Latent Profile Analysis of an Equal Opportunity Climate Measure[*]

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Equal Opportunity Climate (EOC) measures assess organizational climate associated with equity and fairness as perceived by organizational members. Using a sample of 14,323 respondents from a random sample of 200 organizations within the United States Department of Defense, this study used latent profile analysis to examine configurations of EOC perceptions related to race, sexual harassment, age, religion, and disability. Four distinct EOC configurations were found to relate to experienced discrimination, such that respondents who had personally experienced discrimination in the previous 12 months displayed more negative EOC configurations. Respondent demographics such as race, age, gender, and job type showed incremental prediction of EOC configuration, beyond experienced discrimination. Finally, job-related attitudes directed at one's job, workgroup, and organization differed as a function of the EOC configuration displayed by respondents. This person-centered analytic approach is novel to the study of EOC perceptions, which has traditionally emphasized variable-centered approaches.

The United States workforce is becoming increasingly heterogeneous (Doverspike, Taylor, Shultz, & McKay, 2000; Fullerton & Toossii, 2001; Judy & D'Amico, 1997). Organizations and researchers have become more interested in diversity and its implications. An area of increasing interest is that of climate for diversity. Diversity climate reflects the extent to which employees perceive organizational practices and the social environment are influenced by group membership (McKay, Avery, & Morris, 2009). Equal opportunity climate (EOC) focuses specifically on equity and fairness within organizational contexts (Estrada, Stetz, & Harbke, 2007), overlapping considerably with what Cox (1994) and others (e.g., Van Knippenberg & Schippers, 2007; Kossek, & Zonia, 1993) refer to as diversity climate. Diversity climate is typically assessed in terms of individuals'

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evaluations of methods for managing workplace diversity (Kossek & Zonia, 1993; McKay et al., 2009; Barak, Cherin, & Berkman, 1998; Van Knippenberg & Schippers, 2007), whereas EO climate focuses more specifically on perceptions of the opportunities and potential favoritism afforded to groups of employees defined in terms of race, color, sex, religion, or national origin (Dansby & Landis, 1991).

Climate is considered to be an important determinant of individual behavior in the workplace. Climate is fundamentally based on the perceptions of individuals about the characteristics of their work environment (Burke, Borucki, & Kaufman, 2002; James & Sells, 1981; Schulte, Ostroff, Shmulyian, & Kinicki, 2009). Regardless of whether addressed at the individual (e.g., psychological climate) or organizational level of analysis, climate is typically addressed from a *variable-centered* perspective within organizational research endeavors. That is, climate research typically focuses on the relationships between molar and specific climates (e.g., climate for diversity), as well as the relationships between climate(s) and workplace characteristics and outcomes (e.g., Carr, Schmidt, Ford, & Deshon, 2003; Dickson, Resick, & Hanges, 2006; Lindell & Brandt, 2000; Moliner, Martinez-Tur, Peiró, Ramos & Cropanzano, 2005; Ostroff, Kinicki, & Tamkins, 2003; Schneider, Salvaggio, & Subirats, 2002). These approaches generally adhere to nomothetic perspectives.

While evaluating the associations between specific facets of climate and organizational outcomes has enhanced our understanding of the importance of climate in organizations, less is known about how profiles (or configurations) of multi-faceted climate perceptions form within individuals and how these profiles could indicate qualitatively different experiences of climate among individuals.

EOC has traditionally been approached from a nomothetic perspective. Consequently, the relationships between facets of EOC and relevant correlates have been examined extensively, as along with quantitative differences between groups of respondents on various aspects of EOC. However, to our knowledge, no published empirical studies have approached EOC from an idiographic, or *person-centered* analytic approach. Such an approach may enhance understanding of the EOC construct because different configurations of EOC perceptions could emerge from the perceptions of distinct subgroups of respondents.

The current study examines EOC using a person-centered approach (e.g., see Ostroff et al., 2003). This study complements prior variable-centered research on climate by enhancing our understanding of unique characteristics of the EO climate experience, as well as antecedents (e.g., individual differences) and consequences (e.g., job attitudes) of different configurations of EO climate. We examine whether respondent characteristics, specifically experienced discrimination and demographics, predict the EOC configurations respondents exhibit. Finally, we investigate whether or not respondent groups that show different EOC response profiles also exhibit different job-related attitudes (e.g., job satisfaction, organizational commitment, organizational trust).

EO Climate Configuration

Previous studies of EO or diversity climate have linked climate perceptions to organizational outcomes using multivariate procedures (e.g., multiple regression) to determine the unique relationships between specific climate facets and outcomes

(Schulte et al., 2009). Such variable-centered approaches assume the influence of climate facets are additive (Schulte et al., 2009). However, climate perceptions may interact with or influence one another (Schulte et al., 2009). Scholars (e.g., Ostroff et al., 2003; Schulte et al., 2009) have called for more climate research using the person-centered (or configural) approaches to account for such interactive effects. A person-centered approach (e.g., clustering, latent profile analysis) enables a holistic assessment of a person's response pattern across multiple measures (Meyer, Tsui, & Hinings, 1993). Configural approaches emphasize identifying subgroups within a population who share similar patterns of response (Marsh, Lüdtke, Trautwein, Alexandre, & Morin, 2009; Meyer et al., 1993).

Meaningful subgroups of respondents to a multi-faceted EOC measure, who share similar climate perceptions, may be detected through configural analyses. These unobservable subgroups (or latent classes) are assumed to differ from one another quantitatively, qualitatively, or both. Quantitative differences are represented by mean level differences between classes for specific indicators or variables (e.g., differences in the perceived degree of racial favoritism within an organization). Qualitative differences are revealed by different patterns of responses across variables. For example, one class might show uniform positive EOC perceptions, while another class shows positive perceptions of some aspects of EOC and negative perceptions of other aspects of EOC.

Empirically establishing respondent groups who share common EOC perceptions within a diverse respondent population could enhance understanding of the EOC construct in three ways. First, it would reveal the unique configurations of multi-faceted EOC perceptions and their prevalence within organizations. Prior studies have identified groups of individuals with differing perceptions of global organizational climate using cluster analysis (e.g., Jackofsky & Slocum, 1988; Joyce & Slocum, 1984; Schulte et al., 2009). However, previous studies have been criticized for failing to provide meaningful socio-psychological explanations for why people within groups hold similar perceptions (González-Roma, Peiró, & Tordera, 2002; Patterson, Payne, & West, 1996; Payne, 1990). Specifically, Patterson et al. (1996) argue that it is imperative for climate researchers to "identify 1) factors in individuals that are associated with variations in perceptions of climate, 2) factors in environments that increase consensus, and 3) properties of groups that lead the individuals in them to develop a coherent view of their social world" (p. 1688).

Consistent with Patterson et al.'s (1996) recommendations, identifying subgroups of respondents with shared EOC perceptions also allows us to examine the individual and organizational factors that contribute to EOC configurations. For instance, prior experience of discrimination is expected to influence the specific EOC profile a respondent exhibits. Likewise, respondent demographics (e.g., race, gender, etc.) are also expected to relate to EOC response profiles. Lastly, identifying subgroups with specific EOC profiles allows us to test whether or not these groups differ on important job-related attitudes that have been linked to diversity climate and EOC specifically, such as job satisfaction and organizational commitment (e.g., McIntyre, 2002; Truhon & Parks, 2007). The following sections expand upon these ideas and develop specific hypotheses.

