medium and low. There were two different vignettes for each level, resulting in a total of six vignettes. The two low levels were coded as 1 and 2, the medium levels as 3 and 4, and the high levels as 5 and 6. The vignettes were put together from sentences taken from Sauser, Evans, and Champion (1979). In the Sauser, Evans, and Champion (1979) study, each of these sentences was rated by 100 judges in terms of performance level and assigned a value based on the average rating. For the present study, sentences representing high, medium and low ratings were chosen and put together with sentences with similar ratings.

### *Distractors*

*Distractor questions* (to distract from the question of whether the target is straight or gay) were asked about the race and age of the target.

*Distractor scales:* The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) (in Appendix C), the Self-esteem Scale (Rosenberg, 1965) (in Appendix D), the Ambivalent Sexism Inventory (Glick and Fiske, 1996) (in Appendix E) and the short version of the Attitudes toward Women Scale (Spence, Helmreich, & Stapp, 1973) (in Appendix F) were included as distractor scales.

### *Manipulation Check*

As a manipulation check, participants were asked whether they thought each target person was straight or gay. This question was put among several other (distractor) questions, all preceded by the instructions: “Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:” and the answer alternatives were “(1) Gay, (2) Straight, (3) Don’t know”.

### *Pilot Test*

A pilot test was conducted to determine if the manipulation of sexual orientation was effective. The pilot test was performed in exactly the same way as the main study, using the same stimulus materials, with the exception that in the pilot study, the background descriptions of the target persons were not paired with descriptions of job performance. Instead, all background descriptions followed each other in one section of the packet and all job performance descriptions followed each other in another section.

Thus, in the stimulus materials for the pilot study, there was first background descriptions of six targets – one gay male, one gay female, two straight males and two straight females (with the order between these varied between participants). After each background description, participants were asked whether they thought each target was heterosexual or homosexual, and as distractors, participants were also asked to indicate their perceptions of several other characteristics of each target, including gender, race and age.

Next in the pilot stimulus materials packages were descriptions of six person's job behaviors – two at a low level of job performance, two at a medium level and two at a high level (with the order between these varied between participants). Participants were asked to rate the job behaviors of each target person on the same items as in the main study, and also asked the same items about salary and promotion recommendations as in the main study. Finally, at the end of the questionnaire, there was an open-ended question asking subjects what they thought was the main focus of the study.

Using 59 participants, results showed that the manipulation of sexual orientation of the targets was successful; 93% correctly identified the gay male, 93% correctly identified the lesbian, 90% and 92% correctly identified the straight males, respectively, and 92% and 95% correctly identified the straight females, respectively.

In the pilot study, the presence of possible demand characteristics was tested by asking participants an open-ended question about what they thought the study was about. Of the 40 participants who did not get the ATLG scale or any of the distractor scales, 3 (7.5%) mentioned gay/sexual preference/sexual orientation in their answer, and 6 (15%) mentioned stereotypes in their answer. Of the 19 of the participants who did get the



ATLG scale and some of the distractor scales, 6 (32%) mentioned sexual orientation/homosexual in their answer. Participants were asked a question about when they started to think that the study was about what they thought it was about. Of the 6 participants who thought sexual orientation was a main focus, 5 (83%) said they started to think so during the ATLG-and-other-scales part of the booklet and for the remaining 1 participant (17%), the answer to this question was unclear.

Since the ATLG and the distractor scales were placed after the scenarios in the booklets, even if the presence of ATLG items tipped about a third of the participants off as to the focus of the study, it is unlikely that a large percentage of the participants in the real study would have gone back in their booklets to change their earlier answers.

## RESULTS

### *Data Cleaning*

Before analyzing the data set, it was cleaned. The data from 26 raters were omitted for different reasons, such as giving invalid responses on the ATLG items, giving invalid responses about their sex, or having excessive amounts of “I don’t know” answers to questions about target sex and target sexual orientation. Data for another 141 targets were omitted for reasons such as the rater misidentifying the target sex or target sexual orientation, not answering the questions about target sex or target sexual orientation, or answering these questions with “I don’t know”. Before deletion of any raters or targets, 291 data points were missing.

After deletion of these raters and targets, remaining missing cases in continuous variables were imputed with maximum likelihood estimation (MLE). MLE makes fewer statistical assumptions about the data and is generally considered superior to imputation by multiple regression and mean substitution (Garson, 2008). Substitution is generally preferred to deletion (listwise or pairwise), since listwise and pairwise deletion are considered inefficient methods, which lead to bias. Missing categorical variables cannot be imputed, so they were deleted. Before deleting missing cases in each variable, Chi-square tests were performed to examine if there were systematic patterns between the missing cases and the variables of interest. All such Chi-square tests were non-significant, indicating no correlation with variables of interest.

The question about target sex was only answered with “don’t know” in six cases. All of those targets were female, and four of them were lesbian. Looking at the cases where the target sexual orientation was answered incorrectly, again it is the lesbian whose

sexual orientation was misidentified most often (13 times, compared to 9 times for the gay male, 3 and 4 times for the straight males, respectively, and 8 and 5 times for the straight females, respectively).

### *Manipulation Check*

To check whether raters had accurately perceived the sex and sexual orientation of each target, questions about sex and sexual orientation of targets were included as manipulation checks. There were a total of 7 targets for which there was no response to the question about their sex, 18 targets for which there was no responses to the question about their sexual orientation, 6 targets for which the rater had answered the question about their sex with “don’t know”, 56 targets for which the rater had answered the question about their sexual orientation with “don’t know”, 32 targets whose sex was misidentified and 42 targets whose sexual orientation was misidentified, with some overlap in targets in terms of missing/wrong answers about their sex and their sexual orientation. Only targets for which the rater had accurately perceived both their sex and their sexual orientation were included in the analysis. This resulted in a total of 1599 targets.

### *Dependent Variables*

The job performance variable had been conceptualized as containing three sub-variables: job performance, promotion recommendations and salary recommendations. In addition, liking had been measured with 7 items and liking had been hypothesized to be an integral part of job performance. The bivariate correlations among all items in these four scales were computed. Correlations among all items were high,  $>.82$ ,  $p<.001$ , with the exception of one item. One of the two items in the promotion recommendations scale

had a negative correlation with all other items. The scale of this item was reversed compared to those of all other items. Presumably, many of the participants had failed to notice the reversed scale, leading to negative correlations with other items. This item was not included in the analyses. After omission of the one bad item in the promotion recommendations scale, this scale contained only one item. Reliabilities for the other three scales were high, a Cronbach's alpha of .98 for job performance ratings (8 items), .96 for pay raise recommendations (2 items) and .98 for liking ratings (7 items). Although the bivariate correlations among all other items were high, the scales were kept as four separate variables, since they had been conceptualized that way; it is expected that because of the high intercorrelations among the four scales, results of the analyses will be similar across these measures. The intercorrelations among the four dependent variables are shown in table 1.

### *Performance Levels*

The scenarios had been put together so as to present descriptions of three different performance levels, one high, one medium and one low, with two scenario descriptions at each level. To test whether the scenarios had been perceived in this way by the participants, paired sample t-tests between the two ratings on each level for each variable were performed. Although the analyses showed that there were significant differences between each of the two scenario descriptions on each level, except between the two low levels, the effect size of the differences between the two scenarios on each level were small, whereas there were much larger differences between the three levels originally hypothesized. (Measured in Cohen's  $d$ , no effect size within levels was greater than .29

and no effect size between levels was smaller than 2.37.) Therefore, the performance levels were treated as three, with two scenarios on each level.

### *The ATLG Scale*

The ATLG (Attitudes Toward Lesbians and Gay Men) scale is a scale consisting of two subscales, the ATL (Attitudes Toward Lesbians) scale and the ATG (Attitudes Toward Gay Men) scale. The correlation between the ATL and the ATG ratings was high,  $r=.84$ ,  $p<.01$ . Because participants' scores on the ATLG scale had been hypothesized as a mediator, between rater gender and performance ratings, the full ATLG scale was used for all targets, rather than using the ATL for female targets and the ATG for male targets. However, to test hypotheses 1a and 2, separate ATL and ATG scores were retained.

### *Analyses*

Descriptive statistics for the four dependent variables are provided in Tables 2 through 5.

Hypothesis 1a and 2 were tested with a 2 (rater gender) by 2 (ATL versus ATG) mixed ANOVA, after mean ATL and ATG scores had been converted to standardized scores (z-scores). The reason for converting the raw scores to z-scores was that the ATL and ATG scales contain different items, and therefore it is not certain that their means and standard deviations are the same, making interpretations based on raw scores possibly misleading. As shown in Table 6, hypothesis 1a, predicting that men would show more negative attitudes toward lesbians and gay men than would women, was supported,  $F=30.38$ ,  $p<.001$ . Using z scores, males showed more negative attitudes toward lesbians and gay men (mean=-.37) than did female raters (mean=.28).

Hypothesis 1b suggested a two-way interaction between target gender and target sexual orientation on attitudes toward lesbians and gay men, with attitudes toward gay males being more negative than attitudes toward lesbians. In other words, participants' ATG scores were assumed to be higher than their ATL scores. Unfortunately, this hypothesis could not be tested conclusively, since the ATL and ATG scales contain different items, and thus a different scaled score may not reflect differences in attitudes.

Hypothesis 2 predicted a three-way interaction effect between rater gender, target gender and target sexual orientation on attitudes toward lesbians and gay men, with male raters showing more negative attitudes toward gay men than toward lesbians, and female raters showing more negative attitudes toward lesbians than toward gay men. In other words, both participants' ATL and ATG scores were assumed to differ depending on rater gender. The repeated measures ANOVA showed that there was a significant interaction effect,  $F=46.6$ ,  $p<.001$ . Paired samples  $t$ -tests performed on the  $z$ -scores showed that the differences between ATL and ATG scores were significant for both male and female raters,  $t=13.0$ ,  $p<.001$  for male raters and  $t=4.8$ ,  $p<.001$  for female raters. As shown in Table 6, using the  $z$ -score values, male raters held more negative attitudes toward gay men (mean=-.46) than toward lesbians (mean=-.22) and female raters held more negative attitudes toward lesbians (mean=.17) than gay men (mean=.35), as had been hypothesized.

For Hypothesis 3, a main effect of negative attitudes toward lesbians and gay men on job performance ratings was predicted. The hypothesis was tested using bivariate correlations between the raters' ATLG scores and their ratings on each of the four dependent variables for straight and gay targets. Correlations were very low and non-

significant for all four dependent variables, as shown in Table 7. (No numerical value was greater than .11.)

Hypotheses 4 through 10 were tested with mixed ANOVAs, with rater sex as the between-subjects factor, and target sex, target sexual orientation, and performance level as within-subject factors. One ANOVA was performed for each dependent variable. ANOVA Tables for each of the four dependent variables are provided in Tables 8 through 11.

As shown in Table 8 through 11, hypothesis 4 was not supported. There was no main effect of rater gender on job performance ratings, promotion, recommendations, pay raise recommendations or liking ratings.

However, as Table 8 through 11 indicate, hypothesis 5 was supported for three of the four dependent variables. Results showed there were statistically significant main effects of target gender for job performance ratings ( $F=5.26$ ,  $p<.05$ ), pay raise recommendations ( $F=4.96$ ,  $p<.05$ ), and liking ratings ( $F=4.93$ ,  $p<.05$ ). On all three variables, male targets received higher ratings than did female targets, although the effect sizes were minimal (all eta squared  $<.001$ ). Descriptive statistics for hypotheses 4 and 5 are provided in Table 12.

Hypothesis 6, 7, 8, 9 and 10 were not supported. No support was found for the two-way interaction effects between rater gender and target sexual orientation (hypothesis 6), target gender and target sexual orientation (hypothesis 7) or target gender and performance level (hypothesis 9), on job performance ratings, pay raise recommendations, promotion recommendations or liking ratings. In addition, no support was found for significant three-way interaction effects between rater gender, target

gender and target sexual orientation (hypothesis 8) or target gender, target sexual orientation and performance level (hypothesis 10) on job performance ratings, pay raise recommendations, promotion recommendations or liking ratings. Descriptive statistics for hypotheses 6 through 8 are provided in Table 13, and descriptive statistics for hypotheses 9 and 10 are provided in Tables 14 through 17.

Hypotheses 11, 12 and 13 were not tested, because hypothesis 3 was not supported, and therefore, no mediation could exist.

A few more significant relationships, which had not been hypothesized, were found. Target sexual orientation was found to predict the ratings on all four dependent variables, job performance ratings ( $F=1338$ ,  $p<.001$ ,  $\eta^2=.06$ ), pay raise recommendations ( $F=1312$ ,  $p<.001$ ,  $\eta^2=.07$ ), promotion recommendations ( $F=1328$ ,  $p<.001$ ,  $\eta^2=.06$ ) and liking ratings ( $F=1382$ ,  $p<.001$ ,  $\eta^2=.07$ ). Straight people were rated higher than gay people on all variables as shown in Table 18.

An interaction effect between target sex and rater sex was found for three of the four variables, job performance ratings ( $F=1.84$ ,  $p<.05$ ,  $\eta^2<.001$ ), pay raise recommendations ( $F=3.88$ ,  $p<.05$ ,  $\eta^2<.001$ ), and liking ratings ( $F=4.39$ ,  $p<.05$ ,  $\eta^2<.001$ ), as shown in Table 12. Generally, male raters gave higher ratings to male targets than female, whereas there was no strong effect for female raters.

An interaction effect between target sexual orientation and performance level was found for three of the four variables, pay raise recommendations ( $F=3.02$ ,  $p<.05$ ,  $\eta^2=.002$ ), promotion recommendations ( $F=3.11$ ,  $p<.05$ ,  $\eta^2=.003$ ), and liking ratings ( $F=3.35$ ,  $p<.05$ ,  $\eta^2=.003$ ). The effect of straight people being rated



higher than gay was stronger at higher performance levels than at lower for all of the three dependent variables.

The analysis also showed that the manipulation regarding performance levels was successful. Performance level was a significant predictor for all four dependent variables, job performance ratings ( $F=297$ ,  $p<.001$ ,  $\eta^2=.02$ ), pay raise recommendations ( $F=269$ ,  $p<.001$ ,  $\eta^2=.02$ ), promotion recommendations ( $F=278$ ,  $p<.001$ ,  $\eta^2=.02$ ) and liking ratings ( $F=276$ ,  $p<.001$ ,  $\eta^2=.02$ ). The means and standard deviations for each of the four dependent variables for the six performance level manipulations are shown in Table 19.

Since homosexual people cannot be legally married in Michigan, it was uncertain if homosexual couples should best be compared to married straight couples or to straight couples who were living together, but not married. Therefore, half of the described heterosexual targets were described as being married, and half as unmarried, but living together with their significant other. Because of this, differences in ratings between married and unmarried but co-habiting straight targets could also be analyzed. Comparisons between married and unmarried straight targets are shown in Tables 20 to 23.

#### *Post Hoc Analyses: Testing for Demand Characteristics*

Because of the repeated measures design, with each subject rating six targets, of whom two were gay, subjects may have guessed the purpose of the study, resulting in possible demand characteristics and social desirability and thus reducing the effect sizes. For this reason, an analysis was done using only the first vignette in each booklet.

Presumably, it would not have been as easy for subjects to guess the purpose of the study after seeing only the first booklet.

Hypotheses 4 through 10 were tested with ANOVAs, one ANOVA for each of the four dependent variables. Table 29 shows the results for all significant effects found when using all six vignettes in each booklet and those found when using only the first vignette in each booklet. When only the first vignette in each booklet was analyzed, only one hypothesis was supported, and only using one of the dependent variables, although there were a number of other statistically significant results. Hypothesis 5, predicting a main effect of target gender on ratings, was supported for job performance ratings ( $F=9.79$ ,  $p<.01$ ,  $\eta^2=.006$ ). For job performance ratings, there was also a significant interaction effect between target sex and performance level ( $F=3.89$ ,  $p<.05$ ,  $\eta^2=.005$ ). This interaction was different from what had been predicted by hypothesis 5, however. On low and medium performance levels, male targets were rated higher than female targets, but on high performance levels, female targets were rated slightly higher. Means and standard deviations for male and female targets on each of the performance levels are shown in Table 30. Finally, the four-way interactions between rater sex, target sex, target sexual orientation and performance level were significant for two of the dependent variables, pay raise recommendations ( $F=3.11$ ,  $p<.05$ ,  $\eta^2=.009$ ) and liking ( $F=3.80$ ,  $p<.05$ ,  $\eta^2=.006$ ). Both cell sizes and the effects sizes of the four-way interactions were small. As Table 29 shows, effect sizes were generally not much larger when only the first vignette in each booklet was analyzed. Therefore, these results do not support the idea that demand characteristics and social desirability reduced the effects found when analyzing all six vignettes.

The analysis of only the first vignette in each booklet also showed that the manipulation of performance levels was successful. Performance level was a significant predictor for all four dependent variables, job performance ratings ( $F=625$ ,  $p<.001$ ,  $\eta^2=.827$ ), pay raise recommendations ( $F=244$ ,  $p<.001$ ,  $\eta^2=.684$ ), promotion recommendations ( $F=216$ ,  $p<.001$ ,  $\eta^2=.657$ ) and liking ratings ( $F=471$ ,  $p<.001$ ,  $\eta^2=.807$ ).

## DISCUSSION

To date, the research on workplace discrimination of gay men and lesbians is limited. Most studies on workplace discrimination against homosexuals have been conducted as survey studies of self-identified lesbians and gay men or as correlational studies using archival data (e.g. Badgett, 1995, 2001; Black, Makar, Sanders, & Taylor, 2003, Clain & Leppel, 2001, Fassinger, 1996; Ragins & Cornwell, 2001; Ragins, Cornwell & Miller, 2003). One study that used a laboratory design was Horvath and Ryan (2003), which investigated a few possible predictors of hiring discrimination. Heterosexual male applicants were found to receive the highest ratings, and heterosexual women received the lowest ratings. There was no significant difference between the ratings received by homosexual women and those received by homosexual men. In laboratory studies, third variables can be controlled for better than in non-laboratory studies, so that one can be reasonably sure that any effect found is due to the variables of interest, which is an advantage. On the other hand, it is difficult to take all real-life aspects into account in a laboratory study, so studies using archival data can be advantageous in advancing our understanding of how things play out in the real world. The aim of the present study was to investigate a possible avenue in which workplace discrimination of gay men and lesbians may be played out – through differences in performance appraisals.

The results in this study did not consistently support gender role theory. An interaction effect between target sexual orientation and performance level was found. The effect that straight people were preferred to gay people was stronger at higher performance levels than at lower, as can be seen in Table 28. In contrast, the interaction

between target gender and performance level was not significant for any of the four dependent variables, which corroborates findings of previous research (Swim, Borgida & Maruyama, 1989). The fact that the interactions between target gender and performance level were not significant, whereas the interaction effects between target sexual orientation and performance level were significant does not clearly support gender role theory, but could possibly be explained by greater demand characteristics associated with sex than with sexual orientation. The three-way interaction between target gender, target sexual orientation and performance level was not significant for any of the four dependent variables. This last finding (or lack of finding) makes the interaction effect difficult to explain in terms of gender role theory and the violation of gender roles by homosexual people. As discussed in the introduction, although both lesbians and gay men violate gender roles, the implications of doing so are different for different sexes. Since males and the male gender role has a higher status, when gay men violate their gender role, they violate a role with higher status, whereas when lesbians violate their gender role, in violate a role with lower status in favor of one with higher status.

Supporting gender role theory, as has been found in previous research, it was found that males have more negative attitudes toward homosexual people than do females, and that the differences in attitudes toward gay males compared to lesbians were larger for male raters than for female raters; male raters penalized men more for being homosexual than did female raters. This is consistent with gender role theory (Bem, 1993) which holds that men are seen as the superior sex, and with Herek's (1986) and Whitley and Kite's (1995) assertion that men are more likely to judge those who fail to conform to gender roles more harshly than do women, because men experience stronger

pressure to conform to gender roles. Thus, the findings using the four dependent variables (performance ratings, promotion recommendations, salary recommendations, and liking ratings) did not support gender role theory, but the findings using attitudes toward lesbians and gay men did. Possibly, the findings regarding attitudes toward lesbians and gay men should be viewed as a stronger indication, since these are people's attitudes measured directly, whereas ratings on the four dependent variables depend on other factors as well, and may not be strongly correlated with attitudes (or, in fact not correlated at all, as this study seemed to indicate).