Antecedents of EO Climate Configurations

EOC perceptions reflect one's experience with or exposure to discrimination or unequal treatment of various groups in the workplace. As such, individuals' personal experience with discrimination should logically impact their perceptions of EOC. That is, individuals who have been discriminated against (or perceive they have been discriminated against) are expected to show more negative EOC perceptions than those who have not experienced discrimination. Indeed, past research has shown that individuals who have experienced sexual harassment had less favorable perceptions of EOC (Newell, Rosenfeld, & Culbertson, 1995). Research not directly measuring EOC suggests a linkage between the experience of discrimination and negative job-related attitudes. Individuals who have experienced gender or race based discrimination have been shown to be less satisfied with their organization (Rosenfeld, Newell, & Le, 1998). Racial discrimination has been linked to reduced job satisfaction and increased intentions to leave organizations (Antecol & Cobb-Clark, 2007; Rosenfeld et al., 1998). This evidence suggests discriminatory acts have real and detrimental effects on targeted employees' perceptions of the workplace and their jobs.

Existing research is less clear, however, as to how the experience of a particular type of discrimination (e.g., racial) influences the configuration of EOC perceptions held by individuals. That is, how does the experience of a specific discriminatory act influence one's perceptions of the prevalence of all types of discrimination in the workplace? As the EOC construct taps perceived inequities across several categories of individual differences (i.e., EOC is multifaceted), experiencing a discriminatory act may influence only those perceptions related to the type of discrimination experienced. For instance, the experience of sex discrimination may negatively impact one's perception of the relative treatment of men and women in the organization but not one's perception of equal treatment of various racial, ethnic, age groups, etc.

On the other hand, being discriminated against may have a deeper and further reaching influence on one's perceptions of equality within the organization. This is consistent with Lind's (2001) notion of the use of fairness heuristics in the formation of organizational justice perceptions. Lind (2001) argues that while individuals cannot observe all of the decisions and behaviors of an organization's leadership, individuals will make inferences about the fairness of those decisions and behaviors based on salient personal experiences with leadership. Truhon (2008) contends that EOC, in part, reflects respondents' expectations of either unobserved (to the respondent) or future behavior within the organization. Individuals' perceptions of EOC depend on their expectations of how their organizations manage EO problems in general (Truhon, 2008). Therefore, experiencing an isolated discriminatory behavior may taint one's broader perceptions of equity and fairness within their organization. The result would be less positive evaluations of climate for all varieties of discrimination and unequal treatment, and not just those pertaining to the type of discrimination one has personally experienced.

Research also indicates that multiple types of discrimination may be commonly experienced by members of certain demographic groups (e.g., Higginbotham & Weber, 1999). For instance, more black women report racial discrimination and gender discrimination than their white

counterparts (Higginbotham & Weber, 1999). This finding suggests race-based discrimination and gender-based discrimination may co-occur in the workplace. More broadly speaking, certain demographic groups may be more susceptible to experiencing multiple types of workplace discrimination. Therefore, determining how experienced discrimination relates to EOC configurations requires accounting for the types of discrimination one has experienced. This study examines how personal experiences with unique types of discrimination jointly relate to EOC configurations.

While the existing literature is arguably too young to hypothesize the exact nature of the EOC configurations resulting from past discrimination, the preceding rationale strongly suggests that experienced discrimination will play a role in the formation of EOC configuration. We therefore hypothesize the following:

Hypothesis 1: Experienced discrimination will predict EOC configuration.

Membership in certain minority and other demographic groups may also relate to individuals' configuration of EOC perceptions. Demographics of interest in this study include race, gender, and age. We also consider job category (e.g., enlisted personnel, officer, civilian, etc.) as a relevant demographic distinction in the current context. Differences in absolute level (as opposed to the configuration) of EOC perceptions across demographic groups have been addressed in a variety of studies. For instance, non-Whites have been shown to exhibit more negative EOC perceptions than Whites (Rosenfeld et al., 1998; Truhon, 2005; Truhon & Parks, 2007). Also, women have been shown to exhibit more negative

EOC perceptions than men (Rosenfeld et al., 1998; Truhon and Parks, 2007). Considering race and gender jointly, Moore and Webb (1998; 2000) found that Black women showed the least favorable climate perceptions of all groups they sampled. Similarly, Rosenfeld et al. (1998) found that EOC perceptions Black female service members were less positive than those of other groups. Thus, the absolute levels of EOC perceptions appear to differ across demographic groups.

The *configuration* of EOC perceptions may also differ across demographic groups. That is, the relative levels of climate across facets of EOC (e.g., climate reflecting perceptions of racism and sexism) may differ across demographic groups. The EOC construct is inherently multifaceted, and dependent on the types of inequities one perceives within one's organization.

According to Schulte, Ostroff, and Kinicki (2006), the interrelationships among climate factors reflect the social context in which one works and interacts. Through interaction and observation, members of a particular demographic group are likely to hear about or witness instances of discrimination or unfair treatment of others within the group. If members of a particular demographic group (e.g., females) perceive inequities in regards to the opportunities afforded to individuals of another relevant demographic group (e.g., males), lower EOC perceptions related to gender may result. For instance, Dansby and Landis (1998) found minority female military officers' EOC perceptions become more positive as their representation within the organization increases.

It is unclear the extent to which perceived gender inequalities (as an example) in the workplace influences facets of EOC not pertaining to gender (e.g., race- or age-related discrimination). Likewise,

perceived race-related inequalities (as another example) may influence EOC perceptions related to racial discrimination to a greater extent than it influences other facets of EOC. If this is the case, EOC perceptions will show fairly unique configurations across respondent demographic groups within which discrimination occurs. However, awareness of discrimination affecting others in one's demographic group may have more broad and deleterious effects on the entire configuration of EOC. For instance, fairness heuristics (Lind, 2001) may lead one to assume such discrimination is commonplace across a number of demographic groups, resulting in more negative perceptions of all facets of EOC. This study evaluates this issue by examining differences in unique configurations of EOC perceptions that exist across demographic groups and categories.

One limitation of prior research on EOC differences across demographic groups is that these differences are rarely adjusted to account for prior experience with discrimination, yet the prevalence of discrimination likely differs substantially across demographic groups. The current study addresses this limitation by examining how EOC configurations differ across demographic groups while statistically controlling for experienced discrimination. Considering the aforementioned rationale, we hypothesize EOC configurations will differ across demographic groups.

> **Hypothesis 2**: Respondent demographics will predict EOC configuration.

Outcomes Affected by EO Climate Configurations

To hypothesize the influence of EOC configuration on job-related attitudes, we consider Cox's (1994) interactional model of cultural diversity (IMCD). Cox's (1994) model links diversity climate (which is conceptually related to EOC) to organizational effectiveness. Diversity climate is theorized to influence organizational-level outcomes (e.g., attendance, productivity) through individual outcomes, such as affective (e.g., job satisfaction, organizational commitment) and job performance outcomes (Cox, 1994).

Much like diversity climate, (e.g., Hicks-Clarke & Iles, 2000; Hopkins, Hopkins & Malette, 2001; McKay et al., 2007), aggregate measures of EOC have shown linkages to a variety of organizational outcomes, such as organizational commitment, job satisfaction, and perceived workgroup efficacy in active duty military personnel (e.g., Estrada et al., 2007; McIntyre, Bartle, Landis, & Dansby, 2002). Research has also indicated that facets of EOC climate (e.g., climate reflecting perceptions of racism and sexism) are significant predictors of organizational outcomes including job satisfaction, organizational commitment, and work group effectiveness (McIntyre, 2002; Truhon & Parks, 2007). We also expect EOC configuration to relate to job-related attitudes and perceptions. Job attitudes and perceptions of interest in the present study are job satisfaction, organizational commitment, organizational trust, work group effectiveness, and work group cohesion.

Social Exchange Theory

Social exchange theory (SET) suggests a mechanism through which EOC configurations may influence job-related attitudes. SET (Blau, 1964; Homans, 1958) dictates that social and economic exchanges motivate behaviors and affect organizational attitudes such as organizational trust and supervisory trust (DeConinck, 2010).

Closely linked with social exchange theory are perceptions of organizational justice (Homans, 1958). Individuals who perceive and expect fair organizational procedures (i.e., procedural justice), fair treatment by colleagues and leaders (i.e, interactional justice) and fair remuneration (i.e., distributive justice) are likely to have more positive attitudes toward their organizations (Colquitt, 2001), be more committed to and exhibit more effort on behalf of their organizations (Colquitt, 2001), exhibit higher trust in their organization and organizational leaders (Brockner & Siegel, 1996; DeConinck, 2010).

The notion of social exchange is firmly embedded within the EOC construct. Items tapping the facets of EOC commonly ask respondents the extent to which opportunities are made equally available to certain employee groups (e.g., "Older workers are provided the same opportunities for advancement as younger workers"). EOC configurations indicating strong perceptions of equal opportunity and treatment of all employees within one's organization are indicative of a fair and equitable exchange between employees and their organization. Such configurations are expected to be associated with more positive job-related attitudes (Colquitt, 2001). On the other hand, EOC configurations indicating perceived inequality of treatment of certain groups within the organization would suggest an unequal exchange, resulting in more negative job-related attitudes. We therefore hypothesize the following:

Hypothesis 3a: EOC configuration will be significantly related to job satisfaction, such that those with more uniformly positive EOC configurations will have higher levels of job satisfaction.

Hypothesis 3b: EOC configuration will be significantly related to organizational commitment, such that those with more uniformly positive EOC configurations will have higher levels of organizational commitment.

Hypothesis 3c: EOC configuration will be significantly related to organizational trust, such that those with more uniformly positive EOC configurations will have higher levels of organizational trust.

Social exchange theory also dictates that high levels of reciprocity are required for individuals to be motivated to work with others (Gouldner, 1960). This is particularly true for social exchanges between individuals which go above and beyond the exchange of financial rewards (Gouldner, 1960). If the principle of reciprocity is violated, individuals may form lower expectations of their work group and exert less effort toward the accomplishment of the group's goals. EOC configurations are indicative of the level of reciprocal fair and equitable treatment individuals perceive in their work environment. A uniformly high EOC configuration suggests one perceives an equitable social exchange with respect to the organization and its members. Such EOC configurations are expected to be associated with increased effort exerted towards meeting collective work group goals, leading to higher perceptions of work groups cohesion and effectiveness. Therefore, we hypothesize the following:

Hypothesis 3d: EOC configuration will be significantly related to work group cohesion, such that those with more uniformly positive EOC configurations will have higher levels of work group cohesion.

Hypothesis 3e: EOC configuration will be significantly related to perceived work group effectiveness, such that those with more uniformly positive EOC configurations will have higher levels of perceived work group effectiveness.

Method

Sample and Procedure

The sample consisted of 14,323 U.S. military personnel employed across 200 military organizations (e.g., units, agencies) who responded to the DEOCS in 2008. When requested by a military commander or leaders of a civilian federal organization, all members of an organization are asked to complete the DEOCS. While the DEOCS can be administered via paper-and-pencil, only responses to the web-based version were used in this study. An invitation to complete the DEOCS containing a web link (URL) to the online instrument was distributed to all organizational members. Organizational members receive instructions regarding the purpose of the DEOCS and are assured that data they provide will be strictly confidential.

The 200 organizations included in the current study were randomly selected from a database of over 14,000 military and federal organizations and over one million respondents. A summary of demographics for the final sample is provided in Table 1. The sample consisted of predominantly White males, age 22-30, who were enlisted personnel. However, females and other ethnicities and age groups were also represented. Respondents also reported whether or not they had personally experienced specific types of discrimination in the workplace in the past 12 months. Reports of experienced discrimination are summarized in Table 1. Discrimination due to race, national origin, or color was most frequently reported (12%), followed by gender and age discrimination.

Measured Variables

Equal Opportunity climate. The DEOCS was used to assess five facets of Equal Opportunity climate. The facets included *racist behavior* (three items including, "Offensive racial/ethnic names were frequently heard"), *gender (sex) discrimination* (four items including, "sexist jokes were frequently heard"), *age discrimination* (three items including, "An older individual did not get the same career opportunities as did a younger individual"), *religious discrimination* (three items including, "A demeaning comment was made about a certain religious group"), and *disability discrimination* (three items including, "A worker with a disability was not given the same opportunities as other workers"). Respondents indicated the likelihood each behavior could have occurred at their duty location in the 30 days prior to taking the survey. Responses were provided using a 5-point Likert-type scale ranging from 1 (*there is a very high chance that the action occurred*) to 5 (*there is almost no chance the action occurred*). Scale scores for each climate facet were computed by averaging item responses. Internal consistency reliabilities are presented in Table 2.

Job-related attitudes. *Job satisfaction* was assessed using five items. Responses used a 5-point Likert-type scale ranging from 1 (*very satisfied*) to 5 (*very dissatisfied*). A sample item is "How satisfied are you with [your] job?" We also measured *workgroup cohesion* (four items including, "My workgroup works well together as a team"), *workgroup effectiveness* (four items including, "The quality of output of my work group is very

high"), *organizational commitment* (five items including, "I am proud to tell others I work for this organization"), and *organizational trust* (three items including, "This organization is loyal to its members"). Respondents indicated their level of agreement with each statement ranging from 1 (*total agreement*) to 5 (*total disagreement*). All scale scores were reverse-scored, such that high values indicated more positive attitudes. Internal consistency reliabilities for these scales are presented in Table 2.

Analysis

We conducted an LPA using Mplus (version 5.2). LPA is used to cluster individuals who share a similar response patterns on continuous variables (for a computational overview, see Muthén, 2001), similar to the way in which factor analysis is used to cluster variables that show common variance (Lubke & Muthén, 2005; Pastor, Barron, Miller, & Davis, 2007). A diagram of the LPA model estimated is presented in Figure 1. Observed scores for the five DEOCS subscales were specified as indicators of latent profile (or class) membership. These indicators were not allowed to correlate within class, satisfying the local independence assumption of classical latent profile as described by Muthén (2001). Under local independence, all covariances among the five DEOCS subscales were modeled through the categorical latent variable c. Indicator means were freely estimated across groups. Indicator variances were estimated, but constrained to equality across groups.