As shown in Tables 8 to 11, there were significant main effects of target sexual orientation on all four dependent variables, and as shown in Table 18, the direction of the differences was the same for all four dependent variables, with straight people being rated higher than gay people, although the effect sizes were small (eta squared .06 and .07 for all dependent variables). This is in line with the findings of Horvath and Ryan (2003). Unlike what was hypothesized, no interaction effect between target sex and target sexual orientation was found. The non-significant interaction effect is also different from the findings in the laboratory study by Horvath and Ryan (2003) and correlational studies using archival data of other studies (e.g. Black, Makar, Sanders, & Taylor, 2003, Clain & Leppel, 2001) One can speculate about the reason why no interaction effect was found in this study. It is possible that the interaction effect found by Horvath and Ryan (2003) might be the result of a flaw in the research methodology of that study. In Horvath and Ryan (2003), each rater rated several hypothetical targets in terms of how desirable the targets were perceived to be to hire. However, the sexual orientation and gender of each target was always paired with the same background information in their hypothetical

resumes. Although effort was made through iterative pilot studies to make the information on all resumes equally appealing in terms of hirability, it is possible that any differences found were not due to the sex and sexual orientation of the targets but to the different information regarding their backgrounds.

One reason why no interaction effect was found in the present study may be that, as discussed below, it is possible that people need a richer stimulus environment for their prejudices to have a clear effect on their ratings. That way, they can attribute their negative attitudes toward someone to something else than their prejudices – in this case regarding gender roles. A laboratory study like the present one is not very rich in stimulus, so effects of people's prejudices regarding gender roles may not show up very clearly. Another reason why no interaction effect was found in this study may be the sample – young undergraduate students. Young students may not have as strong gender stereotypes as older people, and therefore may not “reward” lesbians for violating the “inferior” female gender role. Finally, one reason why no interaction effect was found in the present study may be the fact that it was a laboratory study, and therefore, if the interaction effect is brought about by real world phenomena, it is less likely that it will show up in laboratory studies.

For instance, it is possible that gay men and women have different interests and make different career choices as compared to straight people of the same gender, as suggested by the numerous findings showing that gay people tend to be more similar to straight people of the opposite sex than are straight people (e.g. Lippa, 2005, Rahman, Wilson, and Abrahams, 2003, Sanders and Wright, 1997, Willmott and Brierley, 1984). There is mounting evidence that at least part of the explanation for men's and women's

different career choices is biological (Pinker, 2008). Another reason for why archival studies typically find that straight men make more than gay men, whereas the opposite is true for women may be gender roles – since gay people are typically less gender-typed than straight people (Herek, 1996), the role of breadwinner may be more important to straight men than gay men, but more important to lesbians than straight women. A third reason for this interaction effect in studies using archival data may be the division of labor in typical households. In heterosexual couples, the woman typically does more housework than the man, and consequently has less time and energy to devote to work outside the home (Kurdek, 1993), whereas the tasks seem to be more equally shared in same-sex households (Kurdek, 1993, Kurdek, 2005, Kurdek, 2006).

The correlation between the ratings on the liking items with job performance ratings, salary recommendations, and promotion recommendations were in the same range as the correlations of the three latter variables with each other, as shown in Table 1. Thus, liking was associated with ratings as measured in this study and context. Since liking was measured at the same time as the three other dependent variables, it is not possible to make any inference about the direction of the relationships – whether liking influences job performance ratings, job performance ratings influences liking, or if the relationship is bidirectional, as suggested by Lefkowitz (2000).

The effect sizes of the effects were small. It is difficult to interpret how the small effects size for sexual orientation found using an experimental design generalizes to actual organizational settings. Even though effects sizes found in the laboratory are typically larger than those found in field studies, this may not necessarily be the case in this study. For one thing, the sample – undergraduate students – may not be



representative of the population of managers who would typically be rating employees. Among the correlates of negative views of homosexuals found in previous studies (e.g. Herek, 1984b; Herek, 1991; Kite & Whitley, 1996) are being male and holding more traditional gender roles. Participants in this study were predominantly female, whereas managers are largely male. Undergraduate students are younger than managers, and they may hold less traditional gender roles. Therefore, older, largely male managers as a group may hold more negative views of homosexuals than do undergraduate, younger, largely female students, so effect sizes may have been larger in a population of managers.

It is also possible that any differences in ratings received by straight and gay targets are larger in a richer stimulus environment. Raters may be reluctant to bring their prejudices to bear on ratings when targets are only described on paper. If, on the other hand, there are plenty of other factors that raters can attribute their dislike of homosexual targets to, such as for instance gestures, speech patterns and clothing, raters' dislike of homosexual targets may be more likely to result in lower ratings for the homosexual targets.

Moreover, it may be that some heterosexuals' dislike of homosexual people is in fact not due to homosexuality itself, but to correlates of it, such as gender atypical behavior, mannerisms, speech patterns and clothing. Using Kite and Whitley's (1996) categorization, this would be attitudes toward homosexual persons (rather than attitudes toward the homosexual behavior itself). All these things could not be manipulated in this study, so if they are in fact associated with lower ratings of homosexual targets, effects found in the field would be larger than those found in the laboratory.

Finally, even small differences in performance ratings between two groups may lead to fairly large differences in promotions and levels reached within organizations, as shown in the computer simulation by Martell, Lane and Emrich (1996). This is due to the pyramid structure of most organizations and the tournament model used in most organizations, in which early career success is a necessary precondition for subsequent promotion.

Finally, although tangential to the main focus of the thesis, another interesting finding is that unmarried people appeared to be rated higher than married people, see Tables 20 through 23. The direction of this presumed effect was the same for both male and female targets and for all four dependent variables, and it seemed to be stronger for female targets on all four variables, however, the effect was only significant in itself for female targets on the dependent variable promotion recommendations,  $t=2.17$ ,  $p<.05$ . This discriminatory lower rating of married people as compared to unmarried people may add to real-life stresses of married people with children. However, this finding is contrary to the findings of real-life outcomes of studies using archival data, which typically find that married men earn more than unmarried men (e.g. Antonovics & Town, 2004, Chun & Lee, 2001). The term for this is marriage premium. Chun and Lee (2001) found that the marriage premium for men was due to degree of specialization within the household, with wives doing more of the housework than husbands.

### *Practical Implications*

Effect sizes for the difference in ratings between heterosexual and homosexual targets were small. Although the findings of this experiment do not indicate significant bias against gays, it is important that all employees are evaluated based on job related

information and not on uncontrollable demographic characteristics. Anti-discrimination laws prohibiting discrimination based on sexual orientation exist in many countries, however, particularly in Europe, and in several states and many cities and counties in the U.S. As discussed above however, it is possible that differences in ratings between straight and gay people may be larger in organizational settings than in the laboratory. If this is true, then we need to continue to conduct research within organizations to provide evidence that sexual orientation is one basis for unfair discrimination in the workplace and require anti-discrimination laws. Also, the interaction effect between differences in ratings based on the target's sexual orientation and their performance level indicates that the bias in ratings may depend on factors such as performance level. This may mean that bias is significant under more specific conditions, rather than overall, which also supports the need for anti-discrimination laws.

### *Limitations*

This was a laboratory study using undergraduate students as raters, and as such, the organizational, social and emotional contexts of performance appraisal could not be taken into account. Since targets were only described on paper, the external validity was low.

Although laboratory studies typically control for third variables better than non-laboratory studies, in this study, it is possible that the results were still influenced by third variables. Care was taken to make all six targets as similar as possible, except for their sex and sexual orientation. However, the manipulation of sexual orientation may have introduced some error in the study. Among the information that was intended to give participants clues about the targets' sexual orientation were the major in the targets'

undergraduate degree, previous employment and extracurricular activities. This information may have allowed participants to bring their implicit theories to bear on the targets. For instance, participants may have inferred that the targets taught different courses, with different numbers of students enrolled, and identical descriptions of the targets' on-the-job behaviors may have been interpreted and rated differently for different targets because of these assumptions. Participants may have had implicit theories about such factors as majors and class sizes of teachers who have certain characteristics, for instance being male or female, likelihood of being gay or straight, and of being a good or poor teacher.

Other possible issues in this study were demand characteristics and social desirability bias. It is possible that some subjects understood the purpose of the study and that this influenced their answers, leading to smaller effect sizes than would otherwise have been found. The presence of strong demand characteristics and social desirability bias was tested with the post hoc analyses, in which only the first vignette in each booklet was analyzed. Overall, the post hoc analyses did not show much greater effect sizes than the analyses done with all six vignettes in each booklet, indicating that demand characteristics and social desirability bias may not have been big issues in this study. To minimize the effects of demand characteristics and social desirability, in the main study, the ATLG scale was placed after all vignettes, since the pilot study had shown that seeing the ATLG items made it more likely for participants to guess what the study was about. Moreover, the ATLG items were interspersed among the items of several scrambled distractor scales, and several distractor questions were used after each vignette – in addition to sex and sexual orientation of the targets, which were the variables of interest.

Some results indicate that social desirability was probably not a big concern in this study. The results when analyzing only the first vignette in each booklet – since it was presumed to be less likely that participants may have guessed the purpose of the study so early on – overall did not show much greater effect sizes than those found when analyzing all six vignettes in each booklet. Also, in the pilot study, few participants indicated that they thought the purpose of the study was anything related to sexual orientation or gender without having seen the ATLG scale, which in the main study was placed after all vignettes. However, although the pilot study showed that the purpose of the study was unclear to the majority of pilot study participants, because of demand characteristics and social desirability, it is likely that the results of the pilot study represent a conservative or lower proportion of the participants who actually guessed what the study was about.

Another limitation to this study was that ratings on all of the dependent variables were given by the same raters at the same point in time, thus leading to a risk of common method variance. Common method variance can lead to inflated correlations between variables, so it is possible that the high intercorrelations between liking ratings and job performance ratings, salary recommendations, and promotion recommendations were partially due to common method variance. Harrison, Mclaughlin and Coalter (1996) assert that common method variance is more of a problem under five conditions: when scales on a self-report survey are overtly similar, contiguous (placed close to each other), comprised of small numbers of items, and measure narrowly defined or novel cognitions as independent and dependent constructs. In this study, scales were overtly similar, contiguous, comprised of a relatively small numbers of items, and measured narrowly defined cognitions as dependent constructs. Thus, according to Harrison et al. (1996)

common method variance may have been a problem in the present study. However, since the main focus of this study was not the intercorrelations among dependent variables, but rather if sexual orientation affects job performance ratings, the common method variance problem might not be a serious threat to the validity and conclusions of the findings that were the main interest. Moreover, the fact that interaction effects were found in this study mitigates concerns over the possible presence of common method variance, as compared to if only main effects had been found. One potential remedy for the common method variance, the multitrait-multimethod matrix (Campbell & Fiske, 1959) does not seem to be applicable, because “there is no direct means of cross-validating people’s descriptions of their feelings or intentions” (Podsakoff & Organ, 1986, p. 533). Possible ways to deal with the problem would be to use different raters for the liking ratings than for the job performance ratings, and/or to collect these ratings at different points in time.

Unlike real-life performance ratings, there was no longitudinal aspect to this study; all ratings were given at the same time, just after reading the background files with personal information about each target and his described on-the-job performance. Therefore, it was not possible to examine whether liking affects job performance ratings, job performance ratings affect liking, or if the relationship is bidirectional. Also, as just mentioned, one possible consequence of measuring different variables at the same time is common method variance. A longitudinal study could shed more light on the direction of the liking-job performance ratings relationship, as well as better avoid common method variance.

One shortcoming of this study was that because of the very large number of possible combinations of the background files and job performance descriptions into

booklets when order is taken into account, was that background files and job performance descriptions were not totally counterbalanced, but rather randomized. Because of this, even though each performance level, sex and sexual orientation was represented in each position in some booklets, they were not all represented an equal number of times in each position. The mean ratings for each performance level did differ somewhat depending on position in the booklets. In other words, it seems as if there may have been carry-over (or spill-over) effects from earlier vignettes to later ones, see Tables 24 through 27, so it is possible that the order of appearance may have had an (albeit small) effect on the mean ratings for each target sex and sexual orientation. It is possible that significant effects found in this study may be partly due to the order effect. Future studies could address this shortcoming in different ways. One obvious way would be to have each rater rate only one target. The obvious drawback of this design is that it would have lower power than a design in which each rater rated several targets. Another way to address the order effect would be to completely counterbalance the vignettes. This is possible, but the number of possible combinations increases very quickly with the number of vignettes (each made up of one background file and one performance description, combined in all possible ways), so counterbalancing is difficult when using several vignettes. A third way to address this shortcoming is to use a similar design to that used by Horvath and Ryan (2003) in which the description of each target was always combined with the same background information. This approach has another drawback, however, as mentioned earlier, because possible effects found may not be due to the variables of interest but to non-equal background descriptions.

Another limitation to this study concerns generalizability. All targets, both straight and gay, were described as living together with a significant other (and half of the straight targets were described as being married to their significant other). As Tables 20 to 23 show, there were differences in ratings depending on marital status. Therefore, it is uncertain how the findings of the present study generalize to people, straight or gay, who are single.

Since the ATL and ATG scales contain different items, a score on the ATL cannot be compared directly to a score on the ATG in terms of underlying attitudes. To test whether attitudes were more negative toward gay males than lesbians, scales containing identical items, except for the words “lesbians” and “gay men” have to be used. This was not done in the present study, and doing so in future studies would be advantageous.

For hypotheses 9 and 10, it was assumed that for targets described as performing on a medium level, their performance would be somewhat ambiguous to the raters, since they were not described as clearly performing well or not well. However, it may not be the case that a medium performance is more ambiguous than a strong or weak performance. As Table 28 shows, it appears that the standard deviations in ratings were larger for both straight and gay targets on all of the dependent variables on the medium level than on the high and low performance levels, except for liking ratings for gay targets, where the standard deviation was largest on the high performance level. This would support the idea that performance on a medium level is more ambiguous. On the other hand, the differences in standard deviations between performance levels were generally not very large, and also, the fact that the standard deviations were generally



larger on the medium performance level may be due to floor and ceiling effects on low and high performance levels.

As in most studies, there were missing data and invalid responses in the raw data. When this is the case, it is possible that the missing data or invalid responses affect the statistical results and interpretations of the findings. However, it is unlikely that this has been the case in the present study. Before deletion of cases with missing categorical variables (which cannot be imputed), Chi-square tests were performed to examine if there were systematic patterns between the missing cases and the variables of interest. All such Chi-square tests were non-significant, indicating no correlation with variables of interest. Missing continuous variables were imputed with maximum likelihood estimation, which makes fewer statistical assumptions about the data and is generally considered superior to imputation by multiple regression and mean substitution (Garson, 2008). Also, the missing and invalid responses were very few, less than 1% of total data points.

Another thing that can be mentioned here was that the question about target sex was (only) answered with “don’t know” in six cases, and that all of those targets were female, and four of them lesbian. Target sexual orientation was answered incorrectly most often for lesbians as well (13 times, compared to 9 times for the gay male, 3 and 4 times for the straight males, respectively, and 8 and 5 times for the straight females, respectively). Even though it appears that lesbians were the most difficult for raters to identify correctly, there was no impact on the statistical analysis. Chi-square tests were performed before removing these cases, and again, they were not significant, indicating no correlation with variables of interest.

### *Future Research*

One interesting matter to look into for future studies has already been suggested. There was no interaction effect between target sex and target sexual orientation, although studies using archival data usually find such an effect (Black et al., 2003, Clain & Leppel, 2001). Three possible reasons for this difference have been mentioned above – differences in career choices, gender roles and housework. Teasing apart these possible three reasons is a task for future research. To try to find out which factors are responsible for which effects, it would be helpful to conduct archival studies of large populations, in which possible combinations of the factors of interest are present in different combinations in different sub-populations.

Another aspect future research could investigate is whether the found effect of sexual orientation depends on the type of job – perhaps to what extent the job is gender stereotyped or how high status it has. Future research could also look into exactly what it is that causes these differences in performance ratings (as seen in Table 8). Clearly, in a study like the present one, it must be the fact that the targets are homosexual *per se*. But in other studies using live ratees, or possibly video recordings of ratees, other factors may be ground for discrimination as well, such as non-gender typed manners or speech patterns.

Another issue which could be the focus of further study is the finding that gay people were penalized more at higher performance levels than at lower. It is possible that this is paralleled by job status and organizational level, such that gay people are penalized more in higher status jobs and at higher organizational levels.

A further topic for future research could be to investigate the context in which possible discrimination occurs. Maybe it is more likely under certain conditions – organizational, contextual, or psychological. Factors which could be investigated include size of the organization, type of organization (e.g. for-profit, non-profit), sector of the economy, gender composition of the workforce in the organization, department and team, stress level in the organization and in the raters, and gender type of job.

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## APPENDIX A

### THE ATLG SCALE

Scale items for the Attitudes Toward Lesbian and Gay Men (ATLG) scale. Items 1 through 10 comprise the Attitudes Toward Lesbians (ATL) subscale; items 11-20 constitute the Attitudes toward Gay men (ATG) subscale. Shorter form items are 1, 4, 5, 7, 10 (ATL-S); 12, 14, 15, 18, 20 (ATG-S). Scoring is reversed for starred (\*) items.

1. Lesbians just can't fit into our society.
2. A woman's sexuality should *not* be a cause for job discrimination in any situation.  
\*
3. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.
4. State laws regulating private, consenting lesbian behavior should be loosened. \*
5. Female homosexuality is a sin.
6. The growing number of lesbians indicates a decline in American morals.
7. Female homosexuality in itself is no problem, but what society makes of it can be a problem. \*
8. Female homosexuality is a threat to many of our basic social institutions.
9. Female homosexuality is an inferior form of sexuality.
10. Lesbians are sick.
11. Male homosexual couples should be allowed to adopt children the same as heterosexual couples. \*
12. I think male homosexuals are disgusting.
13. Male homosexuals should *not* be allowed to teach school.
14. Male homosexuality is a perversion.
15. Just as in other species, male homosexuality is a natural expression of sexuality in human men. \*
16. If a man has homosexual feelings, he should do everything he can to overcome them.
17. I would *not* be too upset if I learned that my son was a homosexual. \*
18. Homosexual behavior between two men is just plain wrong.
19. The idea of male homosexual marriages seems ridiculous to me.

20. Male homosexuality is merely a different kind of lifestyle that should *not* be condemned. \*

Herek, G.M. (1988). Heterosexuals' attitudes toward lesbians and gay men: Correlates and gender differences. *The Journal of Sex Research*, 25, 451-477.

**APPENDIX B**  
**ITEMS FROM THE RUBIN LIKING SCALE**

1. I think that this professor is unusually well adjusted.
2. In my opinion, this professor is an exceptionally mature person.
3. I have great confidence in this professor's good judgment.
4. I think that this professor is one of those people who quickly wins respect.
5. This professor is one of the most likeable people I know.
6. This professor is the sort of person whom I myself would like to be.
7. It seems to me that it is very easy for this professor to gain admiration.

Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology*, 16, 265-273.

## APPENDIX C

### THE MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

Please respond to the following statements with “true” or “false”.

1. Before voting I thoroughly investigate the qualifications of all the candidates.
2. I never hesitate to go out of my way to help someone in trouble.
3. It is sometimes hard for me to go on with my work if I am not encouraged.
4. I have never intensely disliked anyone.
5. On occasion I have had doubts about my ability to succeed in life.
6. I sometimes feel resentful when I don't get my way.
7. I am always careful about my manner and dress.
8. My table manners at home are as good as when I eat out in a restaurant.
9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
10. On a few occasions, I have given up doing something because I thought too little of my ability.
11. I like to gossip at times.
12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
13. No matter who I'm talking to, I'm always a good listener.
14. I can remember “playing sick” to get out of something.
15. There have been occasions when I took advantage of someone.
16. I'm always willing to admit it when I make a mistake.
17. I always try to practice what I preach.
18. I don't find it particularly difficult to get along with loudmouthed, obnoxious people.
19. I sometimes try to get even, rather than forgive and forget.
20. When I don't know something I don't at all mind admitting it.
21. I am always courteous, even to people who are disagreeable.
22. At times I have really insisted on having things my way.
23. There have been occasions when I felt like smashing things.

24. I would never think of letting someone else be punished for my wrongdoings.
25. I never resent being asked to return a favor.
26. I have never been irked when people expressed ideas very different from my own.
27. I never make a long trip without checking the safety of my car.
28. There have been times when I have been quite jealous of the good fortune of others.
29. I have almost never felt the urge to tell someone off.
30. I am sometimes irritated by people who ask favors of me.
31. I have never felt that I was punished without a cause.
32. I sometimes think when people have a misfortune they only got what they deserved.
33. I have never deliberately said something that hurt someone's feelings.

Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.