The number of latent classes was first set to $k = 2$, with additional classes specified in subsequent models. As convergence on a local maximum can result in inaccurate model estimates and classification with LPA (see Hipp & Bauer, 2006), multiple random

sets of starting values were employed. We used between 50 and 1,000 sets of random starting values with between 10 and 30 of the highest log-likelihood values selected for final-stage optimizations (depending on the number of classes specified). Two or more of the highest log-likelihood values should replicate to provide evidence that a global maximum was achieved (Hipp & Bauer, 2006).

Evaluating the goodness-of-fit for each mixture model involved fit indices and a content-oriented evaluation of the utility of the model. Based on recommendations from prior research (Nylund, Asparouhov, & Muthén, 2007), the fit indices evaluated included the Bayesian Information Criterion (BIC) and the sample size-adjusted BIC (aBIC). Models with lower BIC and aBIC values are considered better fitting than those with higher values. We also used the Lo-Mendell-Rubin (LMR) likelihood ratio test and the bootstrap likelihood ratio test (BLRT) to determine the correct number of classes. A low *p*-value resulting from either the LMR or BLRT indicates the k–1-class model should be rejected in favor of a model with at least k classes (Muthén, 2001). Models were also evaluated based on a content-oriented perspective. We considered the both the utility of adding additional classes in subsequent models and the theoretical interpretation of within- and between-class response patterns.

To evaluate Hypotheses 1 and 2, a set of correlates representing experienced discrimination and demographic information was included in all models. Latent class membership was regressed onto each correlate, representing a multinomial logistic regression. We included these correlates in the estimation model for the LPA (as opposed to conducting a post-hoc analysis for statistical relationships) because the inclusion of correlates has been shown to

improve the accuracy of latent group classification (see Lubke & Muthén, 2007). When a theoretical rationale exists suggesting a causal relationship between correlates and latent class membership (as is the case in the current study), it is generally recommended to include those correlates in the estimation model (e.g., Muthén, 2006).

To evaluate Hypothesis 3, we compared the latent group means on the six job-related attitude scales using the AUXILIARY (e) function in Mplus (see Muthén & Muthén, 2007). This method provides a statistical significance test of the equality of group means on the outcomes across the latent groups.

Results

Descriptive statistics and correlations for the DEOCS subscales and job-related attitude scales are presented in Table 2. Summary results from all LPA models estimated are presented in Table 3. For all models, the highest log-likelihoods replicated providing evidence that a global maximum was achieved. BIC and aBIC values decreased as the number of classes increased. Both BLMR and LMR LRT p-values were significant for the two-, three-, and four-class models, suggesting at least four classes should be considered. The LMR p-value for the five-class model was not statistically significant, suggesting the four-class solution should be retained. Entropy was high (.90) for the four-class model, indicating the model classified individuals fairly well (Lubke & Muthén, 2005).

We also estimated six- and seven-class models.[1] The six-class solution showed both BLMR and LMR LRT p-values to be significant and had lower BIC and aBIC values compared to the four-class model. However, we retained the four-class model as our final model for two reasons.

Primarily, findings from LPA Monte Carlo studies suggest not increasing the number of classes once the LMR p-value first becomes nonsignficant (Nylund et al., 2007). Additionally, the six-class solution resulted in two relatively small classes (each less than 9% of the sample) that shared a very similar response profile to two groups in the four-class model, which limited the utility of the six-class solution. Therefore, we retained the four-class model for subsequent analyses.

The latent response profiles from the four-class model are presented in Figure 2. The box plots display the 25th, 50th, and 75th percentiles (represented by the bottom of the box, the horizontal line in the middle of the box, and the top of the box, respectively) for all five DEOCS subscales. The response profiles show Class 4, comprised of 58% ($n = 8,217$) of the sample, had the most positive overall climate perceptions, which were generally consistent across subscales. Classes 2 (27%, $n = 3,914$) and 3 (12%, $n = 1,753$) showed similar response patterns to one another across subscales, though Class 2 respondents showed more negative climate perceptions overall. Class 1 (3%, $n = 438$) was in the minority, showing fairly uniform negative climate perceptions across subscales. A notable trend across all classes was that the *racist behaviors* and *sex discrimination* subscales tended to show the most negative ratings while the *religious* and *disability* subscales showed the most positive ratings.

In evaluating Hypotheses 1 and 2, the results indicated both experienced discrimination and respondent demographics significantly predicted respondents' most likely latent class. Results are presented in Table 4. Table 4 presents the relative odds of belonging to Classes 1, 2, and 3 (as opposed to Class 4) as a function of experienced discrimination and

demographic characteristics. All effects statistically control for all other variables in the model. Respondents who reported experiencing discrimination of any type were much more likely to belong to Classes 1, 2, or 3 than Class 4 (i.e., the uniformly positive climate group). This was particularly true for discrimination due to race. For a typical respondent having experienced racial discrimination, the odds of belonging to Classes 1 or 2 were 17 and 9 times greater (respectively) than a respondent who had not experienced discrimination. The results presented in Table 4 indicate that respondents who had experienced discrimination were much more likely to show negative or moderate EOC configurations (i.e., Classes 1, 2, and 3) compared to a positive EOC configuration.

Results also revealed respondent demographic characteristics predicted their most likely latent class (see Table 4). Black and African American respondents were more likely than White respondents to belong to Classes 1, 2, and 3. Females were less likely than males to belong to Classes 1 and 2. Respondents who were 31 to 50 years-old were less likely to belong to Classes 1 and 2 than those ages 22-30. Finally, type of employment showed a strong relationship to class membership. Respondents who were lower in rank (e.g., Enlisted) or civilians were more likely to belong to Classes 1, 2, and 3 than those of higher rank (e.g., Officers).

In evaluating Hypothesis 3, the results showed significant differences in job-related attitudes across all latent profile groups. Scale means for each latent group, as well as the statistical comparisons across groups, are presented in Table 5. For all job-related attitudes, respondents in Classes 1, 2, 3, and 4 held the most negative to most positive (respectively) attitudes towards their jobs and organizations.

Discussion

The current findings suggest the idiographic exploration of EOC can contribute new insights that complement those produced by nomothetic approaches previously employed in this area. We found evidence of four distinct subgroups whose EOC configurations differed both quantitatively and qualitatively (see Figure 2). The quantitative differences are visually apparent, with EOC scale means covering the full range of the possible scale values across the latent classes. Qualitative differences in EOC configuration were also found. For example, Classes 1 and 4 show somewhat more uniform response configurations across the five subscales compared to Classes 2 and 3. To our knowledge, prior research has never before established the nature and prevalence of such EOC response profiles in organizational settings.

We also found theoretically consistent relationships between respondent experience with discrimination (Hypothesis 1) and demographics (Hypothesis 2) and EOC perception configurations. Discrimination due to race (i.e., the most frequently reported type of discrimination) was most strongly associated with belonging to the least desirable latent class (i.e., Class 1). This type of discrimination may be particularly damaging to all facets of EOC, as members in Class 1 had generally uniform negative climate perceptions across facets.

There were several notable findings that arose from assessing the unique influences of experienced discrimination and demographics on EOC profiles. For instance, women were less likely than men to be in the lower (i.e., least desirable) classes *unless* they had experienced discrimination. This finding runs contrary to

findings of Truhon and Parks (2007), who found women had uniformly lower EOC perceptions. Our findings suggest that EOC perceptions are not related solely to gender, but rather the interplay between gender and experiences of discrimination.

A second notable finding was that Black or African American respondents were more likely than White respondents to fall in the lower classes, regardless of whether or not they had experienced discrimination. This is consistent with prior research (e.g., Truhon, 2005; Truhon & Parks, 2007). This finding may be attributable to the increased likelihood that Black or African Americans had witnessed or heard about race discrimination within their organization, as this was the most frequently reported type of discrimination. A third notable finding was that regardless of having experienced discrimination, respondents' type of employment was strongly linked to their most likely EOC profile. Enlisted military were more likely to belong to the lower classes than Officers, suggesting job context or status may play a role in the formation of EOC perceptions.

The findings also linked EOC profiles to job-related attitudes (Hypothesis 3). Response profiles appeared more related to attitudes targeted towards organizations relative to the self or respondents' workgroups. This finding is consistent with previous research illustrating EOC perceptions are impacted by pervasiveness of equity and fairness perceptions at the organizational level (Peterson, Van Driel, Crepeau, & McDonald, 2008). Furthermore, EOC profile group differences in workgroup cohesion perceptions were more pronounced than differences in perceived workgroup effectiveness. This finding is intuitive, as the cohesiveness construct is more proximally related to EOC than workgroup performance. Respondents may also be in a

better position to reliably judge workgroup cohesion than workgroup or organizational performance.

Limitations and Future Research Directions

The current study is not without limitations. One limitation of this study is the reliance on employees within the Department of Defense (DoD) community. While a large number (i.e., 200) of separate organizations were randomly sampled from the larger DoD community to provide more generalizable findings, respondents from the military and other government organizations may exhibit different EOC response profiles than those employed in private organizations. Therefore, future research should attempt to replicate the current findings in other organizational settings. The likelihood of this study being replicated in a civilian context is, however, low due to the risk of litigation that may arise from the results.

Another limitation of this study is the potential for common-method bias in evaluating the relationships between EOC perceptions and job-related attitudes (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Both sets of measures were assessed using self-reports on the same questionnaire, which could lead to inflated estimates of the relationships among these variables (Crampton & Wagner, 1994; Doty & Glick, 1998; Podsakoff et al., 2003). To reduce the potential influence of common-method bias, different response formats (i.e., scale anchors) were used to assess EOC perceptions and job-related attitudes. Also, no personally identifying information was collected and respondents were assured that their responses were anonymous. However, additional research assessing these constructs at different points in time would

mitigate the potential influence of common-method bias.

Some may also question our decision to retain the four-class model given the small proportion of the sample belonging to Class 1 (3%). There is typically little practical benefit in identifying such small groups, and classification of individuals into very small classes may be error-prone. However, the focus of this exploratory study is on perceptions of organizational issues (e.g., discrimination) that largely affect minorities or other small subsets of members within organizations. This may lead to small yet distinct subpopulations that do in fact hold unique EOC perceptions. Importantly, this study found strong theoretically consistent statistical linkages between experienced discrimination, respondent demographics, and membership in Class 1. Class 1 also showed significantly lower job-related attitudes than other latent classes. These linkages support the interpretation of Class 1 as a meaningful respondent subgroup.

Finally, this study focuses on *psychological* climate, in that individuals are the unit of analysis. However, climate is commonly conceptualized and studied as a group-level phenomenon concerning the shared perceptions of group members. A configural approach to the study of EOC such as that used in the current study should be extended to higher levels of analysis (e.g., workgroups, divisions, organizations, etc.). EOC configurations of teams and organizations would reveal a more comprehensive picture of climate than measures of individual EOC dimensions. Research into EOC configurations of groups could further our understanding of EOC's influence on group processes (e.g., information sharing, team-member exchange) and outcomes (e.g., shared trust, cohesion) and performance (e.g., sales, productivity) beyond the traditional variable-centered approaches commonly employed in this area.

Conclusion

Workforce diversity is increasing in today's organizations. As a result, climate for diversity and equal opportunity has garnered much research interest. This study adds to existing research by taking a person-centered configural approach to the study of EOC perceptions, and is the first study (to our knowledge) to employ latent profile analysis in this area. The current findings suggest EOC perceptions are the products of an idiographic (i.e., person-centered) process dependent on individuals' experiences with discrimination, demographic characteristics, and job context. Respondents with more negative EOC configurations also consistently showed more negative job-related attitudes than those with more positive EOC configurations. Future theoretical and empirical EOC research should adopt person-centered frameworks and analytic approaches to enhance our understanding of prevalent EOC configurations, their role in the broader nomological network of climate perceptions, and practical implications for the measurement and study of EOC in organizations.

Footnote

[1] A satisfactory model could was not obtained for the seven-class model, as convergence between log-likelihood values could not be achieved. Therefore, results from this model are not presented.

References

Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology, 88*, 295-305.

Antecol, H., & Cobb-Clark, D. (2007). Racial harassment, job satisfaction, and intentions to remain in the military, *Journal of Population Economics*, *22*, 713-738.

Barak, M., Cherin, D., & Berkman, S. (1998). Organizational and personal dimensions in diversity climate: Ethnic and gender differences in employee perceptions. *Journal of Applied Behavioral Science, 34*, 82-104.

Blau, P. (1964). *Exchange and Power in Social Life*. New York: Wiley.

Brockner, J., and P. A. Siegel. 1996. Understanding the interaction between procedural justice and distributive justice: The role of trust. In *Trust in Organizations*, edited by R. M. Kramer and T. R. Tyler, 390-413. Thousand Oaks, CA: Sage.

Burke, M.J., Borucki, C.C., & Kaufman, J.D. (2002). Contemporary perspectives on the study of psychological climate: A commentary. *European Journal of work and Organizational Psychology, 11*, 325-340.

Carr, J.Z., Schmidt, A.M., Ford, J.K., & DeShon, R.P. (2003). Climate perceptions matter: a meta-analytical path analysis relating molar climate, cognitive and affective states and individual level work outcomes. *Journal of Applied Psychology, 88*, 605-619.

Cox, Jr., T. (1994). *Cultural Diversity in Organizations: Theory, Research and Practice*. Berrett-Koehler Publishers, Inc: San Francisco, CA.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 386-400.

Crampton, S. M., & Wagner, J. A. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology*, *79*(1), 67-76.

Dansby, M. R., & Landis, D. (1991). Measuring equal opportunity climate in the military environment. *International Journal of Intercultural Relations, 15*, 389–403.

Dansby, M. R., & Landis, D. (1998). Race, gender, and representation index as predictors of an equal opportunity climate in military organizations. *Military Psychology, 10*, 87-105.

DeConinck, J. B. (2010). The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust. *Journal of Business Research, 63*, 1349-1355.

Dickson, M. W., Resick, C. J., & Hanges, P. J. (2006). When organizational climate is unambiguous, it is also strong.

Journal of Applied Psychology, 91, 351-364.

Doty, D., & Glick, W. H. (1998). Common methods bias: Does common methods variance really bias results? *Organizational Research Methods*, *1*(4), 374-406.