**APPENDIX D**  
**THE SELF-ESTEEM SCALE**

Please indicate the degree to which you agree or disagree with each statement using the following scale

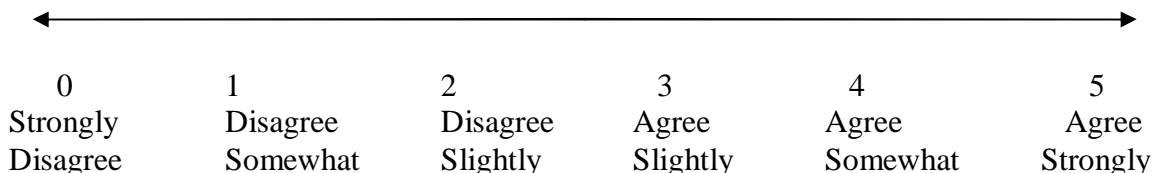
1. STRONGLY DISAGREE	2. DISAGREE	3. AGREE	4. STRONGLY AGREE
-------------------------	-------------	----------	----------------------

1. I feel that I am a person of worth, at least on equal basis with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

**APPENDIX E**  
**THE AMBIVALENT SEXISM INVENTORY**

Please indicate the degree to which you agree or disagree with each statement using the following scale



1. No matter how competent he is, a man is not truly complete as a person unless he has the love of a woman.
2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for “equality”.
3. In a disaster, women ought not necessarily to be rescued before men.
4. Most women interpret innocent remarks or acts as being sexist.
5. Women are too easily offended.
6. People are often truly happy in life without being romantically involved with a member of the other sex.
7. Feminists are not seeking for women to have more power than men.
8. Many women have a quality of purity that few men possess.
9. Women should be cherished and protected by men.
10. Most women fail to appreciate fully all that men do for them.
11. Women seek to gain power by getting control over men.
12. Every man ought to have a woman whom he adores.
13. Men are complete without women.
14. Women exaggerate problem they have at work
15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.



16. When women lose to men in fair competition, they typically complain about being discriminated against.
17. A good woman should be set on a pedestal by her man.
18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing make advances.
19. Women, compared to men, tend to have superior moral sensibility.
20. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives.
21. Feminists are making entirely reasonable demands of men.
22. Women, as compared to men, tend to have a more refined sense of culture and good taste.

Glick, P. & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512.

## APPENDIX F

### THE SHORT VERSION OF THE ATTITUDES TOWARD WOMEN SCALE

The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement. Please use the following scale to make your responses.

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Disagree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Agree</i>
<i>Strongly</i>	<i>Mildly</i>	<i>Mildly</i>	<i>Strongly</i>

1. Swearing and obscenity are more repulsive in the speech of a woman than of a man.
2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.
3. Both husband and wife should be allowed the same grounds for divorce.
4. Telling dirty jokes should be mostly a masculine prerogative.
5. Intoxication among women is worse than intoxication among men.
6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
7. It is insulting to women to have the "obey" clause remain in the marriage service.
8. There should be a strict merit system in job appointment and promotion without regard to sex.
9. A woman should be as free as a man to propose marriage.
10. Women should worry less about their right and more about becoming good wives and mothers.
11. Women earning as much as their dates should bear equally the expense when they go out together.
12. Women should assume their rightful place in business and all the professions along with men.

13. A woman should not expect to go to exactly the same places or to have quite the same freedom as a man.
14. Sons in a family should be given more encouragement to go to college than daughters.
15. It is ridiculous for a woman to run a locomotive and for a man to darn socks.
16. In general, the father should have greater authority than the mother in the bringing up of children.
17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancés.
18. The husband should not be favored by law over the wife in the disposal of family property or income.
19. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.
20. The intellectual leadership of a community should be largely in the hands of men.
21. Economic and social freedom is worth far more to women than acceptance of the ideal or femininity which has been set up by men.
22. On the average, women should be regarded as less capable of contributing to economic production than are men.
23. There are many jobs in which men should be given preference over women in being hired or promoted.
24. Women should be given equal opportunity with men for apprenticeship in the various trades.
25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

Spence, J. T., Helmreich, R., & Stapp, J. (1973). A short version of the Attitudes toward Women Scale (AWS). *Bulletin of the Psychonomic Society*, 2, 219-220.

## APPENDIX G

### BACKGROUND DESCRIPTIONS OF TARGETS

Name: Michael Anderson  
204 E. Oakhill Ave.  
East Lansing, MI 48824  
517-874-3125 (cell)

Emergency contact: Matthew Galloway  
Relationship: Significant other  
204 E. Oakhill Ave.  
East Lansing, MI 48824  
517-230-2468 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in lesbian, gay and bisexual studies, minor in history, Hobart and William Smith  
Colleges (NY), 1998  
Ph.D. in history, Indiana University, 2004

Previous Academic Employment:  
Lecturer, University of Illinois, 9/2004-5/2006

Other employment:  
Super Cuts Hairdresser, 1999-2000  
LaCroix interior design, summer 1998

Extracurricular activities while in college/graduate school:  
Pride Week Committee Member (Vassar College)  
Ballet dancer

Name: Jessica Briggs  
357 S. Beech St.  
East Lansing, MI 48824  
517-468-2146 (cell)

Emergency contact: Katie Gulbin  
Relationship: Significant other  
357 S. Beech St.  
East Lansing, MI 48824  
517-568-2018 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:

B.A. in women's studies with a concentration in queer studies, Smith College (MA),  
1998  
Ph.D. in history, University of Illinois, 2004

Previous Academic Employment:

Lecturer, Northwestern University, 9/2004-5/2006

Other employment:

Softball coach, Lavalley High School, 1999-2000  
Kelly Construction Company, summer 1998

Extracurricular activities while in college/graduate school:

National Coming Out Day Committee Member (Smith College)  
Football player  
Basketball player

Name: Adam Chadwick  
248 E. Evergreen Ave.  
East Lansing, MI 48824  
517-580-2138 (cell)

Emergency contact: Allison Henderson  
Relationship: Significant other  
248 E. Evergreen Ave.  
East Lansing, MI 48824  
517-5486-2168 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in political science, minor in history, Grinnell College (IA), 1998  
Ph.D. in history, Northwestern University, 2004

Previous Academic Employment:  
Lecturer, University of Michigan, 9/2004-5/2006

Other employment:  
CVS pharmacy, 1999-2000  
AMC Theatres, summer 1998

Extracurricular activities while in college/graduate school:  
Local Greenpeace Committee Member (Grinnell College)  
Lacrosse player

Name: Nicholas Dunn  
513 E. Southlawn Ave.  
East Lansing, MI 48824  
517-2468-0542 (cell)

Emergency contact: Marie Dunn  
Relationship: Spouse  
513 E. Southlawn Ave.  
East Lansing, MI 48824  
517-045-0138 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in international politics, minor in history, Hamilton College (NY), 1998  
Ph.D. in history, University of Michigan, 2004

Previous Academic Employment:  
Lecturer, University of Minnesota, 9/2004-5/2006

Other employment:  
S'barro Pizza 1999-2000  
Blockbusters Video, summer 1998

Extracurricular activities while in college/graduate school:  
Local Amnesty International Committee Member (Hamilton College)  
Ice hockey player

Name: Melissa Erney  
175 E. Westview Ave.  
East Lansing, MI 48824  
517-5468-3012 (cell)

Emergency contact: Leonard McKenna  
Relationship: Significant other  
175 E. Westview Ave.  
East Lansing, MI 48824  
517-5046-3846 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in Latin American studies, minor in history, Colby College (ME), 1998  
Ph.D. in history, University of Minnesota, 2004

Previous Academic Employment:  
Lecturer, Purdue University, 9/2004-5/2006

Other employment:  
United States Postal Service, 1999-2000  
Wegman's, summer 1998

Extracurricular activities while in college/graduate school:  
Friends of Latin America Committee Member (Colby College)  
Cheerleader



Name: Helen Field  
357 E. Touraine Ave.  
East Lansing, MI 48824  
517-597-3458 (cell)

Emergency contact: Joseph Field  
Relationship: Spouse  
357 E. Touraine Ave.  
East Lansing, MI 48824  
517-576-2468 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in sociology, minor in history, Oberlin College (OH), 1998  
Ph.D. in history, Purdue University, 2004

Previous Academic Employment:  
Lecturer, Indiana University, 9/2004-5/2006

Other employment:  
Pierre Beauty Salon, 1999-2000  
PNC Bank, summer 1998

Extracurricular activities while in college/graduate school:  
Homecoming Committee Member (Oberlin College)  
Jazz ballet dancer

**APPENDIX H**  
**JOB PERFORMANCE DESCRIPTIONS**

Person 1

This professor refused to help students outside of class because of his “demanding schedule”. He never praises or offers encouragement to the class. He was seldom available during his posted office hours.

This professor presents a slow, rambling lecture. He has a bad accent and is hard to understand. He often stammers and loses his train of thought.

This professor told the class that the course was not in his area of expertise and that he disliked it. He has to refer to his notes before answering any questions from students. He was always the last person to arrive and the first person to leave the classroom.

This professor moved the due date of a major paper up a week so that he would not be rushed at the end of the quarter, thus his students were rushed instead. He required her students to read two textbooks and four paperback books as well as write a term paper. He would not assign work for several days, then would give a heavy assignment for a single night.

This professor never stated his grading procedures. He refused to scale the test even when the whole class did poorly. He tested over material he did not cover.

## Person 2

This professor never made an effort to speak to anyone in class. She embarrassed a student who asked her a question. She gave students her office number but did not make them feel welcome.

This professor lectures very rapidly with such an accent that no one can understand her. Her lectures are boring and unorganized. She will never change her tone or expression while lecturing.

This professor told the students that she comes to class only because she is paid to. She could not answer questions about anything except what was mentioned in the book. She failed to follow up on his promise to find out answers to questions asked in class.

This professor twice assigned five-page papers two days before they were due. When making course assignments, she did not consider that students were taking courses other than hers. She gives more notes in one hour than most do I two.

This professor would not change grades even if she made a mistake in grading. She tells her students to study one thing, then tests on something else. She uses extremely tricky questions on her tests.

### Person 3

This professor saw students in his off-campus office only. He will see students in his office only if they make appointments.

This professor continuously referred back to his notes while attempting to lecture. He sometimes loses his place in his notes. He gave details about the material but never elaborated beyond them.

This professor mentioned several times that the course he was teaching did not represent his major area of interest. He seldom adds anything current to his lectures. He never brings in outside material relating to the subject.

This professor would adjust the homework assignments to suit the wishes of the class. He assigned a four-to-five page paper and specified the format and style in which it was to be written. He gives optional outside reading assignments.

This professor gives objective tests. He gives hard tests which require the students to study a lot. He does not curve grades unless the class does extremely badly.

#### Person 4

This professor leaves promptly after giving his lecture. He is attentive and helpful in class but is unavailable for outside help.

This professor always kept his classroom presentations specific and to the point. He relied heavily on his notes, thus made very little eye contact with his students. He sits on his desk all period.

This professor was never on time for class. He keeps up with the latest developments in his field but does not include them in his lectures. He would sometimes get so involved in the subject matter that he would forget to stop lecturing when the class period was over.

This professor requires a lot of memorization for his class. He gave an extremely heavy assignment one week, then slacked off for a week or so before giving another assignment. He required a term paper, oral presentation and weekly tests.

This professor's test questions are usually reasonable, but are sometimes tricky. He gives multiple-choice tests with some hard and some easy items so that all students will get at least some items correct. He spaces tests two weeks apart.

## Person 5

This professor tried to learn all his students' names. She encourages students to meet with her outside the classroom to discuss anything they wish. She helped a student get through a personal crisis.

This professor speaks clearly and loudly. She used good teaching aids, was articulate, and stressed important points in class. She gave notes in a very well organized outline form.

This professor displayed, both verbally and non-verbally, an infectious enthusiasm and interest in the course. She knows the material so well that she is able to answer all questions asked by his students. If she did not know an answer to a question, she would find it out for the next class.

This professor gives short reading assignments. She distributed the workload evenly across the semester. She takes into consideration students' other classes and outside activities when assigning work.

This professor stated his grading system clearly at the beginning of the semester. She gives her students enough time to complete her tests. Her test questions are to the point and easy to understand.

## Person 6

This professor counseled students regarding their careers and the job market. She made appointments at her students' convenience to discuss problems with class work. She counseled a student and helped her solve a personal problem.

This professor speaks distinctively and uses good grammar. She tried to relate complex material to the students in a manner that they could understand. She presents material orderly and concisely, seldom referred to his notes, and never ran behind schedule.

On the first day of class, this professor told her class how interesting she found the subject and assured them that they would too. She provided examples from her own work experience in the field. She often mentions changes that have occurred since the textbook was published.

This professor reduced the workload at the end of the semester when she realized that her students did not have enough time to complete all of the assignments. She assigned only as much homework as is necessary to learn the material thoroughly. She gives plenty of time to read the material and discuss it fully in class.

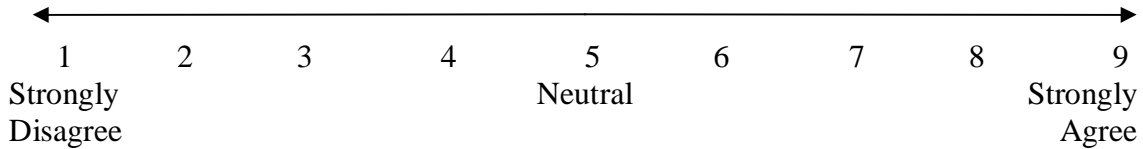
This professor's tests covered only what she told her students would be on them. She told her students how much each test and project was worth toward the final grade. She dropped the lowest quiz grade when calculating final grades.



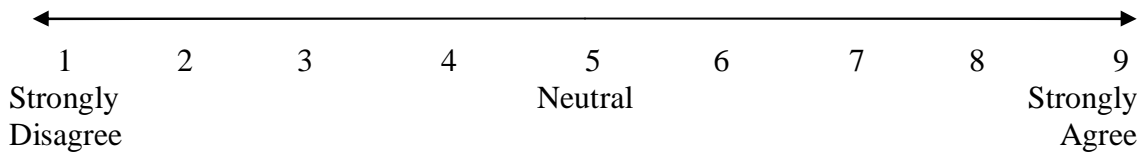
## APPENDIX I

### ITEMS FOR RATING JOB PERFORMANCE AND LIKING

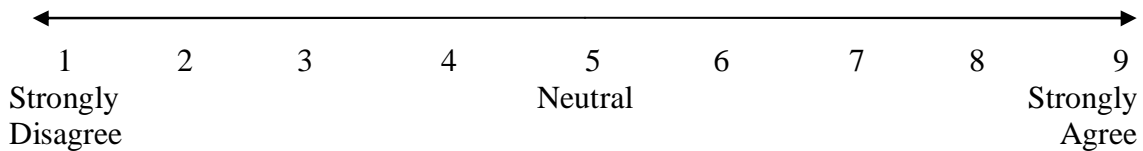
1. This professor treats students well, both in and out of class.



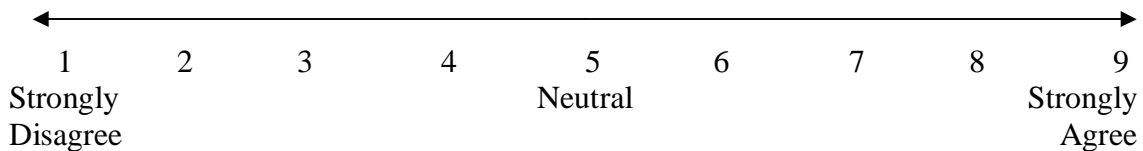
2. This professor organizes material well and is good at presenting it to the class.



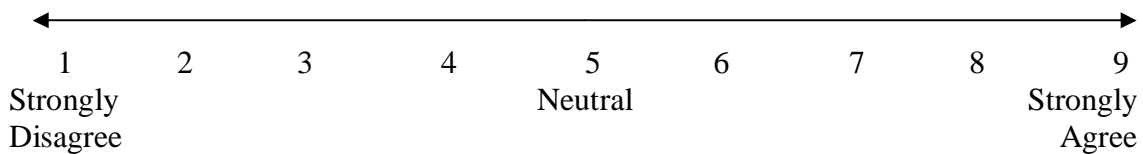
3. This professor is knowledgeable about course material and interested in it.



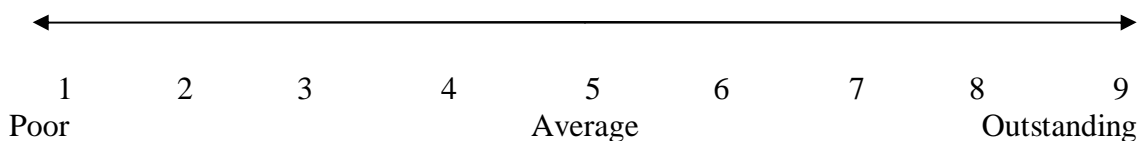
4. This professor assigns a reasonable amount of work.



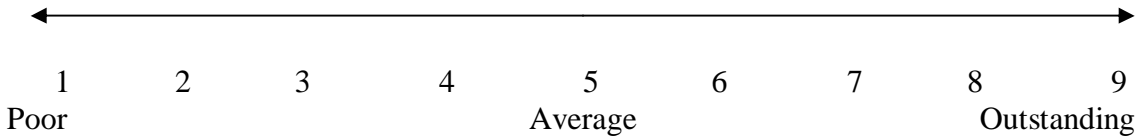
5. This professor's testing and grading policies are fair.



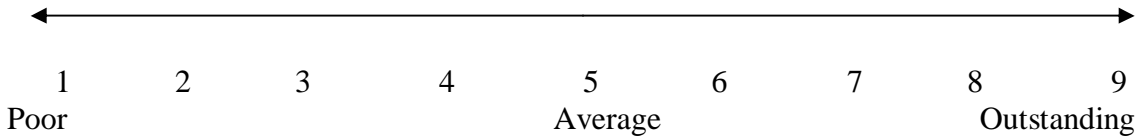
6. Considering all the information you have, how would you rate this professor's overall job performance as an instructor?



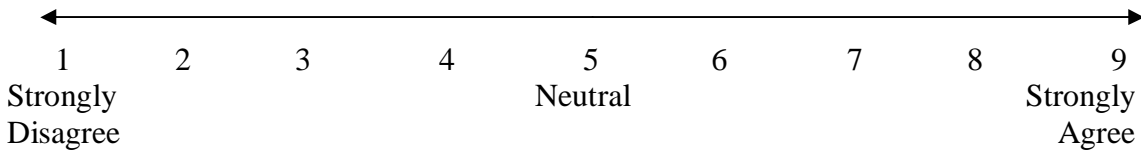
7. How would you rate his/her quality of work?



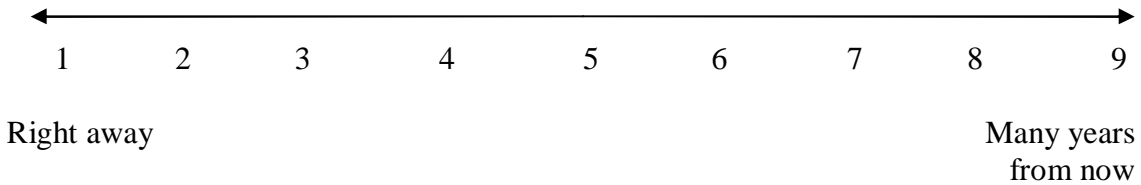
8. How would you rate his/her quantity of work?



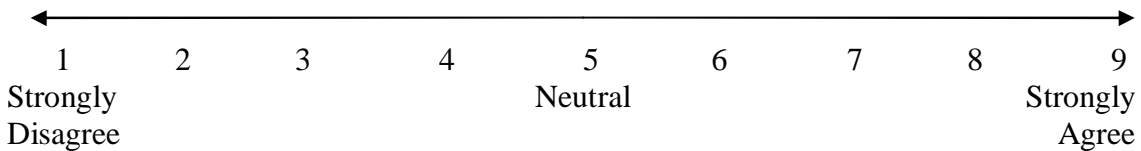
9. This professor should be promoted to a higher position.