Doverspike D, Taylor MA, Shultz KS, McKay PF. (2000). Responding to the challenge of a changing workforce: Recruiting nontraditional demographic groups. *Public Personnel Management, 29*, 445–459.

Estrada, A. X., Stetz, M. C., & Harbke, C. R. (2007). Further examination and refinement of the psychometric properties of the MEOCS with data from reserve component personnel. *International Journal of Intercultural Relations, 31*, 137-161.

Fullerton, H.N. Jr., Toossi M. (2001). Labor force projections to 2010: Steady growth and changing composition. *Monthly Labor Review, 124*, 21–38.

González-Roma, V., Peiró, J.M, & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology, 87*, 465-473.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*, 161–178.

Hicks-Clarke, D., & Iles, P. (2000). Climate for diversity and its effects on career and organisational attitudes and perceptions. *Personnel Review, 29*, 324-345.

Higginbotham, E., & Weber, L. (1999). Perceptions of Workplace Discrimination Among Black and White Professional-Managerial Women. In I. Browne (ed.), *Latinas and African American Women at Work: Race, Gender, and Economic Inequality* (p. 327-353). New York: Russell Sage Publications.

Hipp, J., & Bauer, D. (2006). Local solutions in the estimation of growth mixture models. *Psychological Methods*, *11*(1), 36-53. doi:10.1037/1082-989X.11.1.36.

Homans, G. 1958. *Social behavior as exchange. American journal of sociology,* 62, 597-606.

Hopkins, W. E., Hopkins, S. A., & Mallette, P. (2001). Diversity and Managerial Value Commitment: A Test of Some Proposed Relationships. *Journal of Managerial Issues, 13*, 288-306.

Jackofsky, E.F., & Slocum, J.W. (1988). A longitudinal study of climates. *Journal of Organizational Behavior, 9*, 319-334.

James, L.A., & Sells, S.B. (1981). Psychological climate: Theoretical perspectives and empirical research. In D. Magnusson (Ed.), *Toward a psychology of situations: An Interactional perspective* (pp. 275-295). Hillsdale, NJ: Laurence Erlbaum Associates, Inc.

Joyce, W.F., & Slocum, J.W. (1984). Collective climate: Agreement as a basis for defining aggregate climates in organizations. *Academy of Management Journal, 27*, 721-742.

Judy, R.W. & D'Amico, C. (1997). *Workforce 2020: Work and workers in the 21st century.* Indianapolis, IN: Hudson Institute.

Kossek, E. E., & Zonia, S. C. (1993). Assessing diversity climate: A field study of reactions to employer efforts to promote diversity. *Journal of Organizational Behavior, 14*, 61–81.

Lind, E. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. In J. Greenberg, R. Cropanzano, J. Greenberg, R. Cropanzano (Eds.), *Advances in organization justice* (pp. 56-88). Stanford University Press.

Lindell, M.K., & Brandt, C.J. (2000). Climate quality and climate consensus as mediators of the relationship between organizational antecedents and outcomes. *Journal of Applied Psychology, 85*, 331-348.

Lubke, G. H. & Muthén, B. O. (2005). Investigating population heterogeneity with factor mixture models. *Psychological Methods*, 10, 21-39.

Lubke, G. & Muthén, B. O. (2007). Performance of factor mixture models as a function of model size, covariate effects, and class-specific parameters. *Structural Equation Modeling, 14*(1), 26-47.

Marsh, H.W. Lüdtke, O., Trautwein, U., Alexandre, J. S. Morin. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling: A Multidisciplinary Journal, 16*, 191-225.

McIntyre, R. M., Bartle, S. A., Landis, D., & Dansby, M. R. (2002). The effects of equal opportunity fairness attitudes on job satisfaction, organizational commitment, and perceived work group efficacy. *Military Psychology, 14*, 299-319.

McIntyre, R. M., Bartle, S. A., Landis, D., & Dansby, M. R. (2002). The effects of equal opportunity fairness attitudes on job satisfaction, organizational commitment, and perceived work group efficacy. *Military Psychology, 14*, 299-319.

McKay P. F., Avery D. R., Tonidandel S., Morris M. A., Hernandez, M., Hebl M. R. (2007). Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psychology, 60*, 35–62.

McKay, P., Avery, D., & Morris, M. (2009). A tale of two climates: Diversity climate from subordinates and managers perspectives and their role in store unit sales performance. *Personnel Psychology, 62*, 767-791.

Meyer, A. D., Tsui, A. S., & Hinings, C. (1993). Configurational approaches to organizational analysis. *Academy of Management Journal, 36*, 1175–1195.

Moliner, C., Martínez-Tur, V., Ramos, J. & Cropanzano, R. (2005, May). *Perceived reciprocity and well-being at work: fairness or egoistic preference?* Paper presented at the 12th European Congress of Work and Organizational Psychology, Istanbul, Turkey.

Moore, B.L., & Webb, S.C. (1998). Equal opportunity in the U.S. Navy: perceptions of active-duty African American women. *Gender Issues, 16*, 99-199.

Moore, B.L., & Webb, S.C. (2000). Perceptions of equal opportunity among women and minority Army personnel. *Sociological Inquiry, 70*, 215-239.

Muthén, B. O. (2001). Latent variable mixture modeling. In G. Marcoulides & R. Schumacker (Eds.), *New developments and techniques in structural equation modeling* (pp. 1–33). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Muthén, B. O. (2006). Should substance use disorders be considered as categorical or dimensional? *Addiction, 101*(Suppl. 1), 6-16.

Muthén, L. K. & Muthén, B. O. (2007). *M*plus *user's guide* (5th ed.). Los Angeles: Muthén & Muthén.

Nylund, K., Asparouhov, T., & Muthén, B. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*,*14*(4), 535-569.

Ostroff, C., Kinicki, A., & Tamkins, M.M. (2003). Organizational culture and climate. In w.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Comprehensive handbook of psychology* (pp. 565-593). New York, NY: Wiley.

Pastor, D. A., Barron, K. E., Miller, B. J., & Davis, S. L. (2007). A latent profile analysis of college students'

achievement goal orientation. *Contemporary Educational Psychology, 32*, 8–47.

Patterson, M., Payne, R., & West, M. (1996). Collective climates: a test of their sociopsychological significance. *Academy of Management Journal, 39*, 1675-1691.

Payne, R.L. (1990). Madness is our method. A comment on Jackofsky and Slocum's paper, "a longitudinal study of climates," *Journal of Organizational Behavior, 11*, 77-80.

Peterson, M.H., Van Driel, M., Crepeau, L.J., & McDonald, D.P. (2008, April). *Examining climate strength as a moderator of unit-level relationships between equal opportunity climate and outcome variables.* Paper presented at the 23rd annual conference of the Society for Industrial and Organizational Psychologists, San Francisco, CA.

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.

Newell, C.E., Rosenfeld, P., & Culbertson. (1995). Sexual harassment experiences and equal opportunity perceptions of Navy women. *Sex Roles, 32*, 159-168.

Rosenfeld, P., Newell, C.E., & Le, S. (1998). Equal opportunity climate of women and minorities in the Navy: Results from the Navy Equal Opportunity/Sexual Harassment

(NEOSH) survey. *Military Psychology, 10*, 69-85.