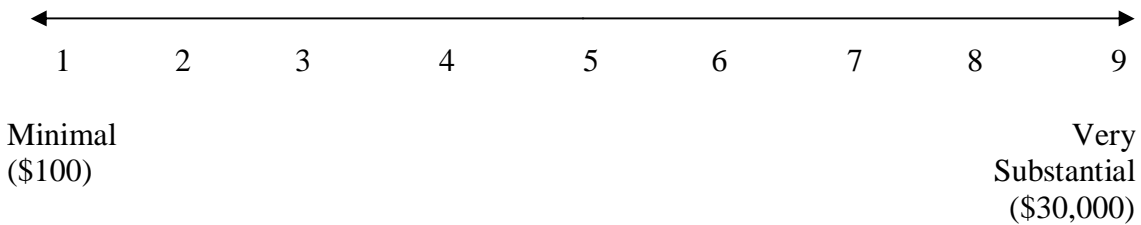
10. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



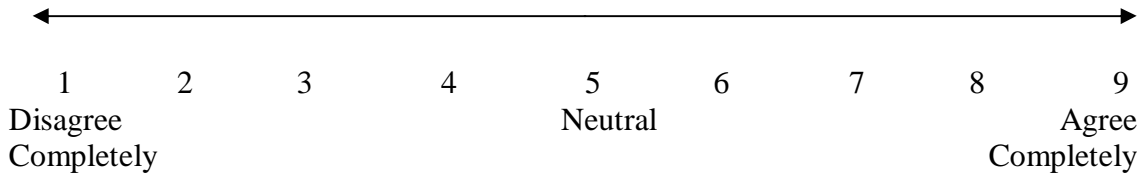
11. This professor should receive a pay raise.



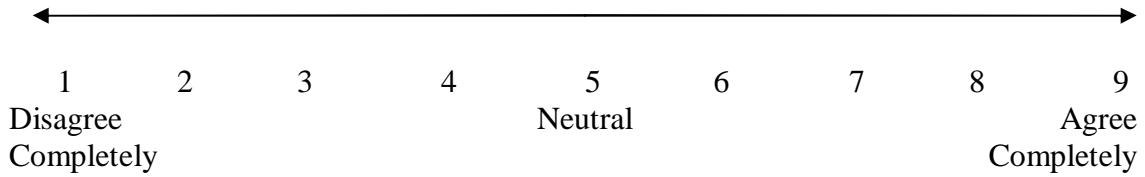
12. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?



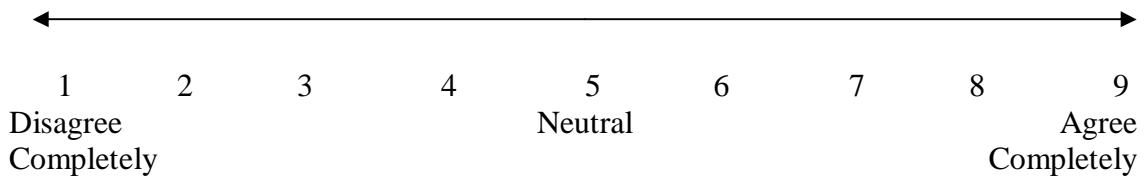
13. I think that this professor is unusually well adjusted.



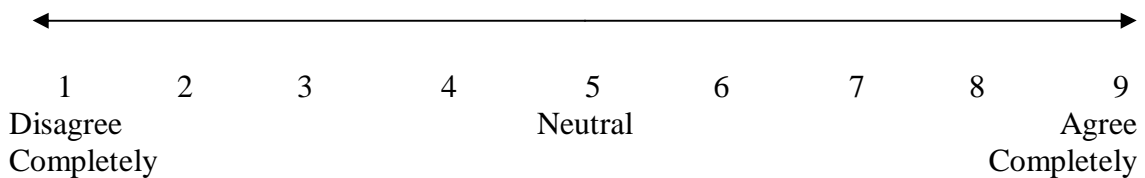
14. In my opinion, this professor is an exceptionally mature person.



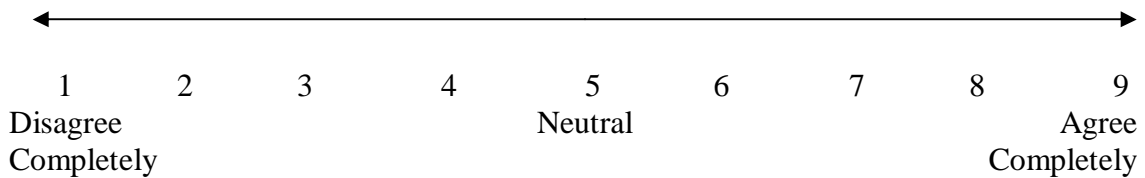
15. I have great confidence in this professor's good judgment.



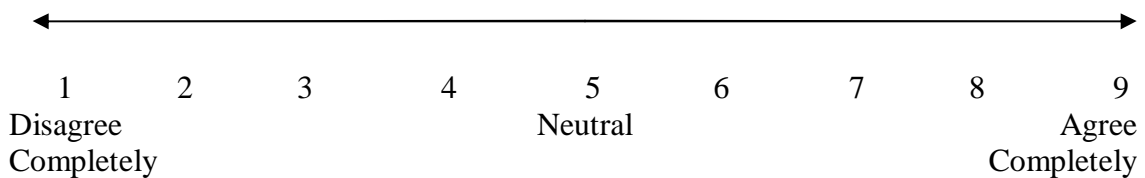
16. I think that this professor is one of those people who quickly wins respect.



17. This professor is one of the most likeable people I know.



18. This professor is the sort of person whom I myself would like to be.





## **APPENDIX J**

### **A SAMPLE BOOKLET**

Booklet code number: 1

Very important! Please enter this code number on your answer sheet.

On the following pages you will find the personnel files and descriptions of job behaviors of a few fictitious professors. For each professor, please read the description about his or her background carefully before you answer the questions about him or her. Then read the description of that professor's job behaviors carefully before you proceed to answer the questions about his or her job performance.

Thanks for participating in this study and providing me with useful data!

Name: Michael Anderson  
204 E. Oakhill Ave.  
East Lansing, MI 48824  
517-874-3125 (cell)

Emergency contact: Matthew Galloway  
Relationship: Significant other  
204 E. Oakhill Ave.  
East Lansing, MI 48824  
517-230-2468 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in lesbian, gay and bisexual studies, minor in history, Hobart and William Smith  
Colleges (NY), 1998  
Ph.D. in history, Indiana University, 2004

Previous Academic Employment:  
Lecturer, University of Illinois, 9/2004-5/2006

Other employment:  
Super Cuts Hairdresser, 1999-2000  
LaCroix interior design, summer 1998

Extracurricular activities while in college/graduate school:  
Pride Week Committee Member (Vassar College)  
Ballet dancer

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

20. (1) Male (2) Female (3) Don't know

21. (1) Married (2) Single (3) In a relationship (4) Don't know

22. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

23. (1) Gay (2) Straight (3) Don't know

24. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

25. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

26. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Michael Anderson refuses to help students outside of class because of his “demanding schedule”. He never praises or offers encouragement to the class. He is seldom available during his posted office hours.

He presents a slow, rambling lecture. He has a bad accent and is hard to understand. He often stammers and loses his train of thought.

He told the class that the course was not in his area of expertise and that he disliked it. He has to refer to his notes before answering any questions from students. He is always the last person to arrive and the first person to leave the classroom.

He moved the due date of a major paper up a week so that he would not be rushed at the end of the semester, thus his students were rushed instead. He required his students to read two textbooks and four paperback books as well as write a term paper. He would not assign work for several days, then would give a heavy assignment for a single night.

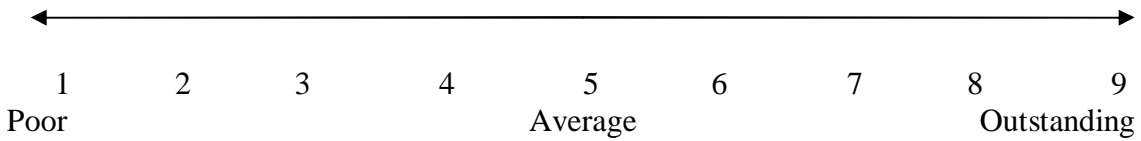
He never stated his grading procedures. He refused to scale the test even when the whole class did poorly. He tested over material he did not cover.

A

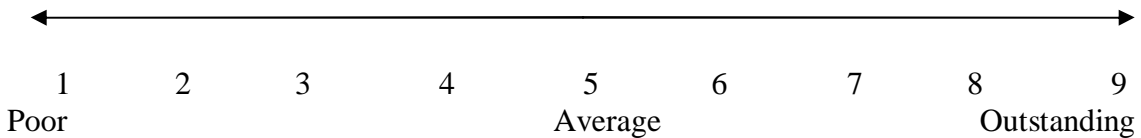




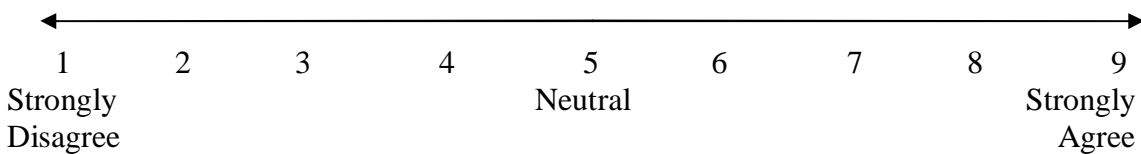
33. How would you rate his/her quality of work?



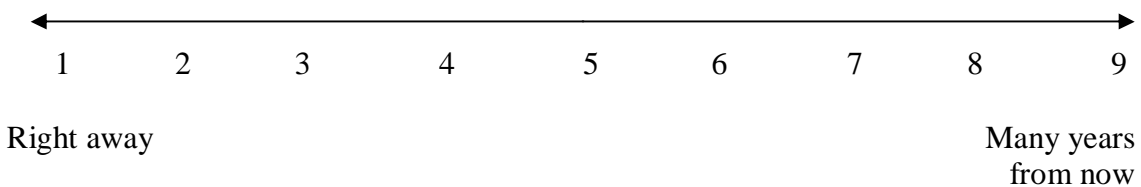
34. How would you rate his/her quantity of work?



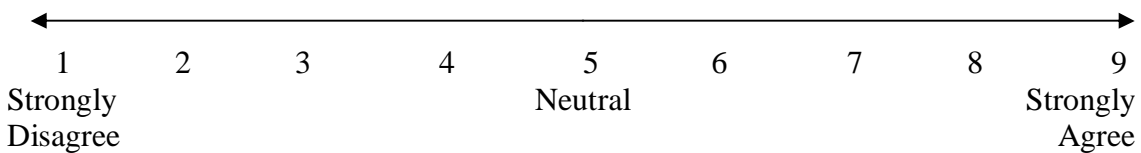
35. This professor should be promoted to a higher position.



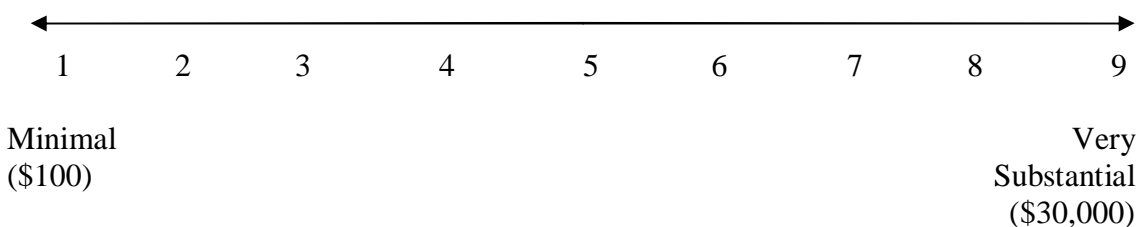
36. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



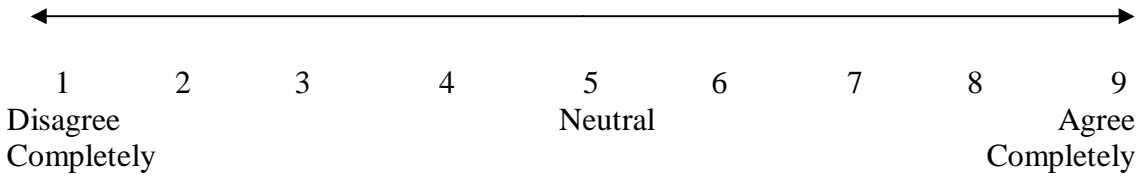
37. This professor should receive a pay raise.



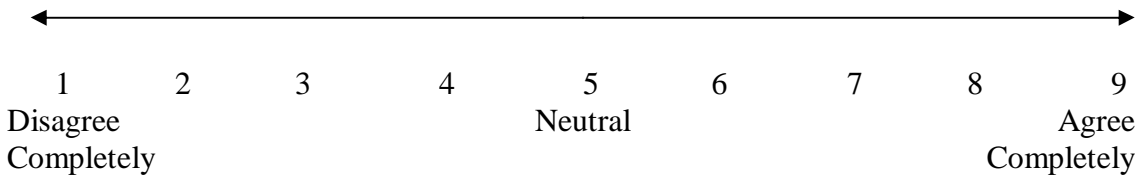
38. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?



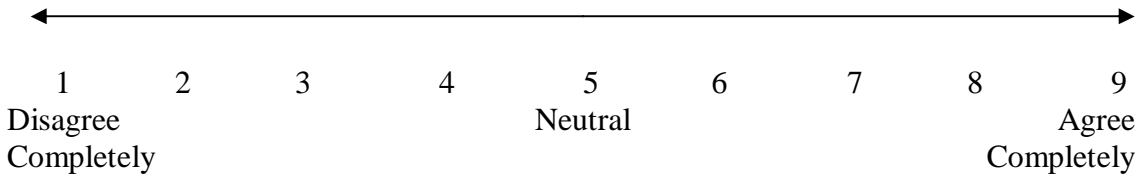
39. I think that this professor is unusually well adjusted.



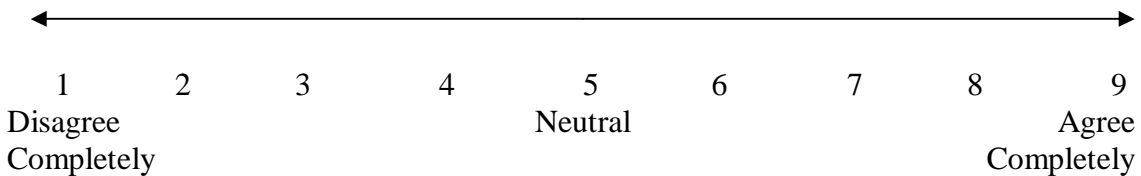
40. In my opinion, this professor is an exceptionally mature person.



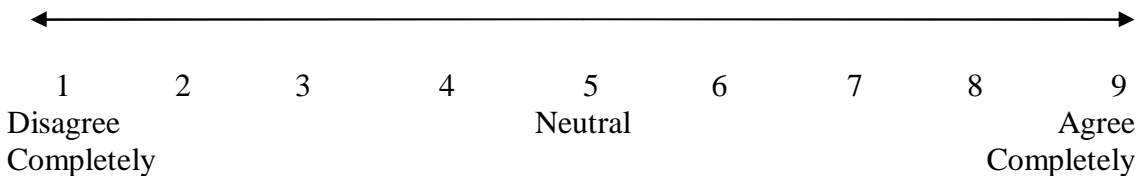
41. I have great confidence in this professor's good judgment.



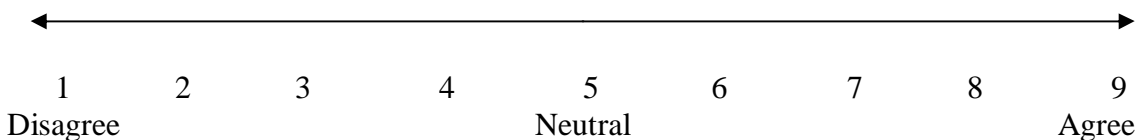
42. I think that this professor is one of those people who quickly wins respect.



43. This professor is one of the most likeable people I know.



44. This professor is the sort of person whom I myself would like to be.



Completely

Completely

45. It seems to me that it is very easy for this professor to gain admiration.



1  
Disagree  
Completely

2

3

4

5  
Neutral

6

7

8

9  
Agree  
Completely

Name: Jessica Briggs  
357 S. Beech St.  
East Lansing, MI 48824  
517-468-2146 (cell)

Emergency contact: Katie Gulbin  
Relationship: Significant other  
357 S. Beech St.  
East Lansing, MI 48824  
517-568-2018 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in women's studies with a concentration in queer studies, Smith College (MA),  
1998  
Ph.D. in history, University of Illinois, 2004

Previous Academic Employment:  
Lecturer, Northwestern University, 9/2004-5/2006

Other employment:  
Softball coach, Lavallo High School, 1999-2000  
Kelly Construction Company, summer 1998

Extracurricular activities while in college/graduate school:  
National Coming Out Day Committee Member (Smith College)  
Football player  
Basketball player

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

46. (1) Male (2) Female (3) Don't know

47. (1) Married (2) Single (3) In a relationship (4) Don't know

48. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

49. (1) Gay (2) Straight (3) Don't know

50. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

51. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

52. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Jessica Briggs never made an effort to speak to anyone in class. She embarrassed a student who asked her a question. She gave students her office number but did not make them feel welcome.

She lectures very rapidly with such an accent that no one can understand her. Her lectures are boring and unorganized. She will never change her tone or expression while lecturing.

She told the students that she comes to class only because she is paid to. She could not answer questions about anything except what was mentioned in the book. She failed to follow up on her promise to find out answers to questions asked in class.

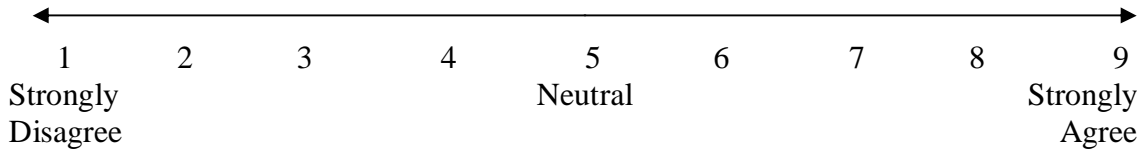
She twice assigned five-page papers two days before they were due. When making course assignments, she did not consider that students were taking courses other than hers. She gives more notes in one hour than most do in two.

She would not change grades even if she made a mistake in grading. She tells her students to study one thing, then tests on something else. She uses extremely tricky questions on her tests.

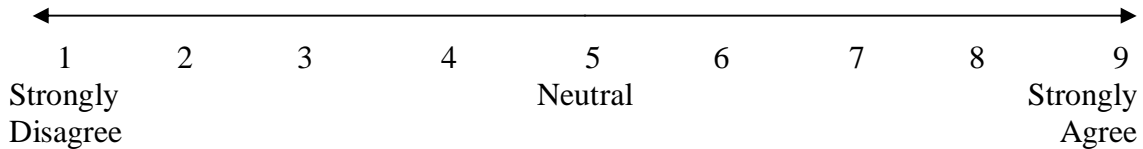
B

For each of the statements below, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your assessment based on the description provided about the person.

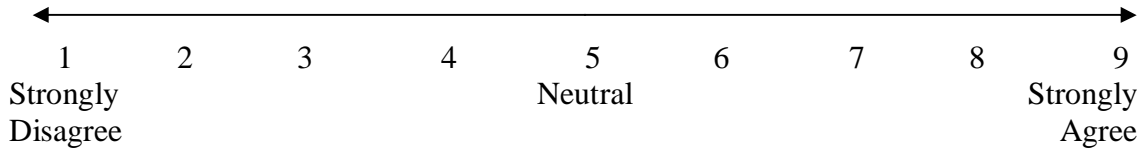
53. This professor treats students well, both in and out of class.



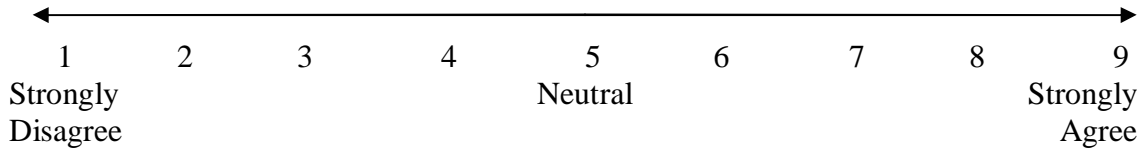
54. This professor organizes material well and is good at presenting it to the class.



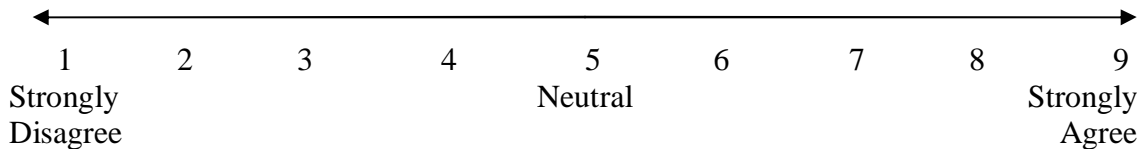
55. This professor is knowledgeable about course material and interested in it.



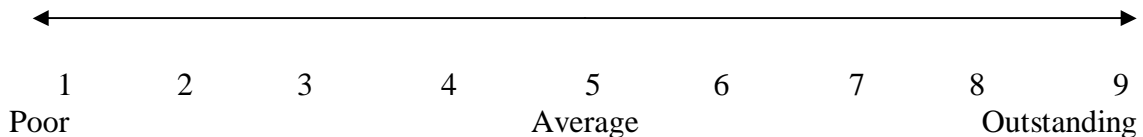
56. This professor assigns a reasonable amount of work.



57. This professor's testing and grading policies are fair.

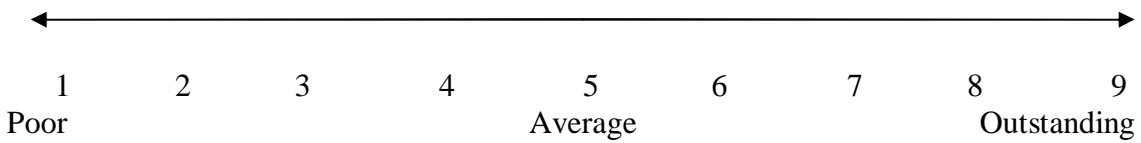


58. Considering all the information you have, how would you rate this professor's overall job performance as an instructor?

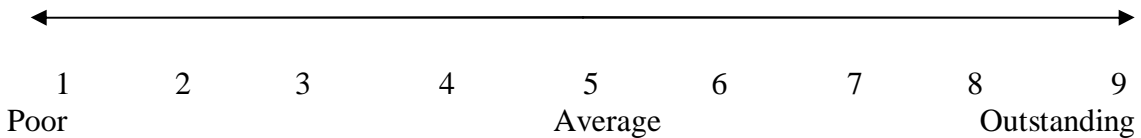




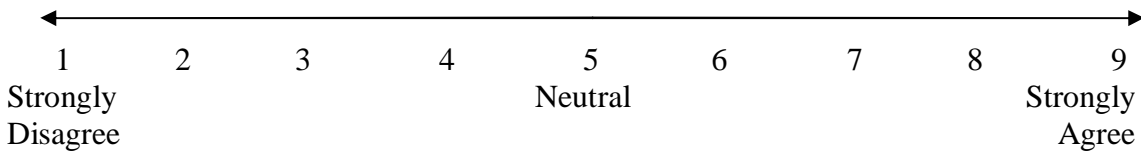
59. How would you rate his/her quality of work?



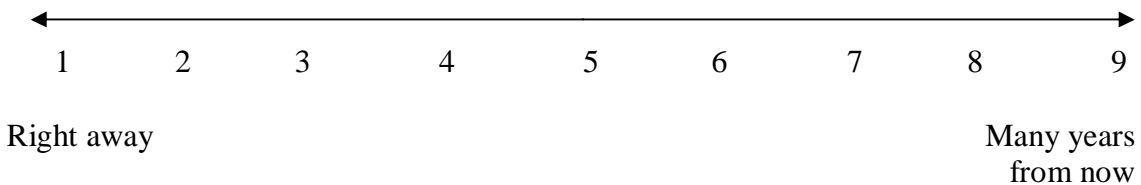
60. How would you rate his/her quantity of work?



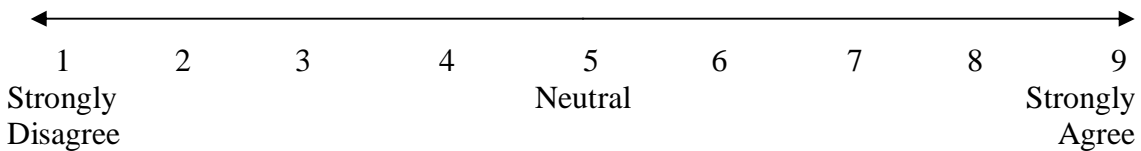
61. This professor should be promoted to a higher position.



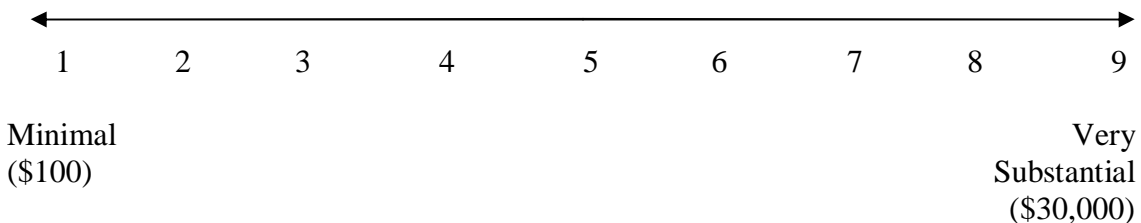
62. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



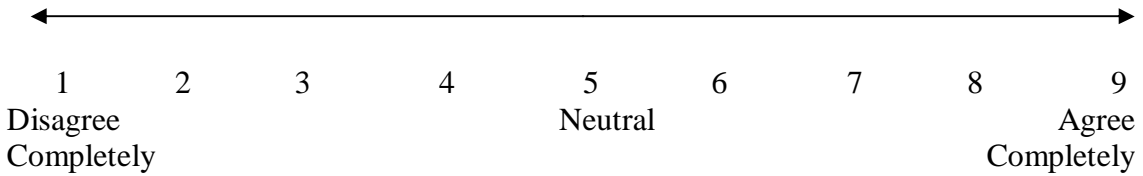
63. This professor should receive a pay raise.



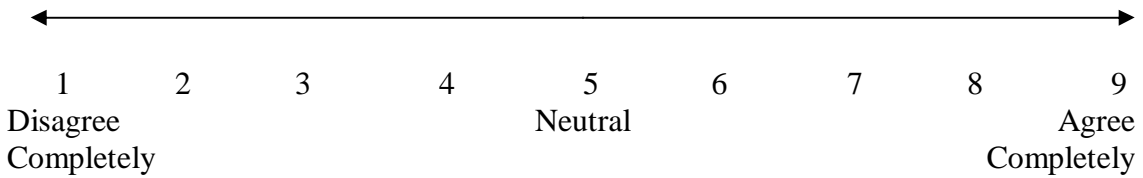
64. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?



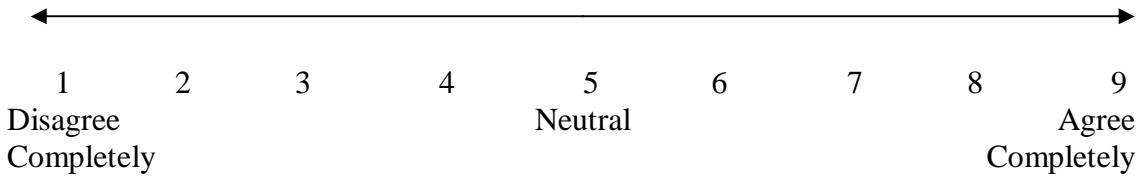
65. I think that this professor is unusually well adjusted.



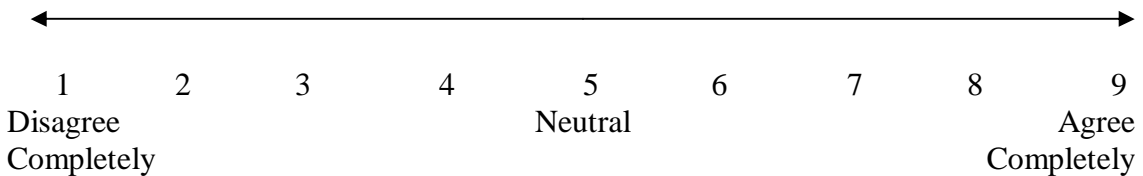
66. In my opinion, this professor is an exceptionally mature person.



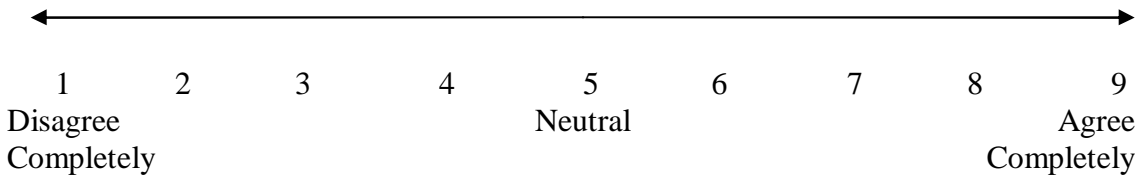
67. I have great confidence in this professor's good judgment.



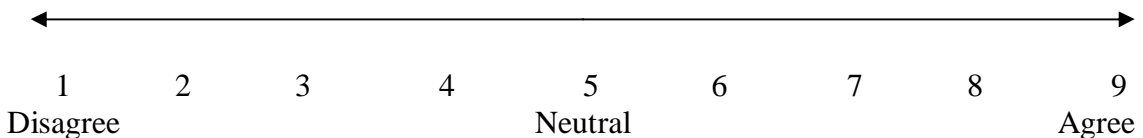
68. I think that this professor is one of those people who quickly wins respect.



69. This professor is one of the most likeable people I know.



70. This professor is the sort of person whom I myself would like to be.



Completely

Completely

71. It seems to me that it is very easy for this professor to gain admiration.



1  
Disagree  
Completely

2

3

4

5  
Neutral

6

7

8

9  
Agree  
Completely

Name: Adam Chadwick  
248 E. Evergreen Ave.  
East Lansing, MI 48824  
517-580-2138 (cell)

Emergency contact: Allison Henderson  
Relationship: Significant other  
248 E. Evergreen Ave.  
East Lansing, MI 48824  
517-5486-2168 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in political science, minor in history, Grinnell College (IA), 1998  
Ph.D. in history, Northwestern University, 2004

Previous Academic Employment:  
Lecturer, University of Michigan, 9/2004-5/2006

Other employment:  
CVS pharmacy, 1999-2000  
AMC Theatres, summer 1998

Extracurricular activities while in college/graduate school:  
Local Greenpeace Committee Member (Grinnell College)  
Lacrosse player

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

72. (1) Male (2) Female (3) Don't know

73. (1) Married (2) Single (3) In a relationship (4) Don't know

74. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

75. (1) Gay (2) Straight (3) Don't know

76. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

77. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

78. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Adam Chadwick sees students in his off-campus office only. He will see students in his office only if they make appointments.

He continuously refers back to his notes while attempting to lecture. He sometimes loses his place in his notes. He gives details about the material but never elaborates beyond them.

He mentioned several times that the course he was teaching did not represent his major area of interest. He seldom adds anything current to his lectures. He never brings in outside material relating to the subject.

He would adjust the homework assignments to suit the wishes of the class.

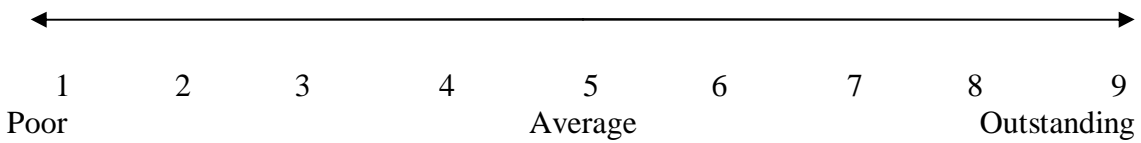
He assigned a four-to-five page paper and specified the format and style in which it was to be written. He gives optional outside reading assignments.

He gives objective tests. He gives hard tests which require the students to study a lot. He does not curve grades unless the class does extremely badly.

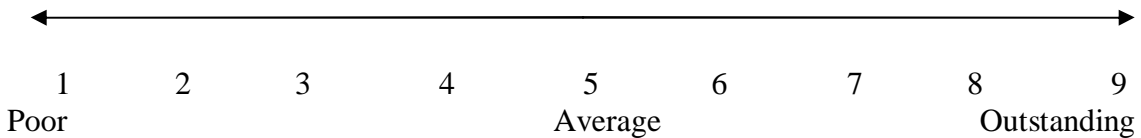
C



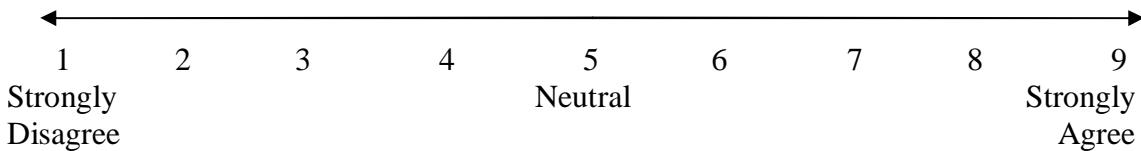
85. How would you rate his/her quality of work?



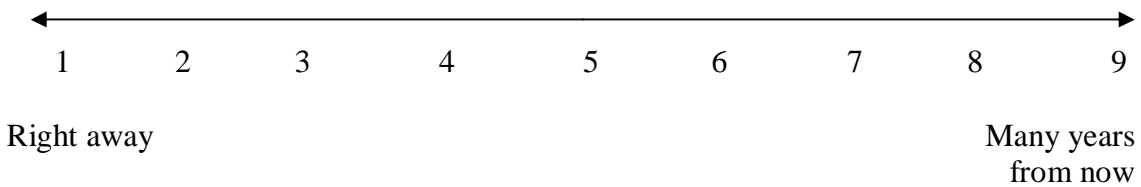
86. How would you rate his/her quantity of work?



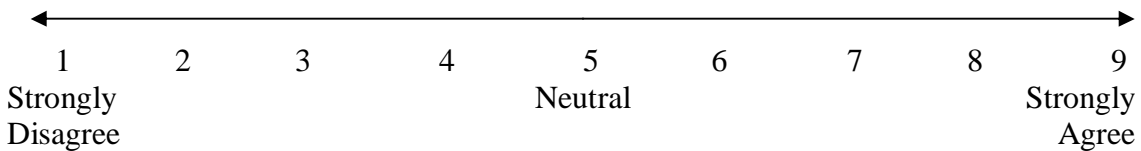
87. This professor should be promoted to a higher position.



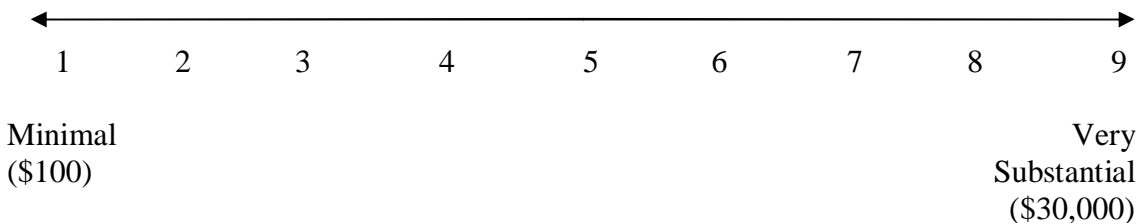
88. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



89. This professor should receive a pay raise.

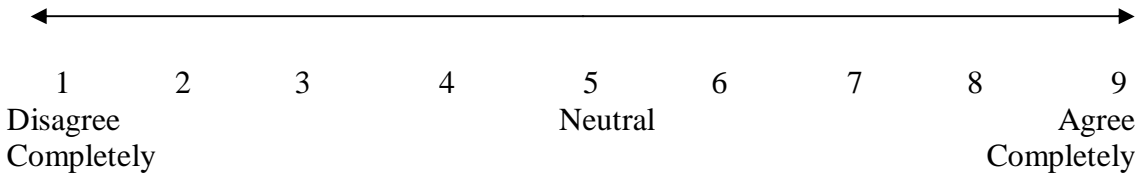


90. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?

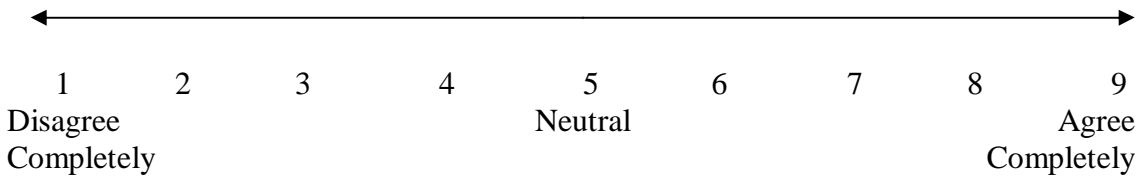




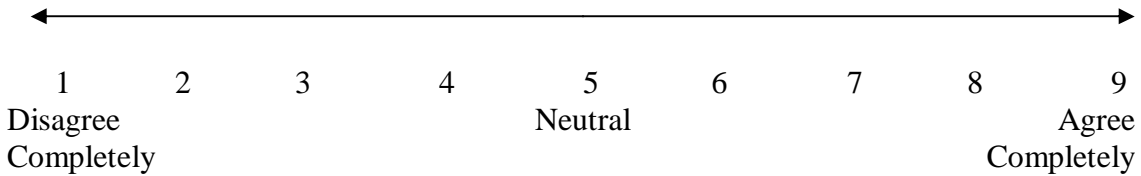
91. I think that this professor is unusually well adjusted.



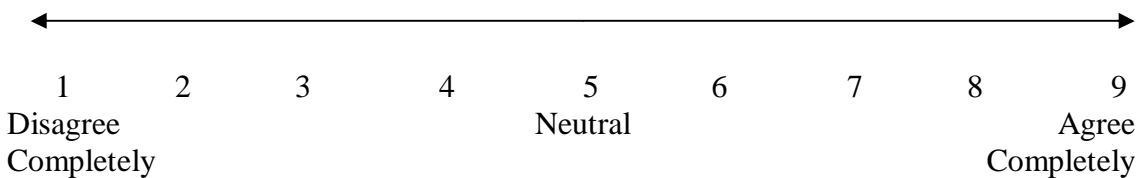
92. In my opinion, this professor is an exceptionally mature person.



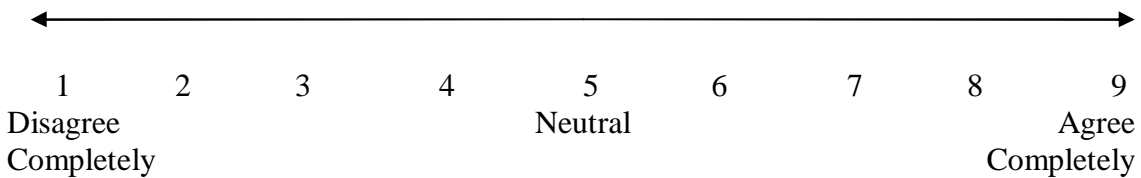
93. I have great confidence in this professor's good judgment.



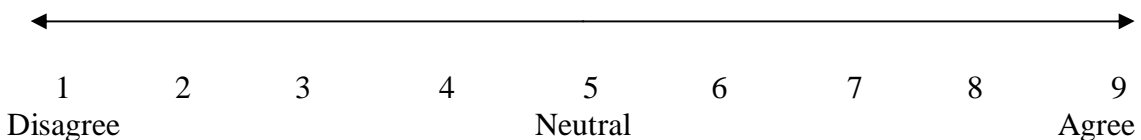
94. I think that this professor is one of those people who quickly wins respect.



95. This professor is one of the most likeable people I know.



96. This professor is the sort of person whom I myself would like to be.



Completely

Completely

97. It seems to me that it is very easy for this professor to gain admiration.



1  
Disagree  
Completely

2

3

4

5  
Neutral

6

7

8

9  
Agree  
Completely

Name: Nicholas Dunn  
513 E. Southlawn Ave.  
East Lansing, MI 48824  
517-2468-0542 (cell)

Emergency contact: Marie Dunn  
Relationship: Spouse  
513 E. Southlawn Ave.  
East Lansing, MI 48824  
517-045-0138 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in international politics, minor in history, Hamilton College (NY), 1998  
Ph.D. in history, University of Michigan, 2004

Previous Academic Employment:  
Lecturer, University of Minnesota, 9/2004-5/2006

Other employment:  
S'barro Pizza 1999-2000  
Blockbusters Video, summer 1998

Extracurricular activities while in college/graduate school:  
Local Amnesty International Committee Member (Hamilton College)  
Ice hockey player

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

98. (1) Male (2) Female (3) Don't know

99. (1) Married (2) Single (3) In a relationship (4) Don't know

100. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

101. (1) Gay (2) Straight (3) Don't know

102. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

103. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

104. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Nicholas Dunn leaves promptly after giving his lecture. He is attentive and helpful in class but is unavailable for outside help.

He always keeps his classroom presentations specific and to the point. He relies heavily on his notes, thus makes very little eye contact with his students. He sits on his desk all period.

He is never on time for class. He keeps up with the latest developments in his field but does not include them in his lectures. He will sometimes get so involved in the subject matter that he will forget to stop lecturing when the class period is over.

He requires a lot of memorization for his class. He gave an extremely heavy assignment one week, then slacked off for a week or so before giving another assignment. He required a term paper, oral presentation and weekly tests.