Schneider, B., Salvaggio, A.N., & Subirats, M. (2002). Climate strength: a new direction for climate research. *Journal of Applied Psychology, 87*, 220-229.

Schulte, M., Ostroff, C., Shmulyian, S., & Kinicki, A. (2009). Organizational climate configurations: relationships to collective attitudes, customer satisfaction, and financial performance. *Journal of applied Psychology, 94*, 618-634.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology*, *81*(3), 219-227.

Schulte, M., Ostroff, C., & Kinicki, A. J. (2006). Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relationships. *Journal of*

Occupational and Organizational Psychology, 79, 645–671.

Truhon, S.A. (2008). Equal opportunity climate in the United States military: Are differences in the eye of the beholder? *European Journal of Work and Organizational Psychology, 17*, 153-169.

Truhon, S.A (2005). Equal Opportunity in the United States military: Are differences in the eye of the beholder? *European Journal of work and Organizational Psychology, 17*, 153-169.

Truhon, S.A., & Parks, K. (2007). *Norming the DEOCS organizational climate survey* Paper presented at the 49th International Military Testing Association Conference: Gold Coast, Queensland, Australia.

Van Knippenberg, D. V., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology, 58*, 515-541.

Table 1

Descriptive Statistics for Experienced Discrimination and

Demographics (n = 14,323)

Experienced Discrimination (in past 12 months)	%
Racial/national origin/color	12%
Gender (sex)	10%
Age	6%
Disability	3%
Religious	3%
Race	
White	48%
Spanish/Hispanic	19%
Black or African American	21%
Asian	7%
Native Hawaiian/Pacific Islander	2%
Amer. Indian/Alaska Native	3%
Gender	
Female	23%
Male	77%
Age (compared to Age 22-30)	
Age 18-21	16%
Age 22-30	42%
Age 31-40	25%
Age 41-50	12%
Age 51+	5%
Type of Employee	
Officer	9%
Warrant Officer	1%
Enlisted	79%
DoD Civilian	10%
Non-DoD Civilian	< 1%

Table 2

Descriptive Statistics for Study Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
EO Climate												
1. Racial Behaviors	3.74	1.14	(.89)									
2. Sexual Harassment	4.05	0.95	.77	(.84)								
3. Religious Discrimination	4.43	0.82	.58	.70	(.83)							
4. Age Discrimination	4.27	0.95	.48	.61	.67	(.89)						
5. Disability Discrimination	4.39	0.87	.48	.59	.68	.72	(.86)					
Job-related Attitudes												
6. Org. Commitment	3.35	1.01	.44	.43	.36	.37	.34	(.81)				
7. Org. Trust	3.36	1.07	.40	.42	.33	.35	.30	.71	(.84)			
8. Workgroup Effectiveness	4.10	0.87	.26	.28	.27	.24	.27	.39	.43	(.87)		
9. Workgroup Cohesion	3.87	0.98	.35	.37	.32	.32	.31	.48	.53	.68	(.90)	
10. Job Satisfaction	3.84	0.87	.33	.36	.31	.30	.28	.59	.58	.53	.58	(.83)

Note. n = 14,221-14,323. All correlations are statistically significant ($p < .001$). Internal consistency reliabilities (α) reported on the diagonal.

Table 3

Latent Profile Analysis Model Comparisons

Model	No. parameters	BIC	aBIC	LMR (*p*)	BLRT (*p*)	Classes with < 5% of sample
2 classes	35	158631.08	158519.85	< .0001	< .0001	0
3 classes	60	147558.76	147368.08	< .0001	< .0001	0
4 classes*	85	143253.72	142983.60	< .0001	< .0001	1
5 classes	110	138927.59	138578.02	0.240	< .0001	1
6 classes	135	136704.00	136274.98	< .0001	< .0001	1

Note. Bayesian Information Criterion (BIC), sample size-adjusted BIC (aBIC), Lo-Mendell-Rubin likelihood ratio test (LMR), Bootstrap likelihood ratio test (BLRT). (*) indicates the final model selected for subsequent analysis.

Table 4

Relationships between Experienced Discrimination, Demographics, and Latent Class

Membership

	Odds Ratio (Odds of class membership vs. Class 4)		
	Class 1	Class 2	Class 3
Experienced Discrimination (compared to No Experience)			
Racial/national origin/color	17.761*	9.478*	5.023*
Gender (sex)	9.034*	7.838*	6.424*
Age	7.584*	8.331*	4.455*
Disability	11.359*	8.248*	4.504*
Religious	10.665*	6.068*	4.100*
Race (compared to White)			
Spanish/Hispanic	1.214	0.964	0.931
Black or African American	2.000*	1.405*	1.146*
Asian	1.508	1.251	1.106
Native Hawaiian/Pacific Islander	1.274	1.547*	0.947
Amer. Indian/Alaska Native	1.531	1.241	1.192
Gender (compared to Male)			
Female	0.541*	0.777*	0.895
Age (compared to Age 22-30)			
Age (18-21)	0.730*	0.908	0.828*
Age (31-40)	0.474*	0.493*	0.628*
Age (41-50)	0.496*	0.430*	0.416*
Age (51+)	0.850	0.788	0.495*
Type of Employee (compared to Officer)			
Warrant Officer	0.000*	2.380*	0.683
Enlisted	5.328*	3.743*	1.966*
DoD Civilian	4.807*	2.895*	1.829*
Non-DoD Civilian	7.721	7.265*	2.812*

Note. Odds ratios greater than 1.00 indicate a higher likelihood of belonging to the target class compared to the reference group. Ratios less than 1.00 indicate a lower likelihood. All variables were dummy-coded such that the reference group represented respondents who had not experienced discrimination, were White, male, age 22-30, and were Officers.

* $p < .05$

Table 5

Mean Differences between Latent Classes on Job-related Attitudes

| | Group Mean | | | | |
Attitude Scale	Class 1	Class 2	Class 3	Class 4	Chi-square
Job Satisfaction	3.13	3.35	3.64	4.09	1060.950*
Organizational Commitment	2.36	2.65	3.04	3.71	1947.185*
Organizational Trust	2.45	2.67	3.03	3.73	1442.487*
Workgroup Cohesion	2.99	3.26	3.62	4.17	1201.982*
Workgroup Effectiveness	3.46	3.65	3.96	4.31	694.027*

Note. The chi-square test represents an omnibus test for equality of means across all four

classes. All follow-up pairwise comparisons between classes were also statistically