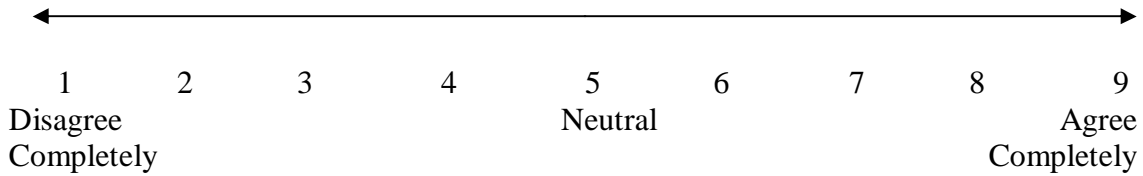
He's test questions are usually reasonable, but are sometimes tricky. He gives multiple-choice tests with some hard and some easy items so that all students will get at least some items correct. He spaces tests two weeks apart.

D

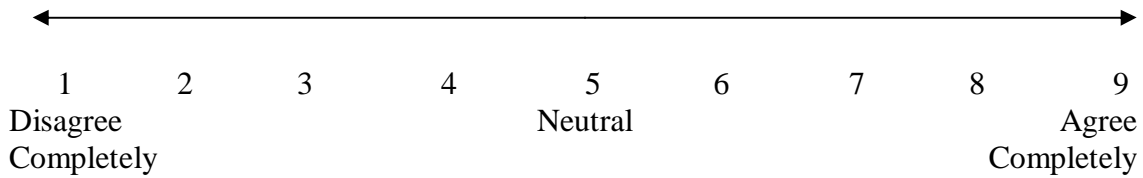




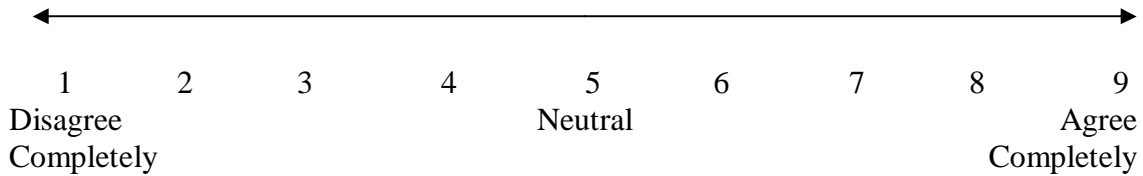
117. I think that this professor is unusually well adjusted.



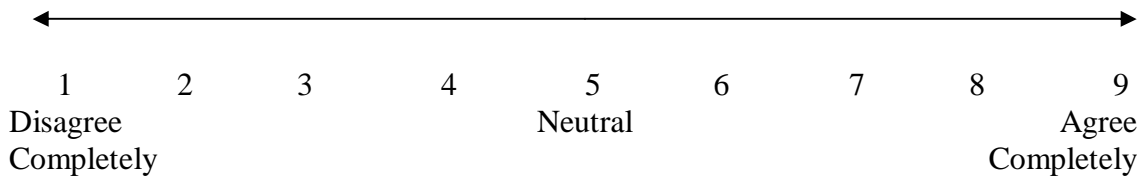
118. In my opinion, this professor is an exceptionally mature person.



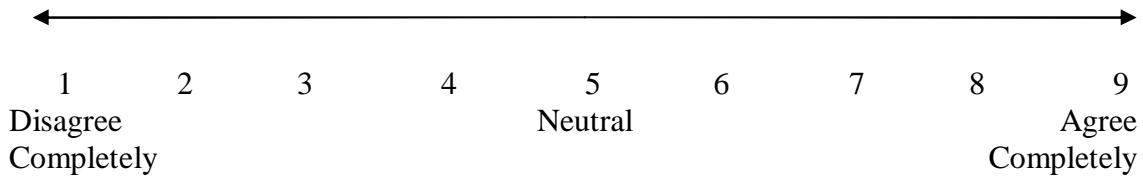
119. I have great confidence in this professor's good judgment.



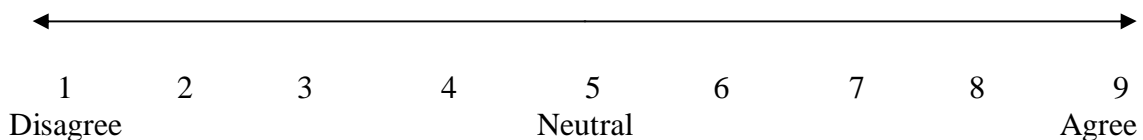
120. I think that this professor is one of those people who quickly wins respect.



121. This professor is one of the most likeable people I know.



122. This professor is the sort of person whom I myself would like to be.





Completely

Completely

123. It seems to me that it is very easy for this professor to gain admiration.



1  
Disagree  
Completely

2

3

4

5  
Neutral

6

7

8

9  
Agree  
Completely

Name: Melissa Erney  
175 E. Westview Ave.  
East Lansing, MI 48824  
517-5468-3012 (cell)

Emergency contact: Leonard McKenna  
Relationship: Significant other  
175 E. Westview Ave.  
East Lansing, MI 48824  
517-5046-3846 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in Latin American studies, minor in history, Colby College (ME), 1998  
Ph.D. in history, University of Minnesota, 2004

Previous Academic Employment:  
Lecturer, Purdue University, 9/2004-5/2006

Other employment:  
United States Postal Service, 1999-2000  
Wegman's, summer 1998

Extracurricular activities while in college/graduate school:  
Friends of Latin America Committee Member (Colby College)  
Cheerleader

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

124. (1) Male (2) Female (3) Don't know

125. (1) Married (2) Single (3) In a relationship (4) Don't know

126. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

127. (1) Gay (2) Straight (3) Don't know

128. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

129. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

130. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Melissa Erney tried to learn all her students' names. She encourages students to meet with her outside the classroom to discuss anything they wish. She helped a student get through a personal crisis.

She speaks clearly and loudly. She uses good teaching aids, is articulate, and stresses important points in class. She gives notes in a very well organized outline form.

She displays, both verbally and non-verbally, an infectious enthusiasm and interest in the course. She knows the material so well that she is able to answer all questions asked by her students. If she does not know an answer to a question, she will find it out for the next class.

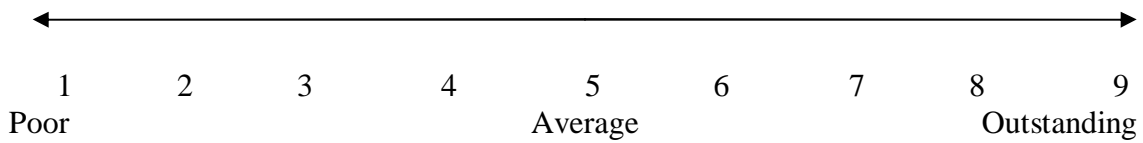
She gives short reading assignments. She distributes the workload evenly across the semester. She takes into consideration students' other classes and outside activities when assigning work.

She stated her grading system clearly at the beginning of the semester. She gives her students enough time to complete her tests. Her test questions are to the point and easy to understand.

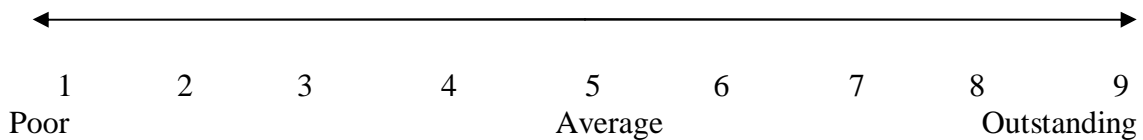
E



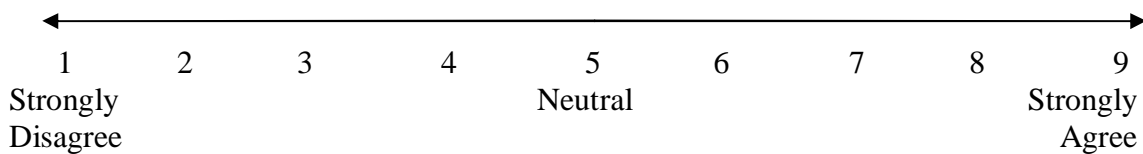
137. How would you rate his/her quality of work?



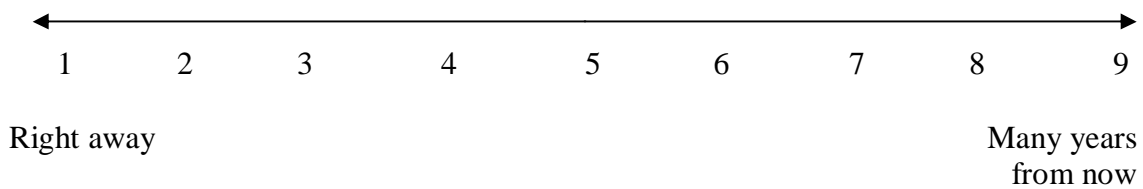
138. How would you rate his/her quantity of work?



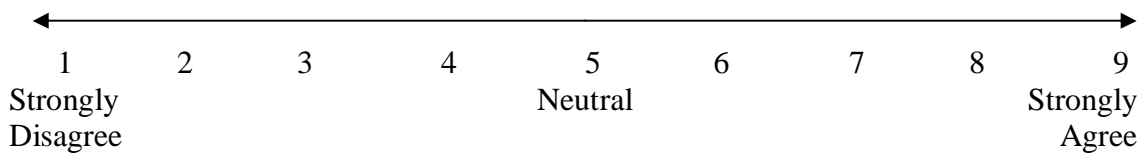
139. This professor should be promoted to a higher position.



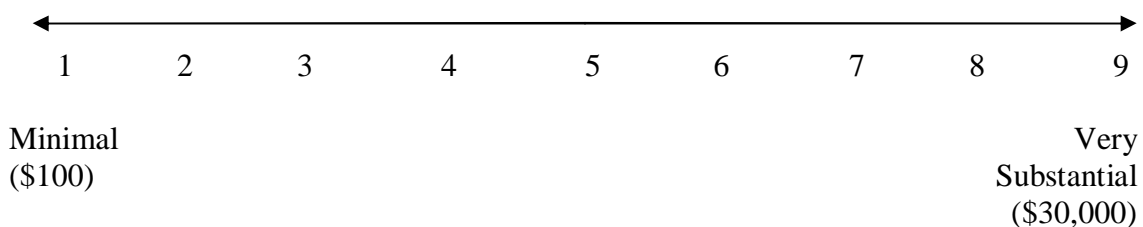
140. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



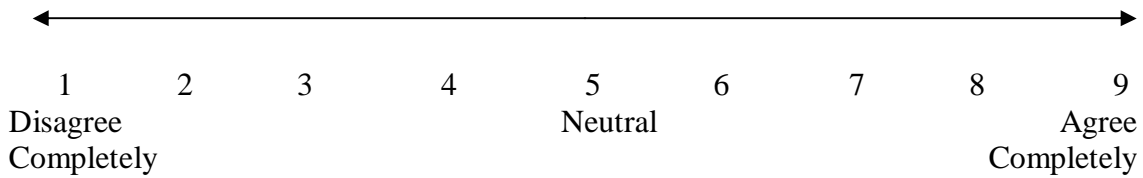
141. This professor should receive a pay raise.



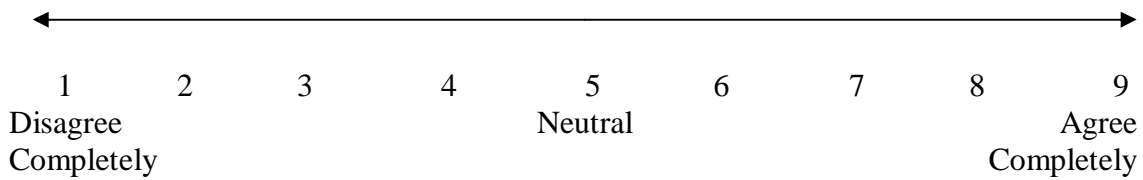
142. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?



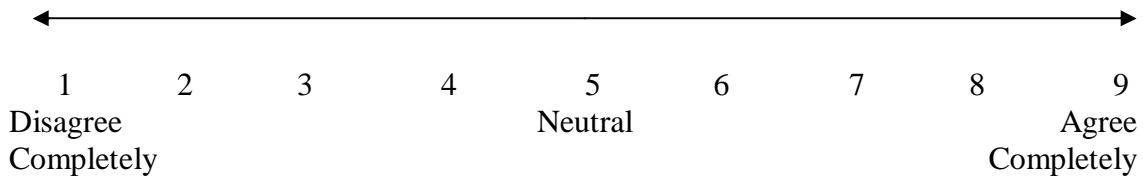
143. I think that this professor is unusually well adjusted.



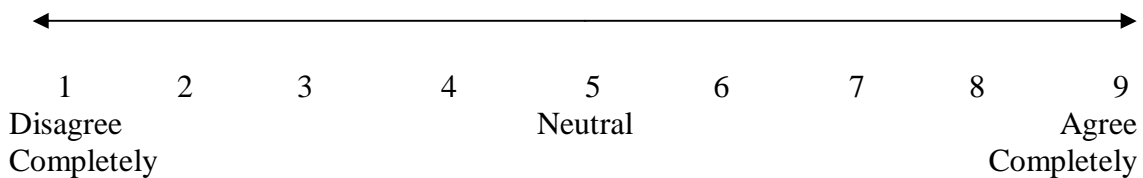
144. In my opinion, this professor is an exceptionally mature person.



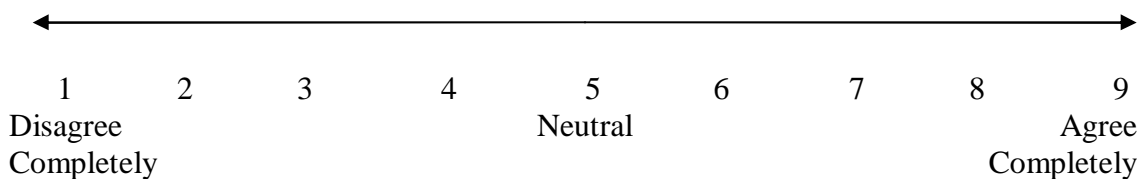
145. I have great confidence in this professor's good judgment.



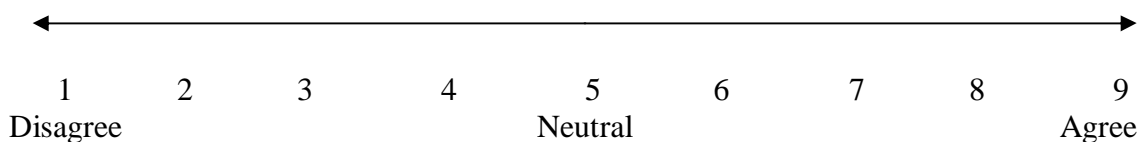
146. I think that this professor is one of those people who quickly wins respect.



147. This professor is one of the most likeable people I know.



148. This professor is the sort of person whom I myself would like to be.



Completely

Completely

149. It seems to me that it is very easy for this professor to gain admiration.



1  
Disagree  
Completely

2

3

4

5  
Neutral

6

7

8

9  
Agree  
Completely



Name: Helen Field  
357 E. Touraine Ave.  
East Lansing, MI 48824  
517-597-3458 (cell)

Emergency contact: Joseph Field  
Relationship: Spouse  
357 E. Touraine Ave.  
East Lansing, MI 48824  
517-576-2468 (cell)

Job title: Adjunct Faculty, Department of History  
College of Liberal Arts  
Michigan State University

Education:  
B.A. in sociology, minor in history, Oberlin College (OH), 1998  
Ph.D. in history, Purdue University, 2004

Previous Academic Employment:  
Lecturer, Indiana University, 9/2004-5/2006

Other employment:  
Pierre Beauty Salon, 1999-2000  
PNC Bank, summer 1998

Extracurricular activities while in college/graduate school:  
Homecoming Committee Member (Oberlin College)  
Jazz ballet dancer

Based on the information provided, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your understanding of this professor. Do you think this professor is:

150. (1) Male (2) Female (3) Don't know

151. (1) Married (2) Single (3) In a relationship (4) Don't know

152. (1) Caucasian (2) African American (3) Asian American (4) Other (5)  
Don't know

153. (1) Gay (2) Straight (3) Don't know

154. In his/her (1) 20s (2) 30s (3) 40s (4) 50s (5) 60s (6)

Don't know

155. (1) a Liberal Arts major (2) a Science major (3) Other (4) Don't know

156. While in college, this person participated in

(1) sports (2) music (3) dance (4) don't know

Helen Field counseled students regarding their careers and the job market. She made appointments at her students' convenience to discuss problems with class work. She counseled a student and helped her solve a personal problem.

She speaks distinctively and uses good grammar. She tries to relate complex material to the students in a manner that they can understand. She presents material orderly and concisely, seldom refers to her notes, and never runs behind schedule.

On the first day of class, she told her class how interesting she found the subject and assured them that they would too. She provides examples from her own work experience in the field. She often mentions changes that have occurred since the textbook was published.

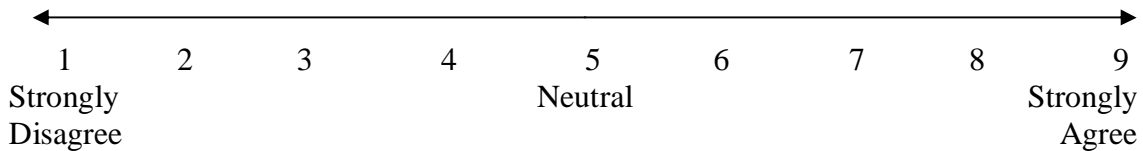
She reduced the workload at the end of the semester when she realized that her students did not have enough time to complete all of the assignments. She assigns only as much homework as is necessary to learn the material thoroughly. She gives plenty of time to read the material and discuss it fully in class.

She's tests covered only what she told her students would be on them. She told her students how much each test and project was worth toward the final grade. She dropped the lowest quiz grade when calculating final grades.

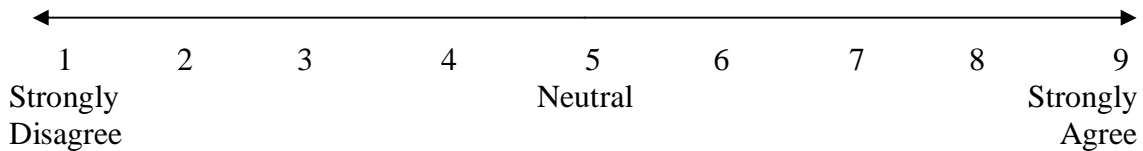
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For each of the statements below, please fill in the bubble ON YOUR ANSWER SHEET that best corresponds with your assessment based on the description provided about the person.

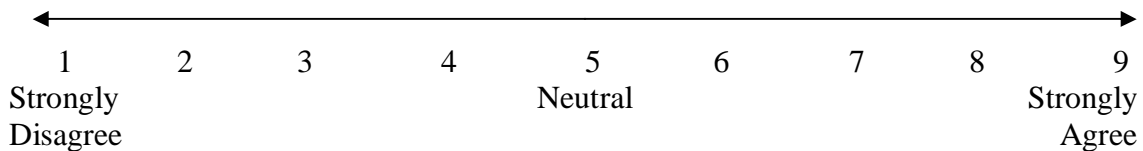
157. This professor treats students well, both in and out of class.



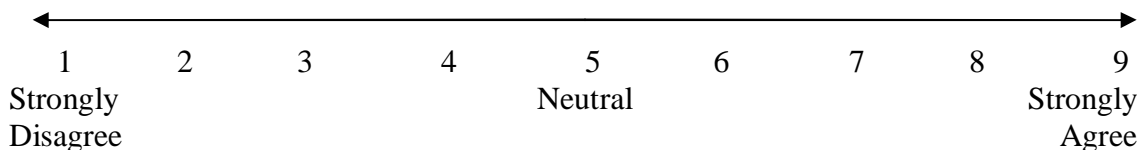
158. This professor organizes material well and is good at presenting it to the class.



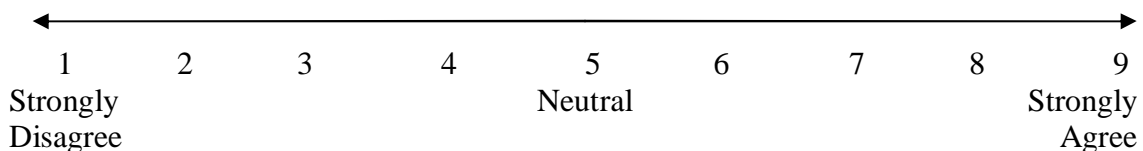
159. This professor is knowledgeable about course material and interested in it.



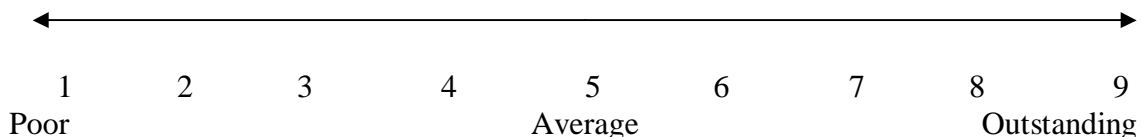
160. This professor assigns a reasonable amount of work.



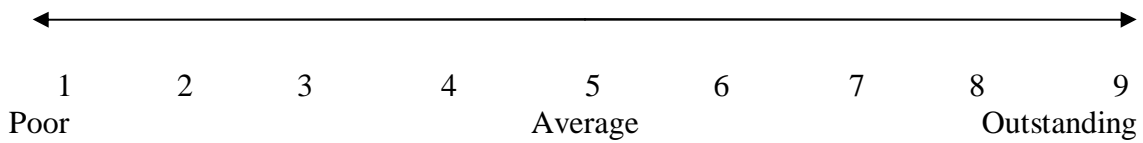
161. This professor's testing and grading policies are fair.



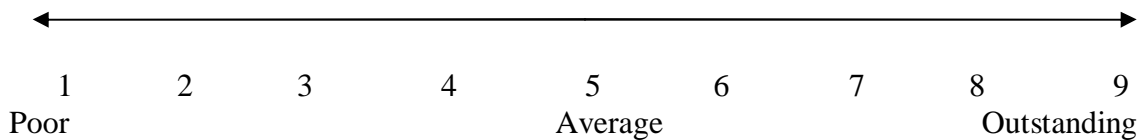
162. Considering all the information you have, how would you rate this professor's overall job performance as an instructor?



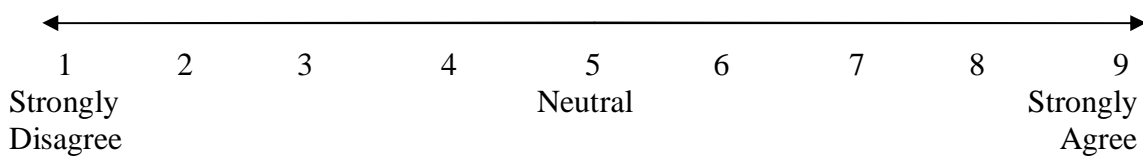
163. How would you rate his/her quality of work?



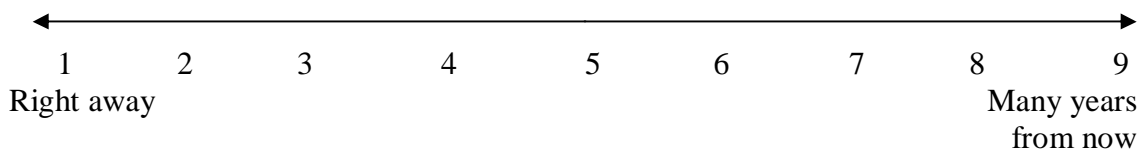
164. How would you rate his/her quantity of work?



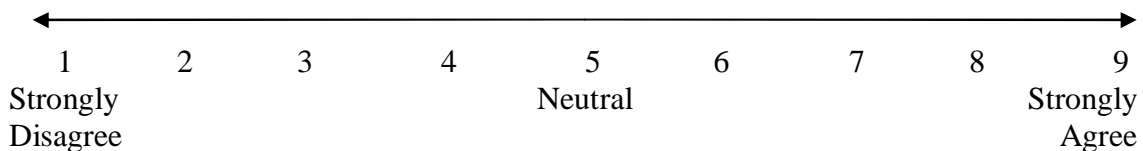
165. This professor should be promoted to a higher position.



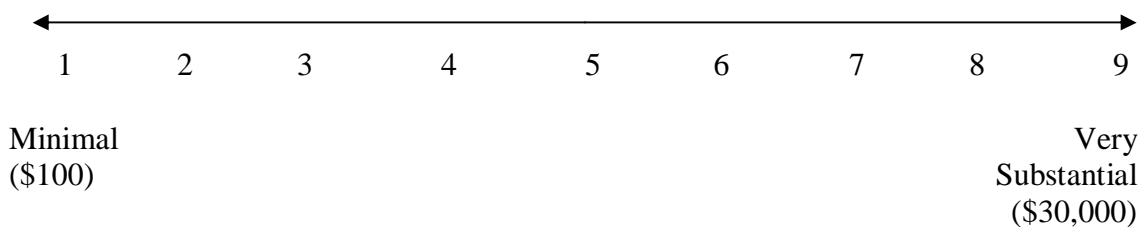
166. Let's assume that this professor will be promoted to a higher position at some point sooner or later. Do you think this should happen



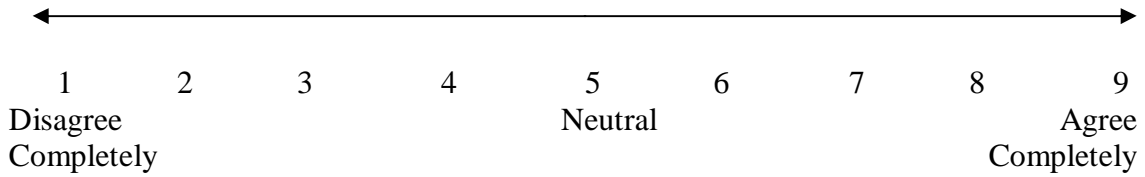
167. This professor should receive a pay raise.



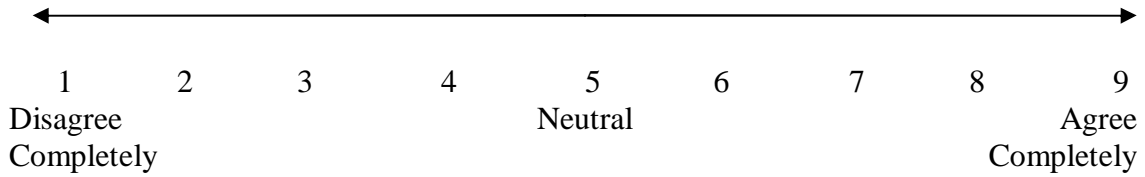
168. Let's assume that faculty members receive pay raises automatically every year, but the amount of the increase is dependent on their performance. How large do you think this professor's pay raise should be this year?



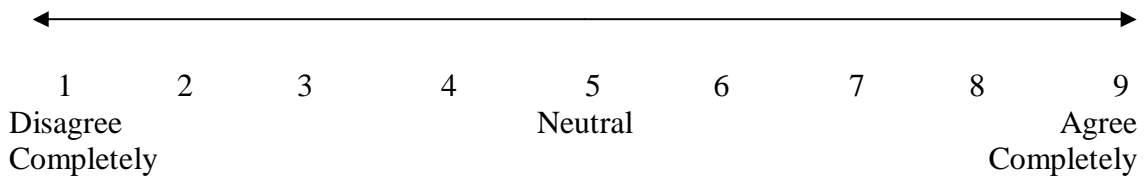
169. I think that this professor is unusually well adjusted.



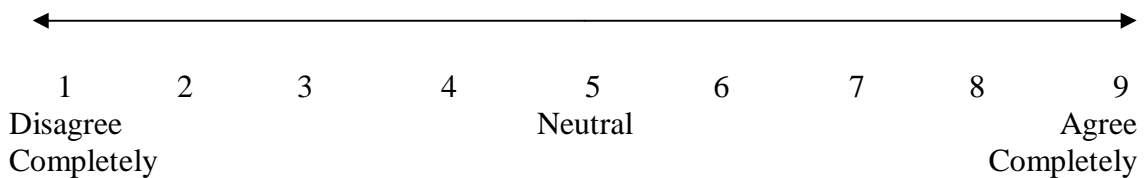
170. In my opinion, this professor is an exceptionally mature person.



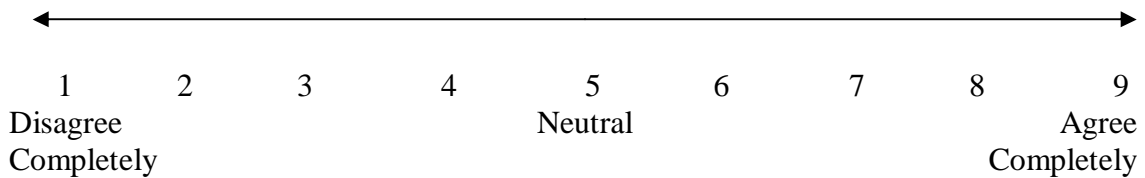
171. I have great confidence in this professor's good judgment.



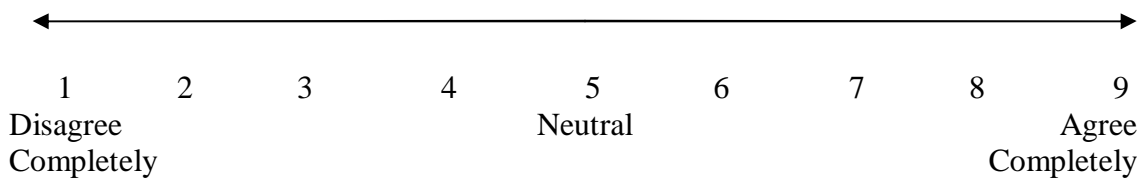
172. I think that this professor is one of those people who quickly wins respect.



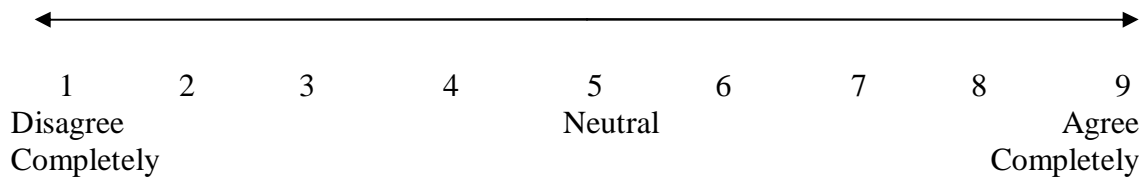
173. This professor is one of the most likeable people I know.



174. This professor is the sort of person whom I myself would like to be.



175. It seems to me that it is very easy for this professor to gain admiration.







176. Female homosexuality is an inferior form of sexuality.
177. I have never been irked when people expressed ideas very different from my own.
178. I have never deliberately said something that hurt someone's feelings.
179. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.
180. I sometimes try to get even, rather than forgive and forget.
181. Lesbians are sick.
182. I take a positive attitude toward myself.
183. I think male homosexuals are disgusting.
184. Women should assume their rightful place in business and all the professions along with men.
185. Male homosexual couples should be allowed to adopt children the same as heterosexual couples.
186. I wish I could have more respect for myself.
187. Women earning as much as their dates should bear equally the expense when they go out together.
188. Male homosexuality is a perversion.
189. I sometimes feel resentful when I don't get my way.
190. I would not be too upset if I learned that my son was a homosexual.
191. If a man has homosexual feelings, he should do everything he can to overcome them.
192. I'm always willing to admit it when I make a mistake.
193. In general, the father should have greater authority than the mother in the bringing up of children.
194. Lesbians just can't fit into our society.
195. Intoxication among women is worse than intoxication among men.
196. It is insulting to women to have the "obey" clause remain in the marriage service.
197. It is ridiculous for a woman to run a locomotive and for a man to darn socks.
198. Just as in other species, male homosexuality is a natural expression of sexuality in human men.

199. Women should be given equal opportunity with men for apprenticeship in the various trades.
200. Male homosexuals should not be allowed to teach school.

End of answer sheet 1. Please continue to the SECOND ANSWER SHEET, and CIRCLE THE NUMBER that corresponds to the degree to which you agree or disagree with each statement, STARTING WITH ITEM 201.

201. No matter who I'm talking to, I'm always a good listener.
202. On a few occasions, I have given up doing something because I thought too little of my ability.
203. On the average, women should be regarded as less capable of contributing to economic production than are men.
204. On the whole, I am satisfied with myself.
205. Sons in a family should be given more encouragement to go to college than daughters.
206. Male homosexuality is merely a different kind of lifestyle that should not be condemned.
207. State laws regulating private, consenting lesbian behavior should be loosened.
208. Swearing and obscenity are more repulsive in the speech of a woman than of a man.
209. Women should worry less about their right and more about becoming good wives and mothers.
210. Telling dirty jokes should be mostly a masculine prerogative.
211. There have been times when I felt like rebelling against people in authority even though I knew they were right.
212. The growing number of lesbians indicates a decline in American morals.
213. The husband should not be favored by law over the wife in the disposal of family property or income.
214. The idea of male homosexual marriages seems ridiculous to me.
215. The intellectual leadership of a community should be largely in the hands of men.

216. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.
217. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancés.
218. There are many jobs in which men should be given preference over women in being hired or promoted.
219. There have been occasions when I took advantage of someone.
220. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.
221. There have been times when I have been quite jealous of the good fortune of others.
222. There should be a strict merit system in job appointment and promotion without regard to sex.
223. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
224. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.

Please answer the following by circling the corresponding numbers ON YOUR ANSWER SHEET.

About you:

225. I am (1) male (2) female
226. I am (1) White (2) Black (3)Asian (4) Pacific Islander (5) Other
227. I am a (1) Freshman (2) Sophomore (3) Junior (4) Senior (5) Grad. student (6) Other

Please answer the following in the space provided ON YOUR ANSWER SHEET.

About you:

228. I am \_\_\_\_\_ years old.

229. What do you think is/are the major focus/foci of this study? Please write your answer in the space provided below. It doesn't have to be long, but please write something.

Thanks for participating! I appreciate your help!

Table 1

*Intercorrelations between Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendations, and Liking Ratings*

	Job Performance Ratings	Pay Raise Recommendations	Promotion Recommendations	Liking Ratings
Job Performance Ratings	1.00	.935**	.926**	.956**
Pay Raise Recommendations		1.00	.930**	.951**
Promotion Recommendations			1.00	.929**
Liking Ratings				1.00

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 2  
*Descriptive Statistics for Rater Gender, Target Gender, and Target Sexual Orientation  
 Using Job Performance Ratings for Low, Medium and High Performance Levels*

Rater sex	Target Sex							
	Male				Female			
	Target Sexual Orientation Straight		Target Sexual Orientation Gay		Target Sexual Orientation Straight		Target Sexual Orientation Gay	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1								
Male	1.90	1.05	1.80	.71	1.81	.78	1.71	.87
Female	1.52	.69	1.59	.73	1.48	.68	1.40	.58
Performance level 2								
Male	4.67	.99	4.53	1.31	4.56	.99	4.57	1.28
Female	4.20	1.15	4.20	.98	4.10	1.19	4.44	1.30
Performance level 3								
Male	8.35	.84	7.84	1.53	8.26	.70	8.04	.73
Female	8.49	.67	8.41	.70	8.56	.67	8.36	.71

Table 3  
*Descriptive Statistics for Rater Gender, Target Gender, and Target Sexual Orientation  
 Using Payment Recommendations for Low, Medium and High Performance Levels*

Rater sex	Target Sex							
	Male				Female			
	Target Sexual Orientation Straight		Target Sexual Orientation Gay		Target Sexual Orientation Straight		Target Sexual Orientation Gay	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
	Performance level 1							
Male	1.63	1.13	1.39	.65	1.40	.75	1.47	.94
Female	1.33	.79	1.42	.85	1.22	.63	1.31	.63
	Performance level 2							
Male	3.63	1.31	3.15	1.51	3.73	1.11	3.62	3.73
Female	3.01	1.36	2.84	1.60	3.10	1.41	3.15	1.34
	Performance level 3							
Male	7.73	1.20	7.19	1.48	7.51	1.37	7.12	7.51
Female	7.79	1.38	7.56	1.40	7.72	1.21	7.17	1.47

Table 4  
*Descriptive Statistics for Rater Gender, Target Gender, and Target Sexual Orientation  
 Using Promotion Recommendations for Low, Medium and High Performance Levels*

Rater sex	Target Sex							
	Male				Female			
	Target Sexual Orientation Straight		Target Sexual Orientation Gay		Target Sexual Orientation Straight		Target Sexual Orientation Gay	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1								
Male	1.62	1.21	1.47	.73	1.55	1.22	1.69	1.38
Female	1.34	1.04	1.45	1.00	1.30	1.08	1.31	.69
Performance level 2								
Male	3.68	1.40	3.35	1.74	4.01	1.49	3.81	4.01
Female	3.27	1.58	3.04	1.37	3.33	1.58	3.62	1.66
Performance level 3								
Male	7.99	1.60	7.81	1.60	7.88	1.48	7.50	1.37
Female	8.23	1.25	7.91	1.46	8.18	1.08	7.69	1.70



Table 5  
*Descriptive Statistics for Rater Gender, Target Gender, and Target Sexual Orientation  
 Using Liking Ratings for Low, Medium and High Performance Levels*

Rater sex	Target Sex							
	Male				Female			
	Target Sexual Orientation Straight		Target Sexual Orientation Gay		Target Sexual Orientation Straight		Target Sexual Orientation Gay	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1								
Male	1.86	1.19	1.64	.61	1.52	.66	1.65	.82
Female	1.38	.73	1.50	.77	1.44	.71	1.31	.44
Performance level 2								
Male	3.76	1.11	3.20	1.14	3.93	1.09	3.66	1.19
Female	3.22	1.11	3.01	1.12	3.18	1.12	3.35	1.29
Performance level 3								
Male	7.96	1.05	7.00	1.52	7.69	1.16	7.07	1.25
Female	8.13	1.17	7.72	1.10	8.15	.81	7.36	1.23

Table 6

*Table Hypotheses 1 and 2: Mean Values for Rater Gender Effects Using Inverse Scales of the ATLG, ATL and ATG*

Rater Sex	Male		Female		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Raw Scores						
ATLG inv.	61.97	16.43	73.12	16.05	68.27	17.11
ATL inv.	68.74	15.39	74.65	14.90	72.08	15.37
ATG inv.	55.19	19.27	71.60	18.06	64.47	20.27
z-scores						
ATLG inv.	-0.37	0.96	0.28	0.94	0	1
ATL inv.	-0.22	1.00	0.17	0.97	0	1
ATG inv.	-0.46	0.95	0.35	0.89	0	1

Table 7

*Table Hypothesis 3: Correlations All Study Mean Ratings*

	ATLG		
	Both Sexual Orientations	Straight	Gay
Job Performance Ratings	0.02	0.07	-0.03
Pay Raise			
Recommendations	0.00	0.04	-0.07
Promotion			
Recommendations	0.03	0.11	-0.02
Liking Ratings	0.01	0.09	-0.10

No correlation was significant

Table 8

*Table Hypotheses 4 to 10: Rater Gender X Target Gender X Target Sexual Orientation X Performance Level Mixed ANOVA Results Using Job Performance Ratings*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Rater Sex	13.02	1.00	13.02	2.47	0.12	0.000
Error (Rater Sex)	1520.76	288.00	5.28			0.013
Target Sex	27.58	1.00	27.58	5.26	0.02	0.000
Error (Target Sex)	1510.37	288.00	5.24			0.013
Target Sex. Orient.	7458.61	1.00	7458.61	1338.40	0.00	0.064
Error (Target Sex. Orient.)	1604.96	288.00	5.57			0.014
Perf. Level	2584.13	1.80	1435.57	296.79	0.00	0.022
Error (Perf. Level)	2507.59	518.42	4.84			0.021
Target Sex * Rater Sex	25.36	1.00	25.36	4.84	0.03	0.000
Target Sex * Target Sex. Orient.	1.22	1.00	1.22	0.18	0.67	0.000
Error (Target Sex * Target Sex. Orient.)	1950.18	288.00	6.77			0.017
Target Sex * Perf. Level	3.56	1.97	1.80	0.03	0.97	0.000
Error (Target Sex * Perf. Level)	32054.75	568.27	56.41			0.275
Target Sex. Orient. * Rater Sex	9.64	1.00	9.64	1.73	0.19	0.000
Target Sex. Orient. * Perf. Level	265.42	1.88	140.99	2.76	0.07	0.002
Error (Target Sex. Orient.* Perf. Level)	27662.16	542.19	51.02			0.237
Perf. Level * Rater Sex	0.29	1.80	0.16	0.03	0.96	0.000
Target Sex * Target Sex. Orient. * Perf. Level	1.89	1.85	1.02	0.02	0.98	0.000
Error (Target Sex*Target Sex. Orient.* Perf. Level)	37329.76	533.53	69.97			0.320
Target Sex * Target Sex. Orient. * Rater Sex	19.10	1.00	19.10	2.82	0.09	0.000
Target Sex * Perf. Level * Rater Sex	40.28	1.97	20.42	0.36	0.69	0.000
Target Sex. Orient. * Perf. Level * Rater Sex	61.82	1.88	32.84	0.64	0.52	0.001
Target Sex * Target Sex. Orient. * Perf. Level * Rater Sex	65.83	1.85	35.54	0.51	0.59	0.001