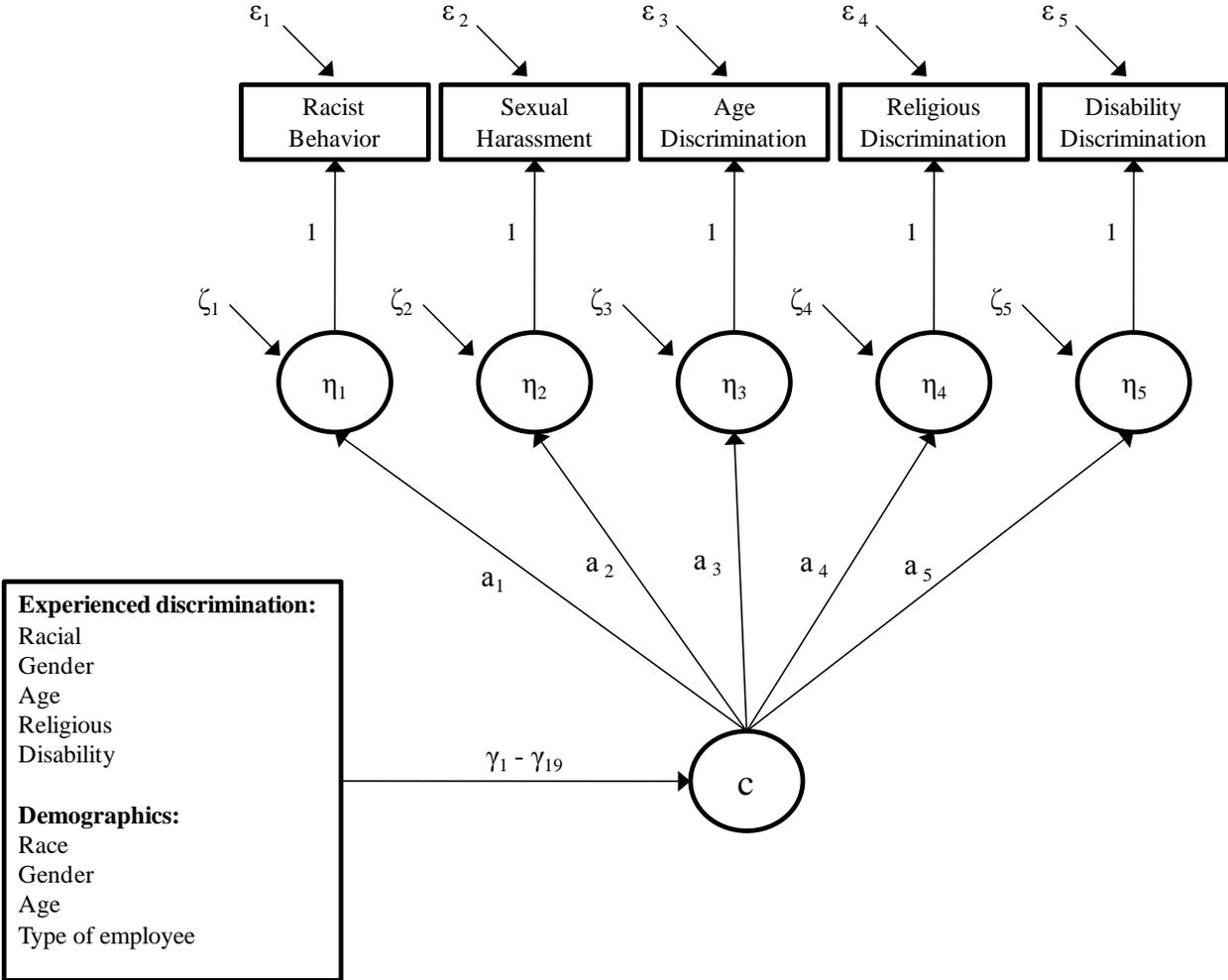significant ($p < .01$, $df = 1$).

* $p < .001$ ($df = 3$)

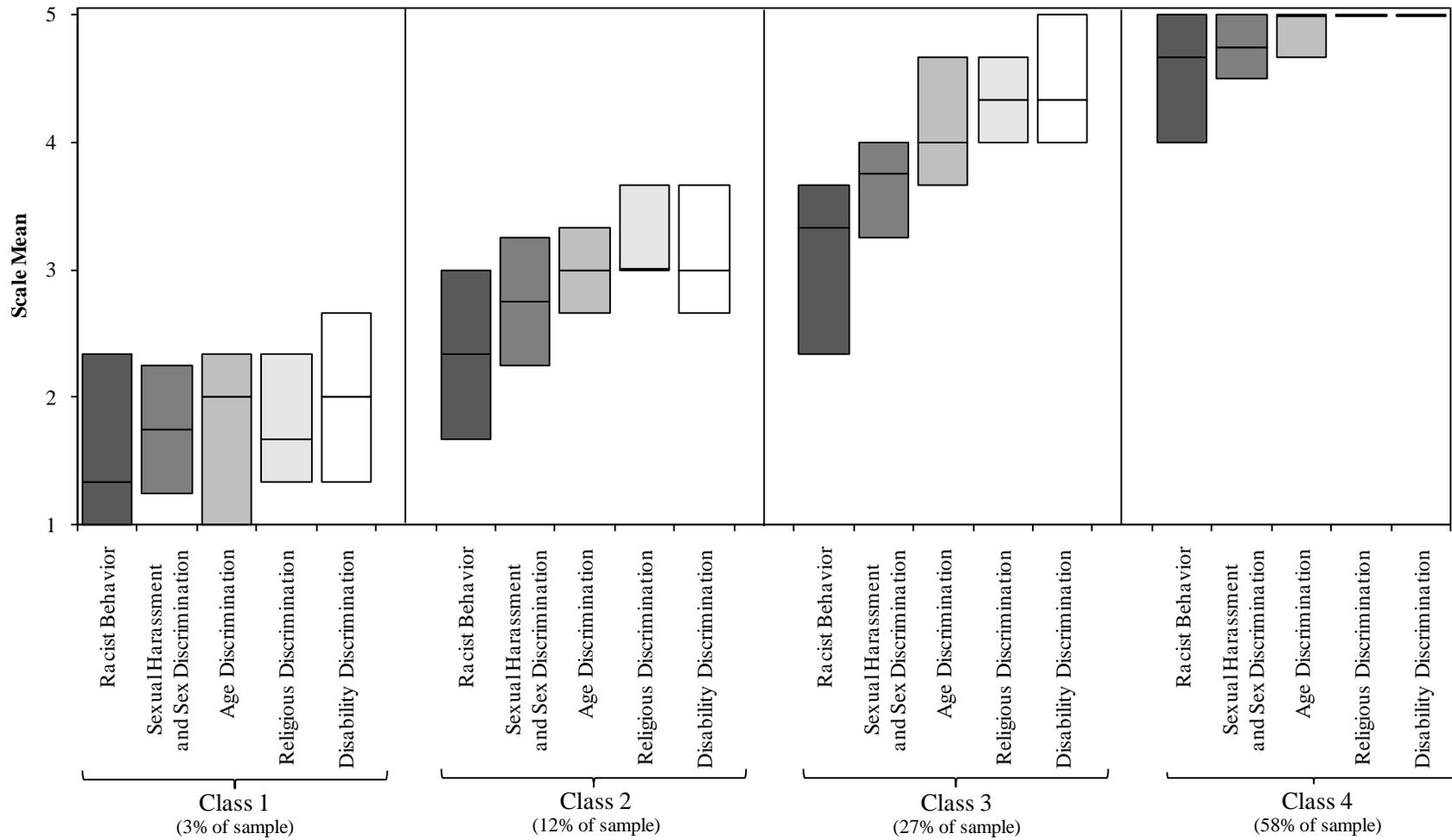*Figure 1*. Diagram of Latent Profile Model

Figure 2. Latent Profiles for the Four-Class Model

Note. Boxes represent 25th, 50th, and 75th percentiles (represented by the bottom of the box, the horizontal line in the middle of the box, and the top of the box, respectively) for each group.