Table 9

*Table Hypotheses 4 to 10: Rater Gender X Target Gender X Target Sexual Orientation X Performance Level Mixed ANOVA Results Using Pay Raise Recommendations*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Rater Sex	15.72	1.00	15.72	3.29	0.07	0.000
Error (Rater Sex)	1377.66	288.00	4.78			0.013
Target Sex	25.20	1.00	25.20	4.96	0.03	0.000
Error (Target Sex)	1464.72	288.00	5.09			0.014
Target Sex. Orient.	6890.03	1.00	6890.03	1311.60	0.00	0.065
Error (Target Sex. Orient.)	1512.90	288.00	5.25			0.014
Perf. Level	2269.17	2.00	1134.58	268.62	0.00	0.022
Error (Perf. Level)	2432.89	505.27	4.82			0.023
Target Sex * Rater Sex	19.73	1.00	19.73	3.88	0.05	0.000
Target Sex * Target Sex. Orient.	1.72	1.00	1.72	0.28	0.60	0.000
Error (Target Sex * Target Sex. Orient.)	1807.52	288.00	6.28			0.017
Target Sex * Perf. Level	9.75	1.98	4.93	0.10	0.91	0.000
Error (Target Sex * Perf. Level)	28842.36	569.96	50.60			0.274
Target Sex. Orient. * Rater Sex	10.17	1.00	10.17	1.94	0.17	0.000
Target Sex. Orient. * Perf. Level	261.23	2.00	130.62	3.02	0.05	0.002
Error (Target Sex. Orient.* Perf. Level)	24894.36	542.87	45.86			0.236
Perf. Level * Rater Sex	2.46	1.75	1.40	0.29	0.72	0.000
Target Sex * Target Sex. Orient. * Perf. Level	3.67	1.87	1.96	0.03	0.97	0.000
Error (Target Sex*Target Sex. Orient.* Perf. Level)	33451.64	539.14	62.05			0.317
Target Sex * Target Sex. Orient. * Rater Sex	20.983	1.00	20.983	3.34	.069	0.000
Target Sex * Perf. Level * Rater Sex	31.12	1.98	15.73	0.31	0.73	0.000
Target Sex. Orient. * Perf. Level * Rater Sex	52.51	1.89	27.86	0.61	0.55	0.000
Target Sex * Target Sex. Orient. * Perf. Level * Rater Sex	57.77	1.87	30.86	0.50	.60	0.001

Table 10

*Table Hypotheses 4 to 10: Rater Gender X Target Gender X Target Sexual Orientation X Performance Level Mixed ANOVA Results Using Promotion Recommendations*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Rater Sex	13.18	1.00	13.18	2.70	0.10	0.000
Error (Rater Sex)	1408.29	288.00	4.89			0.013
Target Sex	18.66	1.00	18.66	3.41	0.07	0.000
Error (Target Sex)	1575.41	288.00	5.47			0.014
Target Sex. Orient.	7043.45	1.00	7043.45	1328.04	0.00	0.064
Error (Target Sex. Orient.)	1527.45	288.00	5.30			0.014
Perf. Level	2520.50	1.84	1372.86	277.70	0.00	0.023
Error (Perf. Level)	2613.97	528.75	4.94			0.024
Target Sex * Rater Sex	18.66	1.00	18.66	3.41	0.07	0.000
Target Sex * Target Sex. Orient.	0.80	1.00	0.80	0.11	0.74	0.000
Error (Target Sex * Target Sex. Orient.)	2049.27	288.00	7.12			0.019
Target Sex * Perf. Level	12.19	1.97	6.17	0.12	0.89	0.000
Error (Target Sex * Perf. Level)	29848.49	568.56	52.50			0.273
Target Sex. Orient. * Rater Sex	7.69	1.00	7.69	1.45	0.23	0.000
Target Sex. Orient. * Perf. Level	281.32	1.88	149.70	3.11	0.05	0.003
Error (Target Sex. Orient.* Perf. Level)	26016.06	541.21	48.07			0.238
Perf. Level * Rater Sex	1.11	1.84	0.61	0.12	0.87	0.000
Target Sex * Target Sex. Orient. * Perf. Level	3.17	1.86	1.70	0.03	0.97	0.000
Error (Target Sex*Target Sex. Orient.* Perf. Level)	34392.65	536.30	64.13			0.314
Target Sex * Target Sex. Orient. * Rater Sex	15.37	1.00	15.37	2.16	0.14	0.000
Target Sex * Perf. Level * Rater Sex	33.03	1.97	16.73	0.32	0.72	0.000
Target Sex. Orient. * Perf. Level * Rater Sex	48.62	1.88	25.87	0.54	0.57	0.000
Target Sex * Target Sex. Orient. * Perf. Level * Rater Sex	58.39	1.86	31.36	0.49	0.60	0.001

Table 11

*Table Hypotheses 4 to 10: Rater Gender X Target Gender X Target Sexual Orientation X Performance Level Mixed ANOVA Results Using Liking Ratings*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Rater Sex	11.99	1.00	11.99	2.49	0.12	0.000
Error (Rater Sex)	1388.27	288.00	4.82			0.013
Target Sex	24.88	1.00	24.88	4.93	0.03	0.000
Error (Target Sex)	1452.21	288.00	5.04			0.013
Target Sex. Orient.	7219.23	1.00	7219.23	1381.89	0.00	0.067
Error (Target Sex. Orient.)	1504.57	288.00	5.22			0.014
Perf. Level	2316.92	1.78	1304.60	276.04	0.00	0.021
Error (Perf. Level)	2417.27	511.48	4.73			0.022
Target Sex * Rater Sex	22.14	1.00	22.14	4.39	0.04	0.000
Target Sex * Target Sex. Orient.	1.78	1.00	1.78	0.28	0.60	0.000
Error (Target Sex * Target Sex. Orient.)	1843.53	288.00	6.40			0.017
Target Sex * Perf. Level	8.51	1.98	4.30	0.08	0.92	0.000
Error (Target Sex * Perf. Level)	29674.07	570.23	52.04			0.275
Target Sex. Orient. * Rater Sex	10.53	1.00	10.53	2.02	0.16	0.000
Target Sex. Orient. * Perf. Level	295.49	1.89	156.74	3.35	0.04	0.003
Error (Target Sex. Orient.* Perf. Level)	25385.97	542.95	46.76			0.235
Perf. Level * Rater Sex	0.62	1.78	0.35	0.07	0.91	0.000
Target Sex * Target Sex. Orient. * Perf. Level	2.62	1.86	1.40	0.02	0.97	0.000
Error (Target Sex*Target Sex. Orient.* Perf. Level)	34326.96	536.92	63.93			0.318
Target Sex * Target Sex. Orient. * Rater Sex	24.18	1.00	24.18	3.78	0.05	0.000
Target Sex * Perf. Level * Rater Sex	25.71	2.00	12.86	0.25	0.78	0.000
Target Sex. Orient. * Perf. Level * Rater Sex	51.32	1.89	27.22	0.58	0.55	0.000
Target Sex * Target Sex. Orient. * Perf. Level * Rater Sex	63.23	1.86	33.92	0.53	0.58	0.001

Table 12

*Table Hypotheses 4 and 5: Means and Standard Deviations for Rater Sex and Target Sex on Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendations and Liking Ratings*

Rater Sex	Male		Target Sex Female		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Job Performance Ratings						
Male	4.94	2.79	4.82	2.79	4.88	2.79
Female	4.68	2.98	4.69	3.00	4.69	2.99
Both	4.80	2.90	4.75	2.91	4.77	2.90
Pay Raise Recommendations						
Male	4.23	2.80	4.15	2.74	4.19	2.77
Female	3.97	2.94	3.93	2.86	3.95	2.90
Both	4.08	2.88	4.03	2.81	4.05	2.84
Promotion Recommendations						
Male	4.40	3.01	4.41	2.92	4.40	2.96
Female	4.18	3.13	4.21	3.07	4.20	3.10
Both	4.28	3.08	4.30	3.01	4.29	3.04
Liking Ratings						
Male	4.37	2.72	4.28	2.67	4.33	2.69
Female	4.14	2.96	4.14	2.87	4.14	2.91
Both	4.25	2.86	4.20	2.79	4.22	2.82



Table 13

*Table Hypotheses 6 to 8: Means and Standard Deviations for Rater Sex, Target Sex, and Target Sexual Orientation Using Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendation, and Liking Ratings*

Target Sex	Target Sexual Orientation											
	Straight						Gay					
	Male	Female		Both		Male	Female		Both			
Rater sex	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Job Performance Ratings												
Male	5.07	2.83	4.85	2.79	4.97	2.81	4.68	2.68	4.75	2.79	4.72	2.73
Female	4.57	2.98	4.68	3.03	4.62	3.00	4.90	2.98	4.72	2.96	4.81	2.96
Both	4.80	2.92	4.75	2.93	4.77	2.93	4.81	2.85	4.73	2.88	4.77	2.86
Pay Raise Recommendations												
Male	4.43	2.84	4.20	2.77	4.32	2.81	3.84	2.68	4.05	2.70	3.94	2.68
Female	3.89	2.96	3.97	2.94	3.93	2.95	4.11	2.91	3.85	2.70	3.99	2.80
Both	4.13	2.92	4.07	2.87	4.10	2.89	3.99	2.81	3.94	2.69	3.97	2.75
Promotion Recommendations												
Male	4.53	3.04	4.46	2.98	4.50	3.01	4.12	2.95	4.32	2.80	4.22	2.88
Female	4.12	3.15	4.23	3.13	4.17	3.14	4.31	3.10	4.19	2.97	4.25	3.03
Both	4.30	3.11	4.33	3.06	4.31	3.08	4.23	3.03	4.24	2.89	4.24	2.96
Liking Ratings												
Male	4.63	2.81	4.36	2.75	4.50	2.78	3.87	2.46	4.11	2.51	3.99	2.48
Female	4.09	2.99	4.22	2.96	4.15	2.97	4.25	2.89	3.99	2.70	4.12	2.80
Both	4.33	2.92	4.28	2.87	4.30	2.89	4.08	2.71	4.04	2.62	4.06	2.66

Table 14

*Table Hypotheses 9 and 10: Target Sex and Target Sexual Orientation for Performance Levels 1, 2, and 3 Using Job Performance Ratings*

Target Sex	Target Sexual Orientation			
	Straight		Gay	
	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1				
Male	1.68	0.88	1.68	0.72
Female	1.63	0.75	1.54	0.74
Performance level 2				
Male	4.41	1.10	4.36	1.16
Female	4.29	1.13	4.49	1.28
Performance level 3				
Male	8.42	0.76	8.18	1.13
Female	8.43	0.69	8.22	0.73
All Performance Levels				
Male	4.80	2.92	4.81	2.85
Female	4.75	2.93	4.73	2.88

Table 15

*Table Hypotheses 9 and 10: Target Sex and Target Sexual Orientation for Performance Levels 1, 2, and 3 Using Pay Raise Recommendations*

Target Sex	Target Sexual Orientation			
	Straight		Gay	
	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1				
Male	1.46	0.96	1.41	0.76
Female	1.30	0.69	1.39	0.78
Performance level 2				
Male	3.28	1.37	3.00	1.37
Female	3.36	1.33	3.34	1.46
Performance level 3				
Male	7.76	1.29	7.41	1.34
Female	7.63	1.28	7.15	1.43
All Performance Levels				
Male	4.13	2.92	3.99	2.81
Female	4.07	2.87	3.94	2.69

Table 16

*Table Hypotheses 9 and 10: Target Sex and Target Sexual Orientation for Performance Levels 1, 2, and 3 Using Promotion Recommendations*

Target Sex	Target Sexual Orientation			
	Straight		Gay	
	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1				
Male	1.46	1.12	1.46	0.89
Female	1.41	1.15	1.48	1.07
Performance level 2				
Male	3.45	1.52	3.19	1.56
Female	3.61	1.58	3.70	1.60
Performance level 3				
Male	8.11	1.43	7.87	1.51
Female	8.05	1.27	7.60	1.56
All Performance Levels				
Male	4.30	3.11	4.23	3.03
Female	4.33	3.06	4.24	2.89

Table 17

*Table Hypotheses 9 and 10: Target Sex and Target Sexual Orientation for Performance Levels 1, 2, and 3 Using Liking Ratings*

Target Sex	Target Sexual Orientation			
	Straight		Gay	
	Mean	Standard Deviation	Mean	Standard Deviation
Performance level 1				
Male	1.58	0.98	1.56	0.70
Female	1.48	0.69	1.46	0.66
Performance level 2				
Male	3.46	1.14	3.10	1.12
Female	3.49	1.16	3.48	1.26
Performance level 3				
Male	8.05	1.12	7.43	1.32
Female	7.95	1.00	7.24	1.24
All Performance Levels				
Male	4.33	2.92	4.08	2.71
Female	4.28	2.87	4.04	2.62

Table 18

*Means and Standard Deviations Depending on Target Sexual Orientation Using Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendations and Liking Ratings*

	Target Sexual Orientation			
	Straight		Gay	
	Mean	Std. Dev.	Mean	Std. Dev.
Job Performance Ratings	4.774	2.93	4.771	2.86
Pay Raise Recommendations	4.10	2.89	3.97	2.75
Promotion Recommendations	4.31	3.08	4.24	2.96
Liking Ratings	4.30	2.89	4.06	2.66

Table 19

*Means and Standards Deviations for the Six Described Performance Levels Using Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendations and Liking Ratings*

Described Performance Level	Job Performance Ratings		Pay Raise Recommendations		Promotion Recommendations		Liking Ratings	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	1.59	0.78	1.40	0.83	1.50	1.26	1.56	0.81
2	1.67	0.82	1.36	0.82	1.40	0.93	1.47	0.80
3	4.03	1.14	3.04	1.37	3.29	1.58	3.23	1.18
4	4.70	1.08	3.44	1.32	3.68	1.53	3.56	1.11
5	8.40	0.73	7.67	1.34	8.04	1.43	7.88	1.10
6	8.35	0.73	7.51	1.30	7.95	1.35	7.71	1.20

Table 20

*Means and Standard Deviations for Married and Unmarried Targets Using Job Performance Ratings*

	Married		Unmarried		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Men	4.70	2.95	4.89	2.90	4.80	2.93
Women	4.51	2.90	5.00	2.94	4.75	2.92
All	4.60	2.93	4.95	2.92	4.77	2.92



Table 21  
*Means and Standard Deviations for Married and Unmarried Targets Using  
 Pay Raise Recommendations*

	Married		Unmarried		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Men	4.04	2.92	4.22	2.92	4.13	2.92
Women	3.87	2.88	4.27	2.84	4.07	2.86
All	3.96	2.90	4.25	2.88	4.10	2.89

Table 22

*Means and Standard Deviations for Married and Unmarried Targets Using Promotion Recommendations*

	Married		Unmarried		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Men	4.27	3.15	4.33	3.07	4.30	3.11
Women	4.04	3.07	4.62	3.04	4.33	3.05
All	4.16	3.11	4.48	3.06	4.31	3.08

Table 23

*Means and Standard Deviations for Married and Unmarried Targets Using Liking Ratings*

	Married		Unmarried		All	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Men	4.24	2.96	4.41	2.89	4.33	2.92
Women	4.05	2.88	4.51	2.84	4.28	2.86
All	4.14	2.92	4.46	2.86	4.30	2.89

Table 24

*Means and Standard Deviations Depending on Order in the Booklet Using Job Performance Ratings*

Order	Performance Level					
	1		2		3	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	1.62	0.78	4.30	1.00	8.13	0.71
2	1.64	0.79	4.19	1.21	8.31	0.51
3	1.76	0.88	3.63	0.71	8.43	0.65
4	1.71	0.91	4.48	1.23	8.53	0.67
5	1.36	0.47	4.10	0.84	8.47	0.76
6	1.55	0.69	4.65	1.17	8.45	0.84

Table 25

*Means and Standard Deviations Depending on Order in the Booklet Using Pay Raise Recommendations*

Order	Performance Level					
	1		2		3	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	1.36	0.63	3.03	1.24	6.56	1.26
2	1.34	0.91	3.26	1.44	7.08	1.11
3	1.51	0.95	2.60	0.74	7.59	1.33
4	1.38	0.86	3.45	1.36	8.01	1.24
5	1.05	0.20	3.36	1.43	7.90	1.18
6	1.43	0.83	3.65	1.31	8.05	1.14

Table 26  
*Means and Standard Deviations Depending on Order in the Booklet Using  
 Promotion Recommendations*

Order	Performance Level					
	1		2		3	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	1.28	0.63	2.83	1.47	7.31	1.49
2	1.37	1.21	3.53	1.59	7.56	1.29
3	1.49	1.05	3.20	1.14	8.08	1.18
4	1.56	1.30	4.05	1.60	7.98	2.08
5	1.19	0.78	3.51	1.47	8.33	1.13
6	1.52	1.58	3.94	1.38	8.31	1.09

Table 27  
*Means and Standard Deviations Depending on Order in the Booklet Using Liking Ratings*

Order	Performance Level					
	1		2		3	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	1.43	0.56	3.21	0.86	7.00	1.11
2	1.46	0.81	3.47	1.29	7.69	1.05
3	1.56	0.93	3.06	0.83	8.00	1.02
4	1.68	0.99	3.59	1.30	8.16	0.89
5	1.35	0.58	3.46	1.12	8.19	1.10
6	1.56	0.77	3.72	1.18	8.19	0.88

Table 28

*Means and Standard Deviations for Straight and Gay Targets on Each Performance Level Using Job Performance Ratings, Pay Raise Recommendations, Promotion Recommendations and Liking Ratings*

	Performance Level	Straight		Gay	
		Mean	Std. Dev.	Mean	Std. Dev.
Job Performance Ratings	1	1.66	0.82	1.61	0.73
	2	4.35	1.12	4.42	1.22
	3	8.42	0.73	8.20	0.96
Pay Raise Recommendations	1	1.38	0.84	1.40	0.77
	2	3.32	1.35	3.17	1.42
	3	7.70	1.29	7.28	1.39
Promotion Recommendations	1	1.43	1.13	1.47	0.98
	2	3.53	1.55	3.44	1.60
	3	8.08	1.35	7.74	1.53
Liking Ratings	1	1.53	0.85	1.51	0.68
	2	3.47	1.15	3.29	1.20
	3	8.00	1.06	7.34	1.29



Table 29

*Significant Effects When Using All Six Vignettes in Each Booklet Compared to When Using the First Vignette Only*

		All six vignettes			First vignette only		
	Effects	F	Sig.	Eta Squared	F	Sig.	Eta Squared
Job Performance Ratings	Target Sex	5.26	0.02	0.000	9.791	0.00	0.006
	Target Sexual Orientation	1338.4	0.00	0.064	0.283	0.60	0.000
	Target Sex * Rater Sex	4.84	0.03	0.000	0.089	0.77	0.000
	Target Sex * Perf. Level	0.03	0.97	0.000	3.885	0.02	0.005
Pay Raise Recommendations	Target Sex	4.96	0.03	0.000	1.206	0.27	0.002
	Target Sexual Orientation	1311.6	0.00	0.065	1.543	0.22	0.002
	Target Sex * Rater Sex	3.88	0.05	0.000	0.005	0.94	0.000
	Target Sex. Orient. * Perf. Level	3.02	0.05	0.002	0.188	0.83	0.000
	Rater Sex * Target Sex * Target Sex. Orient. * Perf. Level	0.5	0.60	0.001	3.106	0.05	0.009
Promotion Recommendations	Target Sexual Orientation	1328.04	0.00	0.064	2.745	0.10	0.004
	Target Sex. Orient. * Perf. Level	3.11	0.05	0.003	0.281	0.76	0.001
Liking Ratings	Target Sex	4.93	0.03	0.000	1.603	0.21	0.001
	Target Sexual Orientation	1381.89	0.00	0.067	2.245	0.14	0.002
	Target Sex * Rater Sex	4.39	0.04	0.000	0.464	0.50	0.000
	Target Sex. Orient. * Perf. Level	3.35	0.04	0.003	0.457	0.63	0.001
	Rater Sex * Target Sex * Target Sex. Orient. * Perf. Level	0.53	0.58	0.001	3.8	0.02	0.006

Table 30

*Means and Standard Deviations for Job Performance Ratings for Male and Female Targets on Each Performance Level Using Only the First Vignette in Each Booklet*

Job Performance Ratings					
		Males		Females	
Performance Level		Mean	Std. Dev.	Mean	Std. Dev.
	1	1.76	0.82	1.51	0.65
	2	4.54	0.98	3.80	0.80
	3	7.95	0.63	8.05	0.75